AVIATION

For updated information, please visit www.ibef.org

April 2021
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>Advantage India</td>
<td>4</td>
</tr>
<tr>
<td>Market Overview</td>
<td>6</td>
</tr>
<tr>
<td>Recent Trends and Strategies</td>
<td>18</td>
</tr>
<tr>
<td>Growth Drivers</td>
<td>23</td>
</tr>
<tr>
<td>Opportunities</td>
<td>33</td>
</tr>
<tr>
<td>Key Industry Contacts</td>
<td>35</td>
</tr>
<tr>
<td>Appendix</td>
<td>37</td>
</tr>
</tbody>
</table>
Executive summary

**Expected aviation market ranking by 2024**

3rd largest

**Indian domestic air passenger traffic for FY21 (May 2020-March 2021)**

53.4 million

**For 2028, forecasted contribution of travel & tourism to GDP**

US$ 492.21 billion

**Spending on business travel in 2019**

US$ 234.16 billion

**Expected expenditure of Indian travellers in 2021**

US$ 136 billion

---

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Leisure Travel</th>
<th>Business Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>234.16</td>
<td>12.84</td>
</tr>
<tr>
<td>2028F</td>
<td>432.35</td>
<td>24.41</td>
</tr>
</tbody>
</table>

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

- **2018**: 247.30
- **2028F**: 492.21

CAGR 7.13%

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

- **FY18**: 308.75
- **FY19**: 344.70
- **FY20**: 341.05
- **FY21**: 53.40

---

Note: *At real prices, E - Estimated, F - Forecasted, *As per IATA forecasts, *- until March 2021

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

2 Increasing investments
► 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).

3 Policy support
► 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).

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

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
India is the 7th largest civil aviation market in the world and is set to become the world’s 3rd* largest by 2024.

In FY21 (from May 2020 to March 2021), airports in India pegged the domestic passenger traffic to be ~53.4 million, a ~62% y-o-y decline over the fiscal ended March 31, 2020.

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 in India (464)

- AAI managed (125)
- Non-AAI airports and airstrips (339)

AAI managed (125)
- Non-operational (9)
- Operational (90)
- Civil enclaves (26)

Non-AAI airports and airstrips (339)
- Domestic airports (66)
- Customs airports (7)
- International (17)

Activity in AAI airports - shares (%) - FY20

- Aircraft movement: 83.3% Domestic, 16.7% International
- Passenger traffic: 80.5% Domestic, 19.5% International
- Freight traffic: 39.8% Domestic, 60.2% International

**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

**Data for February 2021**

<table>
<thead>
<tr>
<th>Airline operators</th>
<th>Market share</th>
<th>Load factor</th>
<th>Passengers ferried (lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IndiGo</td>
<td>54.2%</td>
<td>74.4%</td>
<td>54.2</td>
</tr>
<tr>
<td>spiceJet</td>
<td>12.6%</td>
<td>78.9%</td>
<td>12.6</td>
</tr>
<tr>
<td>Air India</td>
<td>11.0%</td>
<td>78.3%</td>
<td>17.13</td>
</tr>
<tr>
<td>go</td>
<td>7.8%</td>
<td>76.5%</td>
<td>12.15</td>
</tr>
<tr>
<td>AirAsia</td>
<td>6.8%</td>
<td>67.9%</td>
<td>10.52</td>
</tr>
<tr>
<td>Vistara</td>
<td>6.8%</td>
<td>73.7%</td>
<td>10.55</td>
</tr>
</tbody>
</table>

**Note:** Market Share and Passenger Load Data for the month of February 2021  
**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

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

Chennai: Passenger traffic handled
FY16: 15.22 million
FY17: 18.36 million
FY18: 20.36 million
FY19: 22.54 million
FY20: 22.26 million

Hyderabad: Passenger traffic handled
FY16: 12.39 million
FY17: 15.10 million
FY18: 18.16 million
FY19: 21.40 million
FY20: 21.65 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

Note: FY - Indian Financial Year (April - March)
Source: AAI
Airlines 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:

[Image of bar charts showing domestic and international demand, capacity, and utilisation for FY16 to FY19^]
Growth in passenger traffic has been strong since the new millennium, especially with rising income and low-cost aviation.

In February 2021, the average daily passenger traffic stood at 2,76,175.

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: FY - Indian Financial Year (April - March), *passenger - Domestic + International,, ^- until February 2021
Source: Association of Private Airport Operator, Airports Authority of India
Domestic passenger traffic expanded at a CAGR of 12.91% from FY16 to FY20.

