



INDIA INFRASTRUCTURE FINANCE COMPANY LTD

REPORT ON AIRPORT SECTOR

JANUARY 2024

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Introduction

- On October 7, 2023, India Infrastructure Finance Company Limited (IIFCL) organized a Round Table Conference on the Airport Sector in New Delhi, graced by the esteemed presence of Dr. Vivek Joshi, Secretary, Department of Financial Services (DFS), Ministry of Finance, as the Chief Guest.
- The roundtable conference on Airport Sector was aimed at bringing key stakeholders including representatives from the Ministry of Civil Aviation, major PPP Airport Operators, Financial Institutions, Rating Agencies and Aviation Consultants together to put forth their views and deliberate on policy reforms and avenues to attract more investments towards augmentation of Airport Infrastructure.
- The conference comprehensively covered various dimensions of Airport Infrastructure, including the sector's outlook, regulatory framework, private capital expenditure strategies, overview of major airport projects, and recommendations to accelerate their expansion strategies. The experts representing financial institutions and key stakeholders offered a realistic picture of the airport infrastructure landscape through their discussions centered around minimizing risks, broadening revenue streams, ensuring adaptable regulations, and revaluation of investments in India's civil aviation sector. The discussions yielded rich insights in a number of areas which can serve as invaluable benchmarks and strategies for various stakeholders towards fortifying the sector.
- The conference at its core addressed the challenges faced by the Indian Airport Sector through insightful discussions. IIFCL succeeded in imparting renewed purpose and momentum to the group by bridging the divide amongst lenders and airport operators on investment propositions.
- The event embodied the perspectives, vision and collaborative spirit of all the stakeholders who expressed confidence on sustainable growth potential of the Indian Aviation Sector. The discussions delved deep into the evolving nature of Indian airport infrastructural requirements, nature of capital support for such projects, acknowledging uneven progress, complex interplay between public policy, private sector participation and geopolitics. The conference brought to the fore urgent need to address issues entailing concession agreement, robustness of security structure for lenders and crucial role of alternative investments along with convention debt and equity.
- The reports aims to encapsulate the essence of the discussions, the collective stride of all key stakeholders towards solutions while offering an incisive analysis of the presentation made by each participating stakeholder.

Key Recommendations

- I. Ease of Doing Business: Provisions for single window clearance system related to land /environment/design by the concessioning authority are essential at the pre-bid stage to avoid project delay and reduce administrative snarls.
- **II. Robust Support Infrastructure:** Efficient transportation network needs to be placed to support the growing number of passengers. Business/ aero-hubs can be established along these networks to drive non-aero revenue and attract more investments.
- **III. Policy Reforms:** National Civil Aviation Plan along with Greenfield Airport Development Plan must be reviewed and overhauled by fortifying termination payment clauses, clearance mechanism, concession extension, project cost recognition and approval mechanism. AERA may consider laying down the tariff related regulations following due process to ensure uniform and consistent approach, across various airports, and also between the various control periods.
- IV. Revisiting AERA Norms: Average Revenue Requirement and resultant tariff determination by AERA should take into account the loan covenant obligations. Disallowance of certain capex related costs, inappropriate and untimely trueups allowed by AERA pose as risks. Rationalizing the control period tenor to address fluctuating tariffs is needed. Options such as bidding on tariffs with an escalation clause and pre-determining tariffs based on first principles with definitive escalation provisions are needed.
- V. Government Support: Grants and concessions may be awarded to viable Greenfield projects. State support, minority stake acquisition and privatization of public airports are expected to increase investor interest. Airport Financing Model akin to Hybrid Annuity Model followed in the Road Sector may be considered.
- VI. Concession Agreements: Redefining concession tenure accounting for extensions in specific scenarios and establishing a Tripartite Agreement between lenders, concessionaire and authority is beneficial for project implementation and viability.
- VII. Transparent Disclosures: Project appraisal and risk assessment requires transparent disclosure policy from all stakeholders. A transparent bidding process for tariffs can also reduce price volatility.
- VIII. Risk Sharing: Joint risk sharing strategies distributes risks suitably among various stakeholders, which ensures a balanced risk profile making it an attractive investment proposition. Greater participation by Insurance Companies, Pension Funds, IDFs and Equity Investors throughout the project lifecycle is needed.

- IX. Enhanced Debt Support: A crucial requirement for developers is substantial debt support from the lending community and other investors, especially given the critical nature of the next 10 years for their capital expenditure planning. There is a need for increased participation by lenders and other investors, along with backing for adaptable financial structuring and reduced cost of funds.
- X. Project Risk Mitigation It is imperative to have in place capex benchmarking. Phasing of the capex by airport developers attuned to realistic volume growth expectation remains a crucial aspect to render it to become a viable and bankable proposition
- XI. Commercial Framework Overhaul Implementing a dual-till framework, which segregates the airport's commercial business and its risks from the core aero business, could be considered, especially when long-term tariffs are assured.
- XII. Financing Cluster Airports The expansion of cluster airports' financing remains a critical aspect in India's aviation development, driven by the increasing influx of travellers from Tier-2 and Tier-3 cities which would enable shared expenses, and cross-subsidy methods, utilizing revenue streams from both aero and non-aero sources.

Overview of the Indian Airport Sector

India's aviation sector has experienced significant growth in the past 9 years, which has increased the requirement for new airports. The number of operational airports in the country has doubled from 74 in 2014 to 148 in 2023.



