

# AVIATION



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# Executive summary

Aviation  
market ranking  
as of 2024

**3<sup>rd</sup> largest**

Air passenger  
traffic in FY24  
(in millions)

**376.43**

Air passenger  
traffic in FY23  
(in million)

**327.28**

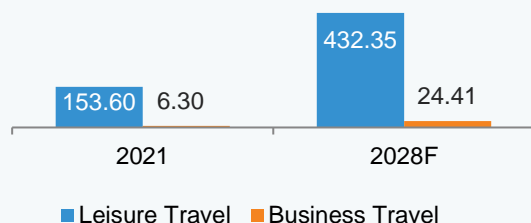
For 2028,  
forecasted  
contribution of  
travel &  
tourism to GDP

**US\$ 512 billion**

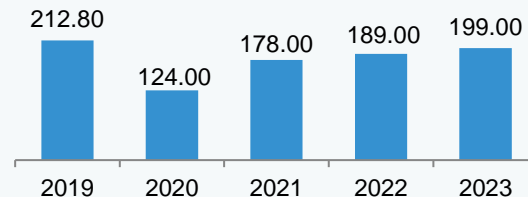
Expected  
expenditure of  
Indian  
travellers in  
2030

**US\$ 410 billion**

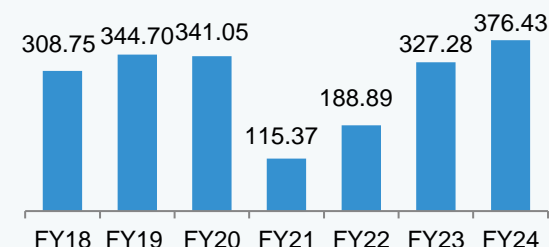
**Business and Leisure Travel Spending  
(US\$ billion)**



**Travel and Tourism Total Contribution to  
GDP (US\$ billion)**



**Air passenger traffic in India (million)**



*Note: E - Estimated, F - Forecasted,*

*Source: World Travel and Tourism Council, Airport Authority of India*



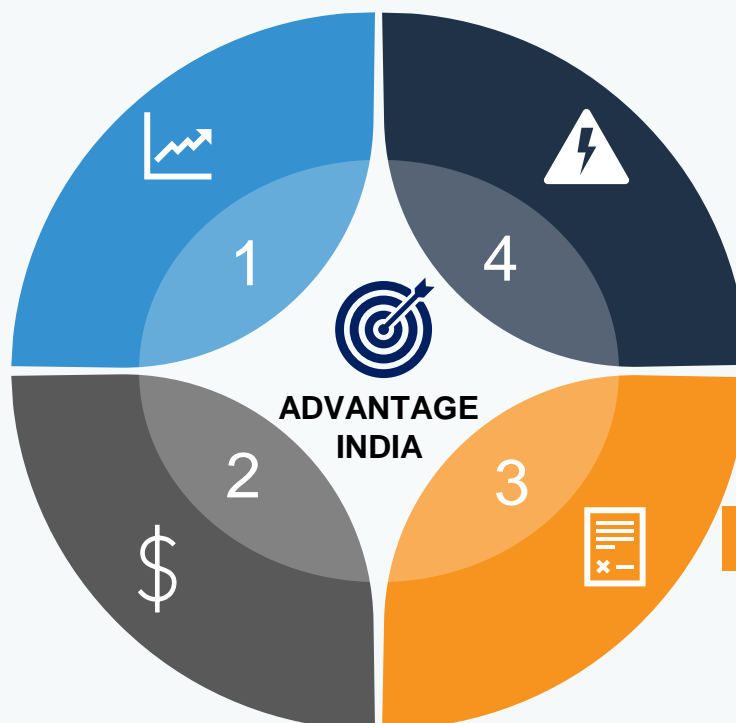
# Advantage India

## 1 Robust demand

- ▶ Rising working group and widening middle-class demography is expected to boost demand.
- ▶ India has envisaged increasing the number of operational airports to 220 by 2025.
- ▶ India will require over 2800 new commercial airplanes in the next 20 years.

## 2 Increasing investments

- ▶ Six international airports completed under PPP. The sector is expected to witness investments worth US\$ 25 billion by 2027
- ▶ Growing private sector participation through the Public-Private Partnership (PPP) model is evident, with 14 airports in India currently operated under PPP agreements.
- ▶ In May 2023, Union Civil Aviation Minister Mr. Jyotiraditya Scindia said that there is a plan to invest Rs. 1 lakh crore (US\$ 12 billion) in airports in the coming days.



## 4 Opportunities in MRO

- ▶ Growth in aviation accentuating demand for MRO facilities.
- ▶ Expenditure in MRO accounts for 12-15% of the total revenue; it is the second-highest expense after fuel cost.
- ▶ Revenues of domestic MRO services providers in India are expected to triple by FY28, driven by a doubling aircraft fleet, government support, and ongoing MRO capex at airports, according to Crisil.
- ▶ In June 2023, the US committed to creating a global hub for MRO for high-end drones in India.

## 3 Policy support

- ▶ As per the present FDI Policy, 100% FDI is permitted in scheduled Air Transport Service/Domestic Scheduled Passenger Airline (Automatic upto 49% and Government route beyond 49%). However, for NRIs 100% FDI is permitted under automatic route in Scheduled Air Transport Service/Domestic Scheduled Passenger Airline

**Notes:** FDI - Foreign Direct Investment, MRO - Maintenance, Repair and Overhaul; FY - Indian Financial Year (April - March)

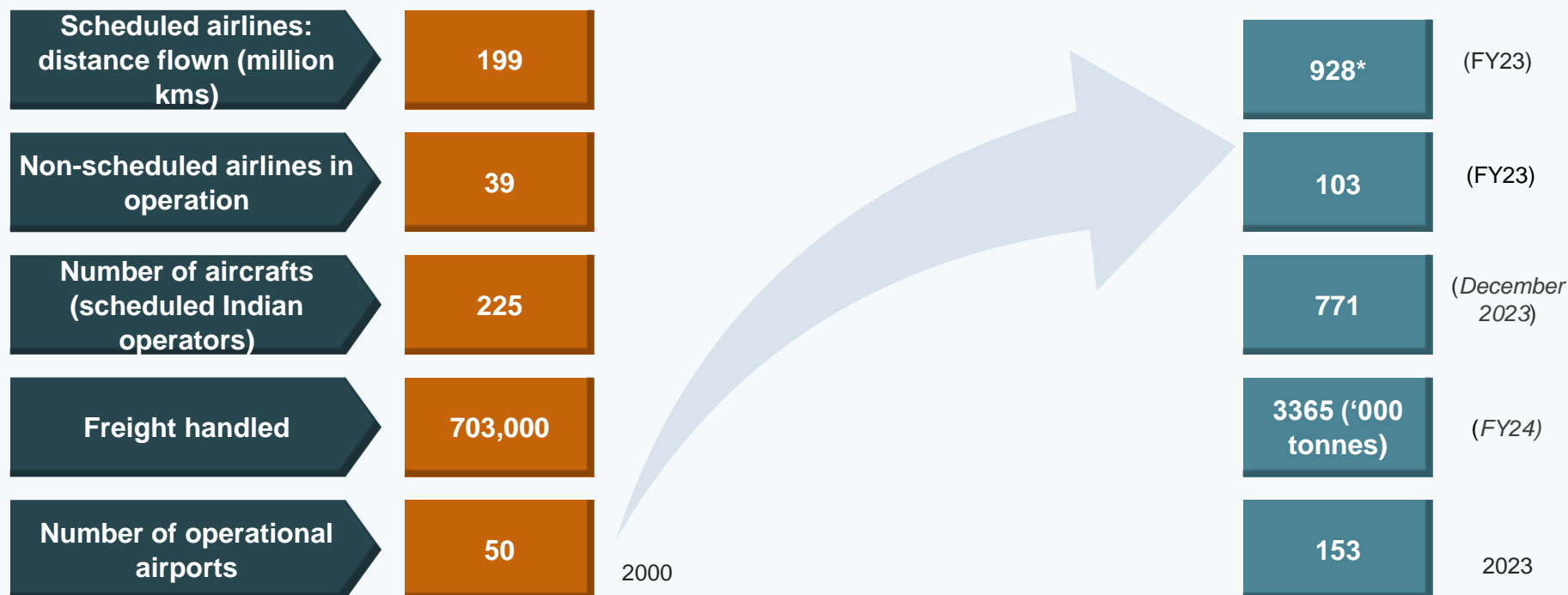
**Source:** Ministry of Civil Aviation, MRO India, IATA, Crisil, FICCI, PWC

