

The Issue

Type of Issue	Share Aggregating Upto Rs.mn
Fresh Issue	2,400
Offer for Sale*	3,482
Total	5,882

*At Upper Price Band

Issue Break-Up

Reservation for	% of Issue
QIB	50%
NIB	15%
Retail	35%
Total	100%

Indicative Offer Timeline	Indicative Date
Bid/Offer Opening Date	14 Dec, 2021
Bid/Offer Closing Date	16 Dec, 2021
Finalization of the Basis of Allotment	21 Dec, 2021
Credit of shares	23 Dec, 2021
Initiation of refunds	22 Dec, 2021
Listing Date	24 Dec, 2021

Use of Proceeds

Repayment of all or portion of outstanding borrowings
Funding working capital requirements
Upgrading and expanding its existing facilities at Chennai

Manager JM Financial Limited, IIFL Securities

Registrar Link Intime India

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Company Overview:

Data Patterns (India) Limited, one of the fastest growing companies in the Defence and Aerospace Electronics sector in India. It has proven in-house design and development capabilities and experience of more than three decades (including through their erstwhile subsidiary) in the defence and aerospace electronics space. The company offerings cater to the entire spectrum of defence and aerospace platforms – space, air, land and sea. It is the highest growing company in terms of revenues amongst key Indian defence and aerospace companies as captured in the Company Commissioned F&S Report. It has design capabilities across the entire spectrum of strategic defence and aerospace electronics solutions including processors, power, radio frequencies (“RF”) and microwave, embedded software and firmware and mechanical engineering. The companies core competencies include electronic hardware design and development, software design and development, firmware design and development, mechanical design and development, product prototype design and development, functional testing and validation, environment testing and verification and engineering services opportunities. Its capabilities across the spectrum of defence and aerospace electronics solutions from design to delivery allow data patterns a significant competitive advantage in terms of overall development time and cost and also allows it to offer competitive pricing when bidding for defence and aerospace projects. The company’s platform specific products and products certified for ongoing programmes allow its to be the preferred OEM supplier for such qualified product requirements, driving growth and revenue visibility over many years.

Valuation:

At the upper price band of Rs.585, the stock is trading at a PE of 54.6x FY21 EPS. Data Patterns (India) Limited (“Data Patterns”) is among the few vertically integrated defence and aerospace electronics solutions provider catering to the indigenously developed defence products industry. They have proven in-house design and development capabilities and experience of more than three decades (including through their erstwhile subsidiary) in the defence and aerospace electronics space. Its core competencies include electronic hardware design and development, software design and development, firmware design and development, mechanical design and development, product prototype design and development, functional testing and validation, environment testing and verification and engineering services opportunities. Data patterns is well positioned to benefit from the government’s ‘Atmanirbhar Bharat’ and ‘Make in India’ initiatives.

We believe rising government’s expenditure on defence and modernisation of armed forces will benefit company like Data Patterns. Advancing ahead, Data Patterns plans to upgrade and expand its existing facilities at Chennai and strengthen its position in India’s growing market. We assign a subscribe rating to the issue given.

Products Offered



Indigenously developed fire control system for the BrahMos missile programme



Designed and developed the second launch pad countdown system for delivery to the Indian government space organization



Designed and developed Primary Surveillance Radar for coastal surveillance for the Indian government space organization



Developed Seaking automated test equipment for INS Shikra



Laser guided bomb kit tester



Satellite bus management system



Digital flight control computer

Products Offered

Surveillance radar



Weather radars



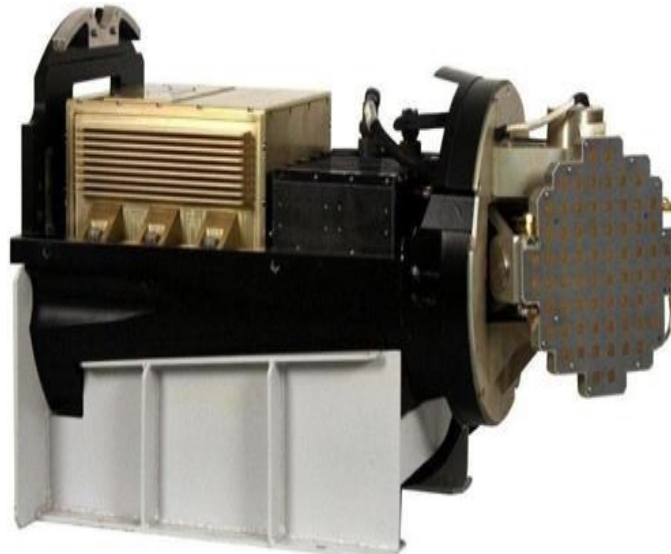
Wind Profile Radar



Tracking radars



BrahMos missile seeker

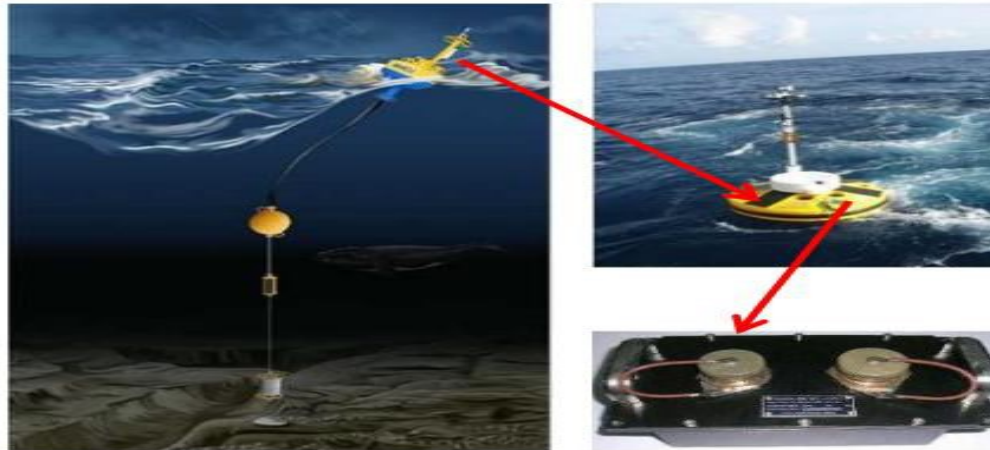


Identify Friend or Foe (IFF) Seeker



Products Offered

Oceanography Products



Data Buoy CPU

Electronic warfare suite



V/UHF Monitoring Receiver



V/UHF Search Receiver



Digital Direction Finder



Airborne Radar Warning Receiver



Wide Band Signal Processing Unit



Next Generation COMM EW Receiver



Radar Warning Receiver

Products Offered (BrahMos)

Fire Control systems: Land Based



These systems were indigenously developed around 2002 and deployed across India. They believe that this particular product has a high export potential due to the success of the BrahMos missile programme.

Airborne launcher for Sukhoi 30



After the successful implementation of the land based BrahMos launcher they received an order from BrahMos Aerospace Private Limited to develop flight qualified launchers in the BrahMos System. Multiple units have been delivered to equip Su-30 aircraft with the BrahMos missile launch capability.

Other electronic systems



As a result of their involvement in the BrahMos programme, they have also developed, an auxiliary product. The Missile Checkout System that validates the health of the missiles in storage have been indigenised and maintained by us. These are installed in various locations around India.

Subsequently they have developed 'O' level and 'I' level testers for the BrahMos air version launcher which have been delivered.

Products Offered (Avionics)



Light Utility Helicopter Cockpit display



Fixed Wing Cockpit displays

Avionics Displays

They have focused on Avionics displays as one of their key technology domains. These displays have to withstand airborne standards and there is a premium placed on these displays due to multi-disciplinary technological content. Their products have been used on the LCA, Intermediate Jet Trainers and LUH.

For example, the entire Glass Cockpit of the LUH is produced and delivered by their Company along with the accompanying Data Interface Unit.



