EXECUTIVE SUMMARY

- India is set to surpass UK and become the third largest aviation market around 2024.\(^\text{1}\)
- By FY19, passenger traffic at Indian airports stood at 344.70 million from 308.75 million in 2017-18.
- Please change the update to: During FY20 (till May 2019), air passenger traffic stood at 55.60 million.
- India's domestic aviation market is the third largest market in the world.
- 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 further forecasted to increase to US$ 492.21 billion by 2028F.

- Business and leisure travel to boost growth.

Note: *At real prices, E – Estimated, F – Forecasted, Conversion rate - US$ 1 = Rs 65.12, \(^{1}\)As per IATA forecasts
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.^

Growth in aviation accentuating demand for MRO facilities

Expenditure in MRO accounts for 12-15 per cent of total revenues; 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.

Investments to the tune of Rs 420-450 billion (US$ 5.99-6.41 billion) are expected in India’s airport infrastructure between FY18-23#.

Growing private sector participation through the Public - Private Partnership (PPP) route.

The government has been encouraging private sector participation.

Foreign investment up to 49 per cent is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline.

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

In FY19, airports in India witnessed domestic passenger traffic of about 275.21 million people.

During FY20 (till May 2019), domestic passenger traffic stood at 44.37 million.

Investments worth US$ 6 billion are expected in the country's airport sector in 5 years.

In-service fleet size of scheduled Indian operators stood at 620 airplanes, as of July 2018. The number of airplanes is expected to grow to 1,100 planes by 2027.

### Key Figures

<table>
<thead>
<tr>
<th>Category</th>
<th>FY19</th>
<th>FY18</th>
<th>2019P up to April 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled airlines: distance flown (mn km)</td>
<td>199</td>
<td>225</td>
<td>506.91</td>
</tr>
<tr>
<td>Non-scheduled airlines in operation</td>
<td>39</td>
<td>620</td>
<td>106</td>
</tr>
<tr>
<td>Number of aircrafts (scheduled Indian operators)</td>
<td>225</td>
<td>106</td>
<td>620</td>
</tr>
<tr>
<td>Cargo handled</td>
<td>703,000</td>
<td>3,357,028</td>
<td>3,357,028</td>
</tr>
<tr>
<td>Number of operational airports</td>
<td>50</td>
<td>103</td>
<td>103</td>
</tr>
</tbody>
</table>

**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

For updated information, please visit www.ibef.org
AIRPORTS AND AIRSTRIPS

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

Activity in AAI airports - shares (%) – FY19 (up to Feb 2019)

- Aircraft movement:
  - Domestic: 82.63%
  - International: 17.37%

- Passenger traffic:
  - Domestic: 79.84%
  - International: 20.16%

- Freight traffic:
  - Domestic: 61.80%
  - International: 38.20%

Note: AAI – Airports Authority of India, JV – Joint Venture, FY – Indian Financial Year (April – March)
Source: Airports Authority of India
## MAJOR AIRLINES OPERATING IN INDIA

<table>
<thead>
<tr>
<th>Airline</th>
<th>Market Share</th>
<th>Passenger Load Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>SpiceJet</td>
<td>13.1%</td>
<td>93.7%</td>
</tr>
<tr>
<td>GoAir</td>
<td>10.8%</td>
<td>90.8%</td>
</tr>
<tr>
<td>Jet Airways</td>
<td>0.8%</td>
<td>76.3%</td>
</tr>
<tr>
<td>Jetlite</td>
<td>0.2%</td>
<td>79.1%</td>
</tr>
<tr>
<td>Air India</td>
<td>13.9%</td>
<td>81.2%</td>
</tr>
<tr>
<td>Indigo</td>
<td>49.9%</td>
<td>87.8%</td>
</tr>
</tbody>
</table>

**Note:** Market Share and Passenger Load Data for the month of February 2019  
**Source:** Directorate General of Civil Aviation
MAJOR AIRPORTS IN INDIA

**Bengaluru**
Passenger traffic handled in
FY16: 18.97 million
FY17: 22.88 million
FY18: 26.91 million
FY19: 33.31 million
FY20: 2.73 million (up to April 2019)

**Mumbai**
Passenger traffic handled in;
FY16: 41.67 million
FY17: 45.15 million
FY18: 48.50 million
FY19: 48.82 million
FY20: 3.32 million (up to April 2019)