# Market Overview



# Evolution of the Indian aviation sector

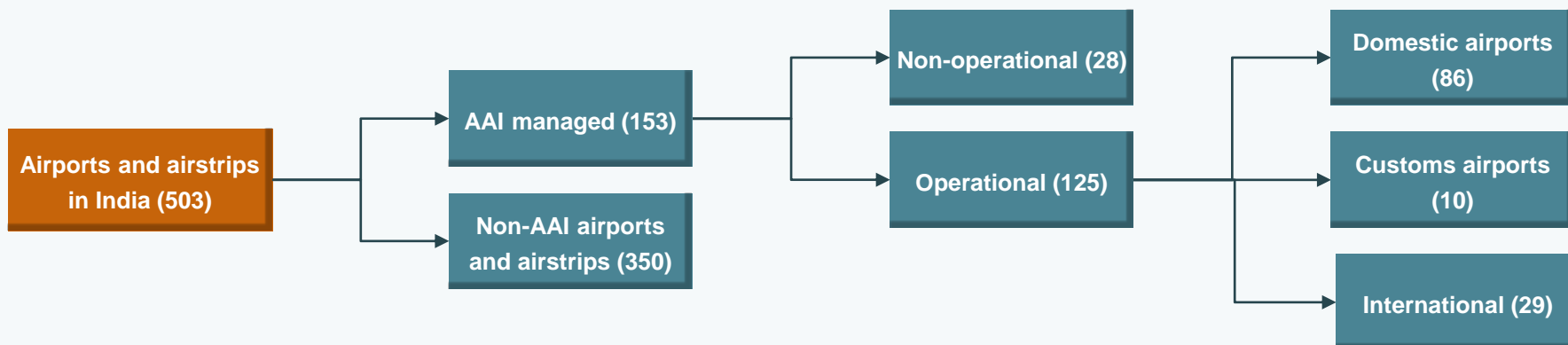
- India is the 3<sup>rd</sup> largest civil aviation market in the world.
- In FY24, airports in India pegged the domestic passenger traffic to be 306.79 million, a 13.5% YoY growth, and international passenger traffic to be 69.64 million, a 22.3% YoY growth, over the same period last year.
- On December 19, 2023, ICRA reported that the Indian aviation industry is projected to see year-on-year revenue growth of 15-20% in FY24 and 10-15% in FY25. Despite healthy passenger traffic growth, the recovery in industry earnings will be gradual due to the high fixed costs.
- The Government has set a target to operationalize 1,000 UDAN routes and to revive/develop 100 unserved & underserved airports/heliports/water aerodromes (including 68 aerodromes) by 2024.



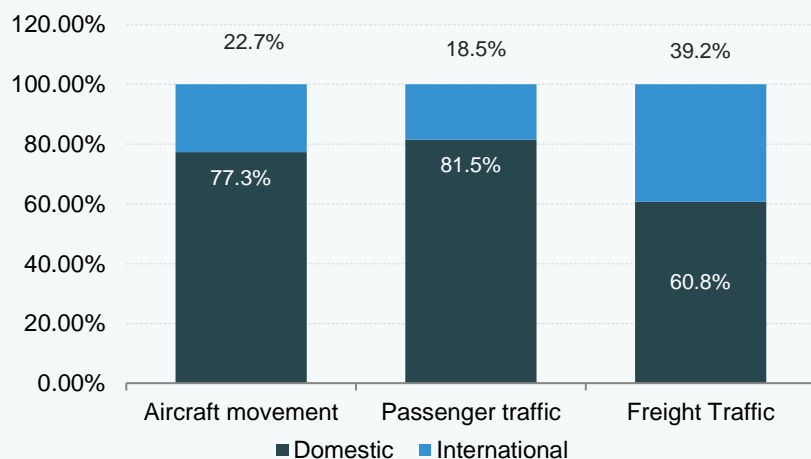
**Note:** \*Scheduled Domestic Services, FY - Indian Financial Year (April - March), mn km - Million Kilometres

**Source:** Airports Authority of India, Ministry of Civil Aviation, DGCA, News Articles

# Airports and Airstrips



Activity in AAI airports - shares (%) - FY24



Activity in AAI airports  
- shares (%) - FY24







Basic facts

- Airports Authority of India (AAI) was -
  - Established in 1994 under the Airports Authority Act.
  - Responsible for developing, financing, operating and maintaining all Government airports.
  - The Aircraft Act (1934) governs remaining airports.

**Note:** AAI - Airports Authority of India, JV - Joint Venture, FY - Indian Financial Year (April - March),  
**Source:** Airports Authority of India



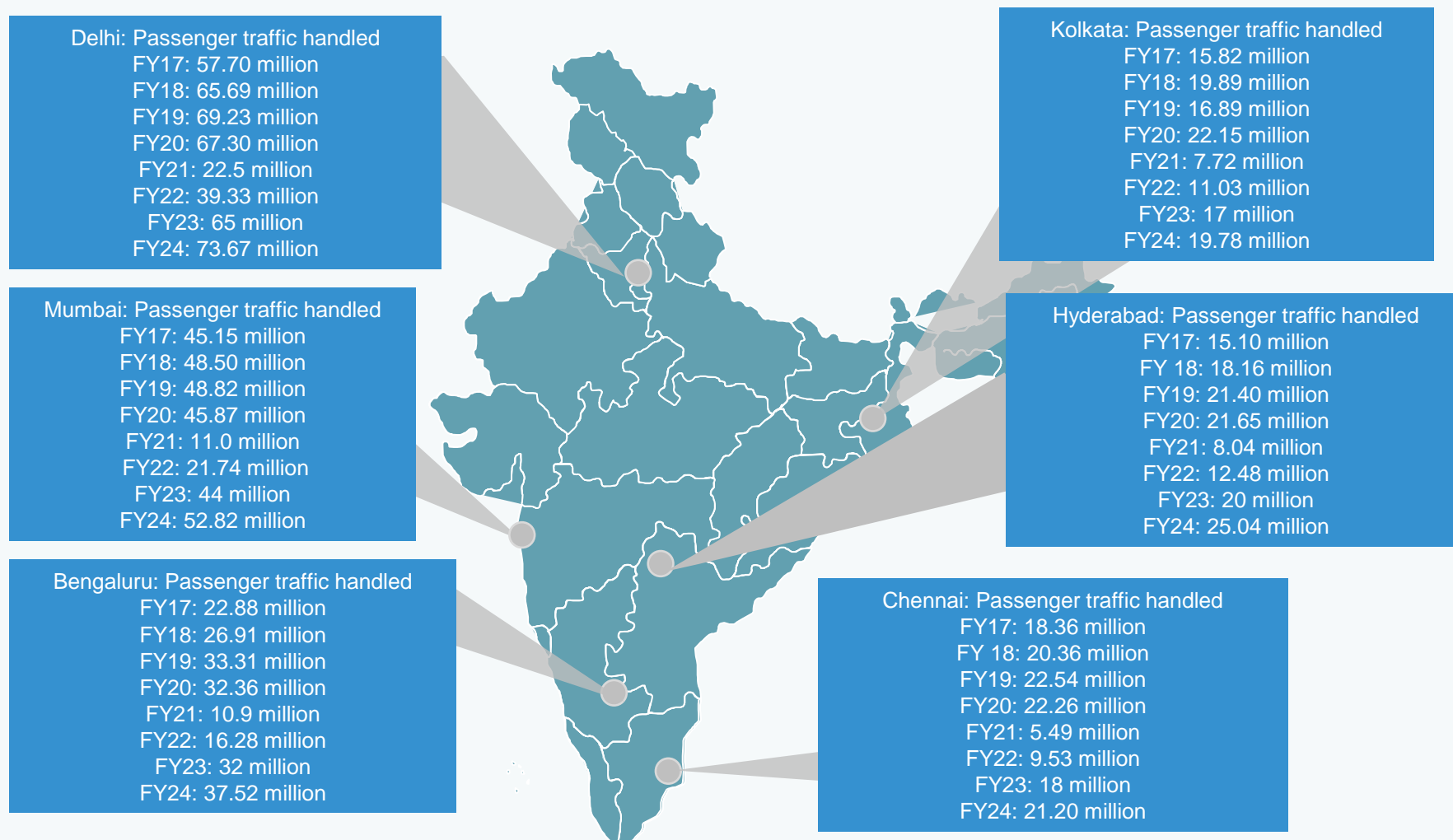
# Key airlines operating in India

Airline operators	Market share (1Q24)	Passengers ferried (Lakh) 1Q24	Passengers ferried (Lakh) CY23
	60.3%	235.97	919.38
	5.4%	21.01	83.90
	12.7%	49.60	147.53
	4.5%	17.55	62.32
	6.06%	23.40	108.93
	9.8%	38.42	138.47