Products Offered (Automated Test Equipment (ATE) & COTS)

Automated Test Equipment

One of their core businesses for over 25 years has been the development of Automated Test Equipment for critical Aerospace requirements. The Indian government space organisation requires various types of automated test equipment for development of its test benches for the Polar Satellite Launch Vehicle (“PSLV”) and Geo Stationary Launch Vehicle (“GSLV”). All the electronic systems on the PSLV and GSLV as well as some satellite sub-systems are tested by the Indian government space organisation using such ATE. A robust service network ensures uptime of all this equipment. They are the only company in India to have developed these complex ATE modules and are well established to capture the opportunity. (Source: Company Commissioned F&S Report) They have a “rate contract” with the Indian government space organisation for more than a decade allowing single vendor procurement, which has expired and is currently under renewal.

COTS



VPX Multi core SBC



VPX Zynq MPSoC based Quad core



High density DIU



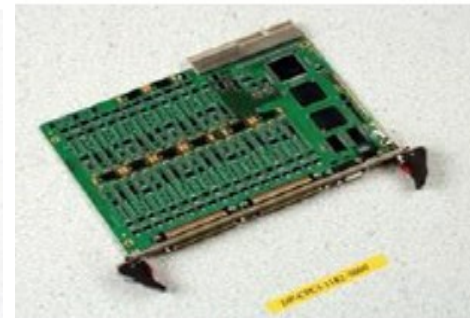
Narrow Band Receiver



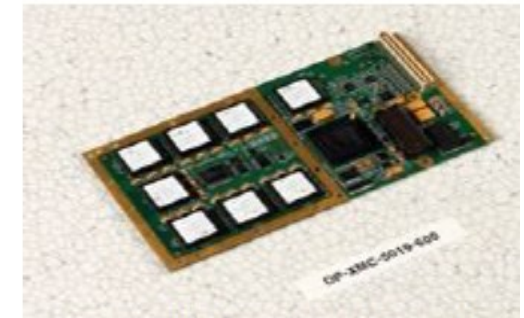
Power supply module



IO Timing module



High speed Datalogger



Synchronized Multi channel Mil 1553B module

Order Book

Order Book as on - Last 5 Fiscals (Rs in mn)

Year	Production Contracts	Development Contracts	Service Contracts
FY17	124	599	82
FY18	1211	545	32
FY19	1619	134	62
FY20	4807	310	738
FY21	3961	305	714
FY21	3943	1208	673
FY21	3898	1233	681

Order book as on September 30, 2021

Particulars	Number of orders	Value (Rs.mn)
Production Contracts	34	3,898.2
Development Contracts	19	1,233.5
Service Contracts	52 (including 27 Build to Print orders)	681.4
Total order book	105	5,813.0

Key Strengths

Indigenous integrated and strategic defence and aerospace electronics solutions provider which is well positioned to benefit from the Make in India opportunity

Since inception, the company have focussed on designing and building their own products. They have extended their product focus across the manufacturing value chain from industrial and test automation to automated test equipment for space systems to developing products and sub-systems for defence and aerospace systems through DRDO. They are focussed on developing complete systems and sub-system solutions in domains such as radars, electronic warfare, communication systems, RF and microwave, Military COTS (such as VME and VPX processor boards, digital receivers, Input/Output modules of many functions and form factors), avionics, missile and torpedo electronics, fire and launch control systems, space-based systems and automatic test equipment. DRDO is its valuable customer and have supplied several electronics-based systems / sub-systems to DRDO for various applications.

Innovation focussed business model

Since inception, the company have focussed on in-house development and manufacturing capabilities lead by innovation and design and development efforts. As on September 30, 2021, they had more than 500 engineers, many of whom serve in both design and development departments. They have in the past initiated development of several projects, such as military grade processor modules, cockpit displays, actuator controllers for missiles and torpedoes, flight control computers, digital receivers and Up/Down converters for radars, with an aim to utilise these components in subsequent projects. Subsequently, they have been able to utilise these pre-developed building blocks and sub-systems in the development of complete systems, thereby allowing for higher value addition while distributing development costs. Further, an ability to partner with their customers through the life cycle of a product, from conception till deployment and thereafter, allows them to be logical partner to their customers as a product moves from development to deployment.

Sound order book across product categories supplying to marquee customers in the defence and aerospace industry

As on September 30, 2021, they had an order book of ₹ 5,812.98 million, with orders from several marquee customers in the Indian defence ecosystem, including the Indian government defence ministry, BrahMos, DRDO, the Indian government space organisation, HAL, BEL and a DPSU involved in the

Key Strengths

missile space. They are currently engaged in the supply of products to several prestigious defence projects in India, including the LCA, the HAL Dhruv, LUH and the BrahMos missile programme. In each of the above projects, their products form critical components, such as the launch systems for the ground based BrahMos missile launcher, flight and safety critical “take me home” displays for the Tejas. Due to their diversification of their products and services over the years, backed by their design and development capabilities, they have grown their order book from ₹ 805.40 million as on March 31, 2017 to ₹ 5,812.98 million, as on September 30, 2021.

Modern certified manufacturing facility of international standards

Their in-house design and development capabilities are complemented by their 100,000 square feet manufacturing facility located on 5.75 acres of land at the SIPCOT Information Technology Park, Siruseri, Chennai, which has facilities for design, manufacturing, qualification and life cycle support of high reliability electronic systems used in defense and aerospace applications. Their facility allows them to be self-sufficient in their requirement of high quality and high complexity production while ensuring functional testing for all their products using internally developed automatic testing equipment. Environmental test facilities are also available for the requirements of JSS55555, MIL-STD-461, MIL-STD-810 including for Highly Accelerated Life Test / Highly accelerated stress screening.

Consistent track record of profitable growth due to a scalable business model

With net profitability growth of approximately 164% between Fiscal 2020 and Fiscal 2021, they are one of the fastest growing companies in the Defence and Aerospace Electronics sector in India with excellent margins and return ratios. Between Fiscal 2019 and Fiscal 2021, they recorded higher growth in revenues, EBIDTA margin, ROCE and ROE amongst key Indian defence and aerospace companies, with a growth in their revenues of 71% during this period. Between Fiscal 2019 and Fiscal 2021, they were amongst the highest growing companies in terms of revenues amongst key Indian defence and aerospace companies as captured in the Company Commissioned F&S Report, with a growth in their revenues of 71% during this period. Further, between Fiscal 2020 and Fiscal 2021, they recorded the highest growth in revenues amongst key Indian defence and aerospace companies with a revenue growth of 43% in this period. Also, in Fiscal 2021, they recorded the highest EBITDA margin, ROCE and ROE amongst key Indian defence and aerospace companies.

Continue expansion of product portfolio with complex technology-based products

They intend to continue to expand their capabilities and product portfolio to enhance their offerings in the defence and aerospace electronics space, especially in complex technology based products. They currently offer electronic solutions developed by specialist teams working on areas including complex 20+ layer PCB designs, FPGA based firmware algorithms, all layers of software including operating system porting, device drivers, networking layers, application software, graphical user interface, cartography, signal processing, streaming protocols and waveform engineering. Further, they intend to opportunistically bid for and engage in higher value projects which require significant use of complex technologies. For example, they have developed and deployed their first Nano satellite ("NIUSAT") which was deployed in 2017. Based on the learning they have received two more contracts to design and build nano satellites. The Indian government space organisation uses on board and ground systems developed by us for their nano satellite programme. Every part of the satellite like on board computers, power systems, telemetry and telecommand, payload data links, sensors, attitude control with reaction wheels allowing movement of the satellite in space, etc. are designed in-house.

Focus on repeat large volume production orders

Due to their reusable building block model and their pre-existing certification and platform specific products, they are able to distribute development costs over multiple programmes and also be the preferred OEM supplier for ongoing programmes. Of these, RWR and ELINT are currently in the testing and flight trial stage, while cockpit displays for LUH, antenna electronics for Ashwini Radars, etc. have entered the initial production phase, which they believe will provide greater volumes and increased orders over the coming years. They aim to focus on such orders or projects wherein the initial development stage has been completed and where they believe there is significant scope for high volume repeat orders or high value repeat orders. For example, the 205 MHz wind profile radar developed by us is capable of re-design and deployment with military applications, such as detection of stealth aircraft. This contract was signed in September 2012 while the design and installation was completed by us in September 2016. The wind profile radar has been operational since 2017.