**Delhi**
Passenger traffic handled in
FY16: 48.42 million
FY17: 57.70 million
FY18: 65.69 million
FY19: 69.23 million
FY20: 4.96 million (up to April 2019)

**Kolkata**
Passenger traffic handled in
FY16: 12.42 million
FY17: 15.82 million
FY18: 19.89 million
FY19: 21.88 million
FY20: 1.77 million (up to April 2019)

**Hyderabad**
Passenger traffic handled in
FY16: 12.39 million
FY17: 15.10 million
FY18: 18.16 million
FY19: 21.40 million
FY20: 1.79 million (up to April 2019)

**Chennai**
Passenger traffic handled in
FY16: 15.22 million
FY17: 18.36 million
FY18: 20.36 million
FY19: 22.54 million
FY20: 1.71 million (up to April 2019)

*Note: FY – Indian Financial Year (April – March)*
*Source: AAI*
Demand and Capacity in India’s civil aviation sector have shown robust growth.

Capacity (Available Seat Kilometer) available in domestic flights has increased to 155,033.4 million km in FY19\(^*\). Correspondingly, demand (Revenue Passenger Kilometer) for domestic services has grown rapidly to 136,631.4 million km in FY19\(^*\).

Capacity (Available Seat Kilometer) available in international flights has increased to 126,054.2 million km in FY19\(^*\). Correspondingly, demand (Revenue Passenger Kilometer) for international services has grown rapidly to 111,620.4 million km in FY19\(^*\).

Growth in demand has consistently outpaced the growth in supply resulting in high utilisation (Passenger Load Factor). As of March 2018, India had the highest utilisation (Passenger Load Factor) among the top seven aviation markets in the world.

**Notes:** *in million kilometre, ^provisional

**Source:** Directorate General of Civil Aviation, TechSci Research
Growth in passenger traffic has been strong since the new millennium, especially with rising incomes and low-cost aviation.

India’s passenger traffic grew at 11.64 per cent year on year to reach 344.70 million in FY19. It grew at a CAGR of 12.64 per cent during FY06-FY19.

Passenger traffic in India during Apr 2018-Mar 2019 stood at 344.70 million.

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**.

Further, India is already the fastest growing domestic aviation market in the world and air connectivity in the country recorded the highest pace of 114 per cent globally between 2013-18**.

Moreover, India’s domestic aviation market has recorded 52 consecutive months of double digit growth by December 2018.

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.

During FY20 (till May 2019), air passenger traffic stood at 55.60 million.

*Notes: CAGR – Compound Annual Growth Rate, FY – Indian Financial Year (April – March), *passenger – Domestic + International, #CAGR is till FY19, **As per IATA, ^ Till May 2019
Source: Association of Private Airport Operator, Airports Authority of India
Domestic passenger traffic expanded at a CAGR of 13.85 per cent over FY06–19.

International passenger traffic registered growth at a CAGR of 9.11 per cent over FY06-19.

During Apr 2018-Mar 2019, domestic passenger traffic stood at 275.22 million while international traffic stood at 69.48 million.

Domestic passenger traffic grew YoY by 13.13 per cent to reach 275.22 million in FY19 and is expected to grow to 293 million in FY20E.

International passenger grew YoY by 6.12 per cent to reach 69.48 million in FY19 and traffic is expected to grow to 76 million in FY20E.

**Notes:** E- Estimate, YoY – Year on Year, FY – Indian Financial Year (April – March)

**Source:** Airports Authority of India, Ministry of Civil Aviation
FREIGHT TRAFFIC…(1/2)

- Freight traffic grew at a CAGR of 7.44 per cent during FY06-FY19 to from 1.40 million MT to 3.56 million MT.
- Freight traffic on airports in India has the potential to reach 17 million tonnes by FY40.
- Growth in import and export in India will be the key driver for growth in freight traffic as 30 per cent of total trade is undertaken via airways.
- In January 2019, the Government of India’s released the National Air Cargo Policy Outline 2019 which envisages making Indian air cargo and logistics the most efficient, seamless and cost and time effective globally by the end of the next decade.

**Notes:** FY – Indian Financial Year (April – March), #CAGR is up to FY18.

**Source:** Airports Authority of India
During FY06-19, domestic freight traffic increased at a CAGR of 8.27 per cent, while international freight traffic grew at a CAGR of 6.94 per cent during the same period.