Figure 1: Number of Airports in India

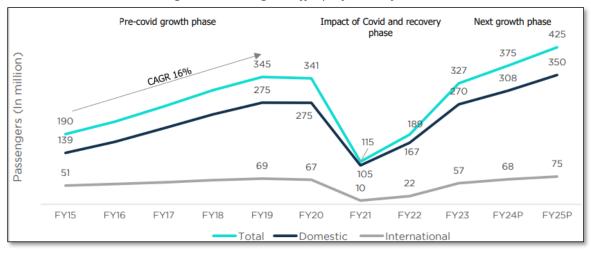
Source: Ministry of Civil Aviation, Press Information Bureau, April 2023

This growth can be attributed to the government's consistent efforts to improve airports and aviation infrastructure. One such initiative is the Regional Connectivity Scheme – Ude Desh ka Aam Nagrik (RCS-UDAN) launched in 2016, under which 469 routes connecting 74 airports have been made operational, providing affordable air travel options for millions of Indians.¹

Passenger Traffic Poised to Reach New Heights by FY25

- Air passenger traffic handled by Indian Airports grew at a GDP multiple of 2.15x of GDP CAGR compared to global multiple of 1.52x.
- Rising working group and widening middle class demography is expected to boost demand for air travel. Emergence of business hubs like Mumbai (Finance), Bengaluru (IT), Chennai (IT), and Delhi (Manufacturing, IT) is likely to boost business travel as well.
- A large part of the rise is also due to increase in domestic passenger traffic, owing to the low cost of airline tickets and expanding incomes, thereby making flying more accessible.

¹ Press Information Bureau, April 2023





Source: Report on Indian Airports, Care Edge Ratings, December 2023

- Passenger traffic is expected to reach new heights in FY25, with a healthy compound annual growth rate (CAGR) of 14%² for FY23-FY25. This is supported by the expansion of both greenfield and brownfield airports in the country.
- In line with the anticipated demand for airports, the Government has envisaged increasing the number of operational airports to 190-200 by FY40. 'In-Principle' approval has been given for setting up of 21 new Greenfield Airports and 11 airports have been operationalized. 25 Airports under Airport Authority of India (AAI) have been earmarked under National Monetization Pipeline (NMP) for monetization in line with government's focus to promote enhanced regional air connectivity. ³
- The Government of India's commitment to the sector is showcased by its substantial investments, with over Rs. 109 lakh crore allocated through the National Infrastructure Pipeline (NIP) from 2019-20 to 2024-25.

New route connectivity to non-metro airports

In India, Tier 2 cities denote the second tier of urban regions, encompassing populations ranging between 5 to 10 lakh residents, while Tier 3 cities comprise smaller urban locales with populations of 1 to 5 lakh. These cities are undergoing rapid development, presenting significant opportunities for various sectors, including aviation. Over time, there has been considerable progress in terms of infrastructure within Tier 2 and Tier 3 cities. Upgraded airports, improved road networks, and better amenities have rendered these cities appealing to both airlines and travelers.

² Report on Indian Airports, Care Edge Ratings, December 2023

³ Ministry of Civil Aviation, Press Information Bureau, March 2022

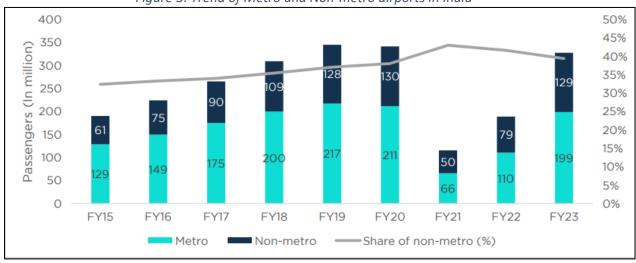


Figure 3: Trend of Metro and Non-metro airports in India

Source: Report on Indian Airports, Care Edge Ratings, December 2023

The trend of higher growth rate at non-metro airports stands continued for first half of FY24 as compared to FY20, with traffic at non-metro airports at 1.11 times compared to metro airports at 1.06 times. Addition of new non-metro destinations by Indian carriers with rising spending propensity is a key enabler for traffic growth at non-metro airports.

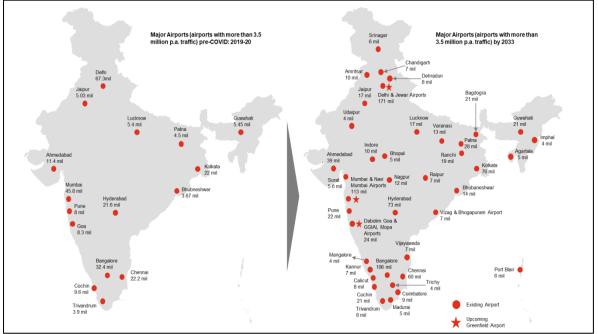
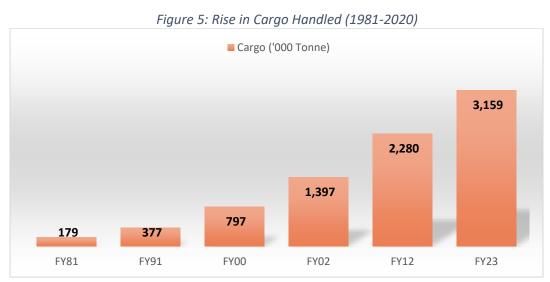


Figure 4: Transformation of Tier 2 Airports into Major Airports

Source: CRISIL report on New Approaches to PPP focusing on the Airport Sector, May 2019

Cargo transportation grown by 65 percent

Cargo transportation, encompassing both domestic and international shipments, has grown by 65 percent, from 2.2 million tonnes in 2014 to 3.6 million tonnes in 2023.



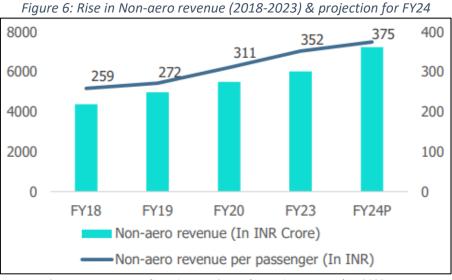
Source: Ministry of Civil Aviation, Press Information Bureau, AKAm Series, August 2022

Demand for Maintenance, Repair and Operations (MRO) projected to be on the rise

- As the aviation market expands, and number of aircraft increase, the demand for Maintenance, Repair and Operations (MRO) will also rise.
- There is lack of adequate MRO facilities at present and India's share is only 2.5% in the Global MRO market. About 90 percent MRO requirements in India are currently met through imports which costs India about US\$ 2 billion in foreign exchange. Dependence on foreign MROs is likely to continue until the domestic India's MRO industry catches up with its foreign counterparts in terms of size and certified breadth of services. India's indigenous
- The Indian MRO industry size is expected to increase from US\$ 1.7 billion in 2021 to US\$ 4.0 billion by 2031, at a compound annual growth rate (CAGR) of 8.9 percent against the expected global CAGR of 5.6 percent.