Augmenting their design and development capabilities and expanding manufacturing infrastructure

They intend to deploy up to ₹ 598.39 million from the Net Proceeds and proceeds from the Pre-IPO Placement of this Offer towards upgrading and expanding of their existing facilities located in Chennai. The proposed expansion of their facilities, which will include acquisition of an additional 2.81 acres of adjacent land for further expansion, large systems integration hangar, complete radar integration, electronic warfare vehicle integration, augmented environmental test infrastructure, multi ton material handling, additional EMS line and clean room for satellite integration. They also intend to augment their design and development capabilities for their various verticals, including their design verticals, through procurement of additional software, testing equipment or other related hardware. They believe that augmentation of their design and development capabilities through acquisition of further infrastructure is part of an ongoing process of increased capabilities. They believe their investment in infrastructure will enable us to cater to the growing demand from their customers and enhance their product portfolio, which in turn is expected to result in an increase in their profits and revenues.

Focus on increasing revenues by leveraging core competencies and grow their services business

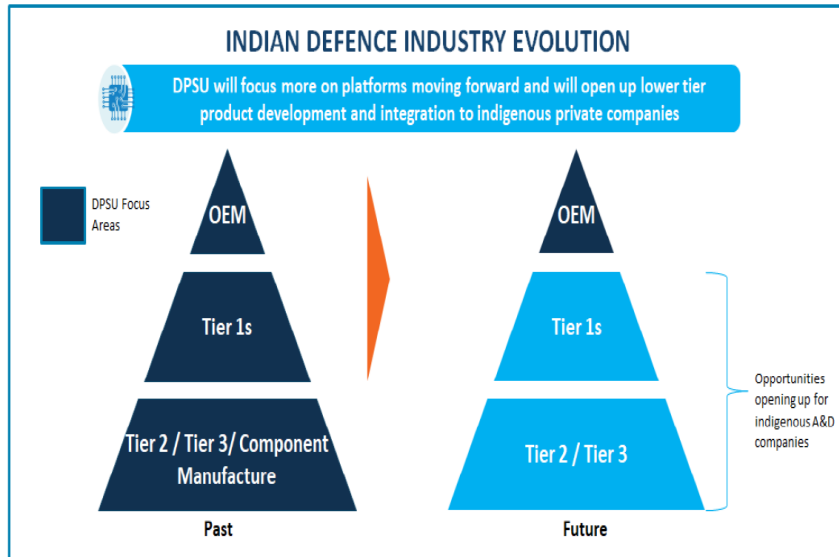
Their core competency is driven by robust process and quality standards. They intend to leverage this expertise and start providing engineering services to OEMs, including for electronic hardware development, embedded software and application development, algorithm and firmware development, testing and validation activities, obsolescence management and life extension of defence OEM products and other non-defence products. Their domain expertise helps us to understand the customer's requirements in a timely manner thereby leading to time and cost efficiencies for all parties. Further, they believe that due to the relatively long life of platforms or products in the defence and aerospace sector, there are significant growth opportunities for their sale of services. Accordingly, they intend to grow their portfolio of services and provide maintenance services, upgradation and other routine repair and upkeep services to customers, to allow us to expand their revenues from sale of services.

Focus on increasing export business

As per the Company Commissioned F&S Report, global defence spending rose to \$ 1,981 billion in 2020 representing an increase of 2.6% over 2019 spending. The global defence expenditure has been steadily increasing in the last five years at a CAGR of approximately 3.6%. In 2020, the top 15 spenders accounted for 81% of the total global spend; with most countries in this group increased their defence expenditure over 2019. Accordingly, United States, most of Europe, India, Japan, UK, France, Australia, etc., cannot deprioritise defence spending and R&D. They intend to expand to high-end global markets similar to India, where they believe their core competency is in complete sync with requirements for various sectors, such as industrial automation, telecom, automobile (electronic sub-systems), medical (electronic sub-systems) and nuclear. Either their engineering services model or product development model shall be utilized to leverage sales from these markets. They intend to identify market opportunities in overseas jurisdictions and tie up with local partners to utilise their existing product portfolio and further develop products suitable for meeting the respective country's native requirements.

Indian Defence Industry

The Indian Defence Industry Evolution – 1950 to Current



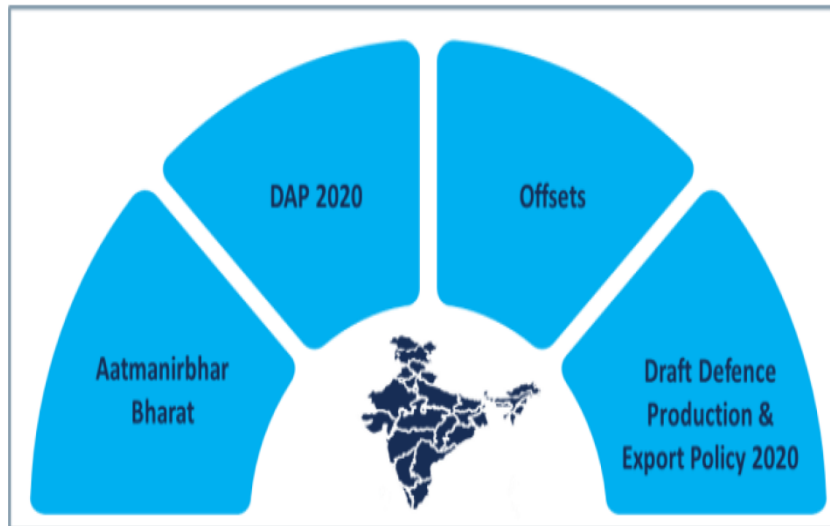
The government's latest policies seek to build greater self-reliance in Indian defence R&D and manufacturing through a combination of the Aatmanirbhar Bharat mission, DAP 2020, Offsets and the upcoming Defence Production and Exports Policy.

The Indian government's approach to promoting more indigenous industry inclusion has been becoming more calibrated in the last few years. The drivers used are indicated in Figure 21. Whilst the onus has been on increasing prioritisation for Indian company led procurement mechanisms, several other policies have also been initiated to simplify entry into the defence sector and devolving more freedoms in avenues such as export selection to Indian companies.

Aatmanirbhar Bharat

Aatmanirbhar Bharat envisions promoting policies and regulations that leads to self-sustainment in key areas on industry, including defence, through a wide raft of new measures including a Defence Production and Export Policy and import protection. The major measures under the ambit of Aatmanirbhar Bharat in defence are as follows:

Indigenous Defence Industry Drivers



Negative Import List – In order to incentivise domestic production and limit imports, the Defence Ministry has banned the import of 209 defence related equipment/ components. Services can only source the listed equipment from Indian vendors. Equipment covered includes segments such as electronic warfare, sensors, radars, Unmanned Aerial Systems etc.

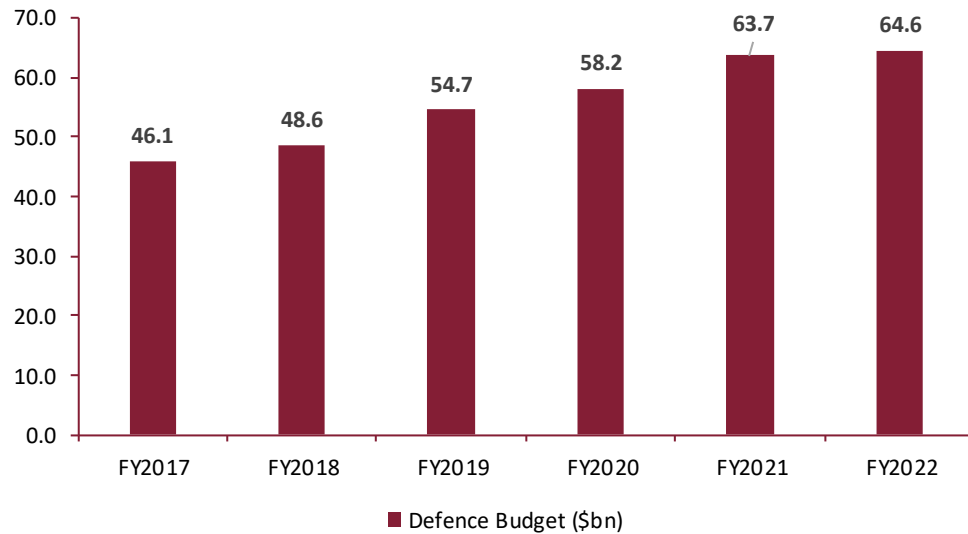
Budget Allocations – An outlay of \$ 9.48 billion has been earmarked for domestic procurement in Fiscal 2021-2022 in order to mitigate procurement delays stemming from non-availability of capital.

