



AVIATION

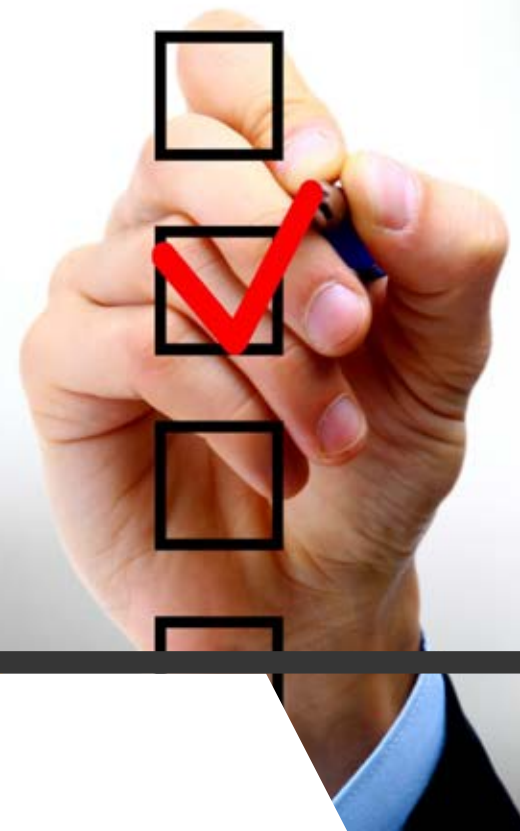
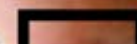
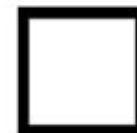
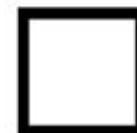


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November 2020

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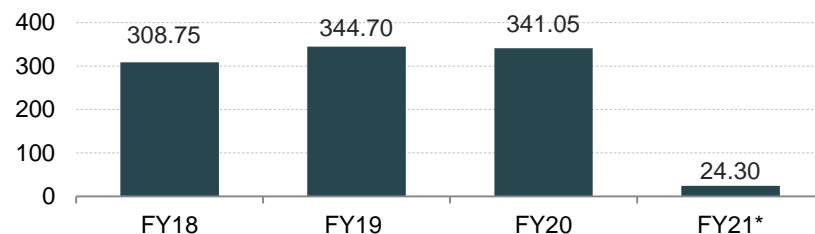
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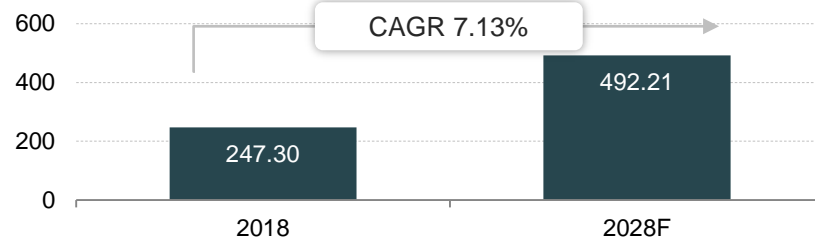
EXECUTIVE SUMMARY

- India is set to surpass UK and become the third largest aviation market by 2024.[^]
- In FY20, air passenger traffic stood at 341.05 million.
- Contribution of travel and tourism to India's GDP increased to US\$ 247.30 billion in 2018 from US\$ 234.03 billion in 2017. The contribution is forecast to reach US\$ 492.21 billion by 2028F.
- Business and leisure travel will boost growth.
- Spending on business travel was US\$ 234.16 billion in 2019 compared with US\$ 234.44 billion in 2018, while that on leisure travel was US\$ 12.84 billion in 2018 compared with US\$ 12.86 billion in 2018.
- The expenditure of Indian travellers is expected to touch Rs. 9.5 lakh crore (US\$ 136 billion) by 2021.

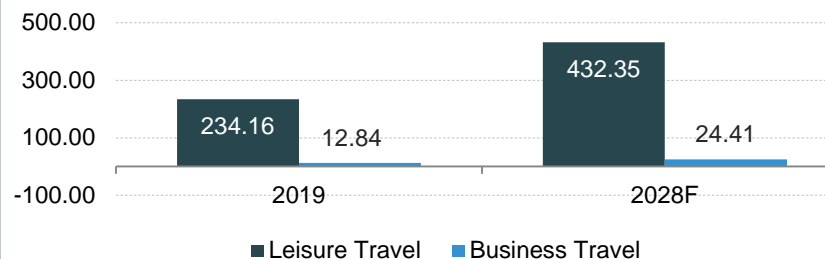
Air passenger traffic in India (million)



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



Business and Leisure Travel Spending (US\$ billion)



Note: *At real prices, E - Estimated, F - Forecasted,, ^As per IATA forecasts, *- till September 2020

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



ADVANTAGE INDIA

- Rising working group and widening middle class demography is expected to boost demand.
- India has envisaged increasing the number of operational airports to 190-200 by FY40.
- Country will become the third largest aviation market in terms of passengers by 2024.[^]
- India will need 2,380 new commercial airplanes by 2038.

Robust Demand

- 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.
 - By 2028, the MRO industry is likely to grow over US\$ 2.4 billion from US\$ 800 million in 2018.

Opportunities in MRO

ADVANTAGE INDIA

- Investment to the tune of Rs. 420-450 billion (US\$ 5.99-6.41 billion) is expected in India's airport infrastructure between FY18-23[#].
- Growing private sector participation through the Public-Private Partnership (PPP).

Increasing Investments

- The Government has been encouraging private sector participation.
- Foreign investment up to 49% is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline.

Policy Support

Notes: FDI - Foreign Direct Investment, MRO - Maintenance, Repair and Overhaul; FY - Indian Financial Year (April - March), [^]As per IATA forecasts, [#]As per CRISIL

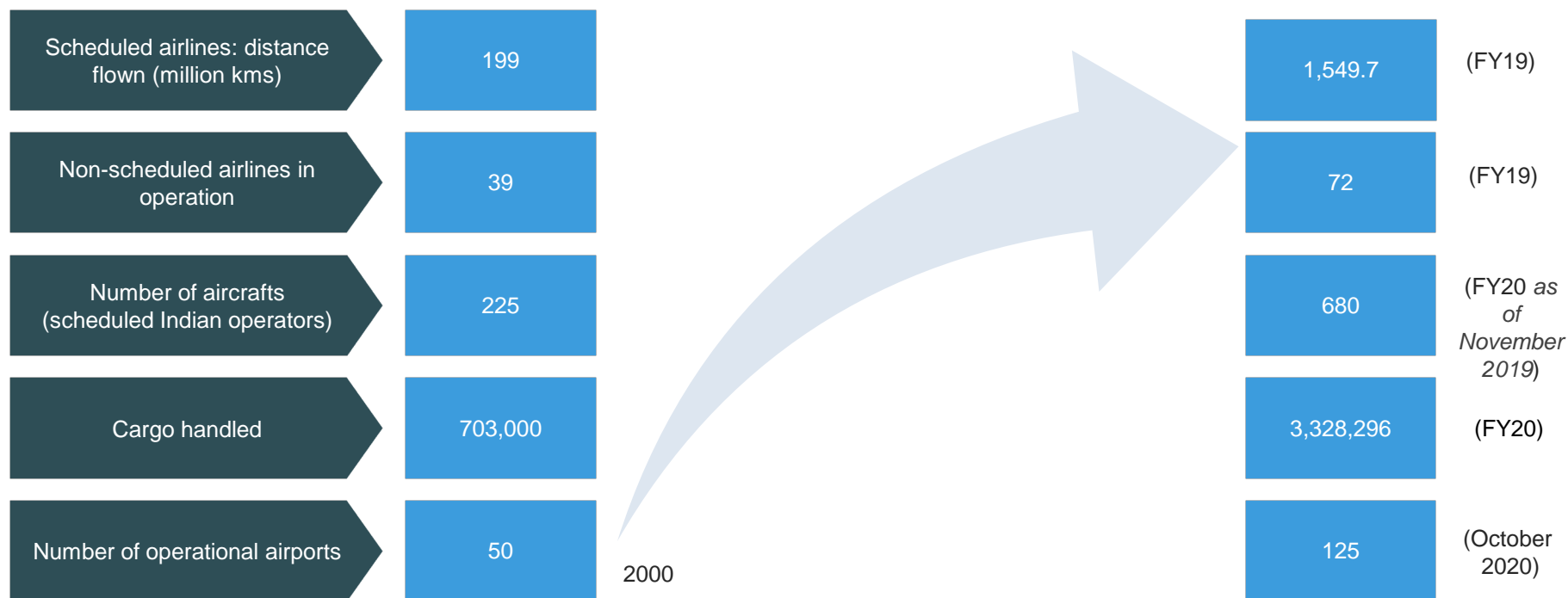
Source: Ministry of Civil Aviation, MRO India, IATA, Crisil, FICCI, PWC