In FY19, domestic freight traffic stood at 1,359.99 tonnes, while international freight traffic was at 2,200.03 tonnes.

During Apr 2018-Mar 2019, domestic freight traffic stood at 1.35 million tonnes while international freight stood at 2.20 million tonnes.

By 2023, total freight traffic is expected to touch 4.14 million tonnes exhibiting growth at a CAGR of 7.27 per cent between FY2016 and FY23. In addition, international freight traffic is expected to grow at a CAGR of 7.13 per cent while domestic freight traffic is expected to grow at a CAGR 7.50 per cent between FY2016 and FY23.
Aircraft movement grew at a CAGR of 5.91 per cent from 1.31 million in FY07 to 2.61 million during FY19.

During FY07-19, domestic aircraft movement increased at a CAGR of 7.93 per cent, while international aircraft movement expanded at 6.36 per cent CAGR over the same period. India's domestic and international aircraft movements grew 14.14 per cent y-o-y and 3.36 per cent y-o-y to 2,153 thousand and 453.61 thousand during 2018-19, respectively.

During Apr 2018-Mar 2019, domestic aircraft movement stood at 2.15 million while international aircraft movement stood at 0.45 million.

**Notes:** CAGR – Compound Annual Growth Rate  
FY – Indian Financial Year (April – March)  
YoY – Year on Year.  
**Source:** Association of Private Airport Operators, Airports Authority of India
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.

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).

Major private sector players:

- Development of Hyderabad International Airport; modernisation of Delhi International Airport
- Modernisation of Mumbai International Airport
- Development of Bengaluru International Airport
- Development of Bengaluru International Airport
- Development of Bengaluru International Airport
- Development of Bengaluru International Airport
- Development of Simoga and Gulbarga airports in Karnataka

Notes: AAI – Airports Authority of India
RECENT TRENDS AND STRATEGIES
### NOTABLE TRENDS IN THE AIRPORTS SECTOR

**Rising private participation and Investments**
- Currently, six international airports have been completed successfully under PPP mode
- The sector is expected to witness investments worth US$ 25 billion by 2027.
- In November 2018, the Government of India approved a proposal to manage six AAI airports under public private partnership (PPP). These airports are situated in Ahmedabad, Jaipur, Lucknow, Guwahati, Thiruvananthapuram and Mangaluru. AAI received 32 technical bids from ten companies.
- Further, the Navi Mumbai airport is being developed under a PPP model 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).

**Greater use of non-scheduled airlines**
- Rising business activity leading to higher demand for non-scheduled airlines
- As of October 2018, there are 106 operators (NSOP)

**User development fees**
- 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

**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.
- Absence of complementary meals in low-cost airlines have boosted the F&B retail segment at airports

**Notes:** FY – Indian Financial Year (April – March), NSOP – Non Schedule Operators Permit  
**Source:** DGCA
STRATEGIES ADOPTED...(1/2)

<table>
<thead>
<tr>
<th>Expansion</th>
<th></th>
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<tbody>
<tr>
<td>- Capacity will also increase with new terminals coming up in Mumbai,</td>
<td></td>
</tr>
<tr>
<td>Bengaluru, Chennai and Kolkata</td>
<td></td>
</tr>
<tr>
<td>- Indian carriers are expected to double their fleet capacity to around</td>
<td></td>
</tr>
<tr>
<td>1,100 aircrafts by 2027.</td>
<td></td>
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<tr>
<td>- In August 2018, SpiceJet operated India’s first ever test flight</td>
<td></td>
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<tr>
<td>powered by biofuel from Dehradun to Delhi.</td>
<td></td>
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<tr>
<td>- In December 2018, IndiGo became first Indian carrier to have an aircraft</td>
<td></td>
</tr>
<tr>
<td>fleet size of 200 planes.</td>
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<tr>
<td>- Number of Operational Airports crossed 100.</td>
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</table>

<table>
<thead>
<tr>
<th>Ancillary services</th>
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<tbody>
<tr>
<td>- Indian LCC’S are looking forward to increase their ancillary services,</td>
<td></td>
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<tr>
<td>without tampering their business models. This includes services like</td>
<td></td>
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<tr>
<td>lounge access, priority boarding, customer loyalty memberships and</td>
<td></td>
</tr>
<tr>
<td>customer meals</td>
<td></td>
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<tr>
<td>- The AAI has allowed the BRTS buses to foray in the airport premises</td>
<td></td>
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<tr>
<td>in Surat. The initiative is to allow the passengers to reach airports</td>
<td></td>
</tr>
<tr>
<td>on time and allow smoother transit.</td>
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</table>