Non-aero revenue per pax on rising trend

Non-aero revenue for five major PPP airports has been on an increasing trend and stood at 52% of total revenue for FY23. Estimates indicate an increase in non-aero revenue per passenger by 1.4x in FY24 as compared to pre-Covid levels of FY19 for PPP airports.



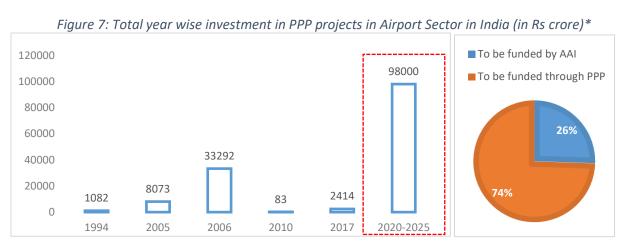
Source: Report on Indian Airports, Care Edge Ratings, December 2023

Airport Sector: Financing Requirements and New Instruments

- The growth aspects of the Airport Sector indicate a capex thrust of Rs 50,000 crore over FY 2024-26 attuned to passenger traffic growth pegged at 2x of GDP growth for FY 23-FY25.⁴
- As per reports, investments worth over Rs 85,000 crore are in the pipeline for airport infrastructure in India during FY23 – FY27.⁵
- This includes ongoing capacity expansion at major private airports, investments by the Airports Authority of India of Rs 25,000 crore for development of AAI-operated airports, around Rs 30,000 -35000 crore is 21 new greenfield airports across the country and about Rs 17,000 crore by the Adani Group towards development of six airports acquired from AAI.
- As per National Monetization Pipeline (NMP), 25 airports including Bhubaneshwar, Varanasi, Trichy, Indore, Raipur, Calicut, Coimbatore, Nagpur, Patna, Madurai, Surat, Ranchi, Jodhpur, Vijayawada, Vadodara, Bhopal, Tirupati, Udaipur, Dehradun and Rajahmundry have been earmarked for leasing over the years 2022 to 2025 under Public Private Partnership (PPP).

⁴ Airports: Preparing for the Next Take-of, Infrastructure – Key Driver of India's Amrit Kaal, March 2023

⁵ ICRA Report on Airports May 2023



Source: CRISIL report on New Approaches to PPP focusing on the Airport Sector, Annual Report of MoCA 2022-2023 *Conversion rate considered for USD to INR: 83.23

- Besides Greenfield projects, there is also a new emerging asset class of completed projects.
- Going forward, accessing the corporate bond market and finding alternative fundraising avenues are going to be a necessity for meeting the infrastructure funding need of the country. InvITs will also lead the way in this sector.
- It is anticipated that the next phase of capex growth will be spearheaded by private airport operators and shall be instrumental in decongestion of present airports and building new capacities at non-metro centers.
- India exhibits substantial potential for growth in the airport sector that can be facilitated through increased involvement of private players, innovative investment channels and supportive government policies.

Key Note Address by Secretary, Department of Financial Services



- Hon'ble Secretary (Financial Services), Dr. Vivek Joshi, emphasized the commitment of Department of Financial Services (DFS) to actively engage with stakeholders in the aviation sector.
- DFS aims to leverage expertise and knowledge of key stakeholders, including developers, rating agencies, and financiers, for informed decision-making.
- Government remains steadfast in its commitment to further fortify the sector, as evidenced by the approval for the establishment of greenfield airports nationwide, in addition to the upcoming development of major airports in Noida and Navi Mumbai. These initiatives are expected to substantially augment the overall airport capacity, catering to the growing demands of the burgeoning aviation industry.
- For fostering a conducive environment for the aviation industry in India, the Ministry of Corporate Affairs have implemented the provisions of Section 14 of the Insolvency and Bankruptcy Code (IBC) to exempt aircraft leasing from its operations. This will help in offering time-bound solutions for lessors to repossess aircraft, thereby reducing their inherent risks.

Special Overview by Mr P.R. Jaishankar, MD, IIFCL



Airport Sector: Growth story from 2014 to 2023

- In the period from 2013-14, the number of domestic flyers in India was 6 crore, which has now surged to a staggering 14.5 crore, representing a remarkable growth rate of 135 percent. Similarly, international air travel has witnessed a 50 percent increase, rising from 4.7 crore to 7 crore passengers.
- Currently, the combined airport capacity of the 6 major metros stands at 22 crore passengers per year. However, with the addition of Navi Mumbai and Greater Noida airports, this capacity is expected to almost double to 41.5 crore passengers.
- For a growing economy like India, the current scenario indicates the need to maintain this growth trajectory for ensuring a more robust and resilient infrastructure in the Airport Sector.

Emerging trends in the Airport Sector

Airports represent one of the most lucrative asset class within the infrastructure sector. An investment of around Rs.1 trillion is being infused in the current year by Government of India.

- New Asset Class of Completed Revenue Generating Projects: Traditionally, the airport sector was defined by a limited number of prominent players for creation of new assets. Gradually, we are moving towards a more structured approach that is driven by new asset class of completed revenue-generating projects.
- Inflow of Global Capital : There has been a substantial increase in the amount of global capital being invested in Indian Infrastructure countering the traditional

pattern of domestic and private equity investments. The sector is seeing inflow of funds from prominent players like Fairfax, Groupe ADB, Zurich Airport International AG, Siemens and Bidvest.