Corporatisation of Ordnance Factory Board ("OFBs") – The government aims to corporatize OFBs in a bid to improve production efficiency and transparency. There are 41 ordnance factories in India, which source components from Tier 2 and Tier 3 suppliers.

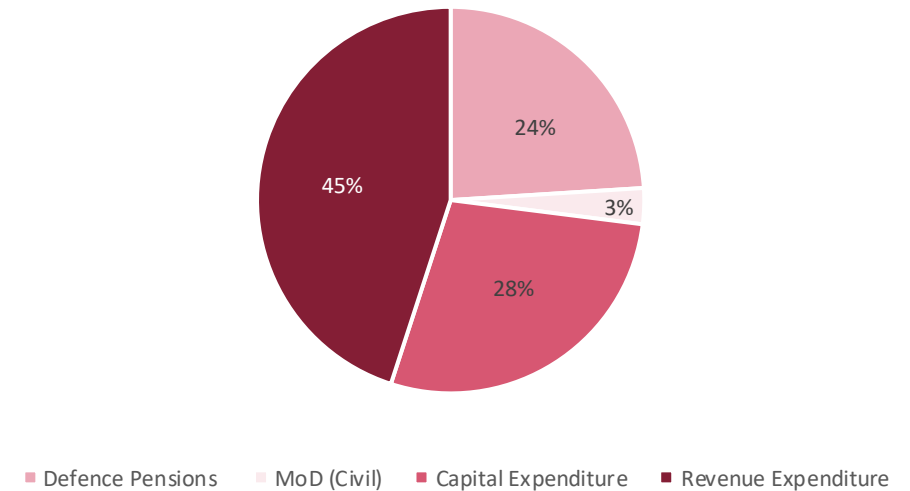
Foreign Development Investment ("FDI") – The FDI limit under the automatic route has been increased from current 49% to 74%. The increase will encourage foreign manufacturers to invest in India with confidence as they will have a controlling stake in a joint venture.

Indian Defence Industry

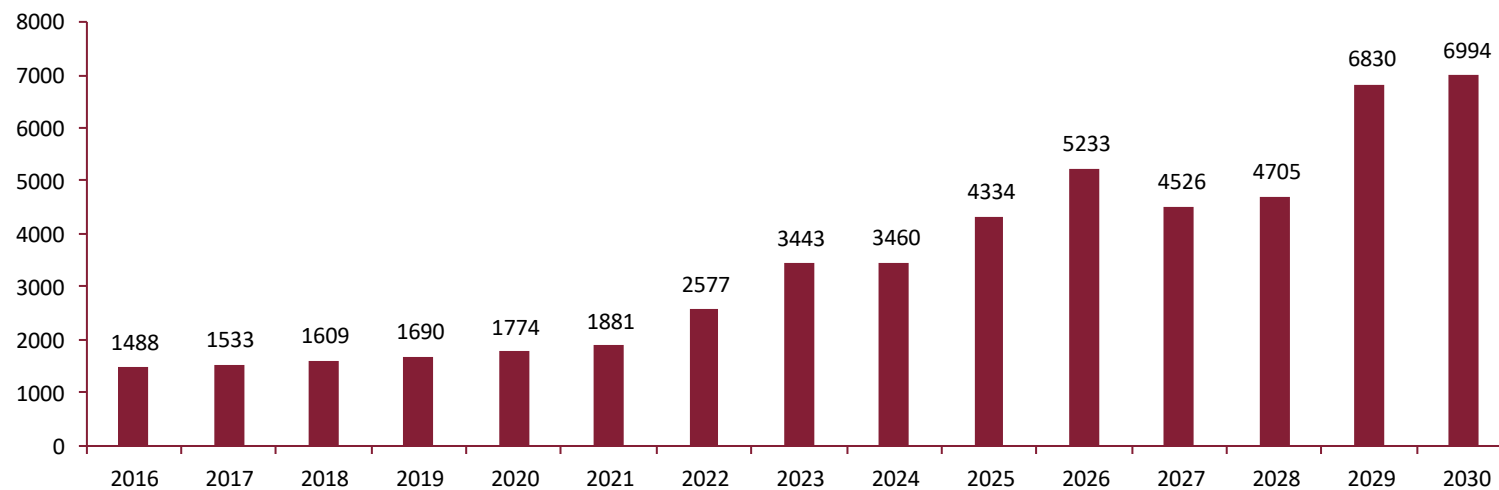
Defence Budget Growth Fiscals 2017-2022



Defence Budget Components - FY22

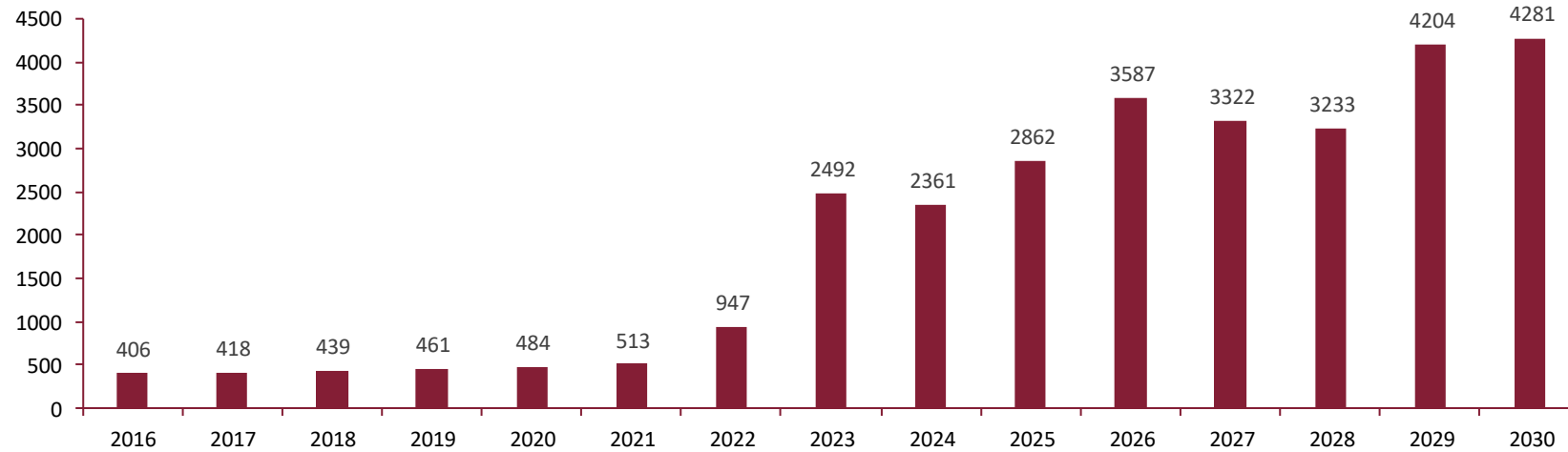


India Defence Electronics Market (\$mn)