**Note:** CY- Calendar Year , 1Q24-Till March 2024

**Source:** Directorate General of Civil Aviation

# Key airports in India

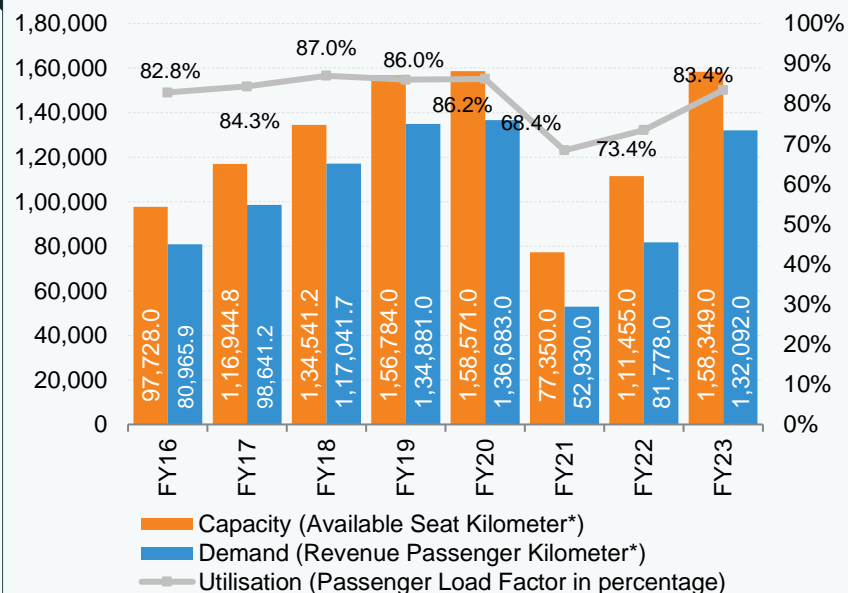


**Note:** FY - Indian Financial Year (April - March), \*Until January 2024

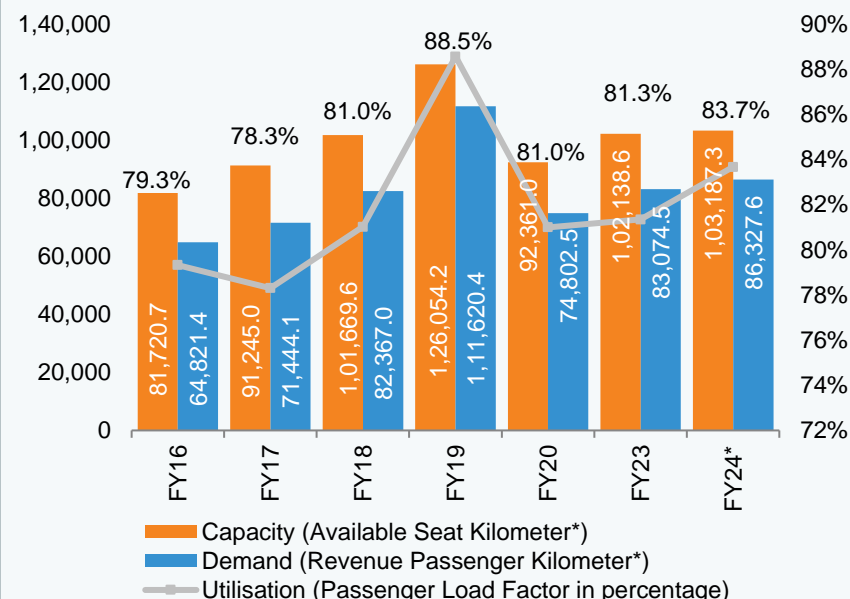
**Source:** AAI, News Articles

# Airline's demand, capacity and utilisation

## Domestic Demand, Capacity and Utilisation



## International Demand, Capacity and Utilisation



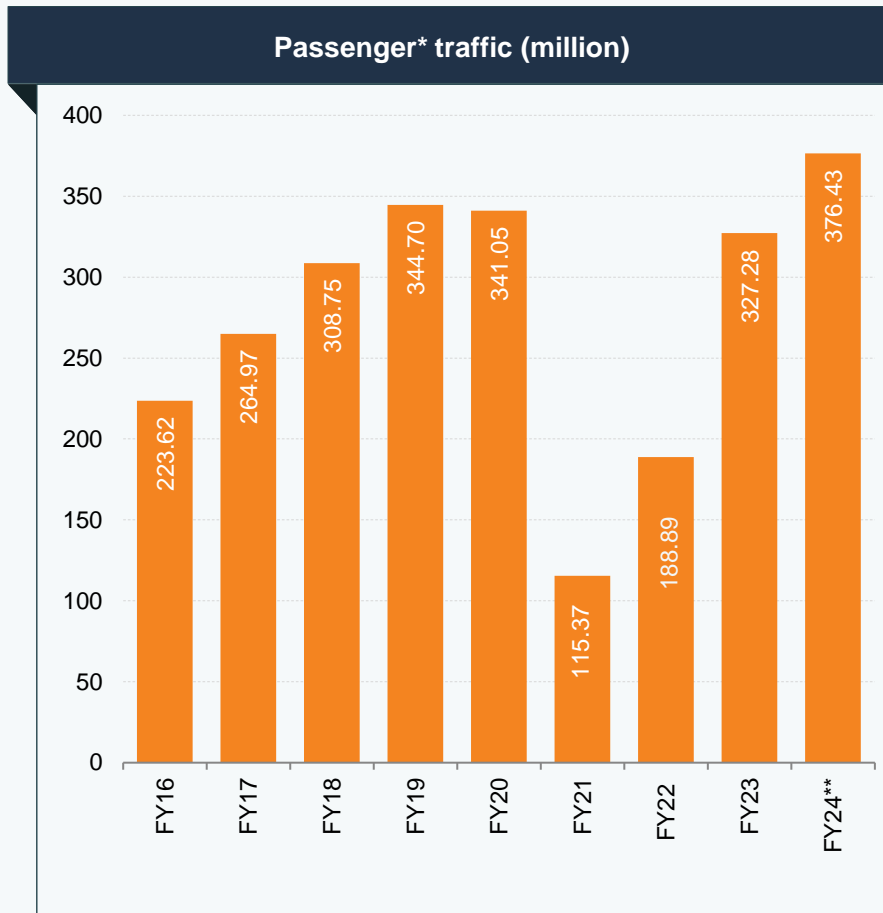
- Demand and Capacity in India's civil aviation sector have shown robust growth.
- Capacity (Available Seat Kilometer) available in domestic flights increased to 158,349 million kms in FY23. Correspondingly, demand (Revenue Passenger Kilometer) for domestic services grew rapidly to 132,092 million kms in FY23.
- Growth in demand has consistently outpaced the growth in supply, resulting in high utilisation (Passenger Load Factor).
- During the year from 2011-12 to 2022-23, the capacity (ASK) in the domestic market grew at a rate of 7.27% (CAGR) while the demand (RPK) grew at 7.96% (CAGR) during the same period.

**Notes:** \*in million kilometre, For Graph 2, FY 21,22- In wake of Covid-19 all International scheduled operations carried by Indian carriers have been suspended as per DGCA's Circular, FY24\*: Till January 2024

**Source:** DGCA

# Passenger traffic...(1/2)

- The passenger traffic (International + Domestic) during FY24 stood at 376.43 million.
- Passenger traffic (International + Domestic) stood at 327.28 million in FY23.
- Growth in passenger traffic has been strong since the new millennium, especially with rising income and low-cost aviation.
- As per the Airports Council International (ACI), Delhi's Indira Gandhi International Airport was ranked at the 10th spot in the world's top 10 busiest airports by passenger traffic.
- India has become the third-largest domestic aviation market in the world and is expected to overtake the UK to become the third-largest air passenger market by 2024.
- By 2036, India is projected to have 480 million flyers, more than Japan (just under 225 million) and Germany (just over 200 million) combined.
- India is expected to overtake China and the United States as the world's third-largest air passenger market in the next ten years, by 2030, according to the International Air Transport Association (IATA).



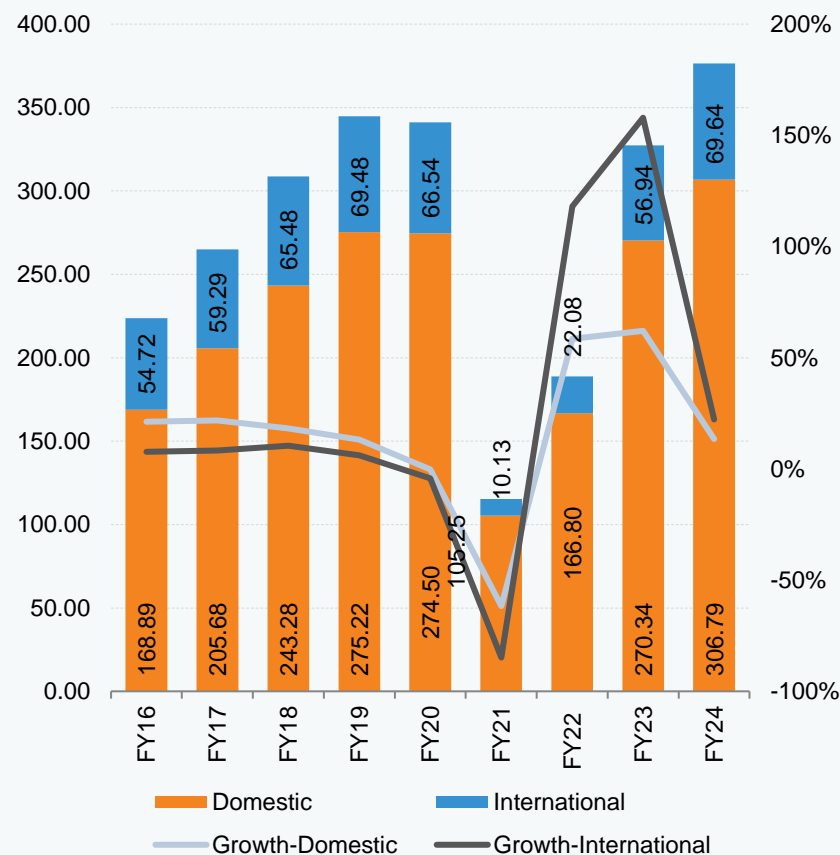
**Notes:** FY - Indian Financial Year (April - March), \*passenger - Domestic + International, \*\*-Until March 2024

**Source:** Association of Private Airport Operator, Airports Authority of India

## Passenger traffic...(2/2)

- Domestic passenger and international passenger traffic increased at a CAGR of 6.95% and 0.57%, respectively, from FY16 to FY23.
- In FY24, airports in India pegged the domestic passenger traffic to be 306.79 million, a 13.5% YoY increase, and international passenger traffic to be 69.64 million, a 22.3% YoY increase, as compared to FY23.
- During April-January 2024, the domestic passenger traffic stood at 254.44 million, registering a 15.33% increase, and international passenger traffic stood at 57.57 million, a 23.46% increase, as compared to the same period the previous year.