- InvITs posing as an important instrument: The introduction of Infrastructure Investment Trusts (InvITs) has led to a significant transformation in the overall lending framework for infrastructure projects. The instrument has been in the market for about 6 years now with an AUM of about Rs.4 trillion. The InvIT structure is an important instrument for augmenting funds towards infrastructure sector and increasing the investment base.
- Need for increased Private Investment: Currently, AAI operates 137 airports in the country. The state of some of these airports can be improved upon to bring them up to International Standards. There is a need for private investment in this space in order to improve passenger and cargo connectivity. Private investment will bring in more world-class facilities in Indian airports and will benefit India economically. Strategically, both the consumer and the industry have benefited from world-class airport assets in Delhi, Mumbai, Bangalore, and Hyderabad. Private investment is critical for scaling up and expanding connectivity to airports beyond the metros.
- National Highway Authority of India (NHAI) like monetization structure: AAI can derive some value from the already established monetization structure established by NHAI. NHAI developed roads infrastructure in the country and is now able to monetize its existing assets and generate revenue for its investors. AAI can also structure a suitable mechanism for the Airport Sector.

Overview by Government Bodies



Airport sector's impressive progress, challenges have emerged, especially in terms of substantial capital expenditure, the sector's vulnerability to external shocks, thereby necessitating the need for robust contingency planning.

Effect of unprecedented events like COVID-19

The pandemic-induced slowdown led to a temporary suspension of Airport Authority of India's dividend payment to the government. The pandemic's impact also influenced the National Monetization Pipeline, limiting AAI's inclusion of additional airports in the planned pipeline. However, the Government of India's proactive approach remains evident, as it has identified 11 more airports for development under the Public-Private Partnership (PPP) mode.

✤ Balancing investor interests and maximizing benefits for passengers

One of the primary areas of focus has been the enhancement of concession agreements, emphasizing the need to strike a balance between safeguarding investor interests and maximizing benefits for passengers. Achieving this equilibrium has proven to be a persistent challenge, given the complex dynamics involved in managing investments to ensure passenger convenience without compromising the profitability of airlines. Further, the expansion of airports and the provision of adequate aircraft parking facilities have emerged as critical priorities within the sector.

Collaboration between Central and State Governments to overcome Challenges related to land scarcity

Challenges related to land scarcity, especially in key areas such as Chennai and Coimbatore, have slowed down the pace of airport expansion. Overcoming these hurdles has necessitated active involvement from both the central government and state governments, emphasizing the significance of fostering a comprehensive understanding and collaboration between these entities.

Perspectives of Airport Operators

Airport Operators representing major PPP airports in India duly acknowledged the crucial transformative role played by key stakeholders including Ministry of Civil Aviation (MoCA), Airports Economic Regulatory Authority (AERA), Airports Authority of India (AAI) and Directorate General of Civil Aviation (DGCA) as well as capital support from Financial Institutions and a host of other investors. The deliberations highlighting challenges and suggested way forward are presented hereunder.



Challenges Faced and Way Forward:

A. Ease Of Doing Business

- Single window clearance: There is a need for a single window clearance of requisite approvals to streamline operations and promote ease of doing business by eliminating the need to approach multiple external organizations individually and bringing all the stakeholders to a single platform. The approach shall significantly reduce administrative burden and provide a centralized platform for all necessary approvals.
- Approvals and clearances before bidding: An urgent need was emphasized to expedite approvals for setting up greenfield facilities. Land/environment clearances

should be obtained by the government prior to tendering concession. The availability of land and other approvals shall give comfort to lenders and investors.

- Well-defined timelines for bid preparation: Investors typically require a longer duration for due diligence when many airports are bid out together. Well defined timelines for the bid preparation and submission leading to the award of the concession will help the investors in completing the due diligence in a timely manner.
- Platform for Information sharing: Foreign investors are at a disadvantage in terms of local knowledge/issues and nuances which might lead to erroneous quantification of expected return on investment. Establish frameworks to evaluate a prospective airport on certain benchmarks and factors which are pertinent to the interests of all stakeholders. Data rooms including all orders/notices/market information can be created to support bidders.

B. Support Infrastructure

• Adequate road and rail connectivity as well as provision of water, power and other utilities are crucial for long-term airport development.

C. Debt Financing

- Need for debt funding for continual expansion of airports: Airports are expected to be continually in expansion mode every few years, with reliance on debt to fund expansion. Highly leveraged balance sheets over the next couple of decades, should not be seen as a constraint to further lending to the project.
- Extended concession periods and long-tenor funding: Developers vouched for the need of taking into account extended concession period while structuring repayment tenor by lenders. owing to the distinctive nature of such projects with higher gestation & cash flow variability, there is a felt need for lenders to provide longer tenor project funding and greater flexibility in debt servicing.
- **Preferential interest rates for critical projects in development phase:** Further, preferential interest rates for critical infrastructure projects in development phase is also needed to support project cash flows.
- Need for flexibility in financing overruns: Provision to be included for cost overrun at the time of initial appraisal itself as project cost generally goes up in case of time overrun, which are common in project of such sizes

D. Alternative Financing

• Need for refinancing of completed projects: Developers asserted that banks are best placed to fund new/expansion projects, however there is a need to develop an ecosystem for refinancing of completed projects through alternative

investments and asset classes to enable banks free up their capital & finance upcoming projects.

- Need for enhancing role of institutional investors: Developers opined that given the predictable nature of returns in airport projects and with established regulatory framework, entities holding long tenor investments, such as insurance companies, provident fund, pension funds, etc. to be enabled by carrying out requisite regulatory changes to invest in airport projects.
- Broadening the investor base: The availability of long-term project financing along with other alternative investment options are crucial to support the capex plans envisaged in the near future. There is a need for a broader investor base, encouraging the involvement of insurance companies, provident funds, and pensions in the airport sector, promoting secure and reliable investment opportunities. Long-term domestic financing sources must be developed. Role of international financial companies (IFC, ADB etc.) in providing credit to developers. Specialized Infrastructure bond market needs to be developed in India in line with global bond market.

E. Tariff determination norms by AERA

The developers acknowledged that although tariff determination process followed by AERA has become stable and largely predictable over the years making the airports an attractive lending option for banks/FIs, however, there are still some issues that need to be addressed to ensure adequate funding is available at competitive rates to meet the growing needs of the aviation market.