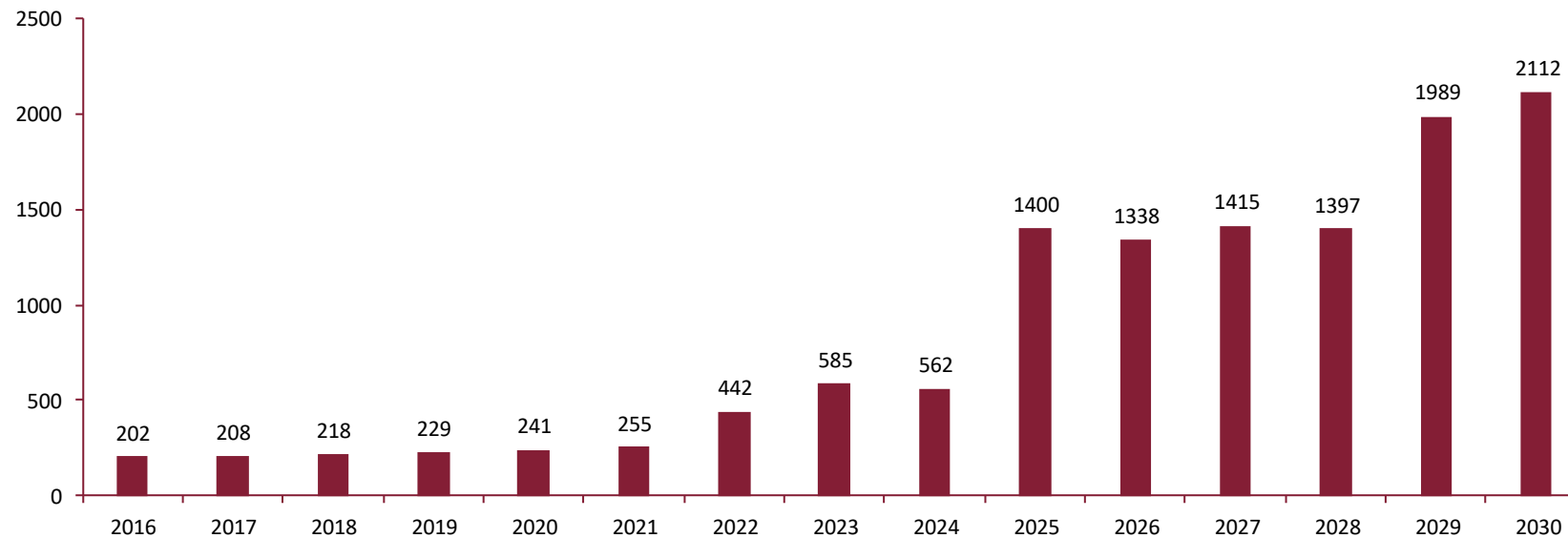


Indian Defence Industry

India EMP Protection Market (\$mn)

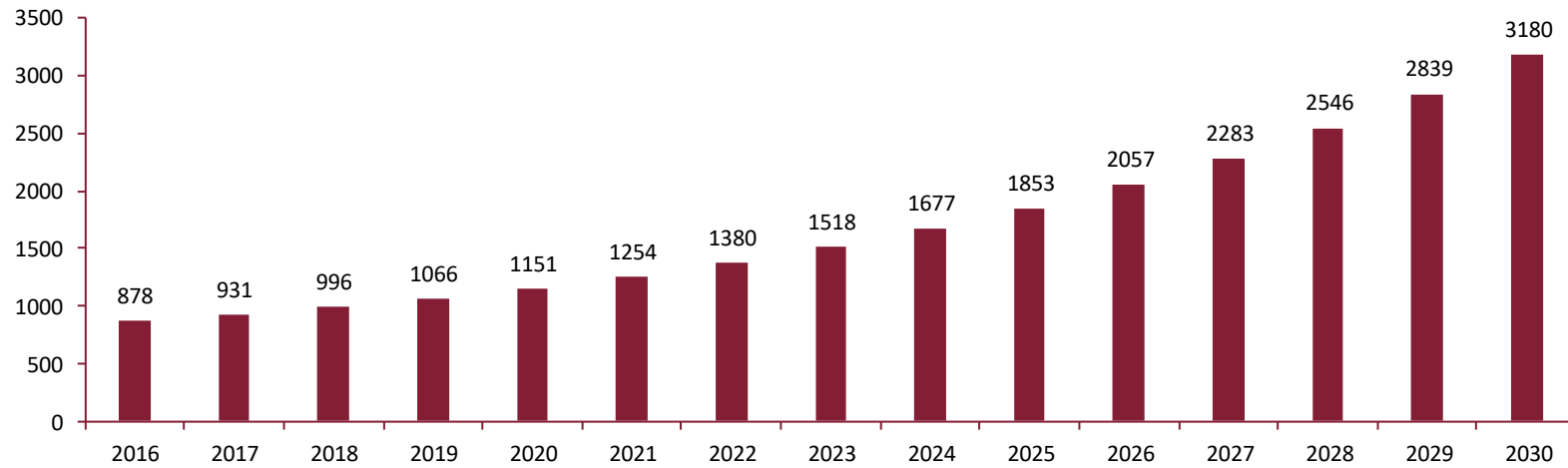


India Defence Optics Market (\$mn)

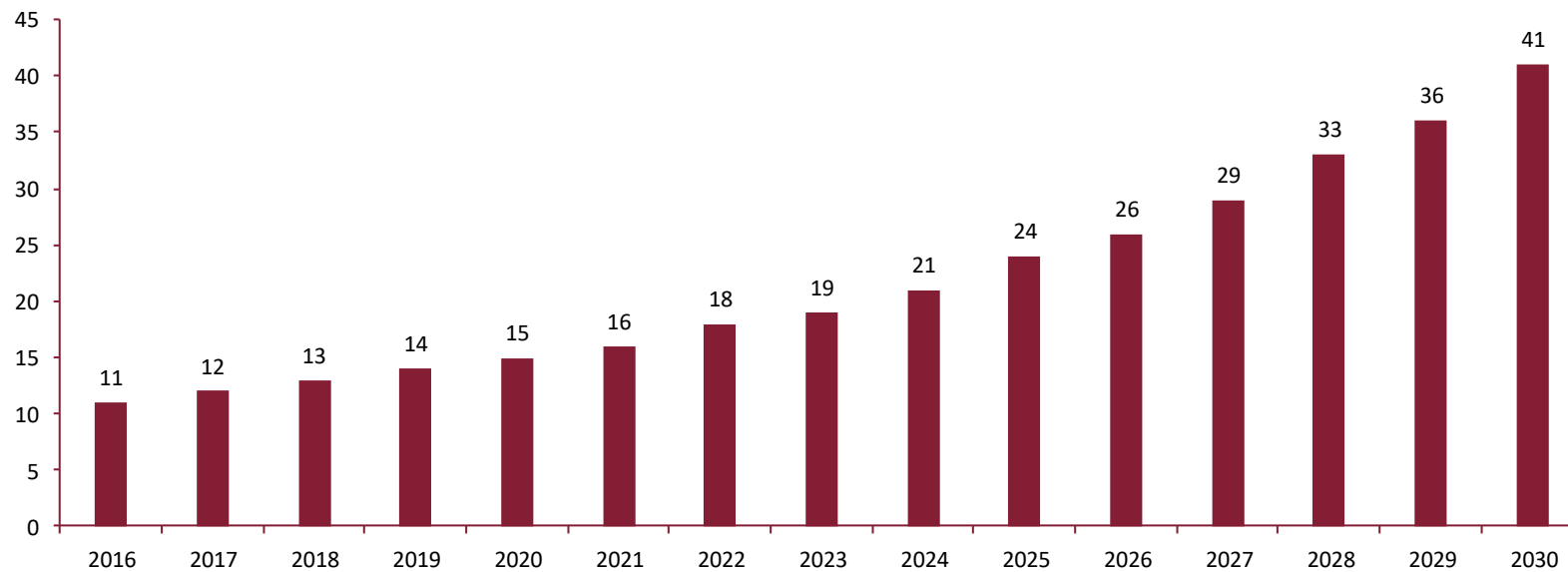


Indian Defence Industry

Military Radar Market (\$mn)