International and domestic passenger traffic (million)

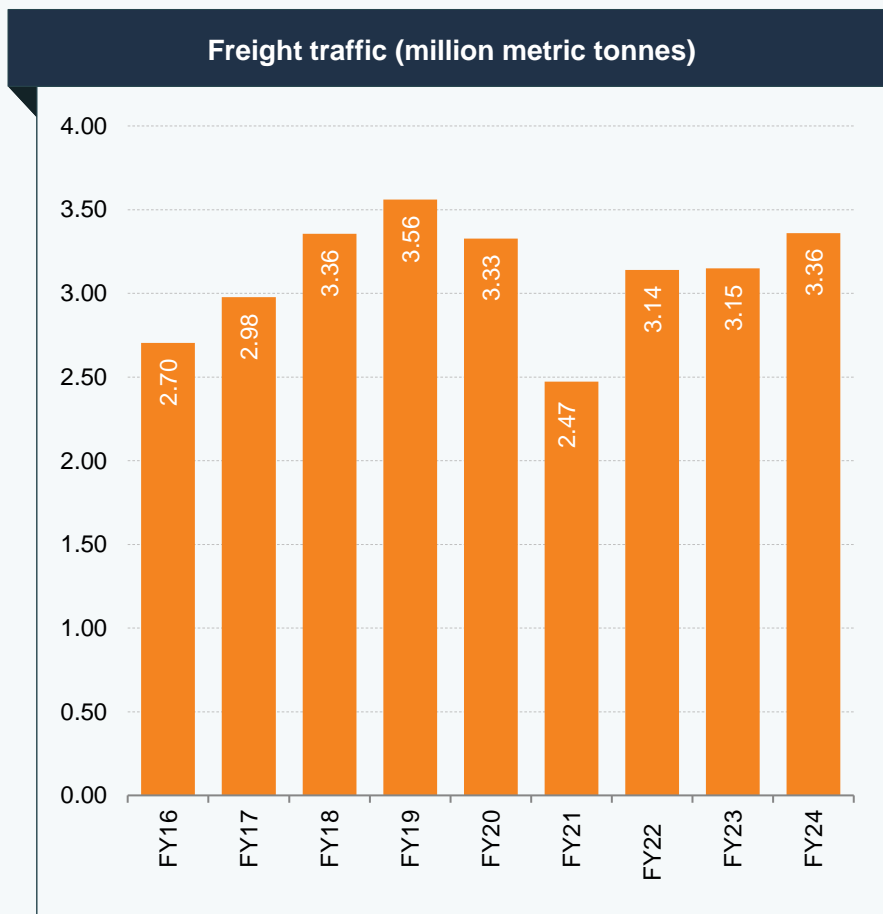


**Notes:** E- Estimate, YoY - Year on Year, FY - Indian Financial Year (April - March), \*Until January 2024

**Source:** Airports Authority of India, Ministry of Civil Aviation

# Freight traffic...(1/2)

- Between FY16 and FY23, freight traffic increased at a CAGR of 2.20% from 2.70 MMT to 3.15 MMT.
- Freight traffic (International + Domestic) stood at 3.36 MMT in FY24.
- During April-January 2024, freight traffic (International + Domestic) stood at 2.73 MMT).
- Freight traffic in airports in India has the potential to reach 17 MMT by FY40.
- Growth in import and export in India will be the key driver for growth in freight traffic as 30% of total trade is undertaken via airways.



**Notes:** FY - Indian Financial Year (April - March) MMT- Million Metric Tonnes, \*Until January 2024

**Source:** Airports Authority of India

## Freight traffic...(2/2)

- From FY16 to FY24, domestic freight traffic increased at a CAGR of 3% and international freight traffic increased at a CAGR of 2.7%.
- In FY24, domestic freight traffic stood at 1.32 MMT and international freight traffic was 2.04 MMT.
- During April-March 2024, domestic freight traffic was 1320 thousand tonnes and international freight traffic was 2046 thousand tonnes.
- Delhi Airport received approval from the Government of India on February 7, 2023, allowing DIAL to serve as a Cargo Transshipment hub between Bangladesh and other global destinations for export cargo. Delhi International Airport Limited (DIAL), a subsidiary of GMR Airports Infrastructure Limited, on March 3, 2023, welcomed the first batch of trans-shipment cargo from Bangladesh, paving the way for a faster and cost-effective route for shipping export cargo internationally.

International and domestic freight traffic

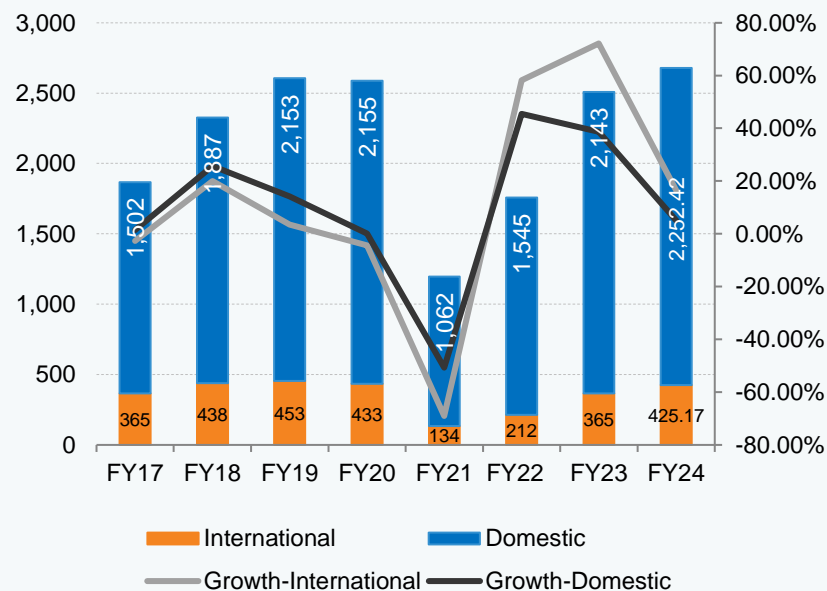


**Notes:** FY - Indian Financial Year (April - March), \*Until January 2024

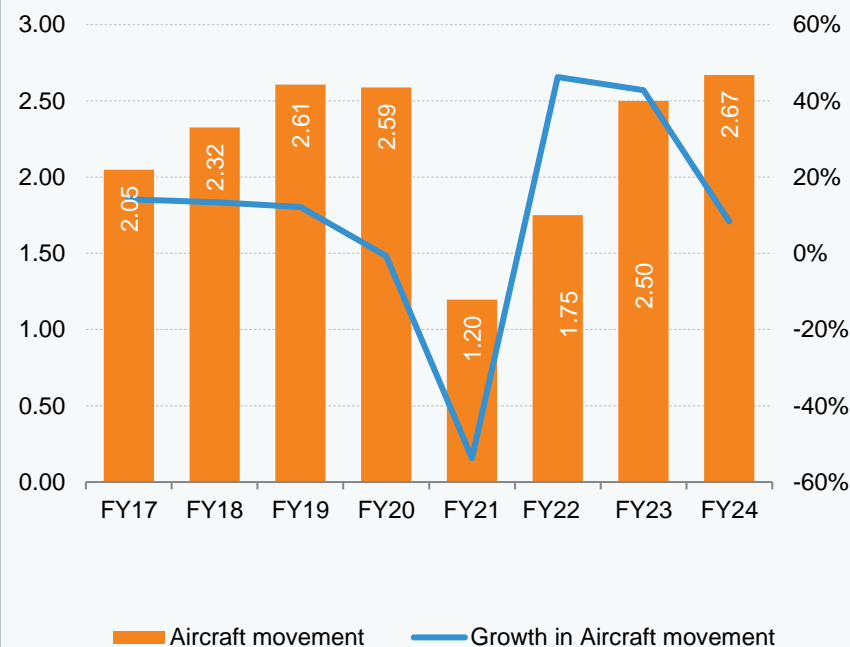
**Source:** Airports Authority of India

# Aircraft movement

Aircraft movement growth ('000)



Total aircraft movement (in million)