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

Source: Central Asia-Pacific Aviation
To become US$ 5 trillion economy, government proposes to take to ramp up infrastructure in seaways, roads, airports and payment infrastructure

In February 2019, the Government of India 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 is working on a blueprint to promote domestic manufacturing of aircrafts and aircraft financing within the country.

In January 2019, the government organised the Global Aviation Summit in Mumbai which witnessed participation of over 1,200 delegates from 83 countries.

In December 2018, Kannur International Airport was inaugurated making Kerala the only state in India to have four international airports.

As of October 2018, the Government of India has released a policy on biometric digital processing of passengers at airports called ‘Digi Yatra’, The policy will ensure uniform implementation and passenger experience across Indian airports through a connected ecosystem.

In September 2018, the Prime Minister of India inaugurated Jharsuguda Airport in Odisha.

In September 2018, the Prime Minister of India also inaugurated Sikkim’s first ever airport, Pakyong Airport. It is AAI’s first greenfield airport construction.

Under Union Budget 2018-19, the government introduced NextGen Airports for Bharat (NABH)-Nirman Scheme which aims a five-fold increase in India’s airport capacity to handle a billion trips per year.

In February 2018, the Prime Minister of India launched the construction of Navi Mumbai airport which is expected to be built at a cost of US$ 2.58 billion. The first phase of the airport will be completed by end of 2019.

**Note:** AAI – Airport Authority of India

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

Policy support
- Greater government focus on infrastructure
- Increasing liberalisation, Open Sky Policy
- Policy sops, FDI encouragement

Increasing investments
- 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
The share of travel and tourism in India’s GDP was 10.4 per cent in 2018. It is expected to grow at 6.9 per cent per annum between 2018E -2028.

Emergence of business hubs like Mumbai (Finance), Bengaluru (IT), Chennai (IT), Delhi (Manufacturing, IT) is likely to boost business travel as well.

Leisure travel spending (inbound and domestic) generated 94.8 per cent of direct Travel & Tourism GDP in 2018, while business travel accounted for the remaining 5.2 per cent.

Leisure travel spending is expected to grow at 7.6 per cent in 2018 and rise to 7.1 per cent per annum between 2018E – 2028 while business travel spending is expected to grow at 6.7 per cent in 2018 and rise to 7.0 per cent per annum between 2018E – 2028.

Notes: IT – Information Technology, E – Estimate
Source: World Travel and Tourism Council, Make in India, Global Business Travel Association
Over FY09-18,
- India’s exports expanded at a CAGR of 5.61 per cent to US$ 302.84 billion in FY18.
- Imports registered a CAGR of 4.71 per cent which reached to US$ 459.87 billion in FY18.

Growing trade augurs well for airports as they handle about 30 per cent of India’s total trade (by value)

During April 2018-March 2019, India’s merchandise exports and imports stood at US$ 331.02 billion and US$ 507.44 billion, respectively.

Notes: CAGR – Compound Annual Growth Rate, FY – Indian Financial Year (April – March), FY19* - up to February 2019
Source: Ministry of Commerce and Industry
### Greater focus on infrastructure
- AAI is going to invest Rs 15,000 crore (US$ 2.32 billion) in 2018-19 for expanding existing terminals and constructing 15 new ones.
- The Indian government is planning to invest US$ 1.83 billion for development of airport infrastructure along with aviation navigation services by 2026.

### Liberalisation, Open Sky Policy
- With the opening of the airport sector to private participation, six airports across major cities are being developed under the PPP model.
- Currently 60 per cent of airport traffic is handled under the PPP model, while the remaining 40 per cent is managed by the AAI.
- Increased traffic rights under bilateral agreements with foreign countries.
- India signed its 1st open skies agreement with Greece.
- In May 2017, India and Spain signed an MoU for cooperation in civil aviation industry. The MOU would spur greater trade, investment, tourism and cultural exchanges between both the countries.
- In April 2017, Brussels Airlines launched its service from Brussels to Mumbai, its 1st flight to Asia. The launch is a part of Lufthansa’s group strategy to expand its business in India.
- In June 2018, India has signed an open sky agreement with Australia allowing airlines on either side to offer unlimited seats to six Indian metro cities and various Australian cities.