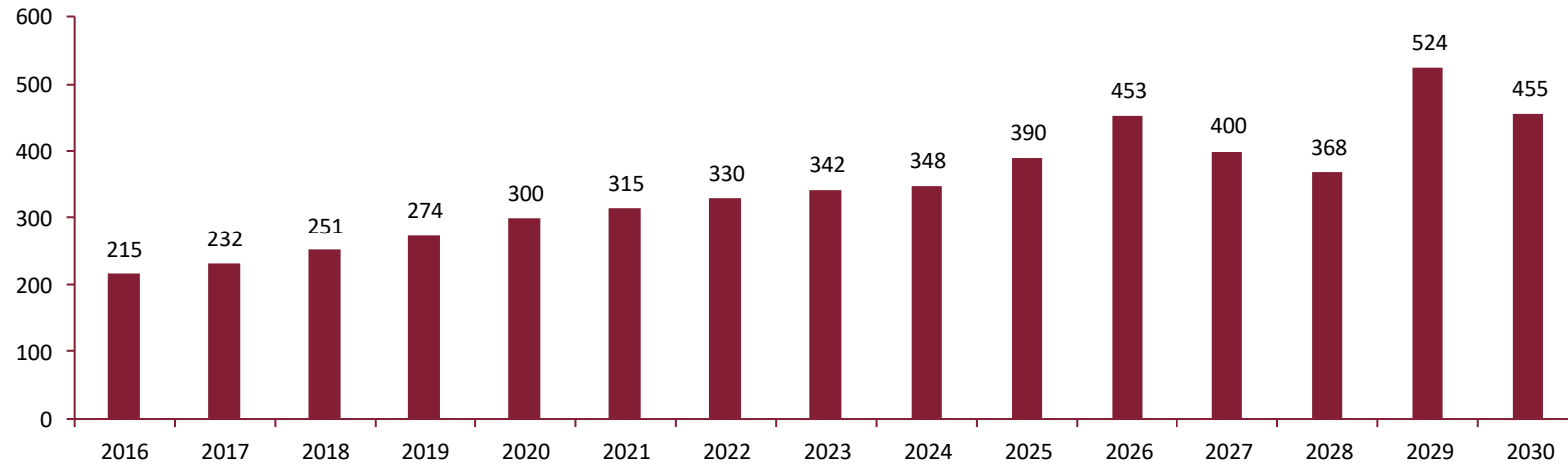


Torpedoes Component Market (\$mn)

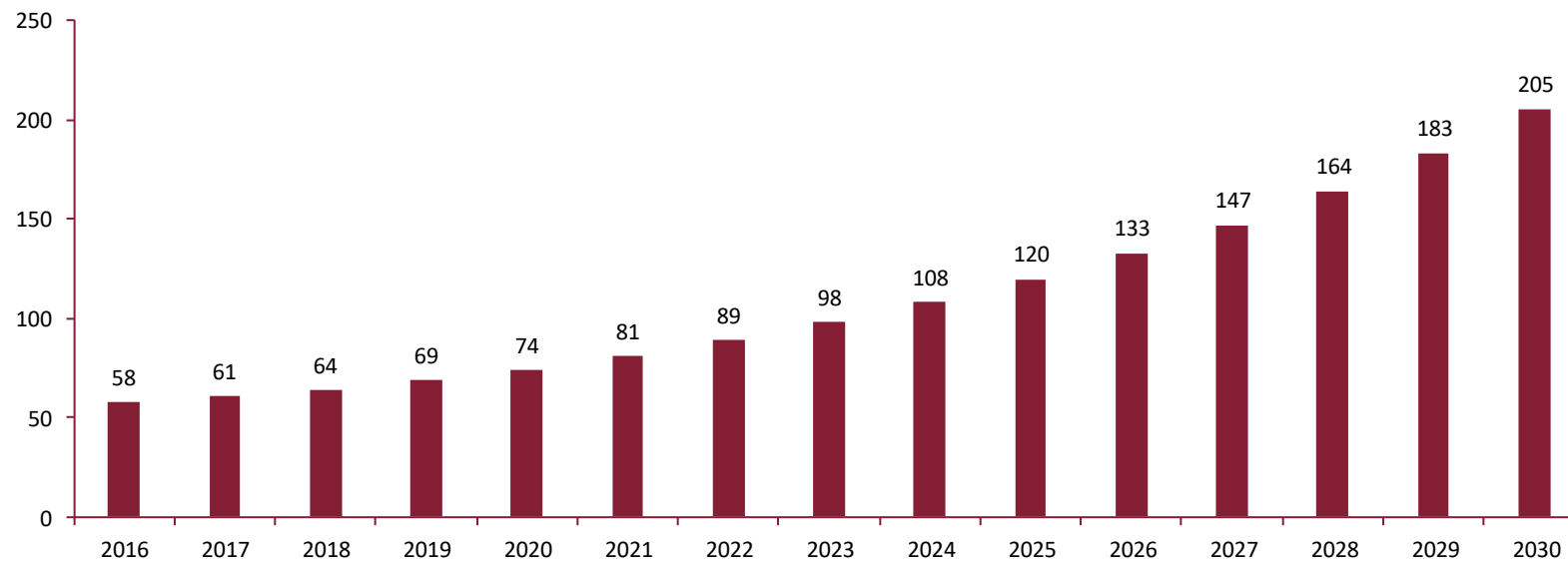


Indian Defence Industry

India Defence Avionics Market (\$mn)



Ground COMINT/ELINT Market (\$mn)