MARKET OVERVIEW

EVOLUTION OF THE INDIAN AVIATION SECTOR

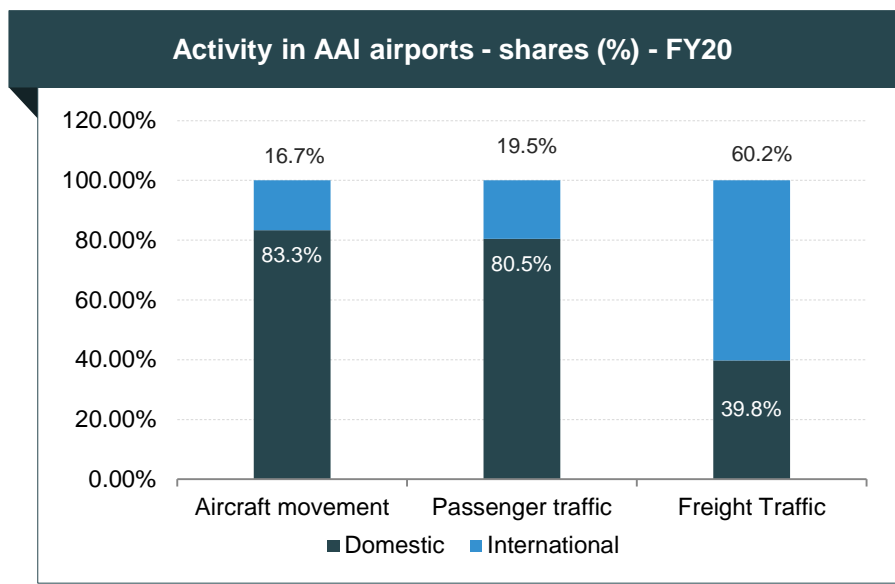
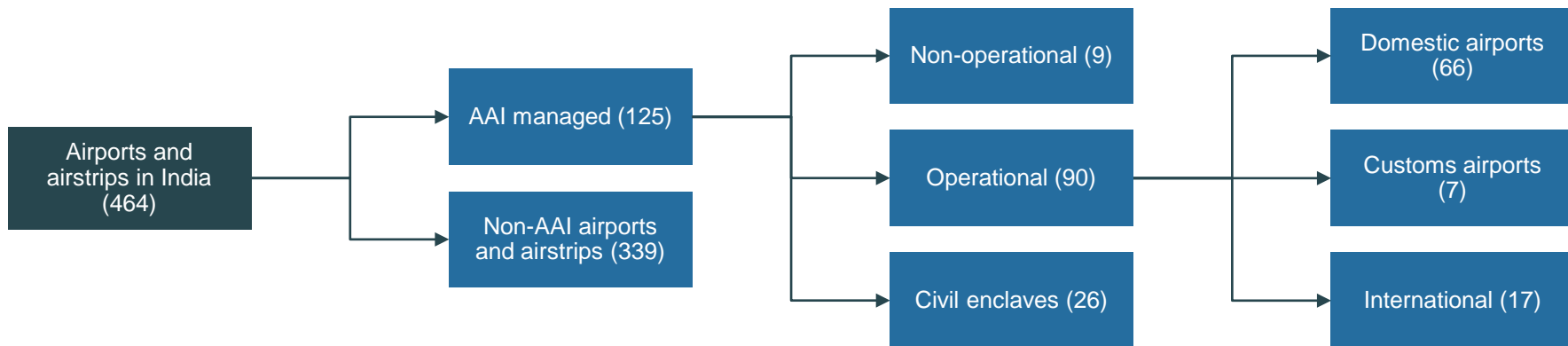
- India is the 7th largest civil aviation market in the world and is set to become the world's 3rd* largest by 2024.
- In FY20, airports in India witnessed domestic passenger traffic of about 274.50 million people.
- India plans to open 100 additional airports by 2024.
- In-service fleet size of scheduled Indian operators stood at 643 airplanes as of July 2019. The number of airplanes is expected to grow to 1,100 by 2027.



Note: *As per IATA forecasts, FY - Indian Financial Year (April - March), mn km - Million Kilometers, P - Provisional

Source: Airports Authority of India, Ministry of Statistics and Programme Implementation, Ministry of Civil Aviation, DGCA, News Articles

AIRPORTS AND AIRSTRIPS



Activity in AAI airports - shares (%) - FY20

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



Indigo

Market share: 49.8%

Passenger load traffic: 199.88 lakh



Air India

Market share: 11.4%

Passenger load traffic: 45.59 lakh



SpiceJet

Market share: 15.9%

Passenger load traffic: 63.65 lakh



GoAir

Market share: 8.8%

Passenger load traffic: 35.47 lakh



Vistara

Market share: 6.2%

Passenger load traffic: 24.82 lakh

Note: Market Share and Passenger Load Data for the month of August 2020

Source: Directorate General of Civil Aviation

MAJOR AIRPORTS IN INDIA

Delhi: Passenger traffic handled
FY16: 48.42 million
FY17: 57.70 million
FY18: 65.69 million
FY19: 69.23 million
FY20: 67.30 million

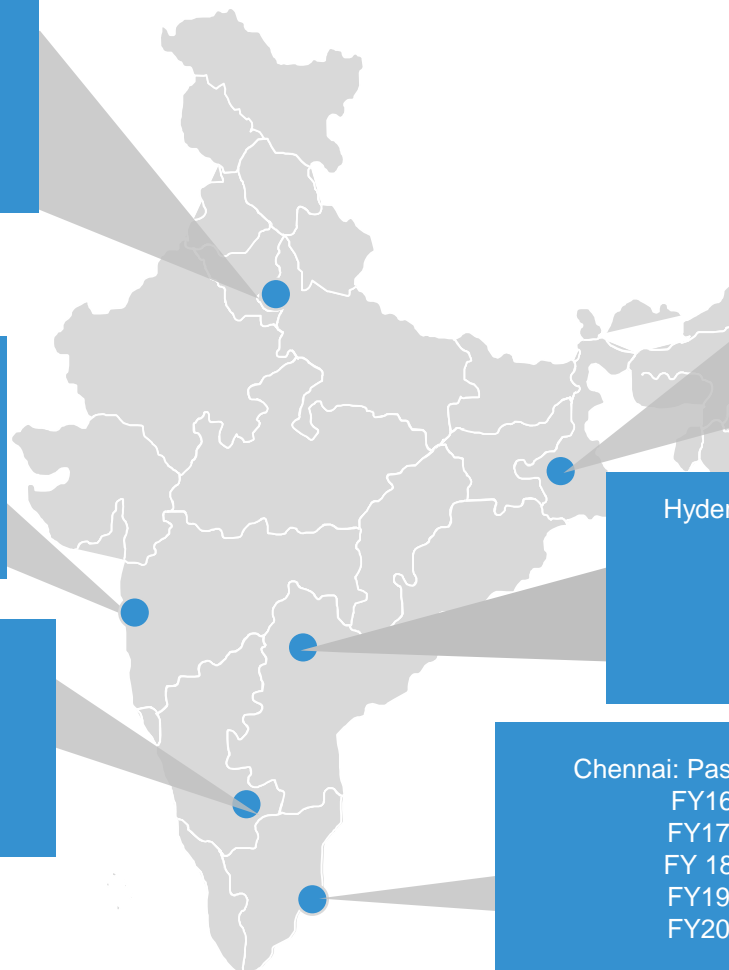
Mumbai: Passenger traffic handled
FY16: 41.67 million
FY17: 45.15 million
FY18: 48.50 million
FY19: 48.82 million
FY20: 45.87 million