- In order to support the adequacy of cash flows to meet the loan servicing/covenant obligations, the ARR and resultant tariff determination by AERA should take into account the loan covenant obligations undertaken by airports and should ensure that the approved ARR should be granted to airports for each control period.
- Developers raised concerns on disallowance of certain capex related costs, appropriate and timely true-ups allowed by AERA posing as risks. Needful policy level changes were contemplated to decimate aforesaid issues thereby improving credit profile of such assets.
- AERA may consider laying down the tariff related regulations following the due process to ensure uniform and consistent approach, across various airports, and also between the various control periods, which will bolster the confidence of the lending ecosystem.

F. Concession framework

Indian aviation sector has matured with a transparent regulatory environment together with a strong Government support amid airlines expansion plans. However, there is a pressing need for certain amendments required in the Concession Agreement.

 Recognition of Project Cost – Concession agreement currently recognizes project cost as lower of a) actual cost of the construction work incurred in relation to construction, implementation, and commissioning b) capital cost as per financial package c) cost as estimated by the Authority as the time of signing of Concession Agreement which is in most cases is lower than the cost funded by the lenders. Therefore, recognition of actual project cost in the Concession Agreement becomes of utmost importance to make the project bankable.

• **Regulatory Asset Base and other parameters** - Returns in case of airport are calculated on the Regulatory Asset Base and therefore it become imperative to provide clarity on classification of each item base as aero and non-aero in the initial stage itself. A particular asset may have different classification from concessionaire and authority perspective which often results in disagreements. It is therefore essential that the asset base on which airports are allowed to earn regulated returns is set and fixed.

Average Revenue Requirement (ARR) and resultant tariff determination by AERA should take into account the loan covenant obligations undertaken by airports and should ensure that the approved ARR should be granted to the airports for each control period.

- Longer Concessions While airport concessions in India range between 40-70 years, this duration is typically not long enough to recover investments over land monetization. The ability to concession real estate beyond the duration of the airport concession will provide the necessary clarity in land monetization and improve the overall economic viability of the project. Longer airport concessions will help more elbow room for developers in appropriate land monetization.
- Authority Grant To reduce the debt burden on the project the prospect of government support in the form of grants based on milestones for the development of large-scale infrastructure projects was recommended considering the success of HAM model in roads, especially in the initial years of a greenfield airport.

Perspectives of Financial Institutions



A. Mitigating Project Risk Factors

- There is a need to establish clear and standardized benchmarks to ensure fair and transparent practices across the board to overcome the issue of capex benchmarking, wherein there is often an ambiguity surrounding whether banks adhere to normative benchmarking when assessing project capex.
- One of the key project risk mitigation suggested was that project breakeven should be achieved only on the basis of aero revenues alone. Non-aero revenues may be considered as a bonus as it takes some time to stabilize.
- Phasing of the capex by airport developers attuned to realistic volume growth expectation remains a crucial aspect to render it to become a viable and bankable proposition. Aligning the capex estimation with the development process would lead to a more accurate estimation and eventually lead to improved planning and financial management. Enhancing the accuracy of nonaero revenue sources to stabilize the fluctuations in aero revenue is an important factor.
- A lengthy control period of 5 years often leads to fluctuating tariffs, resulting in inaccurate projections and financial instability. Implementation of an annual reset could potentially provide better visibility of cash flows for all stakeholders, leading to more predictable and stable financial outcomes.
- In the case of termination payments substitution, the calculation methods may be based on market value or net value, which creates a level of uncertainty for banks. Adoption of a schedule similar to NHAI for year-wise termination

payments, which could bring clarity and allow for the structuring of debt within the termination coverage.

B. Debt Structuring

- The necessity for recourse financing underscoring the importance of confirmed parent support to manage potential risks effectively was emphasized.
- Lenders underscored incorporation of contingencies in financial planning, drawing parallels with risk management strategies in other sectors
- Critical areas viz. policy revamping, state support and financial risk sharing require collective efforts to ensure a more robust and stable financial environment within the airport sector.
- An upfront sanctioned cost over-run window to the extent of 10% of Total Project Cost in line with RBI provisions would effectively manage cost volatility, thereby foster greater confidence among other lenders.
- Shortening of the control period to improve the predictability of cash flows, a factor critical for debt structuring was recommended. Sector-specific RBI norms and government regulations to create opportunities for flexible restructuring shall encourage participation of more lenders without concerns about capital constraints.
- Innovative models were suggested linked airport model to address parking challenges at major airports. The concept aims to redistribute parking loads across various airport facilities, enhancing operational efficiency.
- In terms of project financing, there is a need for investment evaluations to account for the unique characteristics of the evolving airport landscape, distinct from previous rounds of airport investments. The extended concession tenors, which are highly favored by investors, have also played a significant role in generating interest and confidence within the sector.
- Going ahead, the importance of careful investment evaluations in two key areas was highlighted.
 - Firstly, the privatization of existing airports, such as those in Chennai, Kolkata, and Pune, which are transitioning into dual airport systems, necessitates thorough and comprehensive due diligence. This requires adequate time and scrutiny to ensure the optimal investment approach.
 - Secondly, the potential for minority stake acquisitions by state and central governments in select airports merits a closer examination to ascertain the value locked in these opportunities, considering the current investor landscape and interest within the sector.

C. Alternative Investment Markets

Lenders shed light on the reliance on bonds as a developing area within the sector, highlighting the necessity for portfolio bonds to continuously redeploy capital. The urgent need for flexibility in bond market tenors, especially for projects that have not yet matured to the point of deep market penetration and investment grade ratings was emphasized.

- Lenders emphasized the need for revisiting concessions to attract long-term asset investors, such as pension funds, for commercial property development within the aviation sector. They suggested that providing incentives to encourage the participation of these investors in airport financing, specifically on the property side, could significantly benefit the industry.
- Other Investors including LIC highlighted their regulatory mandate, emphasizing the scope for investments in infrastructure and housing. They expressed their interest in engaging with developers and participating in InvITs (Infrastructure Investment Trusts). This approach underscores their commitment to exploring opportunities within the infrastructure sector, aligning with their regulatory requirements and contributing to the growth and development of the industry.