Indian Defence Industry

Indian Space Industry Ecosystem

ISRO enabled space ecosystem

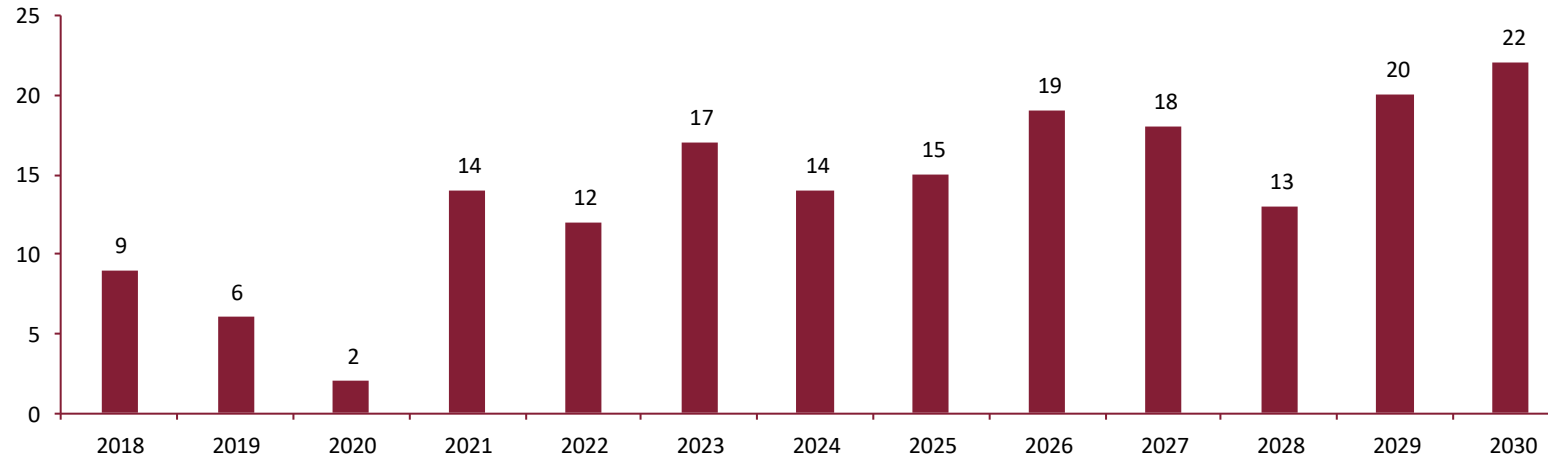


New Space Ecosystem

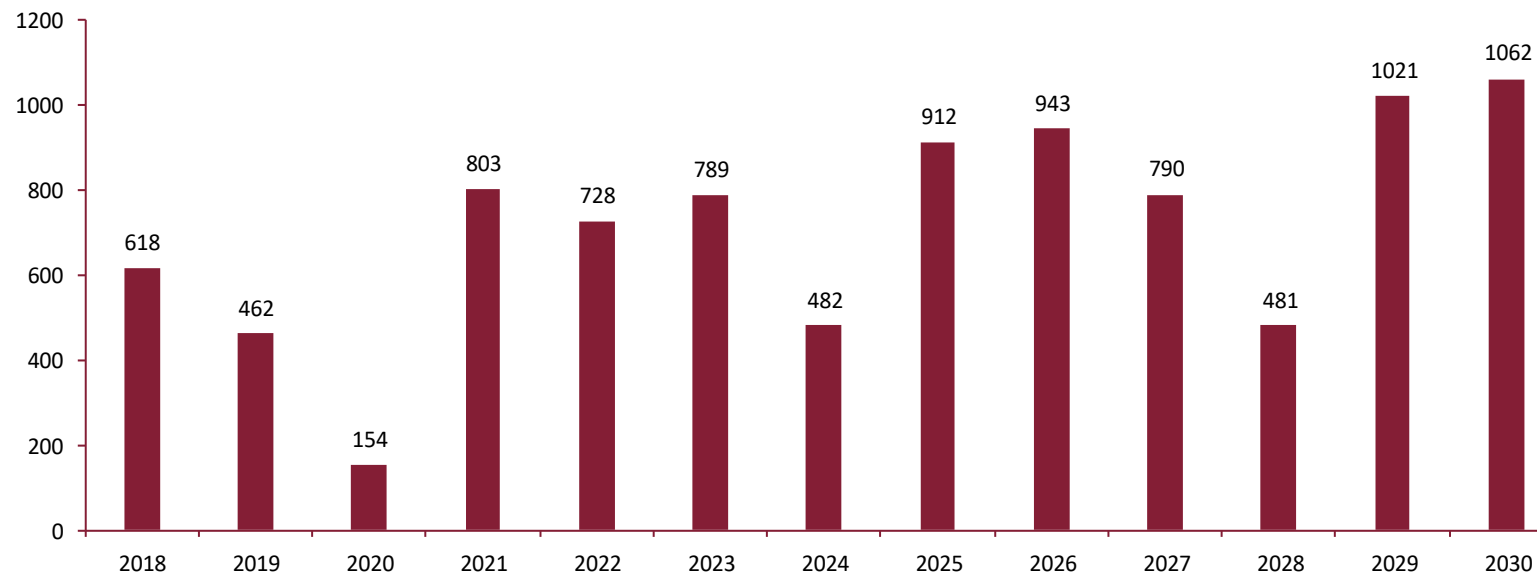


Indian Defence Industry

Indian Satellite Manufacturing Forecast (Units; No. of Satellites CY 2021-2030)

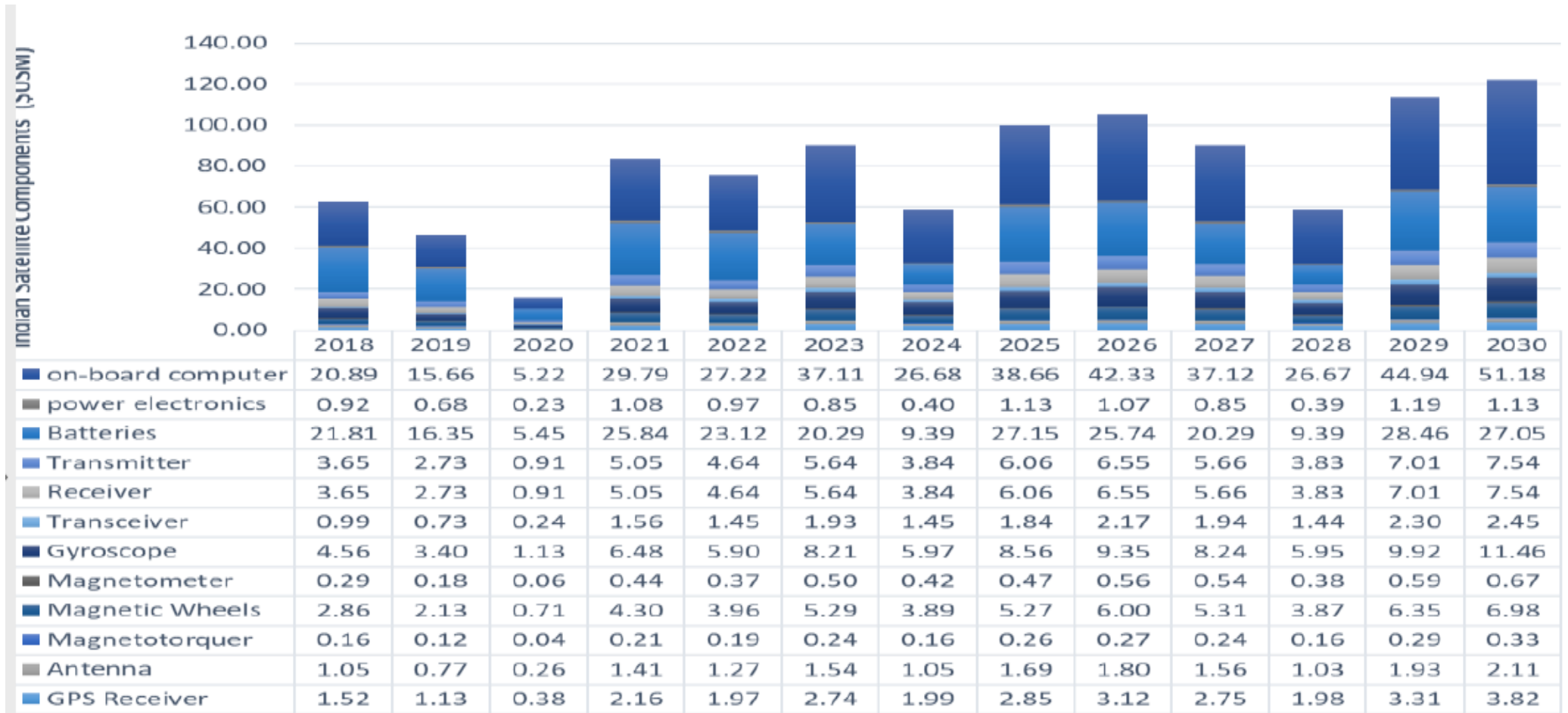


Indian Satellite Manufacturing Revenue Forecast CY 2021-2030 (\$mn)



Indian Defence Industry

Indian Satellite Manufacturing Components Forecast CY 2021-2030 (\$mn)



Comparison with industry peers

Name of Company	FV (Rs.)	Revenue from operations FY21 (Rs.mn)	PAT Rs.mn)	Diluted EPS (Rs.)	P/E Ratio	RoNW	Net Asset Value per equity share (Rs.)	Net Worth (Rs.mn)
MTAR Technologies Ltd	10.0	2464.3	460.7	17.0	83.6	9.7%	155.0	4767.6
Astra Microwave Products Ltd	2.0	6409.1	288.5	3.3	51.3	5.2%	64.5	5587.1
Centum Electronics Ltd	10.0	8174.3	120.4	13.3	34.9	5.4%	173.1	2230.8
Bharat Electronics Ltd	1.0	141086.9	20997.6	8.6	23.5	19.0%	45.4	110595.8
Paras Defence and Space Technologies Limited	10.0	1433.3	157.9	5.6	139.6	7.6%	53.0	2066.4

Comparison with industry peers

Product Capability Comparison of Major Indian Defence Stakeholders

Company	Radars - Tracking & Surveillance	Radars - Multimission	Radars - Specialized (Stealth Detection etc.)	Seekers and Electronics for Missiles/ Torpedoes/ Sonbuys	EW	Communications and SDR	Satcom	Ground Stations	Fire Control Systems	Avionics	Nano and Micro Satellites	Testing
Data Patterns												
L&T (Defence Engineering Revenues)												
BEL												
Paras Defence												
Mahindra Defence Systems												
Tata												
Astra Microwave Products												
Godrej & Boyce												
Centum Electronics												
Alpha Design Technologies												
Adani Aerosapce & Defence Ltd.												
CoreEI Technologies												
Mistral Solutions												

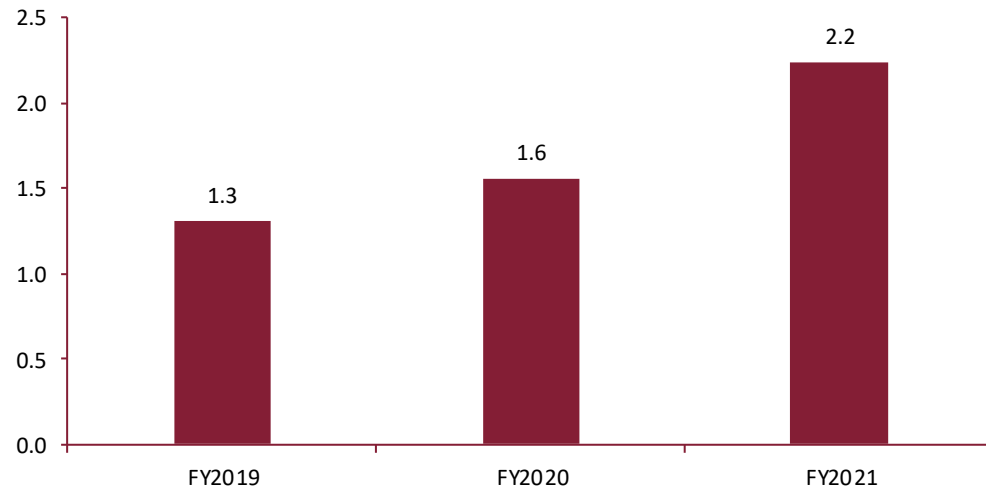
Strong Capability - Products and Components	
Medium Capability - Mostly Components/ Subsystems	
No Capability	