### 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 III cities in next 5 years.
- The 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.
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 have to deploy 20 aircrafts or 20 per cent of 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
For updated information, please visit www.ibef.org

<table>
<thead>
<tr>
<th>Metro Airports</th>
<th>Non-metro airports</th>
<th>Encouragement to FDI</th>
</tr>
</thead>
</table>
| - India has envisaged increasing the number of operational airports to 190-200 by FY40.  
- The AAI has developed and upgraded over 23 metro airports in the last 5 years | - The AAI plans to spend US$ 1.3 billion on non-metro projects over the 5 years (2013–17); mainly focusing on the 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 the PPP model.  
- Upfront subsidy has been proposed through which non-metro airports would be funded by imposing 2 per cent levy on both domestic and international airfares.  
- About 22 airports to get connected under regional connectivity scheme of AAI. | - The GOI has allowed 100 per cent FDI under automatic route for greenfield projects, whereas, 74 per cent FDI is allowed under automatic route for brownfield projects.  
- 100 per cent FDI is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. FDI over 49 per cent would require government approval.  
- Approval of 49 per cent FDI in aviation for foreign carriers.  
- FDI inflows in India’s air transport sector (including air freight) reached US$ 1,833.61 million between April 2000-March 2019 |
PRIVATE SECTOR INVESTMENT IN AIRPORTS RISING … (1/2)

- Recourse to the Public Private Partnership (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 per cent private share holding in IGI Airport (Delhi) - owned majorly by GMR (54 per cent), Fraport AG (10 per cent), Eraman Malaysia (10 per cent); rest of the shares owned by AAI
  - 74 per cent private shareholding in CSI Airport (Mumbai) - owned majorly by GVK (50.5 per cent), Bid Services Division (Mauritius) Ltd. (13.5 per cent), ACSA Global (10 per cent); rest of the shares owned by AAI
  - 74 per cent private shareholding in RGI Airport (Hyderabad) - owned majorly by GMR (63 per cent), Malaysia Airports Holdings Berhad (11 per cent); rest of the shares owned by Government of India (13 per cent) and Government of Andhra Pradesh (13 per cent)
  - 74 per cent shareholding in Kempagowda International Airport (Bengaluru) – owned majorly by Siemens Project Ventures, Germany (40 per cent), Unique (Flughafen Zurich AG) Zurich Airport, Switzerland (17 per cent), L&T, India (17 per cent); rest of the shares owned by AAI (13 per cent) and KSIIDC, which is an agency owned by the state of Karnataka, India (13 per cent)
  - In March 2017, by selling off 2 offshore bonds, GMR plans to raise US$250-300 million for refinancing their debt. In June 2017, GMR announced plans to refinance loans and divest assets in road and power sectors to cut debt so as to invest up to Rs 7,400 (US$ 1.15 billion) crore to expand Delhi and Hyderabad airports.

Source: Notes: KSIIDC – Karnataka State Industrial and Infrastructure Development Corporation Ltd.
PRIVATE SECTOR INVESTMENT IN AIRPORTS RISING … (2/2)

Participation in international airport projects

- Delhi (Modernisation, Terminal 3)
- Mumbai (Modernisation)
- Hyderabad
- Bengaluru

Terminal 3 - Total cost US$ 2.7 billion (including Terminal 3 and 1-D)

PPP format likely to continue

- 15 greenfield projects with private sector participation has been approved in May 2015

In May 2016, US$ 2.23 billion of investments were approved by Airports Authority of India (AAI) for upgrading Indian airports, over a period of four years

- Bijapur Airport
- Shimoga Airport
- Hassan Airport
- Gulbarga Airport
- Mopa Airport, Navi Mumbai Airport, Shirdi and Sindhudurg Airports, Kannur and Aranmula Airports, Durgapur Airport, Dabra Airport, Pakyong Airport, Karaikal Airport and Kushinagar Airport
SUCCESSFUL PPP AIRPORTS IN INDIA