Bengaluru: Passenger traffic handled
FY16: 18.97 million
FY17: 22.88 million
FY18: 26.91 million
FY19: 33.31 million
FY20: 32.36 million

Kolkata: Passenger traffic handled
FY16: 12.42 million
FY17: 15.82 million
FY18: 19.89 million
FY19: 16.89 million
FY20: 22.15 million

Hyderabad: Passenger traffic handled
FY16: 12.39 million
FY17: 15.10 million
FY 18: 18.16 million
FY19: 21.40 million
FY20: 21.65 million

Chennai: Passenger traffic handled
FY16: 15.22 million
FY17: 18.36 million
FY 18: 20.36 million
FY19: 22.54 million
FY20: 22.26 million

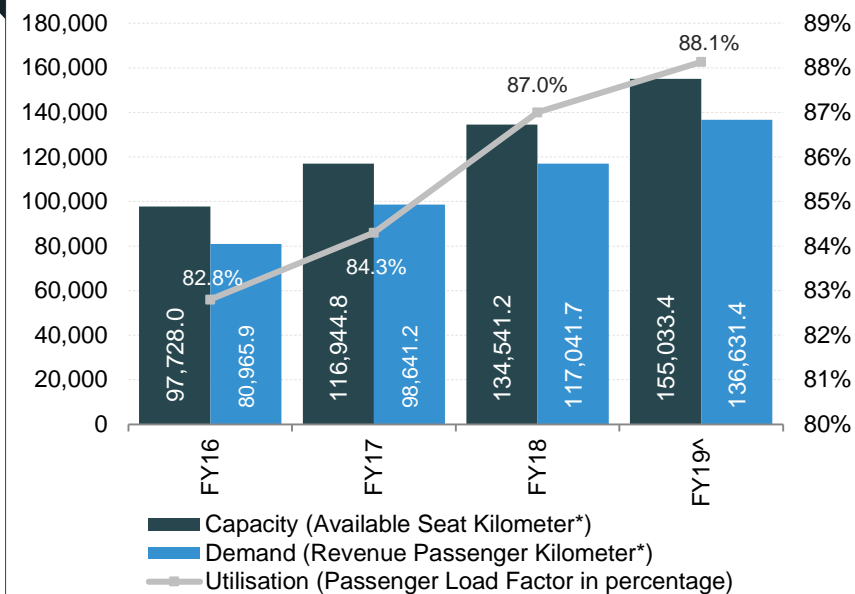


Note: FY - Indian Financial Year (April - March)

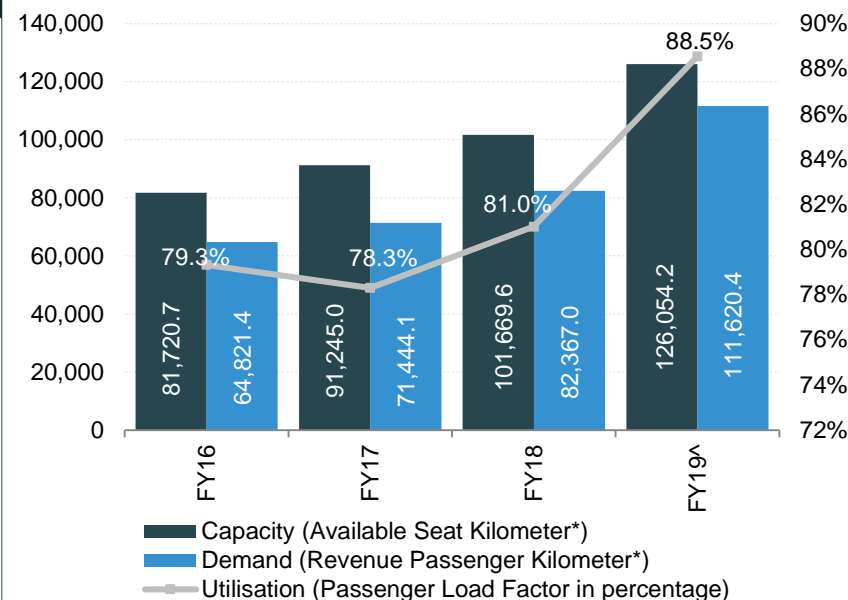
Source: AAI

AIRLINES DEMAND, CAPACITY AND UTILISATION

Domestic Demand, Capacity and Utilisation



International Demand, Capacity and Utilisation



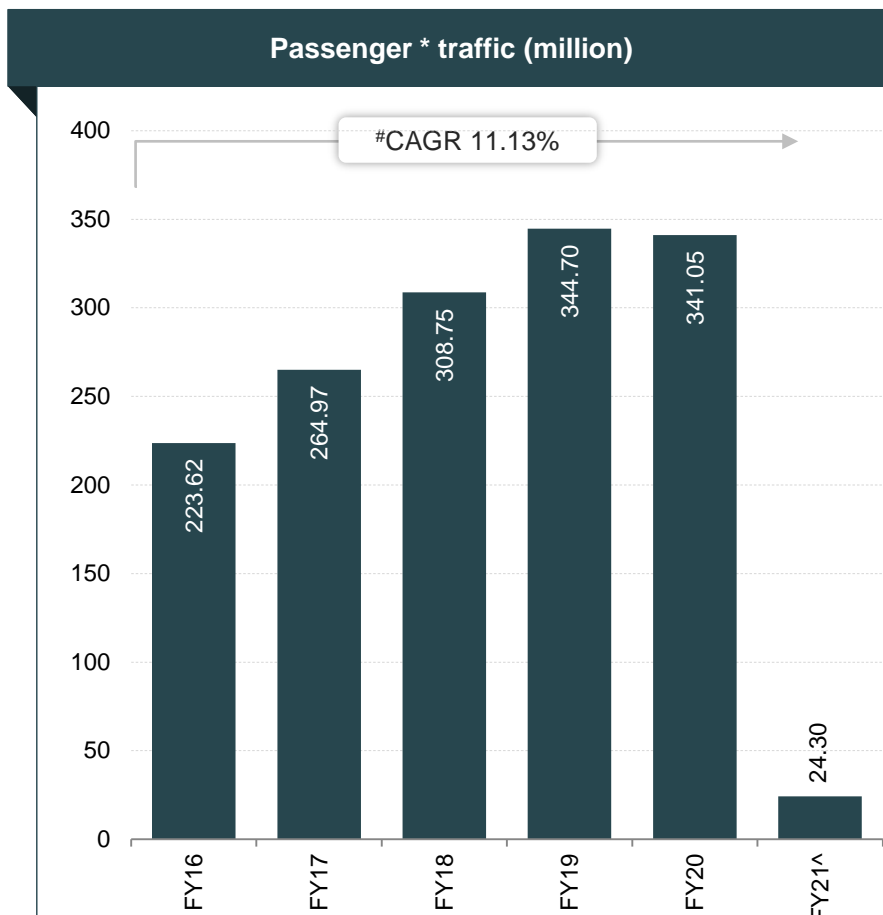
- Demand and Capacity in India's civil aviation sector have shown robust growth.
- Capacity (Available Seat Kilometer) available in domestic flights increased to 155,033.4 million kms in FY19[^]. Correspondingly, demand (Revenue Passenger Kilometer) for domestic services grew rapidly to 136,631.4 million kms in FY19[^].
- Capacity (Available Seat Kilometer) available in international flights increased to 126,054.2 million kms in FY19[^]. Correspondingly, demand (Revenue Passenger Kilometer) for international services grew rapidly to 111,620.4 million kms in FY19[^].
- Growth in demand has consistently outpaced the growth in supply, resulting in high utilisation (Passenger Load Factor).