D. Security arrangement fallback measures

- There is a need for better clarity on termination payments and substitution rights to fortify their security structures. Enhancing the predictability of cash flows remains a significant concern for lenders, a challenge that could be mitigated through clearer tariff determination norms and more foreseeable cash flows. Additionally, implementing a termination payout schedule, similar to the model adopted by NHAI shall enhance predictability for long-term concessions.
- There was a felt need to introduce flexibility in airport expansion projects, allowing for accommodation in the event of force majeure occurrences during the concession period.

D. Regulatory guidelines for Airport sector

- There is a need of clarity from the RBI regarding the classification of refinanced projects, and the need for more explicit guidelines on whether such refinancing would be considered standard or restructured. Establishing clear regulations and guidelines to promote stability, transparency, and predictability in the financial sector.
- Regulatory flexibility from the RBI is much needed to facilitate project restructuring for infrastructure projects, enabling smoother operations and mitigating potential risks.

E. Aero revenue stabilization measures

- Setting up air transportation hubs for specialized goods like pharmaceuticals and semiconductors could lead to unearthing of the sector's untapped possibilities for logistical optimization.
- Further, the potential upside of commercial property development revenue for developers would lead to better predictability. From a lender's perspective, the need for careful evaluation of such alternative revenue streams and the critical role it may play in ensuring the sector's financial stability and predictability was emphasized.

Perspective of Sectoral Experts/ Consultants

Discussions were held highlighting various the critical points pertaining to the connectivity, framework of concessions, cluster airports financing, associated climate risks and airport operation dynamics:

A. Airport connectivity

- Emphasizing the crucial role of "airport infra assets," it is suggested that prioritizing combined financing commitments from both operators and the government, along with implementing preferred commercial arrangements to mitigate potential investment risks, is necessary.
- This approach will ensure that the development of reliable and efficient transport connections to airports is not an afterthought but is proactively addressed, particularly in the context of anticipated dual or multi-airport systems in major cities over the coming decade.

B. Concession framework

- It is deemed essential to consider reforms in the existing policy and regulatory framework governing airport PPPs and commercial contracts. India, as the third largest civil aviation market globally, has valuable insights to assimilate and implement, aiming to encourage both domestic private sector capital and heightened foreign investor engagement. Some areas of intervention include:
- a) Tariff framework Considering various global examples, it is worth exploring alternative tariff setting frameworks that can offer long-term certainty.
 - Options such as bidding on tariffs with an escalation clause and predetermining tariffs based on first principles with definitive escalation provisions have shown promise in fostering increased private sector interest in asset development and operations in countries like Brazil, Greece, Philippines, Indonesia, Mexico, and Japan.
 - A potential approach could involve adopting a "light-touch" strategy, with the regulator serving as a means to enforce order in instances of evident market power or its misuse.
- **b) Commercial framework** The efficacy of the current hybrid till framework in maintaining airport tariffs and encouraging operators to bolster commercial revenue and improve their returns has been notable.
 - When tariffs are predetermined or determined through a bidding framework, the potential for unwarranted escalation or volatility in tariffs is minimized, thereby reducing associated risks.
 - Implementing a dual-till framework, which segregates the airport's commercial business and its risks from the core aero business, could be considered, especially when long-term tariffs are assured under the aforementioned options.

- This approach has the potential to attract a different category of investors, including InvITs, and lenders seeking participation in airport enterprises that align with their risk appetite.
- c) Renegotiation provisions The experiences garnered from the challenges posed by the COVID-19 pandemic have underscored the necessity of incorporating renegotiation provisions in long-term concessions to accommodate unforeseen and potentially impactful events.
 - The Kelkar committee report of 2015 had already emphasized the importance of such provisions, highlighting the need for clear triggers to initiate renegotiation of commercial and performance terms, thereby striking a balance between the interests of investors, financiers, operators, and users.
 - Building on the wealth of experience accumulated over two decades in India and a longer period globally, it becomes imperative to reinforce future PPP contracts with these renegotiation provisions.
 - This proactive approach not only enables rating agencies and insurers to assess pricing risks more equitably but also facilitates the infusion of additional capital, which can be channeled not only towards these projects but also into other assets.
- d) State guarantees on competition One of the other points that came up was the struggle that airports have today to monetize real estate within airports. The evidence in some cases suggests that airports have three primary challenges to contend with:
 - Location of the new airport (and sometimes competition with an existing one).
 - Shorter concession/ lease tenures compared to what the market can offer;
 - Competition from state sponsored projects adjacent to airports.

These can be addressed through appropriate policy interventions and state guarantees in not developing competing (real estate) assets for a specified period or ensure that such "outside" transactions of governments or State agencies are carried out on comparable commercial terms.

- e) State ownership Another recurring concern highlighted pertained to the timely equity infusion by airport promoters. This raised the question of whether government, either at the central or state level, should continue to hold an equity stake in airport assets, given the need for multiple capital infusions to support their growth, which is distinct from other infrastructure assets.
 - With almost two decades of successful private ownership and operation under public-private partnership (PPP) structures and the existing policy permitting 100% investment in airport assets, future airport concessions may not necessitate government ownership.