- Presently India has 5 PPP airports each at Mumbai, Delhi, Cochin, Hyderabad and Bengaluru, which together handle over 55 per cent of 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 has approved development of Nagpur airport on a PPP basis and allocated Rs 100 crore (US$ 15.45 million) for it in 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 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 per cent 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 per cent 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 per cent 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 per cent 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 per cent of 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
<table>
<thead>
<tr>
<th>Major foreign players</th>
<th>Airport</th>
<th>Stake (%)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airports Company South Africa Global</td>
<td>Mumbai International Airport Pvt Ltd</td>
<td>10</td>
<td>Operates and owns 9 airports in South Africa</td>
</tr>
<tr>
<td>Malaysia Airports Holdings Berhad</td>
<td>Delhi International Airport Pvt Ltd</td>
<td>10</td>
<td>Operates and manages 5 international gateways, 16 domestic airports, to 18 short take-off and landing ports (Short Take-off and Landing ports) that serves the rural and remote areas in Malaysia</td>
</tr>
<tr>
<td></td>
<td>Hyderabad International Airport Pvt Ltd</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Frankfurt Airport Services Worldwide</td>
<td>Delhi International Airport Pvt Ltd</td>
<td>10</td>
<td>Global airport operator that offers airport management services including terminal and traffic management, baggage and cargo handling and aviation ground handling</td>
</tr>
<tr>
<td>AirAsia</td>
<td>Joint venture with Tata sons and Arun Bhatia</td>
<td>49</td>
<td>AirAsia is a Malaysian low-cost carrier. It has formed a JV AirAsia (India) Pvt Ltd with Tata Sons (30 per cent stake) and Arun Bhatia via Telestra Tradeplace (21 per cent stake) in March 2013. Tata Sons planning to raise its stake to 41.06 per cent as on August 14, 2015</td>
</tr>
<tr>
<td>Jet Airways</td>
<td>Aeromexico</td>
<td>Signed a MoU</td>
<td>Partnered with Aeromexico for codeshare flights and frequent flyers programme</td>
</tr>
</tbody>
</table>
OPPORTUNITIES
## OPPORTUNITIES

### Policy support and demand growth unlocking large investment potential
- Success of PPP formats will raise investment in existing and greenfield airports
- Private sector participation in 6 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 spend over 12–15 per cent 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 per cent of the MRO needs of Indian operators and obtaining around 20 per cent 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 zero per cent 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

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**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
INDUSTRY ASSOCIATIONS
## INDUSTRY ORGANISATIONS

<table>
<thead>
<tr>
<th>Airports Authority of India (AAI)</th>
<th>Directorate General of Civil Aviation (DGCA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address: Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi –110 003</td>
<td>Address: Aurbindo Marg, Opp. Safdarjung Airport, New Delhi –110 003</td>
</tr>
<tr>
<td>Phone: 91 11 24632950</td>
<td>Phone: 91 11 24622495</td>
</tr>
<tr>
<td>Fax: 91 11 24629221</td>
<td>Fax: 91 11 24629221</td>
</tr>
<tr>
<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>
<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>
</tbody>
</table>
USEFUL INFORMATION
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 FY10 implies April 2009 to March 2010
- GOI: Government of India
- INR: 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)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR 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>
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<tr>
<td>2007–08</td>
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<td>2008–09</td>
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<td>2009–10</td>
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<tr>
<td>2010–11</td>
<td>45.58</td>
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<tr>
<td>2011–12</td>
<td>47.95</td>
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<tr>
<td>2012–13</td>
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<td>2013–14</td>
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<td>2014–15</td>
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<tr>
<td>2015–16</td>
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<tr>
<td>2016–17</td>
<td>67.09</td>
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<tr>
<td>2017–18</td>
<td>64.45</td>
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<tr>
<td>2018–19</td>
<td>69.89</td>
</tr>
</tbody>
</table>

### Exchange Rates (Calendar Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR 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>
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<tr>
<td>2007</td>
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<td>2008</td>
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<td>2009</td>
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<td>2010</td>
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<td>2012</td>
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<td>2013</td>
<td>58.63</td>
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<td>2014</td>
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<td>64.15</td>
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<td>2016</td>
<td>67.21</td>
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<tr>
<td>2017</td>
<td>65.12</td>
</tr>
<tr>
<td>2018</td>
<td>68.36</td>
</tr>
</tbody>
</table>

*Source: Reserve Bank of India, Average for the year*
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