Notes: *in million kilometre, ^provisional

Source: Directorate General of Civil Aviation

PASSENGER TRAFFIC...(1/2)

- Growth in passenger traffic has been strong since the new millennium, especially with rising income and low-cost aviation.
- India's passenger* traffic stood at 341.05 million in FY20. It grew at a CAGR of 11.13% during FY16-FY20.
- India has become the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger* market by 2024.
- By 2036, India is projected to have 480 million flyers, which will be more than that of Japan (just under 225 million) and Germany (just over 200 million) combined.

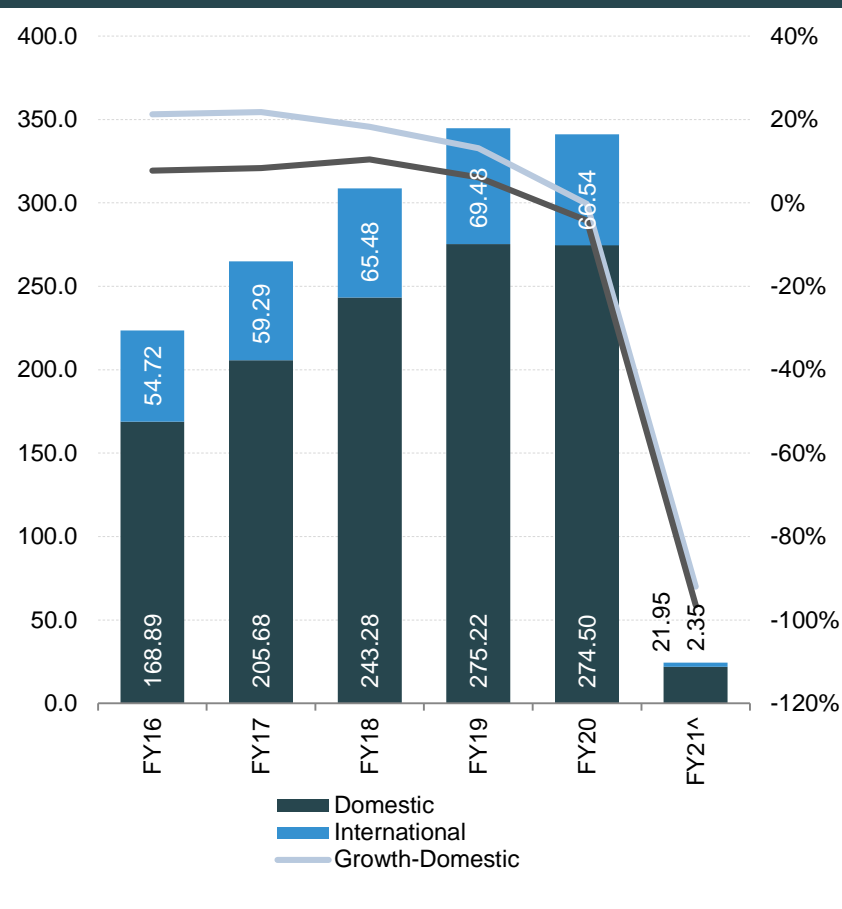


Notes: CAGR - Compound Annual Growth Rate, FY - Indian Financial Year (April - March), *passenger - Domestic + International, #CAGR is till FY20, ^- Till September 2020
Source: Association of Private Airports Operator, Airports Authority of India

PASSENGER TRAFFIC...(2/2)

- Domestic passenger traffic expanded at a CAGR of 12.91% during FY16-FY20.
- International passenger traffic registered growth at a CAGR of 5.01% during FY16-FY20.
- During FY20, domestic passenger traffic stood at 274.50 million while international traffic stood at 66.54 million.

International and domestic passenger traffic (million)

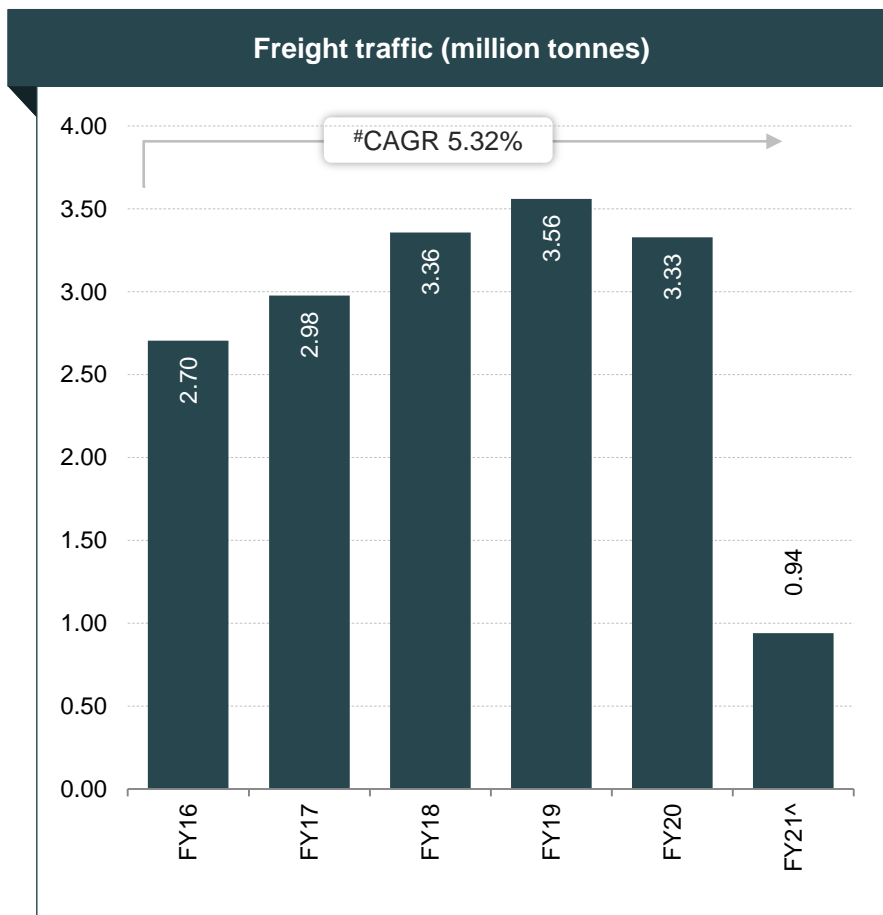


Notes: E- Estimate, YoY - Year on Year, FY - Indian Financial Year (April - March), ^- Till September 2020

Source: Airports Authority of India, Ministry of Civil Aviation

FREIGHT TRAFFIC...(1/2)