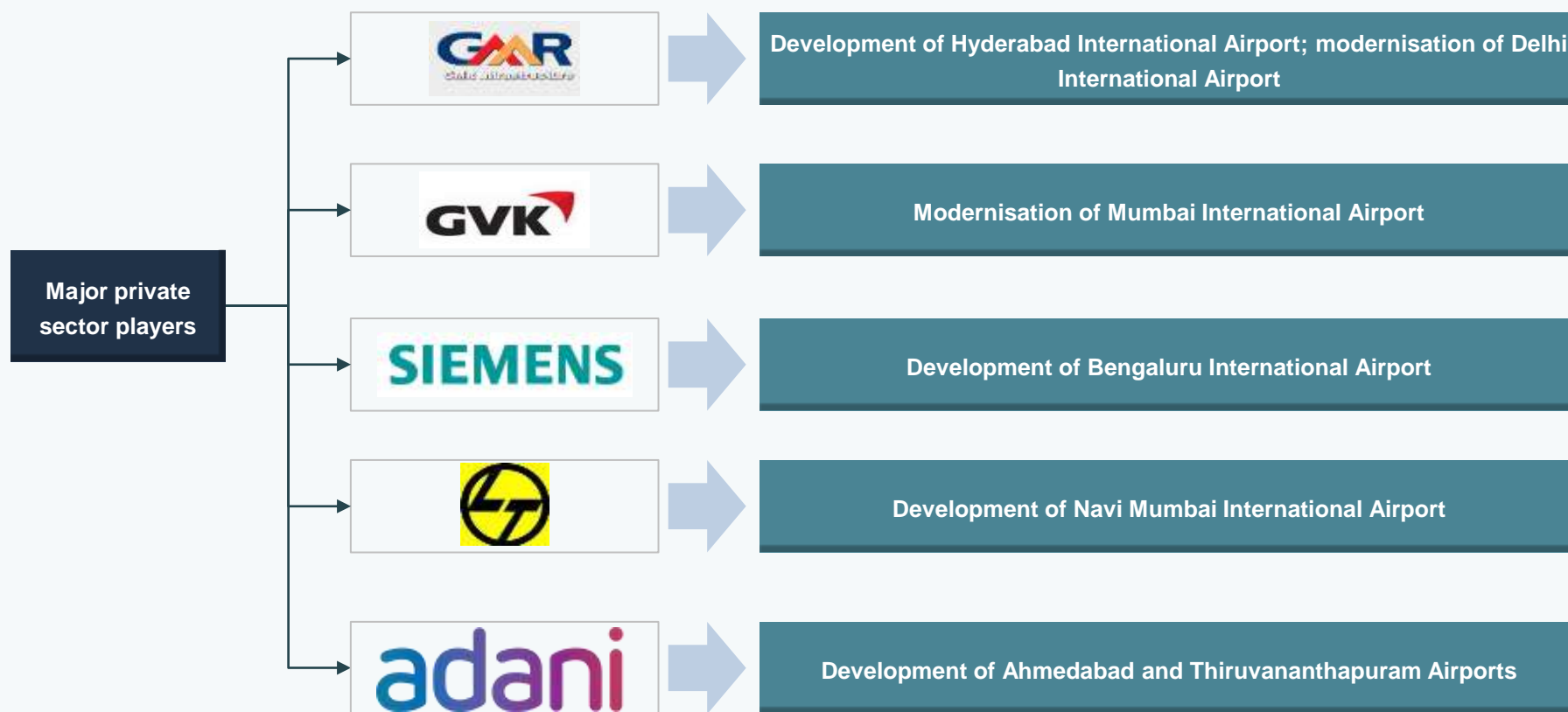
- Aircraft movement increased at a CAGR of 3.85% from 2.05 million in FY17 to 2.67 million in FY24.
- From FY17 to FY23, domestic aircraft movement increased at a CAGR of 6.1%. India's domestic and international aircraft movements reached 2,143,000 and 365,000 respectively in FY23.

**Notes:** CAGR - Compound Annual Growth Rate FY - Indian Financial Year (April - March), \*Until January 2024  
**Source:** Association of Private Airport Operators, Airports Authority of India



# Key public and private sector players

- Until 2013, AAI was the only major player involved in developing and upgrading airports in India.
- Post liberalisation, private sector participation in the sector has been increasing.
- The Government of India gave 'in-principle' approval to 19 airports, out of which, seven are going to be developed on a PPP basis with an investment of Rs. 27,000 crore (US\$ 41.89 billion).



*Notes: AAI - Airports Authority of India*

# Recent Trends and Strategies



# Notable trends in the airports sector

## 1 Greater use of non-scheduled airlines

- Rising business activity leading to higher demand for non-scheduled airlines.
- As of January 2023, there were 103 non-scheduled operators.

## 2 Significant recovery in air traffic

- India's aviation sector soars past pre-pandemic levels in passengers and cargo. Booming domestic travel, especially regional routes, fuels this growth, prompting strategic route expansion by airlines.
- The Ministry of Civil Aviation (MoCA) announced that airlines can operate domestic flights without any capacity restriction, effective from October 18, 2021.

## 3 Water aerodromes

- Under the Regional Connectivity Scheme (RCS)-UDAN, two water aerodromes have been established and commenced operations, enhancing connectivity in remote areas.
- The government is planning to start 14 more water aerodromes across the country, after the successful launch of seaplane service by Prime Minister, Narendra Modi, between the Statue of Unity near Kevadiya in Gujarat's Narmada district and Sabarmati Riverfront in Ahmedabad in October 2020.
- In March 2021, the government announced a plan to set up two water aerodromes in Assam and four water aerodromes in Andaman & Nicobar Islands this year to boost tourism and connectivity.



## 5 Expansion into new segments

- Six international airports completed under PPP. The sector is expected to witness investments worth US\$ 25 billion by 2027.
- Navi Mumbai airport is being developed under PPP by GVK Group subsidiary, Mumbai International Airport (MIAL), and City and Industrial Development Corporation of Maharashtra Ltd (CIDCO), with an investment of US\$ 2.22 billion.
- Zurich Airport International signed the concession agreement for the development of Jewar Airport on the outskirts of Delhi.
- In October 2022, Prime Minister Mr. Narendra Modi laid the foundation stone of C-295 Aircraft Manufacturing Facility in Vadodara, Gujarat.

## 4 Flying Academies

- The Ministry of Civil Aviation (MoCA) is hopeful that aspiring commercial pilots will soon be able to get trained in India without having to leave the country.
- In January 2024, India's DGCA approved two new Flying Training Organisations (FTOs) in Gujarat and Madhya Pradesh. This timely move aligns with airlines' recent orders for 1,000 new planes, strengthening pilot training capacity for India's thriving aviation sector.
- Union minister for Civil Aviation and Steel, Mr. Jyotiraditya Scindia inaugurated GMR School of Aviation at Wings India 2024, near Rajiv Gandhi International Airport.

*Notes: FY - Indian Financial Year (April - March), NSOP - Non Schedule Operators Permit, NSDC-National Skill Development Council*

*Source: DGCA, News Article*

# Strategies adopted...(1/3)

## 1

### Expansion

- The Government of India is poised to unveil 15 airport projects, featuring new terminals in Delhi, Lucknow, and Pune. With a robust investment strategy of Rs. 1 lakh crore (US\$ 12.06 billion), the aim is to elevate the count of airports from 220 within five years, bolstering infrastructure development.
- In June 2023, Union Civil Aviation Minister Mr. Jyotiraditya Scindia said that 200-220 more airports, heliports, and water aerodromes will be built in the country over the next five years.
- On July 14, 2023, the fourth runway and dual ECT (also called elevated taxiways) became operational at the Delhi airport. Indira Gandhi International Airport (IGIA) is the first airport in the country to have four runways and Eastern Cross Taxiways (ECT).
- The Directorate General of Civil Aviation (DGCA) has granted in-principle approval to Air India Ltd. and Interglobe Aviation Ltd (Indigo) for the import of 470 and 500 aircraft respectively. As per the induction plan of the airlines, the aircraft was proposed to be imported during the period 2023-2035.
- Indian carriers are expected to double their fleet capacity to around 1,100 aircraft by 2027.
- As on January 31, 2023, a total number of 73 unserved /underserved airports including nine heliports and two water aerodromes have been operationalised, since 2017, under the UDAN scheme.
- The AAI has announced a few developments in Indian Airports—construction of a new airport on a greenfield site in Hollongi (Arunachal Pradesh) by November 2022, new integrated passenger terminal building expansion of Tiruchirappalli & Pune Airport (March 2022), Guwahati International Airport (June 2022), Maharaja Bir Bikram Airport (Early 2021) and a major expansion of Surat Airport (December 2021).
- India aims to have 220 new airports by 2025, said, Mr. Jyotiraditya Scindia, Minister of Civil Aviation. Cargo flights for perishable food items will also be increased to 30% with 133 new flights in the coming years.
- In February 2022, the Airports Authority of India (AAI) and other airport developers set a capital outlay target of Rs. 91,000 crore (US\$ 12.08 billion) for the development of the airport industry.

*Source: Central Asia-Pacific Aviation, News Article*

## 2

### Government's push

- On January 18, 2024, Union Minister for Civil Aviation Mr. Jyotiraditya M. Scindia inaugurated Wings India 2024 at Begumpet Airport in Hyderabad. The event, themed "Connecting India to the World in Amrit Kaal: Setting the Stage for India Civil Aviation @2047," included the launch of UDAN 5.3.
- MoCA's UDAN scheme boosts regional air connectivity by incentivizing airlines through waived charges, reduced VAT, and excise duty cuts, resulting in 76 airports developed, 519 routes operationalized, and 133.86 lakh passengers benefited.
- In 2023, scheduled airline operators added 112 aircraft to their fleet, totaling 771 aircraft as of December 31, 2023. Inductions aim to meet rising air transport demands.
- The Government has informed that India will spend US\$ 11.88 billion by 2025 to boost regional connectivity by constructing airports and modernizing existing ones.
- In the Union Budget 2023-24, it was announced that 50 additional airports, heliports, water aerodromes, and advanced landing grounds will be revived to improve regional air connectivity in the country.
- Under Union Budget 2021-22, the Indian government expanded the scope for 'Krishi Udaan' in convergence with Operation Green Scheme, wherein air freight subsidy of 50% for agri-perishables would be provided to North-East states and 4 Himalayan states/UTs. The expansion of product coverage will boost the 'Krishi Udaan' scheme and improve air cargo transportation from these states.
- As of November 29, 2021, 1.83 crore Indians were repatriated under the Vande Bharat Mission (VBM). The Vande Bharat Mission operated about 217,000 flights.
- In August 2021, the government convened three groups to revitalise the aviation industry. This committee will advise the government on how to increase local and international connectivity and address concerns such as aircraft leasing & financing, aircraft & component production, and other regulatory requirements. UDAN flights carried 3,438,955 passengers till November 7, 2021.
- On October 09, 2021, the Union Minister of Civil Aviation virtually inaugurated the greenfield Sindhudurg airport in Maharashtra and flagged off the first flight from Sindhudurg to Mumbai under the RCS-UDAN (Regional Connectivity Scheme – Ude Desh Ka Aam Naagrik) scheme by the government.