Key Risks

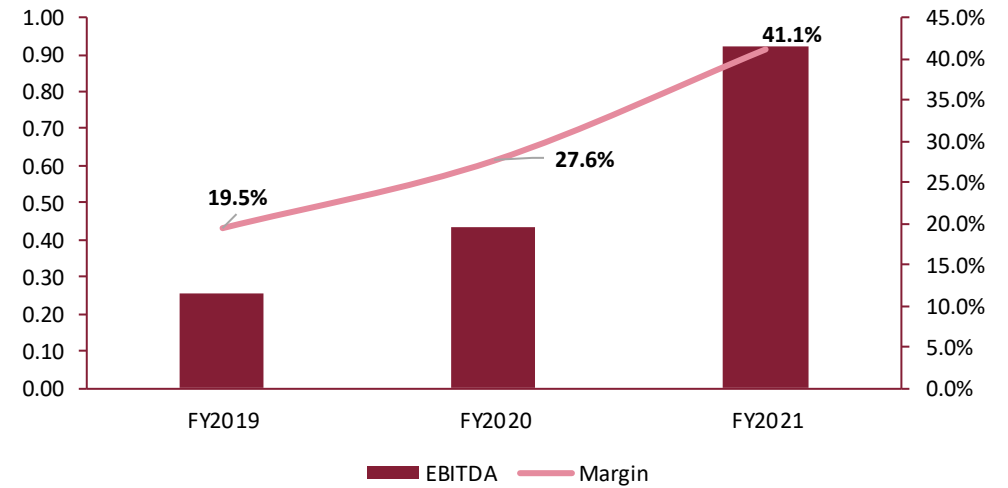
- Their business is largely dependent on contracts from the GoI and associated entities including defence public sector undertakings and government organizations involved in space research. A decline or reprioritisation of the Indian defence or space budget, reduction in orders, termination of existing contracts, delay of existing or anticipated contracts or programmes or any adverse change in the GoI's defence or space related policies may have a material adverse impact on their business.
- They depend on a limited number of customers such as DRDO Defence PSUs such as MoD, BrahMos Aerospace and the Indian government space organization for a significant portion of their revenue. The loss of any of their major customers due to any adverse development or significant reduction in business from their major customers may adversely affect their business, financial condition, results of operations and future prospects.
- The loss, shutdown or slowdown of their Design and Engineering and manufacturing facility may have a material adverse effect on their business, results of operations and financial condition.
- Availability and cost of import and acquisition of raw materials could adversely affect their business, financial condition, results of operations and prospects.
- They have significant power, and fuel requirements and any disruption to their power sources could increase their production costs and adversely affect their results of operations.

Financial Story

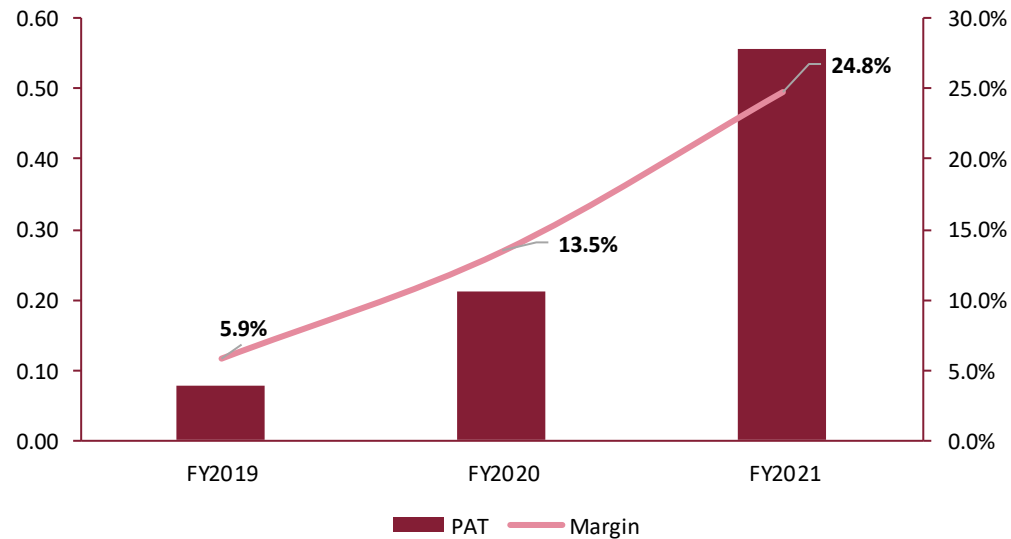
Revenue (Rs.bn)



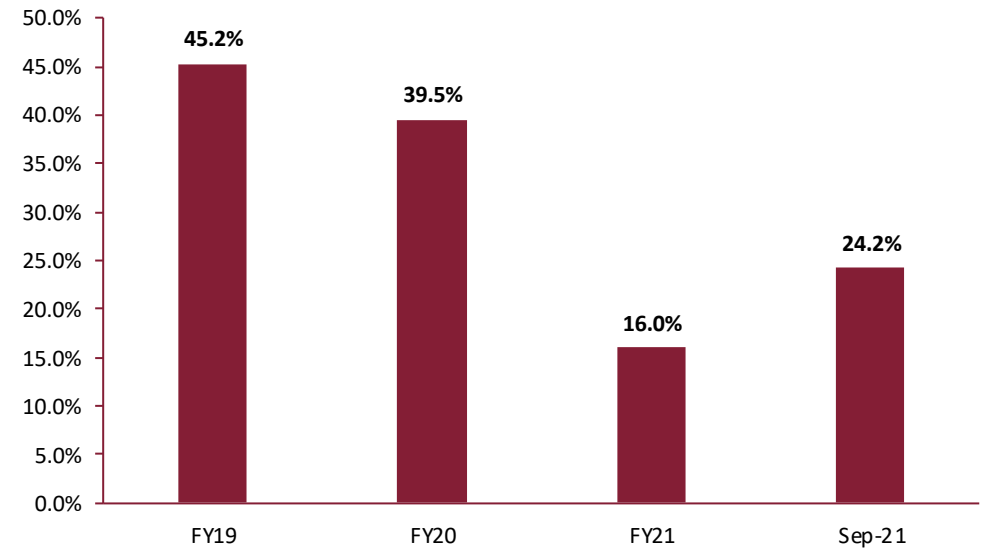
EBITDA (Rs.bn) & Margins (%)



Adj. PAT (Rs.bn) & Margins (%)



Debt/Equity (%)



INDSEC Rating Distribution

BUY : Expected total return of over 15% within the next 12-18 months.

HOLD : Expected total return between 0% to 15% within the next 12-18 months.

SELL : Expected total return is negative within the next 12-18 months.

NEUTRAL: No investment opinion, stock under review.

Note: Considering the current pandemic situation, the duration for the price target may vary depending on how the macro scenario plays out. Therefore, the duration which has been mentioned as a period of 12-18 months for upside/downside target may be higher for certain companies.

DISCLOSURE

DISCLOSURE

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Since inception company's focus has been on research. In view of its research capabilities ISFL focused mainly on institutional business and is today empaneled with most of the local financial institutions, insurance companies, banks and mutual funds. ISFL has grown from being a medium size broking outfit to become one of the largest capitalized Indian broking company offering the complete range of broking services.

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- No penalties have been imposed for any economic offence by any authority.
- No material deficiencies in the systems and operations of the Company have been observed by any regulatory agency.
- There are no pending material litigations or legal proceedings, findings of inspections or investigations for which action has been taken or initiated by any regulatory authority against the Company or its Directors, principal officers or employees or any person directly or indirectly connected with the Company.

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