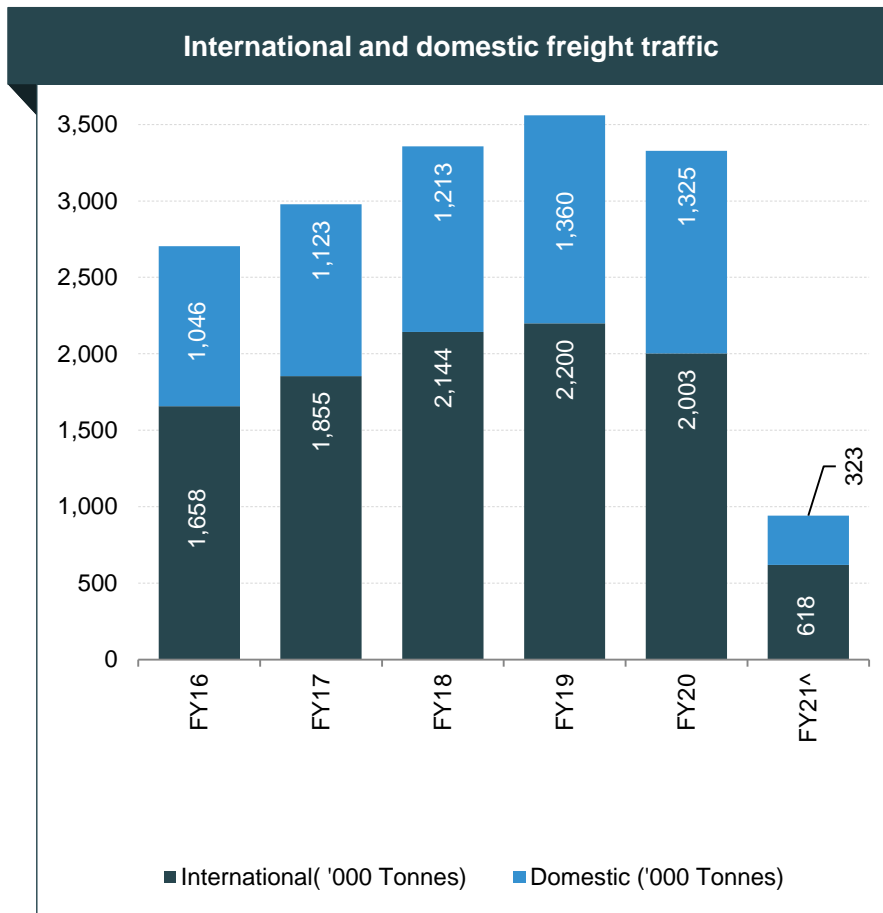
- Freight traffic grew at a CAGR of 5.32% during FY16-FY20 from 2.70 million tonnes (MT) to 3.33 MT.
- Freight traffic on airports in India has the potential to reach 17 MT by FY40.
- Growth in import and export in India will be the key driver for growth in freight traffic as 30% of total trade is undertaken via airways.
- In January 2019, the Government of India released the National Air Cargo Policy Outline 2019, which envisaged making Indian air cargo and logistics most efficient, seamless and cost and time effective globally by the end of next decade.



Notes: FY - Indian Financial Year (April - March), #CAGR is up to FY20, ^- Till September 2020
Source: Airports Authority of India

FREIGHT TRAFFIC...(2/2)

- During FY16-FY20, domestic freight traffic increased at a CAGR of 6.1% and international freight traffic grew at a CAGR of 4.8%.
- In FY20, domestic freight traffic stood at 1.32 MT and international freight traffic was at 2.00 MT.
- By 2023, total freight traffic is expected to touch 4.1 MT, exhibiting a CAGR of 7.27% between FY16 and FY23. In addition, international freight traffic is expected to grow at a CAGR of 7.13% and domestic freight traffic is expected to grow at a CAGR 7.50% between FY16 and FY23.

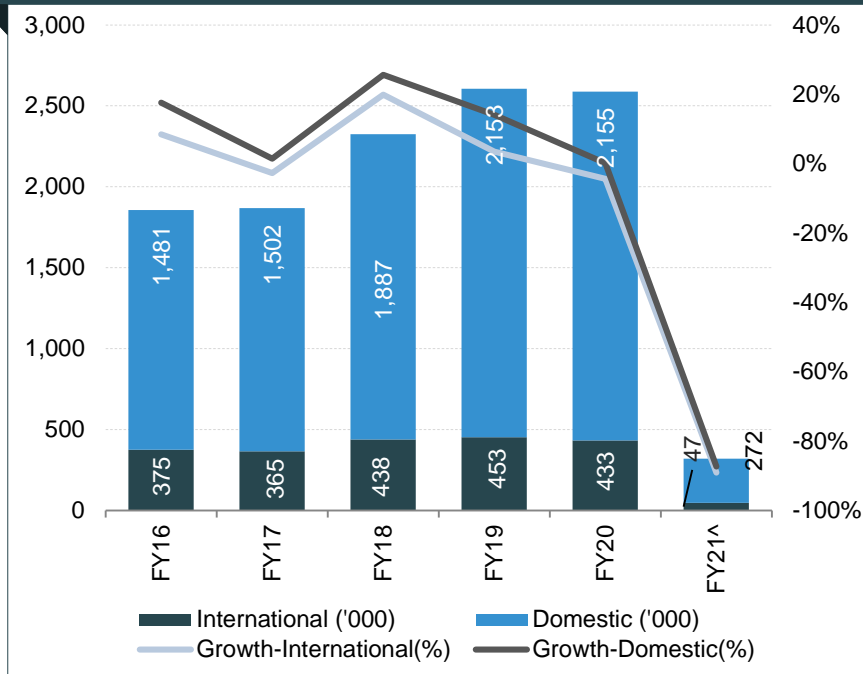


Notes: FY - Indian Financial Year (April - March), ^- Till September 2020

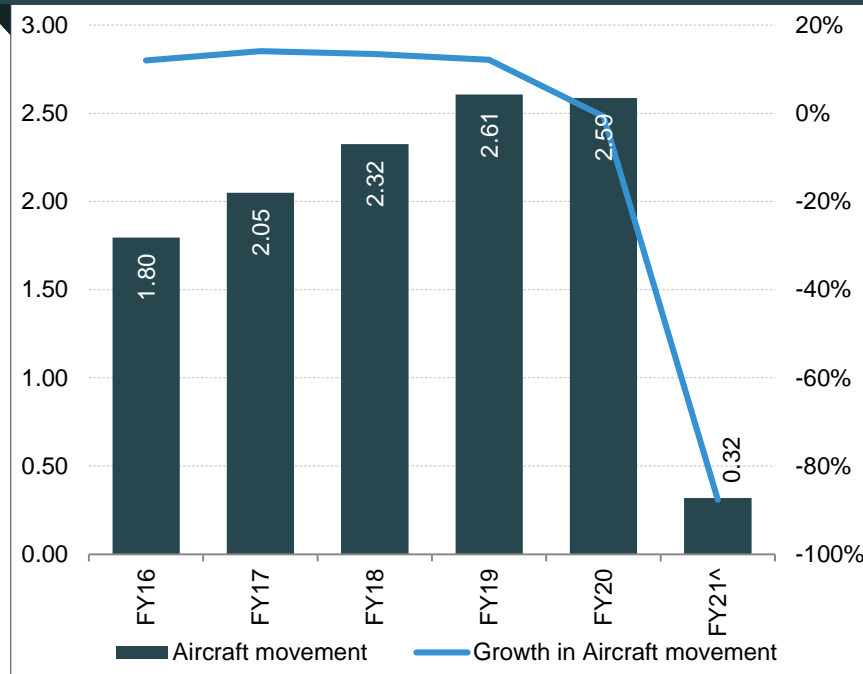
Source: Airports Authority of India

AIRCRAFT MOVEMENT

Aircraft movement growth



Total aircraft movement (million)