*Source: Ministry of Aviation, DPIIT, News Article*

### Ancillary services

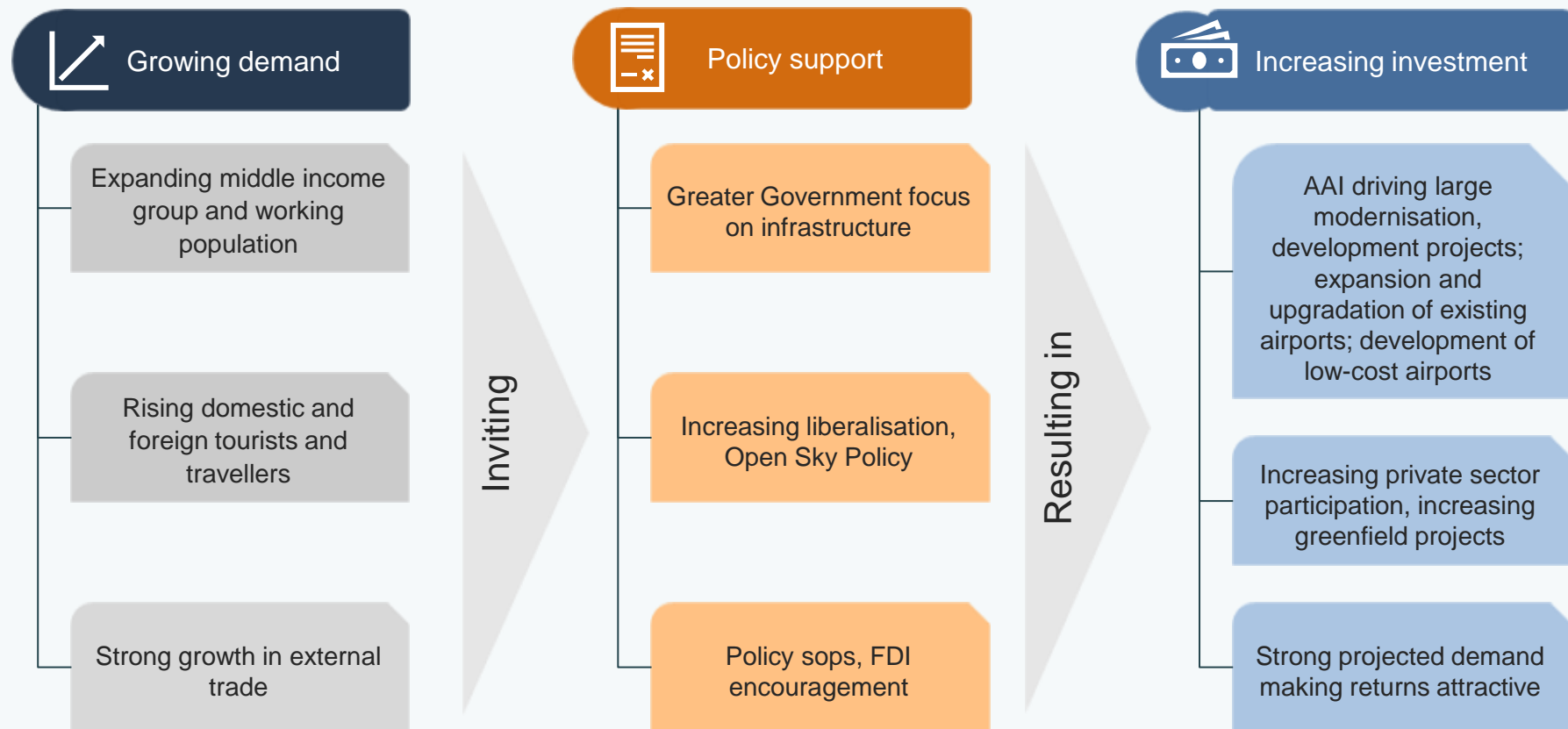
- According to a report by Insight 'Partners, the airline ancillary services market is projected to reach US\$ 728.53 billion by 2030, growing at a CAGR of 20.1% from 2022 to 2030.
- Air India Express is intensifying its focus on ancillary revenue, which currently stands at 14-15%, aiming to boost it to 20%. By diversifying services like food, baggage, and inflight amenities, the airline seeks to enhance non-passenger income.
- Indian low-cost carriers (LCC's) are looking forward to increase their ancillary services, without tampering with their business models. This includes services like lounge access, priority boarding, customer loyalty memberships and customer meals.
- In August 2021, IndiGo joined forces with International Air Transport Association (IATA) to establish a pilot project for IATA Travel Pass, which will allow travellers to generate a 'digital passport' to verify their pre-travel tests or vaccination status to meet the government SOPs.
- In April 2021, Boeing, an aircraft manufacturer, announced that it has partnered with the Indian Aviation Academy (IAA) and the University of Southern California (USC) to conduct safety management system training sessions for all stakeholders in the domestic aviation industry.
- In August 2021, the government plans to implement a biometric boarding system using facial technology in six airports, including Bengaluru, Hyderabad and Pune. The project is currently in the testing phase.
- In September 2021, JetSetGo, a private aviation company, plans to make its flight operations carbon neutral by 2024 through a carbon management programme.

*Source: Central Asia-Pacific Aviation, News Article*





# Strong demand and policy support driving investments

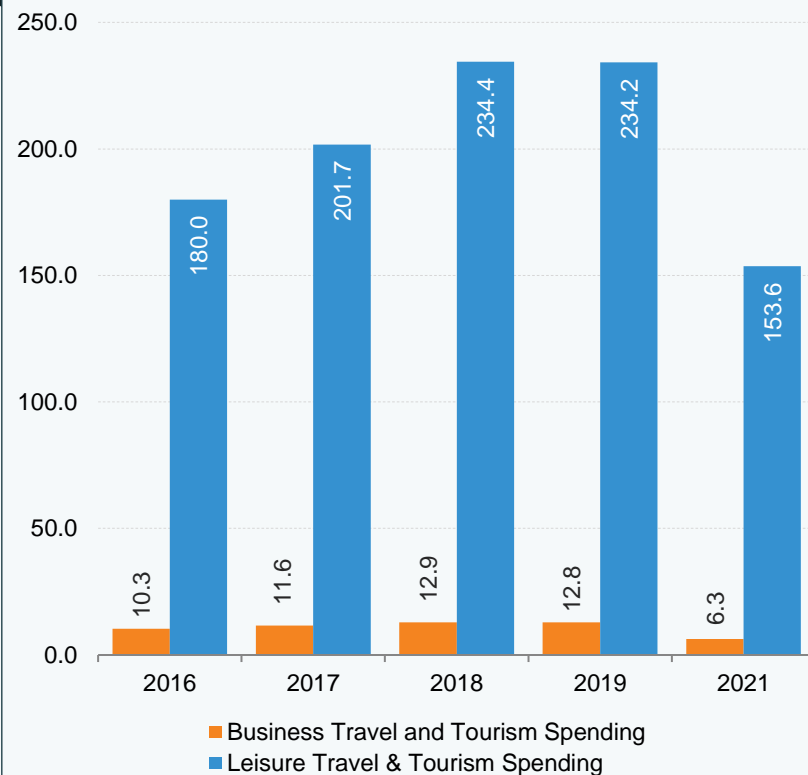




# Travel and tourism

- India's aviation sector, ranked third globally, is driven by robust infrastructure, modern airports, and a 43% annual growth in domestic passengers, contributing significantly to GDP (5%) and providing 4 million jobs.
- In 2022, the contribution of India's travel and tourism sector to India's economy was worth Rs. 15.7 trillion (US\$ 190 billion). By the end of this year, it would be worth Rs. 16.5 trillion (US\$ 200 billion), as per the data released by the World Travel & Tourism Council (WTTC). The forecast for the next ten years is worth an enormous almost Rs. 37 trillion (US\$ 450 billion).
- Indians spent around US\$ 5.5 billion on overseas travel between April-July of FY24.
- The emergence of business hubs like Mumbai (Finance), Bengaluru (IT), Chennai (IT), and Delhi (Manufacturing, IT) is likely to boost business travel as well.
- Leisure travel spending reached US\$ 153.6 billion in 2021 and is expected to reach US\$ 432.3 billion by 2028F, whereas business travel revenue was US\$ 6.3 billion in 2021 and is projected to increase to US\$ 24.4 billion by 2028F.
- India plans to open 100 more airports by 2024.
- The Ministry of Home Affairs (MHA) has resumed granting fresh tourist visas to foreigners coming to India through chartered flights, effective from October 15, 2021.