- Nevertheless, adequate enforcement to safeguard government and public interests can still be achieved through contracts and regulations.
- Alternatively, the government could opt for a golden share arrangement, as observed in MOPA and Bhogapuram airports, providing them with significant rights on the board for strategic decision-making. Any government involvement could be strictly on commercial terms, especially in cases where land sponsorship is involved, and contingent upon equity funding commitments, where applicable.
- f) New elements of capex Another emerging area of focus pertains to the evolving elements of capital expenditure (capex).
 - Presently, there is heightened attention and sensitivity surrounding three critical facets of infrastructure development, namely sustainability, cybersecurity, and accessibility, particularly for disabled passengers.
 - Establishing a comprehensive infrastructure to ensure complete accessibility for the disabled, who constitute an estimated 15% of the global population and heavily rely on air travel, and safeguarding consumer interests in an increasingly connected digital environment, will necessitate significantly higher investments compared to the past.
 - The potential ramifications of a single cyber-attack can be catastrophic, resulting in losses amounting to billions of dollars, as demonstrated by numerous recent incidents.
 - While acknowledging the commendable efforts of several airport operators in addressing these novel challenges, it is imperative to look beyond mere compliance and strive to push boundaries further. This pursuit would require increased funding and financial commitments from the industry, leading to higher risk-adjusted expenditures.
 - With the anticipated bolstering of support for airport operators through a revamped concession and policy framework, our capacity to strategically utilize these funds to achieve desired outcomes, beyond mere compliance, is poised to improve significantly.
 - Moreover, the current climate presents a favourable opportunity to establish Green Funds in India, aimed at supporting sustainability and climate change initiatives, including Sustainable Aviation Fuel (SAF), electrification, and projects centred around hydrogen-based technologies, among others, at a cost that aligns with the interests of Indian entrepreneurs.
- **C. Financing cluster airports** The expansion of cluster airports' financing remains a critical aspect in India's aviation development, driven by the increasing influx of travelers from Tier-2 and Tier-3 cities. The accomplishments of UDAN and the progress of regional airports underscore the necessity for innovative financing mechanisms and commercial frameworks that entice private capital and foster a culture of risk-taking.
 - Examples from the US, Mexico, and AAI in India demonstrate that an effective network of airports can be established and sustained through pricing

autonomy, the allocation of shared expenses, and cross-subsidy methods, utilizing revenue streams from both aero and non-aero sources.

- While the VGF scheme has proven successful in incentivizing various carriers to engage in the UDAN program, there may be a requirement to formulate an alternative strategy for the development of cluster airports under joint ownership to ensure their commercial viability.
- Potential strategies could involve the accumulation and ring-fencing of funds from passengers at major airports, which would benefit from increased feeder traffic as regional airports expand. This approach was previously employed for UDAN through RADF. Another possible measure could involve allowing the cross-subsidization of aero charges among airports within a cluster, at the discretion of the operator, to meet the threshold WACC.
- **D. Climate action challenges** Various discussions were held around climate action perspective, emphasizing the vast opportunities that climate finance can bring while acknowledging the associated risks, particularly from the developer's standpoint.
 - It has become crucial to address the strategic risks posed by climate finance, which are rapidly becoming more significant for both developers and airlines. In this context, it is imperative to involve the entire value chain of the sector to ensure comprehensive climate action strategies.
 - The assessment of the value capture of projects plays a pivotal role in understanding the dynamics at play. While most metro-related projects can effectively capture and calculate value, the models for new airports are expected to be markedly different and present unique challenges.

Meeting these challenges will require a considerable degree of innovation, especially from a non-aero perspective, to develop comprehensive and effective strategies that align with the evolving climate action goals of the aviation industry.

- E. Dynamics of airport operations The aviation industry has long been regarded as customer-centric, with airports assuming the crucial responsibility of accommodating airlines, managing terminal-side operations, and overseeing various airside and landside stakeholders.
 - In recent times, airport operators have found themselves at the forefront of this multifaceted ecosystem, contending with increased competition arising from the emergence of numerous airports. This heightened competition has inevitably impacted the predictability of revenue streams and other financial aspects.
 - Despite these airports being situated at considerable distances of around 150 kilometers from each other, the competitive dynamics within the overall infrastructure model have contributed to constraints on growth and introduced uncertainties in tariff structures and overall revenues.

Such intricate market conditions have necessitated a comprehensive review of existing operational strategies and revenue models within the aviation sector.

Conclusion

Airports are the gateways of global connectivity and create strategic economic hubs in any economy. While the Indian Airport Sector has come a long way, it still lags behind its global peers and needs scale-up with the support of all stakeholders, driven by increased private investments and a conducive policy and economic environment.

India remains a very promising market for aviation sector investors on account of plethora of opportunities both in greenfield and brownfield airports and a decently evolved regulatory framework.

The Indian airport economic regulation is at a much advanced stage with a mature tariff-setting process, a well-defined control period and hybrid till structure with greater flexibility.

- PPP in Airport sector is expected to increase on account of larger proportion of capex needed. Major Capex is estimated at Non-Metro Airports and total debt requirement to support this plan is pegged at Rs.35,000 crore over the next five years. Share of PPP Airports in passenger traffic is likely to reach 70% by FY 2025 underpinned by the operationalization of greenfield PPP airports and capacity expansion at brownfield PPP airports. There is an exponential growth expected from the non-metro airports which shall be a key investment driver.
- Under the National Monetisation Plan, the target for privatization set by the government till FY25 envisaged a fund inflow of approximately Rs 17,000 Crore. In order to propel privatization, the investment traction has to be boosted.
- The following key recommendations of this report aim to encapsulate the essence of the discussions, the collective stride of all key stakeholders towards solutions while offering an incisive analysis of the presentation made by each participating stakeholders:
 - I. Ease of Doing Business with provisions for single window clearance system.
 - II. Robust Support Infrastructure with efficient transportation network
 - III. Policy Reforms such as fortifying termination payment clauses, clearance mechanism, concession extension, project cost recognition and approval mechanism
 - IV. Overhauling AERA Norms such as allowance of capex related costs, appropriate and timely true-ups, rationalizing control period tenor, bidding on tariffs with escalation clause and pre-determining tariffs
 - V. Government Support with grants and concessions may be awarded to viable Greenfield projects
 - VI. Redefining concession tenure accounting for extensions and establishing a Tripartite Agreement
 - VII. Transparent Disclosures in Project appraisal and risk assessment
 - VIII. Equal Risk Sharing among various stakeholders
 - IX. Enhanced debt support in view of large capex requirements for establishment and expansion

- X. Project Risk Mitigation through capex benchmarking
- XI. Commercial Framework Overhaul by implementing a dual-till framework
- XII. Financing cluster airports to enable shared expenses, and cross-subsidy methods.

These inputs are expected to play a crucial role in the upcoming union budget by addressing capital requirements and providing indispensable guidance to regulators.