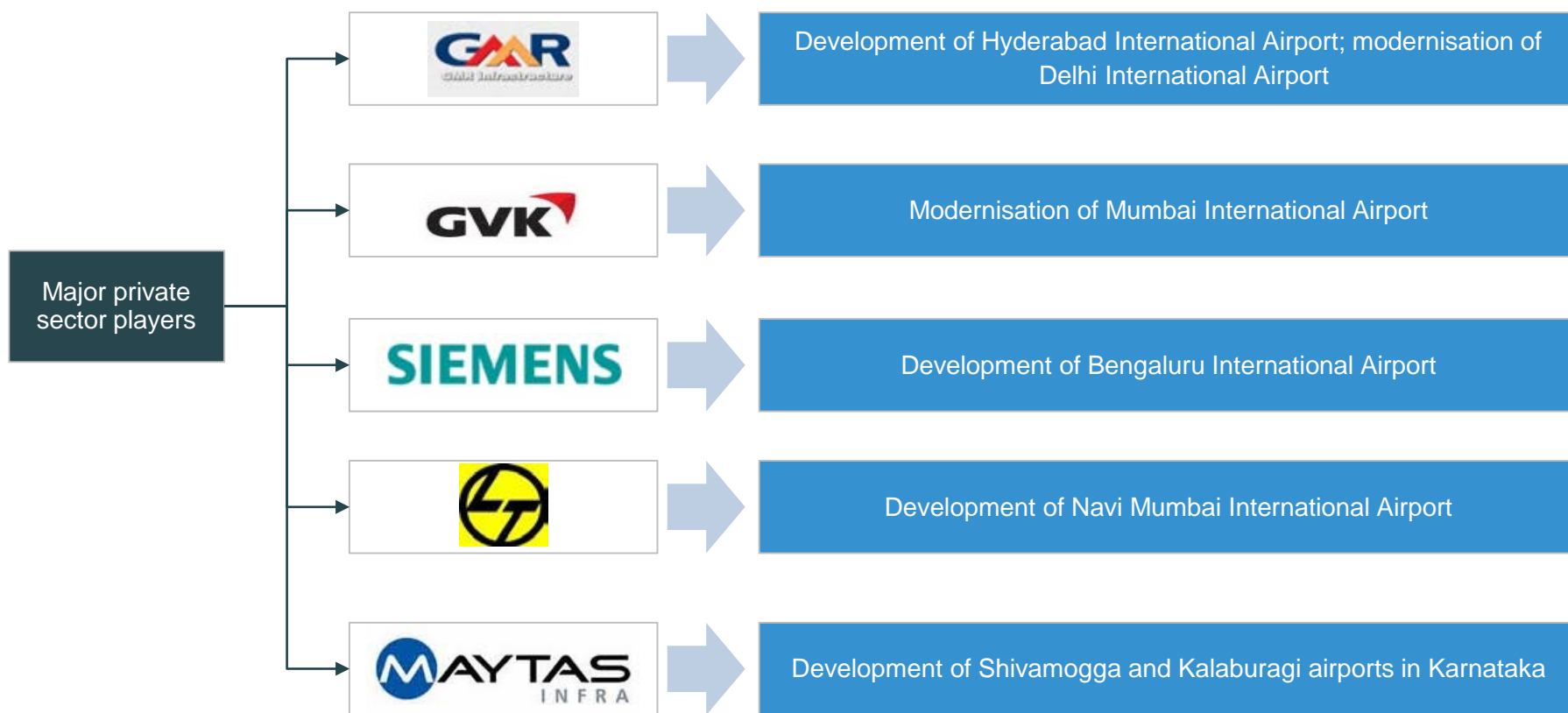


- Aircraft movement grew at a CAGR of 9.56% from 1.60 million in FY16 to 2.59 million in FY20.
- During FY16-FY20, domestic aircraft movement increased at a CAGR of 9.83% and international aircraft movement expanded at a CAGR of 3.57%. India's domestic and international aircraft movements grew to reach 2,155 thousand and 433 thousand during FY20, respectively.

Notes: CAGR - Compound Annual Growth Rate FY - Indian Financial Year (April - March), ^- Till September 2020
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 has given 'in-principle' approval to 19 airports, out of which, 7 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

<p>Rising private participation and investments</p>	<ul style="list-style-type: none"> ▪ Currently, six international airports have been completed successfully 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 Rs. 16,000 crore (US\$ 2.22 billion). ▪ In July 2020, SpiceJet acquired the team and technology platform of Bengaluru-based e-commerce technology company Travenues, a wholly owned subsidiary of online travel aggregator ixigo. ▪ In October 2020, Zurich Airport International signed the concession agreement for the development of Jewar Airport on the outskirts of Delhi. The agreement has granted Zurich Airport International the licence to design, build and operate Noida International Airport (NIAL) for the next 40 years.
<p>Greater use of non-scheduled airlines</p>	<ul style="list-style-type: none"> ▪ Rising business activity leading to higher demand for non-scheduled airlines. ▪ As of February 2019, there were 99 operators (NSOP).
<p>User development fees</p>	<ul style="list-style-type: none"> ▪ Increasing use of development fees by airport developers and operators. ▪ Airport Development Fee: Delhi, Mumbai airports to fund expansion. ▪ User Development Fee: Hyderabad, Bengaluru airports for maintenance.
<p>Focus on non-aeronautical revenue</p>	<ul style="list-style-type: none"> ▪ Indian airports are emulating the SEZ-aerotropolis model to enhance revenues; focus on revenues from retail, advertising, vehicle parking, etc. ▪ With the initiative of displaying “Art for a cause,” Nagpur airport became India’s first airport to take up the cause of empowering the girl child in a unique way.
<p>Water aerodromes</p>	<ul style="list-style-type: none"> ▪ The government is planning to start 14 more water aerodromes across the country, after the successful launch of seaplane service by Prime Minister, Mr. Narendra Modi, between the Statue of Unity near Kevadiya in Gujarat's Narmada district and Sabarmati Riverfront in Ahmedabad in October 2020.

Notes: FY - Indian Financial Year (April - March), NSOP - Non Schedule Operators Permit

Source: DGCA, News Article

Expansion

- Capacity will increase with new terminals coming up in Mumbai, Bengaluru, Chennai and Kolkata.
- Indian carriers are expected to double their fleet capacity to around 1,100 aircrafts by 2027.
- In December 2019, AAI announced its plans to set up India's first three water aerodromes in Andaman & Nicobar.
- In January 2020, IndiGo became the first Indian carrier to have an aircraft fleet size of 250 planes and the first airline to operate 1,500 flights per day.
- In October 2020, the Airports Authority of India (AAI) announced plan to upgrade runways at seven airports across the country by March 2022. These seven airports are at Jammu (Jammu and Kashmir), Kolhapur (Maharashtra), Jabalpur (Madhya Pradesh), Barapani (Meghalaya), Kadapa (Andhra Pradesh), Tirupati (Andhra Pradesh) and Tuticorin (Tamil Nadu).

Ancillary services

- Indian low-cost carriers (LCC's) are looking forward to increase their ancillary services, without tampering their business models. This includes services like lounge access, priority boarding, customer loyalty memberships and customer meals.
- AAI has allowed the Bus Rapid Transit System (BRTS) buses to foray into airport premises in Surat. The initiative is to allow the passengers to reach airports on time and allow smoother transit.

Increasing operations

- Indian LCC's are looking forward to increase their low-cost products on routes which will take up to four hours (shorter international routes).
- This will allow deleveraging of domestic fleet, increasing aircraft utilisation and improving commercial performance.
- Chennai, with its strategic location in South India, has a strong potential to become a hub, with connecting flights to Gulf and across South East Asia.

Source: Central Asia-Pacific Aviation

Government's push

- To become a US\$ 5 trillion economy, the Government proposed to ramp up infrastructure in seaways, roads, airports and payments infrastructure.
- Under Union Budget 2020-21, the Government introduced Krishi Udan scheme on both domestic and international routes to help farmers in transporting agricultural products and improve the product value.
- In November 2020, the Government of India announced that it is likely to increase the total number of allowed domestic flights to 75% of the pre-COVID-19 levels, as it expects a rise in passenger numbers due to the festive and holiday season.
- In September 2020, the Government of India sanctioned Rs. 108 crore (US \$ 14.73 million) for Jagdalpur, Ambikapur and Bilaspur airports in Chhattisgarh under the UDAN scheme for upgrade and development.
- In August 2020, the government approved 78 new routes under UDAN 4.0 to enhance connectivity to the remote and regional areas of the country.
- In April 2020, the government introduced the 'Lifeline Udan' flights to transport essential medical cargo to remote parts of the country to support India's war against COVID-19. Under this scheme, 588 flights were operated by Air India, Alliance Air, IAF and private carriers as of May 31, 2020.
- In February 2019, the Government sanctioned the development of a new greenfield airport in Hirasar, Gujarat, with an estimated investment of Rs. 1,405 crore (US\$ 194.73 million).
- Under Uttar Pradesh Budget 2019-20, the state Government allocated Rs. 200 crore (US\$ 27.72 million) for construction of Ayodhya airport.
- As of January 2019, the Government of India has been working on a blueprint to promote domestic manufacturing of aircrafts and aircraft financing within the country.
- In December 2018, Kannur International Airport was inaugurated, making Kerala the only state in India to have four international airports.