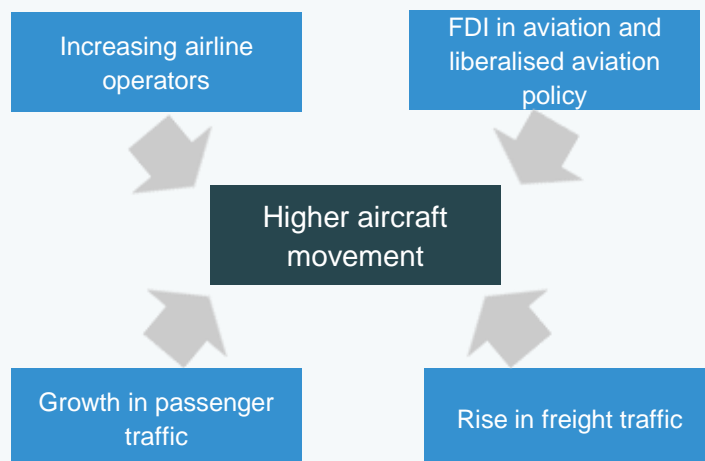
Travel and tourism spending (US\$ billion)



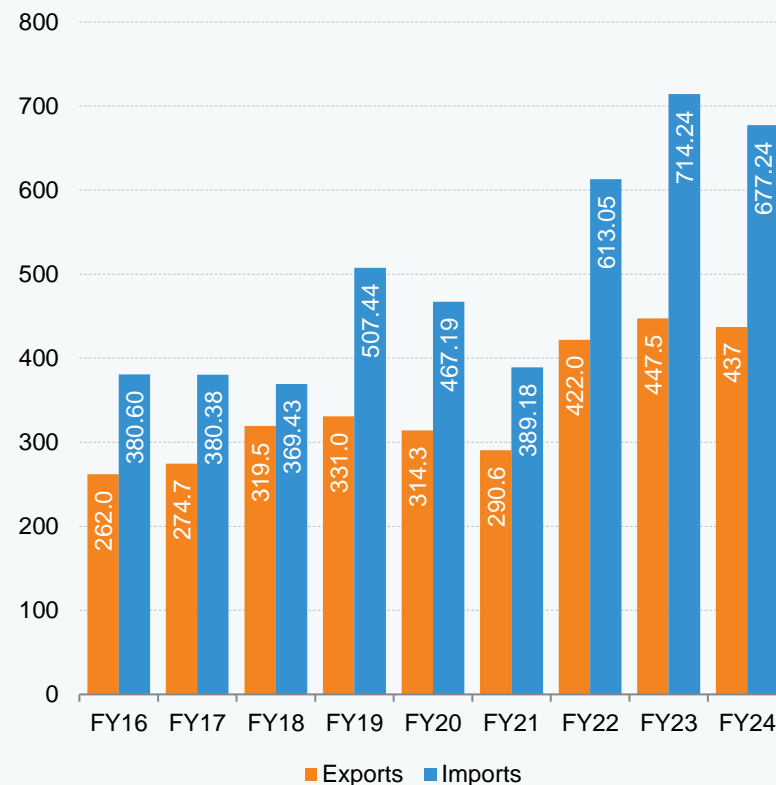
**Source:** World Travel and Tourism Council, Make in India, Global Business Travel Association, News Article

# Export and import

- In FY24, the merchandise exports of India were estimated at US\$ 437 billion and imports were estimated at US\$ 677.24 billion.
- In FY23 India's merchandise exports and imports were estimated at US\$ 447.46 billion and US\$ 714.24 billion, respectively.
- In FY22, merchandise exports and imports stood at US\$ 422 billion and US\$ 613.05 billion, respectively.
- India's merchandise exports increased at a CAGR of 7.9% to US\$ 447.46 billion in FY23.



**Exports and Imports (US\$ billion)**



**Notes:** CAGR - Compound Annual Growth Rate, FY - Indian Financial Year (April - March), \*until January 2024

**Source:** Ministry of Commerce and Industry

# Policy support...(1/4)

1

## Northeast India

- Over 30 airport development projects are under progress across various regions in Northeast India.
- AAI was planning to develop over 20 airports in Tier-II and Tier-III cities in the next five years.
- AAI plans to develop Guwahati as an inter-regional hub and Agartala, Imphal, and Dibrugarh as intra-regional hubs.
- In October 2021, the Minister of Civil Aviation, Mr. Jyotiraditya M. Scindia, virtually flagged off six routes expanding the aerial connectivity of Northeast India.
- In October 2021, the Minister of Civil Aviation, Mr. Jyotiraditya M. Scindia, virtually flagged off the first direct flight along the Shillong–Dibrugarh route, under the RCS-UDAN (Regional Connectivity Scheme - Ude Desh Ka Aam Naagrik) scheme.

2

## Greater focus on infrastructure

- AAI was planning to invest Rs. 25,000 crore (US\$ 3.58 billion) in the next five years to augment facilities and infrastructure at airports. The Indian Government is planning to invest US\$ 1.83 billion for the development of airport infrastructure along with aviation navigation services by 2026.
- In 2019, 85 AAI airports were declared as Single-Use Plastic Free Airport Terminals.

3

## Liberalisation, open sky policy

- With the opening of the airport sector to private participation, six airports across major cities are being developed under PPP.
- Currently, 14 airports are being under PPP agreements.
- Increased traffic rights under bilateral agreements with foreign countries.
- India signed its 1st open skies agreement with Greece.

Source: News Articles

# Policy support...(2/4)

4

## National Civil Aviation Policy, 2016

- The policy covers 22 areas of the civil aviation sector.
- Regional Connectivity Scheme (RCS) has been launched under the policy.
- Airlines can commence international operations and will have to deploy 20 aircrafts or 20% of their total capacity (whichever is higher) for domestic operations.

5

## Taxes and duties

- 100% tax exemption for airport projects for a period of 10 years.
- Indian aircraft Manufacture, Repair and Overhaul (MRO) service providers are exempted completely from customs and countervailing duties.
- The Airport Authority of India plans to abolish royalty and offer steep discounts in lease rent to encourage MRO units to set up facilities at its airports.

6

## Union Budget

- According to the documents of the interim budget for 2024-25, the Ministry of Civil Aviation will get an allocation of Rs. 2,300 crore (US\$ 276 million).
- It will provide tax holiday for capital gains incomes of aircraft leasing and financing companies. Also, it will enable tax exemptions for aircraft lease rentals or royalty paid to foreign lessor under International Financial Services Centre (IFSC) in GIFT (Gujarat International Finance Tec-City) City.
- Under PM Atma Nirbhar Swasth Bharat Yojana, the government proposed development of health systems capacities, which will include aviation entry points. Under this programme, public health units will be strengthened at 32 airports. This programme will facilitate smooth movement of pharmaceuticals through air across India and worldwide.
- Through this budget, the government has reiterated its commitment of disinvestment of Air India and PawanHans in 2021-22.

Source: News Article

## 7

### Encouragement to FDI

- The Government has allowed 100% FDI under automatic route for greenfield projects, whereas 74% FDI is allowed under automatic route for brownfield projects.
- 100% FDI is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. FDI over 49% would require Government approval.
- Approval of 49% FDI in aviation for foreign carriers.
- FDI inflows in India's air transport sector (including air freight) reached US\$ 3.85 billion between April 2000-March 2024.

## 8

### Metro airports

- India has envisaged increasing the number of operational airports to 220 by 2030.
- AAI has developed and upgraded over 23 metro airports in the last 5 years.

## 9

### Non-metro airports

- The Airports Authority of India is to spend Rs 25,000 crore (~US\$ 3 billion) in the next five years to boost infrastructure facilities. The aim is to construct new terminals, expand and modify existing terminals, expand or strengthen existing runways, aprons, Airport Navigation Services (ANS) infrastructure, control towers, and technical blocks.
- The Government of Andhra Pradesh is to develop greenfield airports in six cities-Nizamabad, Nellore, Kurnool, Ramagundam, Tadepalligudem, and Kothagudem under PPP.
- Upfront subsidy has been proposed through which non-metro airports would be funded by imposing 2% levy on both domestic and international airfares.
- About 22 airports to get connected under the regional connectivity scheme of AAI.

## 10

### Production Linked Incentive Scheme for Drones and Drone Components

- To promote the indigenous drone industry, the government notified the Production Linked Incentive (PLI) scheme for drones and drone components on September 30, 2021. The step was widely welcomed by academia and industry experts.
- A provisional list of 23 PLI beneficiaries was released on July 6, 2022. The beneficiaries include 12 drone manufacturers and 11 drone component manufacturers.
- The Ministry of Civil Aviation disbursed an amount of Rs. 30 crore (US\$ 3.7 million) (approximately) to the beneficiaries during FY23 under the PLI Scheme for Drones and Drone Components.

## 11

### Greenfield Airports Policy, 2008

- Government of India formulated a Greenfield Airports Policy, 2008 which provides detailed guidelines, procedures, and steps related to the construction of Greenfield airports across the country, including in Bihar.
- Under the GFA Policy, the project proponent- an airport developer or the respective State Government willing to establish a Greenfield airport is required to send a proposal to the Ministry of Civil Aviation in the prescribed format for a two-stage approval process i.e., 'Site Clearance' followed by 'In-Principle' approval.
- In 2023, the government has accorded 'In-Principle' approval for setting up of 21 Greenfield Airports across the country. Out of these, 11 Greenfield airports have been operationalised.

## 12

### Digi Yatra

- Digi Yatra is a biometric boarding system using Facial Recognition Technology to provide a seamless and hassle-free experience for passengers at airports. It enhances passenger experience by eliminating the need for verification of ticket and ID at multiple touchpoints and provides better throughput through existing infrastructure using a Digital Framework.
- Digi Yatra app users exceed 45.8 lakhs, up by 20.5% from January 1, 2024; total passengers utilizing Digi Yatra for travel reach 1.45 crore; Chennai airport to launch Digi Yatra by March 31, 2024.