International passenger traffic registered growth at a CAGR of 5.01% from FY16 to FY20.

In FY21 (from May 2020 to March 2021), airports in India pegged the domestic passenger traffic to be ~53.4 million, a y-o-y decline of ~62% over the fiscal ended March 31, 2020.

The average number of passengers per flight in February 2021 was 121, against an average of 136 passengers per flight in February 2020.

**Notes:** E - Estimate, YoY - Year on Year, FY - Indian Financial Year (April - March), ^- until February 2021

**Source:** Airports Authority of India, Ministry of Civil Aviation
Freight traffic...(1/2)

- Freight traffic grew at a CAGR of 5.32% from FY16 to FY20 from 2.70 million metric tonnes (MMT) to 3.33 MMT.
- Freight traffic on 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.
- 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, ^- until February 2021

Source: Airports Authority of India
From FY16 to 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 MMT and international freight traffic was at 2.00 MMT.

By 2023, total freight traffic is expected to touch 4.1 MMT, 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), ^- until February 2021

**Source:** Airports Authority of India
Aircraft movement grew at a CAGR of 9.56% from 1.60 million in FY16 to 2.59 million in FY20.

From FY16 to 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 in FY20, respectively.

Notes: CAGR - Compound Annual Growth Rate FY - Indian Financial Year (April - March), ^- until January 2021
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
- Development of Ahmedabad and Thiruvananthapuram Airports
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 2021, there were 101 operators (NSOP).

2 Significant recovery in air traffic
- The Indian aviation sector is on a path to recovery and has exhibited significant rebound to pre-Covid levels in terms of passenger movement and cargo operation.
- 3,13,668 domestic passengers flew on February 28, 2021—the highest number since resumption of domestic flights on May 25, 2020.

3 Water aerodromes
- 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 plan to set up two water aerodromes in Assam and four water aerodromes in Andaman & Nicobar Islands this year to boost tourism and connectivity.
- In March 2021, the government submitted a proposal to develop a water aerodrome project at the Ujjani Dam, under the Ministry of Civil Aviation’s UDAN-RCS (regional connectivity scheme).

4 Focus on non-aeronautical revenue
- 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.

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.

Notes: FY - Indian Financial Year (April - March), NSOP - Non Schedule Operators Permit
Source: DGCA, News Article
Strategies adopted…(1/2)

### 1

#### 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.
- 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 major expansion of Surat Airport (December 2021).
- On January 19, 2021, the Airport Authority of India (AAI) signed a concession agreement with Adani Group for three airports—Jaipur, Guwahati and Thiruvananthapuram. The concession period is 50 years from the date of commercial operations.
- On February 25, 2021, the Airports Authority of India (AAI) issued tenders for construction of the first phase of an international airport at Dholera in Gujarat, entailing an investment of Rs. 987 crore (US$ 135.07 million). The new facility is being set up in greenfield city under the Delhi–Mumbai Industrial Corridor (DMIC) project at Dholera.
- On March 25, 2021, Union Minister of Civil Aviation Hardeep Singh Puri inaugurated the Kurnool Airport, Orvakal, Andhra Pradesh, in a virtual ceremony. The flight operations at Kurnool airport will commence on March 28, 2021 under the Regional Connectivity Scheme – Ude Desh Ka Aam Nagrik (RCS-UDAN).
- In March 2021, the Indira Gandhi International (IGI) Airport in Delhi announced a key expansion project to increase its passenger handling capacity. The expansion project includes a new terminal, advanced facilities, an additional runway and improved capacity to handle more passengers.

### 2

#### 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.
- On December 21, 2020, IndiGo announced that it has collaborated with Urban Drive car rental company to offer self-driven and chauffeur driver services across 60 Indian cities.

Source: Central Asia-Pacific Aviation, News Article
Strategies adopted…(2/2)

3

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 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.

- In March 2021, on the launch of the ‘Azadi Ka Amrit Mahotsav (India@75)’ by the Government of India, the Ministry of Civil Aviation (MoCA) has proposed 392 routes under the UDAN 4.1 bidding process.

- In February 2021, the government identified 24 routes in Assam under the first phase of UDAN 4.0.

- 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 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, about 600 flights flew more than 5 lakh kms and transported about 1,000 tons of essential cargo.