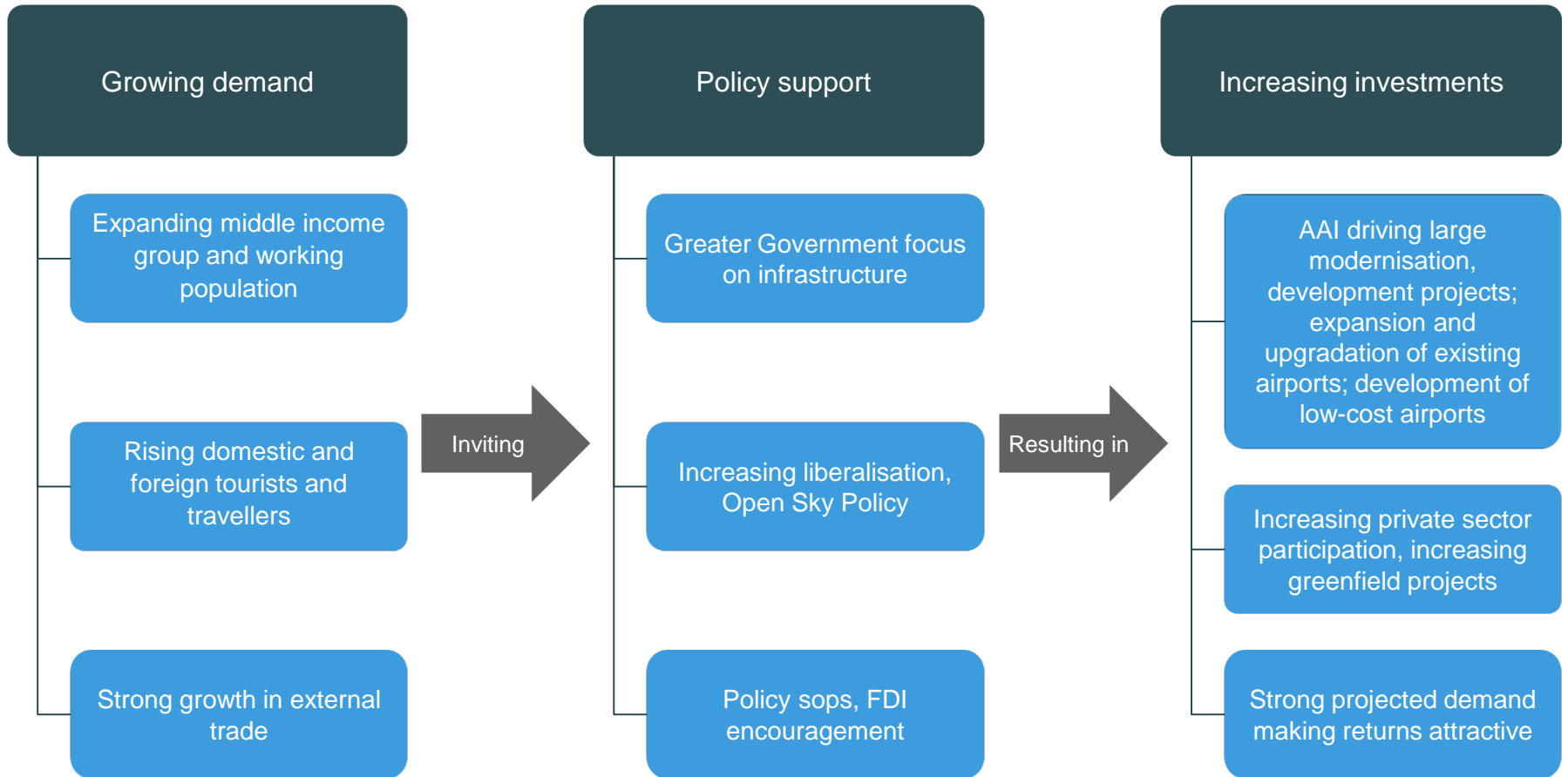
Note: AAI - Airport Authority of India

Source: Central Asia-Pacific Aviation, News Articles



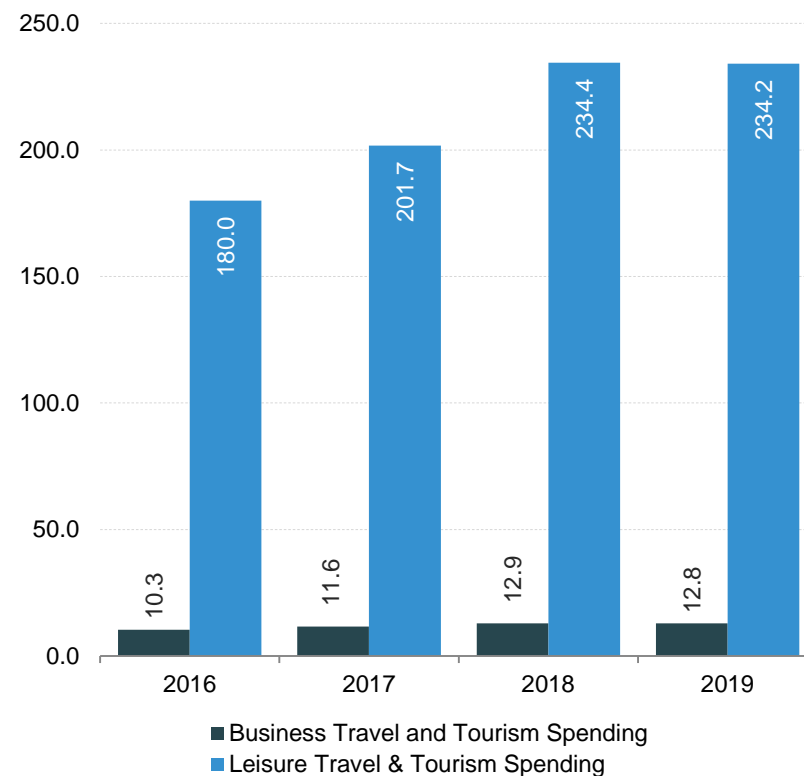
GROWTH DRIVERS

STRONG DEMAND AND POLICY SUPPORT DRIVING INVESTMENTS



- According to WTTC, India ranked 10th among 185 countries in terms of travel & tourism’s total contribution (6.8%) to the GDP in 2019. The contribution was worth Rs. 13,68,100 crore (US\$ 194.30 billion).
- 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\$ 234.16 billion in 2019 and is expected to reach US\$ 432.3 billion by 2028F, whereas business travel revenue was US\$ 12.84 billion in 2019 and is projected to increase to US\$ 24.4 billion by 2028F.
- India plans to open 100 airports by 2024.