Source: News Articles

# Private sector investment in airports rising

- Mumbai International Airport Ltd (MIAL) raised US\$ 750 million in debt in a private placement from a US-based private asset manager, Apollo Global.
- Adani Airport Holdings (AAHL) raised US\$ 250 million in May 2022 for capital expenditure and for the development of six airports that it currently manages.
- Recourse to the PPP model has boosted private sector investments in airports.
- PPP route for five international airports (Delhi, Mumbai, Cochin, Hyderabad, Bengaluru) most noteworthy.
- Increasing share of the private sector in the equity component of major airports –
  - 74% private shareholding in IGI Airport (Delhi) — owned majorly by GMR (54%), Fraport AG (10%), and Eraman Malaysia (10%); the rest of the shares are owned by AAI.
  - 74% private shareholding in CSI Airport (Mumbai) — wholly owned by Adani Group; the remaining shares were owned by the AAI.
  - 74% private shareholding in RGI Airport (Hyderabad) — owned majorly by GMR (63%) and Malaysia Airports Holdings Berhad (11%); the rest of the shares are owned by the Government of India (13%) and Government of Andhra Pradesh (13%).
  - 74% shareholding in Kempegowda International Airport (Bengaluru) — owned majorly by Siemens Project Ventures, Germany (40%), Unique (Flughafen Zurich AG) Zurich Airport, Switzerland (17%), and L&T, India (17%); rest of the shares owned by AAI (13%) and KSIIDC, which is an agency owned by the state of Karnataka, India (13%).
  - Akasa, an ultra-low-cost carrier (ULCC), launched in mid-2022, with an initial investment of US\$ 35 million.
  - In Hyderabad, Tata Advanced Systems Ltd. (TASL) will produce Boeing 737 fan cowls. From FY25 onwards, TASL will supply 50% of the monthly 737 fan cowl requirements.

**Notes:** KSIIDC - Karnataka State Industrial and Infrastructure Development Corporation Ltd.

**Source:** News Article

# Successful PPP airports in India

- Presently, India has five PPP airports, one each at Mumbai, Delhi, Cochin, Hyderabad and Bengaluru, which together handle over 55% of the country's air traffic.
- The Delhi airport accounts for 46% and the Mumbai airport accounts for 39% of the gross revenue with the government. The two airports generated Rs. 29,000 crore (US\$ 3.94 billion) until December 2020.
- Government of India has approved 15 greenfield PPP projects which are expected to increase the air traffic in India. These projects would be set up in Goa, Navi Mumbai, Maharashtra, Bijapur, Gulbarga, Karnataka, Kerala, West Bengal, Madhya Pradesh, Sikkim, Puducherry and Uttar Pradesh.
- The government of Maharashtra approved the development of Nagpur airport on a PPP basis and allocated Rs. 100 crore (US\$ 15.45 million) for it in the State Budget 2018-19. The airport will be upgraded on a DBFOT basis with a private player operating it for 60 years.

Name of the airport	Operator	Type of project/ PPP structure	Revenue sharing
Chhatrapati Shivaji International Airport	Mumbai International Airport Ltd (MIAL)	Brownfield/BOOT	38.7% of gross revenue to be shared with AAI
Indira Gandhi International Airport	Delhi International Airport Ltd (DIAL)	Brownfield/BOOT	45.9% of gross revenue to be shared with AAI
Rajiv Gandhi International Airport	GMR Hyderabad International Airport Ltd (GHIAL)	Greenfield/BOOT	Concession fees - 4% of gross revenue to be shared with AAI
Bengaluru International Airport	Bengaluru International Airport Ltd (BIAL)	Greenfield/BOOT	Concession fees - 4% of gross revenue to be shared with AAI
Cochin International Airport	Cochin International Airport Ltd (CIAL)	Greenfield/BOO	Payment of dividend to the Government towards their 26% equity capital

**Notes:** BOOT - Build Own Operate Transfer; BOO - Build Own Operate, DBFOT - Design Build Finance Operate Transfer

**Source:** Association of Private Airport Operators



# Key projects offered in airports under national infrastructure pipeline - FY 2019-25

Name of the airport	Current Status	Project Cost (US\$ million)	Mode of Implementation
Pune Airport Development	Development	2,695.42	PPP
Navi Mumbai Airport Pre-Development	Development	2,312.38	PPP
Bangalore Airport Expansion	Development	2,298.20	PPP
Sriperumbudur Airport Development	Conceptualization	2,127.96	EPC
Bhiwadi International Airport Development	Conceptualization	1,517.95	EPC
Delhi Airport Expansion	Implementation	1,390.27	EPC
Jewar Airport Development	Development	1,220.03	PPP
Hyderabad Airport Expansion	Implementation	837.00	PPP
Vellore Aerospace Park Development	Conceptualization	425.59	EPC
Coimbatore Airport Expansion	Conceptualization	425.59	EPC
Madurai Airport Expansion	Conceptualization	425.59	EPC
Mopa Airport Development	Development	425.59	PPP
Bhogapuram Airport Development	Development	425.59	PPP
Campbell Bay Airport Development	Conceptualization	354.66	EPC
Port Blair Airport Development	Conceptualization	354.66	EPC
Chennai Airport Upgradation	Implementation	354.66	EPC
Nagpur Airport Upgradation	Development	241.17	PPP
Dholera International Airport Development	Conceptualization	241.17	EPC

**Notes:** PPP - Public Private Partnership, EPC - Engineering, Procurement and Construction

**Source:** India Investment Grid

# Opportunities



OPPORTUNITIES

# Opportunities

## Huge potential to develop India as an MRO hub

- India's MRO industry is expected to grow from US\$ 800 million in 2018 to more than US\$ 2.4 billion by 2028.
- Indian airline companies will spend over 12-15% of their revenues on maintenance, which is the second-highest cost component after fuel.
- The Government has envisaged making India a global MRO hub, handling nearly 90% of the MRO needs of Indian operators and obtaining around 20% of the MRO revenue from foreign-registered aircraft.
- To achieve this, the Government has proposed various key steps including setting up of a high-power task force for the promotion of MRO, declaration of MRO and component warehouses as free trade zones with 0% GST and import restrictions.



## Policy support and demand growth unlocking large investment potential

- Success of PPP will raise investment in existing and greenfield airports.
- Private sector participation in six existing airports operated by AAI is likely to increase investment opportunities for the airport sector.
- The government of India launched the NABH-Nirman Scheme, which is aimed at increasing India's airports' capacity. According to various estimates, India will require investments worth Rs. 3-4 lakh crore (US\$ 62.06 million) to achieve a capacity for having a billion trips per year.

## Leverage on non-aeronautical revenues, improved technology

- Airport developers can now draw on wider revenue opportunities such as retail, advertising, and vehicle parking.
- Future operators will benefit from greater operational efficiency due to satellite-based navigation systems like 'Project Gagan' which is in the development phase.



**Notes:** PPP - Public Private Partnership, NABH - NextGen Airports for Bharat, MRO - Maintenance, Repair and Overhaul, GST - Goods and Services Tax

**Source:** FICCI Vision 2040 for the Civil Aviation Industry in India

# Key Industry Contacts



# Key Industry Contacts

	Agency	Contact Information
	Airports Authority of India (AAI)	<p>Address: Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi -110 003</p> <p>Phone: 91 11 24632950</p> <p>Website: <a href="https://www.aai.aero/en">https://www.aai.aero/en</a></p>
	Directorate General of Civil Aviation (DGCA)	<p>Address: Aurbindo Marg, Opp. Safdarjung Airport, New Delhi -110 003</p> <p>Phone: 91 11 24622495</p> <p>Fax: 91 11 24629221</p> <p>E-mail: <a href="mailto:dri@dgca.nic.in">dri@dgca.nic.in</a> , <a href="mailto:dga@dgca.nic.in">dga@dgca.nic.in</a></p> <p>Website: <a href="https://dgca.gov.in/digigov-portal/">https://dgca.gov.in/digigov-portal/</a></p>



# Glossary

- AAI: Airports Authority of India
- ACI: Airport Council International
- CAGR: Compound Annual Growth Rate
- FDI: Foreign Direct Investment
- FY: Indian Financial Year (April to March); So, FY20 implies April 2019 to March 2020
- GOI: Government of India
- Rs: Indian Rupee
- MRO: Maintenance, Repair and Overhaul
- PPP: It could denote two things (mentioned in the presentation accordingly) -
  - Purchasing Power Parity (used in calculating per-capita GDP - slide 12, GROWTH DRIVERS)
  - Public Private Partnership (a type of joint venture between the public and private sectors)

# Exchange rates

**Exchange Rates (Fiscal Year)**

Year	Rs. Equivalent of one US\$
2004-05	44.95
2005-06	44.28
2006-07	45.29
2007-08	40.24
2008-09	45.91
2009-10	47.42
2010-11	45.58
2011-12	47.95
2012-13	54.45
2013-14	60.50
2014-15	61.15
2015-16	65.46
2016-17	67.09
2017-18	64.45
2018-19	69.89
2019-20	70.49
2020-21	73.20
2021-22	74.42
2022-23	78.60

**Exchange Rates (Calendar Year)**

Year	Rs. Equivalent of one US\$
2005	44.11
2006	45.33
2007	41.29
2008	43.42
2009	48.35
2010	45.74
2011	46.67
2012	53.49
2013	58.63
2014	61.03
2015	64.15
2016	67.21
2017	65.12
2018	68.36
2019	69.89
2020	74.18
2021	73.93
2022	79.82
2023	82.61
2024*	83.21

**Note:** \*- Until April 2024

**Source:** Foreign Exchange Dealers' Association of India



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