- As of December 31, 2020, ~31 lakh Indians have been repatriated under the Vande Bharat Mission (VBM). The VBM has so far involved 6,373 Air India flights and 474 flights by private Indian carriers. About 1,035,471 Indian nationals have been repatriated by Air India, whereas 74,675 Indian nationals have been brought back by private carriers.

Source: Ministry of Aviation, DPIIT, News Article
GROWTH DRIVERS
Strong demand and policy support driving investments

Growing demand
- Expanding middle income group and working population
- Rising domestic and foreign tourists and travellers
- Strong growth in external trade

Inviting
- Greater Government focus on infrastructure
- Increasing liberalisation, Open Sky Policy
- Policy sops, FDI encouragement

Resulting in
- AAI driving large modernisation, development projects; expansion and upgradation of existing airports; development of low-cost airports
- Increasing private sector participation, increasing greenfield projects
- Strong projected demand making returns attractive
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. 16,681 billion (US$ 226.37 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.

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

---

**Export and import (US$ billion)**

- **FY16:**
  - Exports: 262.03
  - Imports: 380.60
- **FY17:**
  - Exports: 274.65
  - Imports: 390.38
- **FY18:**
  - Exports: 319.45
  - Imports: 369.43
- **FY19:**
  - Exports: 331.02
  - Imports: 507.44
- **FY20:**
  - Exports: 314.31
  - Imports: 467.19

**Trends:**
- Increasing airline operators
- FDI in aviation and liberalised aviation policy
- Higher aircraft movement
- Growth in passenger traffic
- Rise in freight traffic
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.

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.
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.

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.

Union Budget 2021-22
- The government allocated Rs. 3,224.67 crore (US$ 440.36 million) for the Ministry of Civil Aviation.
- 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.
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$ 2.88 billion between April 2000 and December 2020.

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.
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.

- 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 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.

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

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

Source: Association of Private Airport Operators
## Key projects offered in airports under national infrastructure pipeline - FY 2019-25

<table>
<thead>
<tr>
<th>Name of the airport</th>
<th>Current Status</th>
<th>Project Cost (US$ million)</th>
<th>Mode of Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pune Airport Development</td>
<td>Development</td>
<td>2,695.42</td>
<td>PPP</td>
</tr>
<tr>
<td>Navi Mumbai Airport Pre-Development</td>
<td>Development</td>
<td>2,312.38</td>
<td>PPP</td>
</tr>
<tr>
<td>Bangalore Airport Expansion</td>
<td>Development</td>
<td>2,298.20</td>
<td>PPP</td>
</tr>
<tr>
<td>Sriperumbudur Airport Development</td>
<td>Conceptualization</td>
<td>2,127.96</td>
<td>EPC</td>
</tr>
<tr>
<td>Bhiwadi International Airport Development</td>
<td>Conceptualization</td>
<td>1,517.95</td>
<td>EPC</td>
</tr>
<tr>
<td>Delhi Airport Expansion</td>
<td>Implementation</td>
<td>1,390.27</td>
<td>EPC</td>
</tr>
<tr>
<td>Jewar Airport Development</td>
<td>Development</td>
<td>1,220.03</td>
<td>PPP</td>
</tr>
<tr>
<td>Hyderabad Airport Expansion</td>
<td>Implementation</td>
<td>837.00</td>
<td>PPP</td>
</tr>
<tr>
<td>Vellore Aerospace Park Development</td>
<td>Conceptualization</td>
<td>425.59</td>
<td>EPC</td>
</tr>
<tr>
<td>Coimbatore Airport Expansion</td>
<td>Conceptualization</td>
<td>425.59</td>
<td>EPC</td>
</tr>
<tr>
<td>Madurai Airport Expansion</td>
<td>Conceptualization</td>
<td>425.59</td>
<td>EPC</td>
</tr>
<tr>
<td>Mopa Airport Development</td>
<td>Development</td>
<td>425.59</td>
<td>PPP</td>
</tr>
<tr>
<td>Bhogapuram Airport Development</td>
<td>Development</td>
<td>425.59</td>
<td>PPP</td>
</tr>
<tr>
<td>Campbell Bay Airport Development</td>
<td>Conceptualization</td>
<td>354.66</td>
<td>EPC</td>
</tr>
<tr>
<td>Port Blair Airport Development</td>
<td>Conceptualization</td>
<td>354.66</td>
<td>EPC</td>
</tr>
<tr>
<td>Chennai Airport Upgradation</td>
<td>Implementation</td>
<td>354.66</td>
<td>EPC</td>
</tr>
<tr>
<td>Nagpur Airport Upgradation</td>
<td>Development</td>
<td>241.17</td>
<td>PPP</td>
</tr>
<tr>
<td>Dholera International Airport Development</td>
<td>Conceptualization</td>
<td>241.17</td>
<td>EPC</td>
</tr>
</tbody>
</table>
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 promotion of MRO, declaration of MRO and component warehouses as free trade zones with 0% GST, 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 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.