About India Infrastructure Finance Company Ltd. (IIFCL)

IIFCL has been in the Infrastructure Financing Sector for the last 18 years and has played a leading role in financing infrastructure projects, particularly PPP projects. IIFCL has so far sanctioned a total of more than 700 projects with a total project outlay of ~Rs.12.95 Lakh Cr, majority of which are PPP Projects. IIFCL is lending to infrastructure projects both as direct financial assistance to infrastructure projects and financial assistance under the Refinance Scheme to other Infrastructure Finance Companies. It also offers innovative products like Credit Enhancement, Takeout Finance, InvITs, Project Bonds, etc.

As on December 31, 2023, IIFCL's Total Sanctions and Disbursements on a cumulative basis exceed Rs. 2.4 Lakh crore and Rs.1.2 Lakh crore, respectively.

IIFCL giving wings to aviation sector

- With an aim to finance development of world class airport infrastructure in India, IIFCL has, till date, sanctioned Rs. 9,297 crore and disbursed Rs. 4,345 to six major airports in India in Delhi, Mumbai, Hyderabad, Navi Mumbai, Noida (Jewar) and the newly developed Manohar International Airport in Goa.
- These airports are of national importance and have been facilitating and improving connectivity across the nation. IIFCL is committed to supporting the government in its mission to improve connectivity for the masses and lower down the logistics cost to benefit the economy at large.

Major Airport Projects Financed by IIFCL



Jewar (Noida) Airport



Goa Airport



Mumbai Airport



Hyderabad Airport

Appendix I

EVENT SCHEDULE

07th October 2023, Saturday: JW MARRIOTT NEW DELHI AEROCITY

•	Registration & Welcome	10:30 - 11:00
•	Welcome Address and Industry Overview by MD, IIFCL -By Sh. P R Jaishankar	11:00 - 11:10
•	Presentation by IIFCL -By Raj Kumar Ralhan, Chief Credit Officer, IIFCL	11:10 - 11:20
•	Key Note Address by the Chief Guest -Sh. Vivek Joshi, Secretary (FS)	11:20 - 11:30
•	Address by Ministry of Civil Aviation -Mr. Joyanta Chakravarty, Director	11:30 - 11:40
•	Address by, Airports Authority of India -Mr. N V Subbarayudu, Executive Director (SIU)	11:40 - 11:50
Prese	ntation by Airport Promoters	
•	Presentation by GMR Airports Limited	11:50 - 12:00
•	Presentation by Adani Airports Holding Ltd.	12:00 - 12:10
•	Presentation by Fairfax India (BIAL)	12:10 - 12:20
•	Presentation by Yamuna (Noida) International Airport Pvt. Ltd.	12:20 - 12:30
Discu	ssion with Financial Institutions	
•	Views of SBI, HDFC, ICICI, Axis, LIC, NaBFID, BoB, Canara, BoM	12:30 - 13:10
Discu	ssion with Multilateral, Investment Bankers and Other Institutions	
٠	Views of EBTC, NIIF, ICF, KPMG, India Ratings	13:10 - 13:25
•	Summing it Up & Key Takeaways -By IIFCL	13:25 - 13:30
	INTERACTION AND LUNCH	13:30 - 14:30

****** End of the Conference *****

Appendix II

List of Stakeholder Consultations

Notable attendees included representatives from the Ministry of Finance, Ministry of Civil Aviation, Airports Authority of India, major Airport Developers, Lenders, Rating Agencies, and various Government Bodies. Detailed list of participants:

S.No	Participant's Name	Institution	Designation
1	Mr. Vivek Joshi (IAS)	DFS, MoF	Secretary
2	Mr. P R Jaishankar	IIFCL	MD
3	Mr. Bhushan Kumar Sinha	DFS, MoF	Joint Secretary
4	Dr. Ram Jass Yadav	Punjab & Sindh Bank	Executive Director
5	Mr. Kalyan Kumar	Punjab National Bank	Executive Director
6	Mr. Partha Sarathi Reddy	NITI Aayog	Director
7	Mr. Samir Jerambhai Boghara	Independent Director	Independent Director
8	Mr. Joyanta Chakraborty	Ministry of Civil Aviation	Director
9	Mr. Manoj Kumar Garg	Directorate General of Civil Aviation	Director
10	Mr. N V Subbarayudu	Airports Authority of India (AAI)	Executive Director
11	Mr. G R K Babu		CFO
12	Mr. Videh Kumar Jaipuriar	CMP Airmorta Sector	CEO
13	Mr. Ashish Jain	GMR Airports Sector	President-Corporate Strategy
14	Mr. Brahmaiah Karnaty		Vice President
15	Mr. Kapil Batra		AGM
16	Sh. Rakesh Tiwari	Adani Airport	CFO
17	Mr. Bhaskar Anand Rao	Bangalore International	CFO
18	Ms. Nirmala Venkatanarayanan	Airport (Fairfax)	Assistant Vice President & Head
19	Ms. Nitu Samra	Yamuna International Airport	CFO
20	Mr. Rahul Mangal	Ltd (Jewar Airport)	Head Project Finance
21	Mr. Ashok Sharma	SBI	CGM PFSBU
22	Mr. Ritesh Sampat	HDFC Bank	Head- Project Finance
23	Mr. Piyush Bhatia	ICICI Bank	Business Head, CGM
24	Ms. Rama Shettigar		Senior Relationship Manager
25	Mr. Parag Thally	Axis	Group Head
26	Mr. Ratnakar Patnaik	LIC	Executive Director
27	Mr. Arvind Vashistha	NaBFID	VP Head Credit Policy & Validation
28	Mr. Sumit Sachdeva	Bank of Baroda	Head-Large Corporate
29	Mr. Bhavendra Kumar	Canara Bank	CGM
30	Mr. Amit Kumar Sharma	Bank of Maharashtra	GM
31	Mr. Varun Sehgal	EBTC	Head
32	Mr. Tejas Deoras	NIIF	Partner- Investment

S.No	Participant's Name	Institution	Designation
33	Dr. Vasudevan	ICF	Head, Aviation, Travel and Tourism
34	Mr. Dhaval Raut	KPMG	Associate Director
35	Mr. Tarun Bansal	India Ratings	Managing Director & Head (BRM)
36	Mr. Amit Singh	6	Associate Director-BRM



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