Travel and tourism spending (US\$ billion)

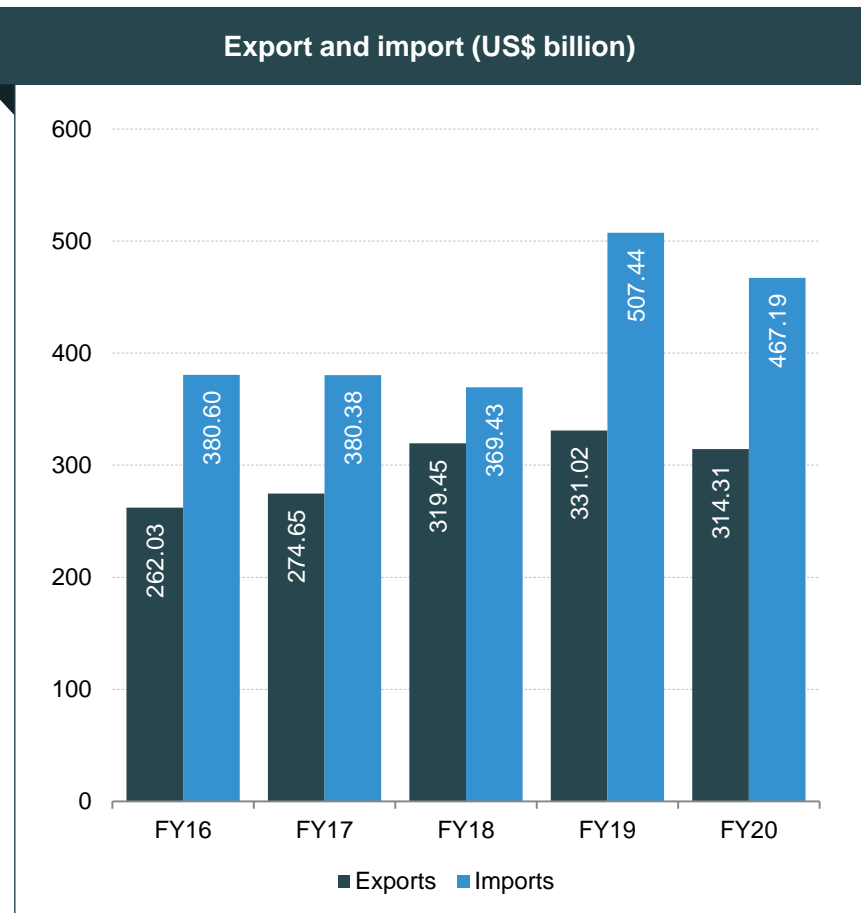
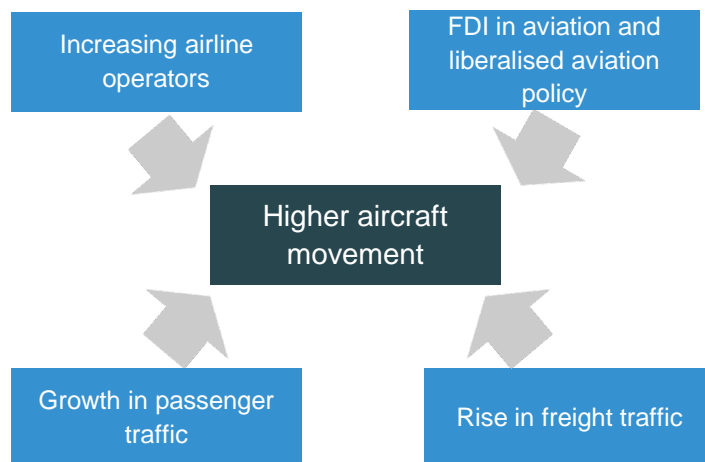


Notes: IT - Information Technology

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

EXPORT AND IMPORT

- Over FY16-20,
 - India's export expanded at a CAGR of 4.65% to US\$ 314.31 billion in FY20.
 - Imports registered a CAGR of 5.26%, which reached US\$ 467.19 billion in FY20.
- Growing trade augurs well for airports as they handle about 30% of India's total trade (by value)
- In FY20, India's merchandise export and import stood at US\$ 314.31 billion and US\$ 467.19 billion, respectively.



Notes: CAGR - Compound Annual Growth Rate, FY - Indian Financial Year (April - March)

Source: Ministry of Commerce and Industry

Greater focus on infrastructure

- AAI plans 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 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.

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, 60% of airport traffic is handled under PPP, while the remaining 40% is managed by AAI.
- Increased traffic rights under bilateral agreements with foreign countries.
- India signed its 1st open skies agreement with Greece.

Northeast India

- Over 30 airport development projects are under progress across various regions in Northeast India.
- AAI plans to develop over 20 airports in Tier-II and Tier-III cities in the next 5 years.
- AAI plans to develop Guwahati as an inter-regional hub and Agartala, Imphal and Dibrugarh as intra-regional hubs.

Notes: India currently has bilateral air service agreements with 104 countries. These include Brazil, 27 members of the EU, and China. In 2008 traffic rights were been enhanced with Mexico, Saudi Arabia, Netherlands, Qatar, Iran, Japan and Turkey, FDI - Foreign Direct Investment, GOI - Government of India

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.

Budgetary support

- The Government has allocated a sum of US\$ 710.38 million to Directorate General of Civil Aviation to implement various schemes.
- The Government has also supported the Bureau of Civil Aviation Security with US\$ 7.62 million to meet their expenditure.
- Allocation to Civil Aviation ministry was Rs. 3,798 crore (US\$ 543.43 million) under Union Budget 2020-21.
- Under Union Budget 2020-21, the Government introduced Krishi Udan scheme on both domestic and international routes to help farmers in transporting agricultural products and improve the product value while One hundred more airports would be developed by 2024 to support Udaan scheme.

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.

Notes: AAI - Airports Authority of India, DGCA - Directorate General of Civil Aviation, FY - Indian Financial Year (April - March)

Source: : Ministry of Civil Aviation

Metro airports

- India has envisaged increasing the number of operational airports to 190-200 by FY40.
- AAI has developed and upgraded over 23 metro airports in the last 5 years.

Non-metro airports

- AAI plans to spend US\$ 3 billion on non-metro projects over the 5 years (2016-20), mainly focusing on modernisation and upgradation of airports. New airports at Itanagar, Kohima and Gangtok are also planned.
- 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 regional connectivity scheme of AAI.

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 inflow in India's air transport sector (including air freight) reached US\$ 2.79 billion between April 2000 and June 2020.

PRIVATE SECTOR INVESTMENT IN AIRPORTS RISING

- 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 private sector in equity component of major airports -
 - 74% private share holding in IGI Airport (Delhi) — owned majorly by GMR (54%), Fraport AG (10%), and Eraman Malaysia (10%); rest of the shares 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%); rest of the shares owned by Government of India (13%) and Government of Andhra Pradesh (13%).
 - 74% shareholding in Kempagowda 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%).

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

Source: News Article

SUCCESSFUL PPP AIRPORTS IN INDIA

- Presently, India has 5 PPP airports, one each at Mumbai, Delhi, Cochin, Hyderabad and Bengaluru, which together handle over 55% of the country's air traffic.
- Government of India has approved 15 greenfield PPP projects which are expected to increase the air traffic in India. These projects would be setup in Goa, Navi Mumbai, Maharashtra, Bijapur, Gulbarga, Karnataka, Kerala, West Bengal, Madhya Pradesh, Sikkim, Puducherry and Uttar Pradesh.
- Government of Maharashtra approved development of Nagpur airport on 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.
- In November 2019, Competition Commission of India (CCI) approved the acquisition of shareholdings in Mumbai International Airport Limited (MIAL) by Adani Properties Private Limited (APPL) .

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



OPPORTUNITIES

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 airport sector.
- Government of India has launched 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.

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 promotion of MRO, declaration of MRO and component warehouses as free trade zones with 0% GST, import restrictions.

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 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 ORGANISATIONS

KEY INDUSTRY ORGANISATIONS

Airports Authority of India (AAI)

Address: Rajiv Gandhi Bhawan, Safdarjung Airport,

New Delhi -110 003

Phone: 91 11 24632950

Directorate General of Civil Aviation (DGCA)

Address: Aurbindo Marg, Opp. Safdarjung Airport,

New Delhi -110 003

Phone: 91 11 24622495

Fax: 91 11 24629221

E-mail: dri@dgca.nic.in, dfa@dgca.nic.in

USEFUL INFORMATION



- 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.	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

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

Source: Reserve Bank of India, Average for the year

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