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 Contacts
## Key Industry Contacts

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Rs. Equivalent of one US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>44.95</td>
</tr>
<tr>
<td>2005-06</td>
<td>44.28</td>
</tr>
<tr>
<td>2006-07</td>
<td>45.29</td>
</tr>
<tr>
<td>2007-08</td>
<td>40.24</td>
</tr>
<tr>
<td>2008-09</td>
<td>45.91</td>
</tr>
<tr>
<td>2009-10</td>
<td>47.42</td>
</tr>
<tr>
<td>2010-11</td>
<td>45.58</td>
</tr>
<tr>
<td>2011-12</td>
<td>47.95</td>
</tr>
<tr>
<td>2012-13</td>
<td>54.45</td>
</tr>
<tr>
<td>2013-14</td>
<td>60.50</td>
</tr>
<tr>
<td>2014-15</td>
<td>61.15</td>
</tr>
<tr>
<td>2015-16</td>
<td>65.46</td>
</tr>
<tr>
<td>2016-17</td>
<td>67.09</td>
</tr>
<tr>
<td>2017-18</td>
<td>64.45</td>
</tr>
<tr>
<td>2018-19</td>
<td>69.89</td>
</tr>
<tr>
<td>2019-20</td>
<td>70.49</td>
</tr>
<tr>
<td>2020-21</td>
<td>73.20</td>
</tr>
</tbody>
</table>

### Exchange Rates (Calendar Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rs. Equivalent of one US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>44.11</td>
</tr>
<tr>
<td>2006</td>
<td>45.33</td>
</tr>
<tr>
<td>2007</td>
<td>41.29</td>
</tr>
<tr>
<td>2008</td>
<td>43.42</td>
</tr>
<tr>
<td>2009</td>
<td>48.35</td>
</tr>
<tr>
<td>2010</td>
<td>45.74</td>
</tr>
<tr>
<td>2011</td>
<td>46.67</td>
</tr>
<tr>
<td>2012</td>
<td>53.49</td>
</tr>
<tr>
<td>2013</td>
<td>58.63</td>
</tr>
<tr>
<td>2014</td>
<td>61.03</td>
</tr>
<tr>
<td>2015</td>
<td>64.15</td>
</tr>
<tr>
<td>2016</td>
<td>67.21</td>
</tr>
<tr>
<td>2017</td>
<td>65.12</td>
</tr>
<tr>
<td>2018</td>
<td>68.36</td>
</tr>
<tr>
<td>2019</td>
<td>69.89</td>
</tr>
<tr>
<td>2020</td>
<td>74.18</td>
</tr>
<tr>
<td>2021*</td>
<td>74.94</td>
</tr>
</tbody>
</table>

**Note:** As of April 2021  
**Source:** Reserve Bank of India, Average for the year
India Brand Equity Foundation (IBEF) engaged Sutherland Global Services private Limited to prepare/update this presentation.

All rights reserved. All copyright in this presentation and related works is solely and exclusively owned by IBEF, delivered during the course of engagement under the Professional Service Agreement signed by the Parties. The same may not be reproduced, wholly or in part in any material form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this presentation), modified or in any manner communicated to any third party except with the written approval of IBEF.

This presentation is for information purposes only. While due care has been taken during the compilation of this presentation to ensure that the information is accurate to the best of Sutherland Global Services’ Private Limited and IBEF’s knowledge and belief, the content is not to be construed in any manner whatsoever as a substitute for professional advice.

Sutherland Global Services Private Limited and IBEF neither recommend nor endorse any specific products or services that may have been mentioned in this presentation and nor do they assume any liability, damages or responsibility for the outcome of decisions taken as a result of any reliance placed on this presentation.

Neither Sutherland Global Services Private Limited nor IBEF shall be liable for any special, direct, indirect or consequential damages that may arise due to any act or omission on the part of the user due to any reliance placed or guidance taken from any portion of this presentation.