adani

Ref No: MIAL/CO/AERA-MYTP/2021/4 10th Dec, 2021

To,
The Chairperson,
Airports Economic Regulatory Authority of India,
AERA Building, New Administrative Block,
Safdarjung Airport,
New Delhi- 110003.

Sub: Revision to the submission of Multi Year Tariff Proposal (MYTP) for Mangaluru International Airport Limited (Earlier Adani Mangaluru International Airport Limited) (MIAL) for First Control Period from 1st April 2021 to 31st March 2026

Dear Sir,

This is in reference to the MYTP submitted for MIAL vide letter number AMIAL/CO/AERA-MYTP/2021/1 dated 31st May 2021. We would like to submit some revisions of the same as given hereunder.

MIAL took over the Airport operations in Oct-2020 and was stabilising the Airport operations, with the support of all the stakeholders, under the transitioned PPP mode.. Over last few months the Team has got better understanding of the operations and keeping in view the progress made and developments in certain areas during this period, a need was felt to revise some of the opex & capex numbers. Therefore MIAL has revised some submissions made in the MYTP, including all but not limited to, with the following major changes : -

1. Asset addition – Runway recarpeting and center lightning which was earlier planned to be done in the next control period, It is now proposed to be taken up during this control period to address safety concerns.
2. Operating Expenses
    a. Number of employees is increased, more particularly the firefighting operators
    b. Start of operations of Anti Drone system is deferred to next year
    c. Corporate Cost allocation is modified
3. Non-Aero revenues are updated with the actual likely position for the first year of the control period.
4. ARR Effectiveness is revised from 1st October, 2021 to 1st Apr 2022.

Mangaluru International Airport Limited
(Formerly known as Adani Mangaluru International Airport Limited)
Adani Corporate House
Shantigram, S G Highway, Ahmedabad - 382421
Gujarat, India
CIN: U63030GJ2019PLC110062

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Registered Office: Adani Corporate House, Shantigram, S G Highway, Ahmedabad - 382421, Gujarat, India

adani

We are enclosing herewith the revised financial model, which incorporates the required changes, for your perusal and consideration. A copy of this is being sent to the Consultant appointed by the Authority for their perusal also.

We shall be pleased to provide any further information that Authority may require in this regard.

Thanking you

Yours truly,
For Mangaluru International Airport Limited,

Manoj Chanduka
Authorized Signatory

Enclosures : -

1. Financial Model in Excel format

Mangaluru International Airport Limited
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Ref No: AMIAL/CO/AERA-MYTP/2021/1 31st May 2021

To,
The Chairperson,
Airports Economic Regulatory Authority of India,
AERA Building, New Administrative Block,
Safdarjung Airport,
New Delhi- 110003.

Sub: Submission of Multi Year Tariff Proposal (MYTP) for Adani Mangaluru International Airport Limited (AMIAL) for First Control Period

Dear Sir,

The Authority vide order No. 48/2020-21 dated 29th October 2020 had approved the existing tariff for Mangalore airport till 31st March 2021 and same was further extended till 30th September 2021 vide order No. 65/2020-21 dated 24th March 2021.

We hereby submit the Multi Year Tariff Proposal for Mangaluru International Airport (IXE) for the first Control Period starting from 1st April 2021 to 31st March 2026 for kind consideration and approval of the Authority, We shall be pleased to provide any further information that Authority may require in this regard.

Thanking you

Yours truly,
For Adani Mangaluru International Airport Limited,

Manoj Chanduka
Authorized Signatory

Enclosures : -

1. Multi Year Tariff Proposal along with annexures
2. Financial Model in Excel format

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Adani Corporate House
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Multi Year Tariff Proposal for Adani Mangaluru International Airport Limited (AMIAL) for First Control Period (FY21-22 to FY25-26)

31.05.2021

Contents

List of Abbreviations

AAHL	Adani Airport Holdings Limited
AAI	Airports Authority of India
AAICLAS	Airports Authority of India Cargo Logistics and Allied Services Company Limited
AEL	Adani Enterprises Limited
AERA	Airports Economic Regulatory Authority of India
AMIAL	Adani Mangaluru International Airport Limited
ARR	Aggregate Revenue Requirement
ASQ	Airport Service Quality
ATM	Air Traffic Movements
AUCC	Airports Users Consultative Committee
CGF	Cargo, Ground handling, and Fuel
COD	Commercial Operations Date
CoD	Cost of Debt
CoE	Cost of Equity
CPI	Consumer Price Index
CWIP	Capital Work In Progress
F&B	Food and Beverages
FCP	First Control Period
FIDS	Flight Information Display Systems
FRoR	Fair Rate of Return
GoI	Government of India
IMF	International Monetary Fund
ITB	Integrated Terminal Building
IXE	Mangaluru International Airport, Mangaluru
LoA	Letter of Award
MoU	Memorandum of Understanding
MYTP	Multi Year Tariff Proposal
NAR	Non-Aeronautical Revenue
NCAP	National Civil Aviation Policy
Pax	Passengers
R&M	Repair and Maintenance

RAB	Regulatory Asset Base
SPV	Special Purpose Vehicle
UK	United Kingdom
WDV	Written Down Value Method

BEFORE THE AIRPORTS ECONOMIC REGULATORY AUTHORITY OF INDIA

AT NEW DELHI

SUBMISSION OF MULTI YEAR TARIFF PROPOSAL FOR AND ON BEHALF OF:

M/S ADANI MANGALURU INTERNATIONAL AIRPORT LIMITED (AMIAL)

I, Manoj Chanduka aged 55 resident of Gujarat, India acting in my official capacity as authorized signatory in M/s Adani Mangaluru International Airport Limited having its registered office at Baikampady Industrial Area, Dakshina Kannada, Mangaluru, Karnataka, 575011 do hereby state and affirm as under that:

1. That I am duly authorized to act for and on behalf of M/s Adani Mangaluru International Airport Limited in the matter of making this submission before the Airports Economic Regulatory Authority of India, New Delhi ('the Authority');

2. I am competent to make this submission before the Authority;

3. I am making this submission in my official capacity and the facts stated herein are based on official records;

4. The contents of this submission which include (i) Business Plan; (ii) Information pertaining to physical assets; (iii) Information relation to the Regulatory Building Blocks; (iv) Historical and Forecasted Volumes; and (v) Historical Revenue, are correct and true to my knowledge and belief and nothing material has been concealed there from.

For Adani Mangaluru International Airport Limited,

Manoj Chanduka

Authorized Signatory

Place: Mumbai

Date: 31.05.2021

1. Background

1.1. Mangaluru, the 4th largest city in Karnataka is an important port city of the State. Its main economic activities include agricultural processing and port related businesses. Additionally, it is seen as one of the key destinations for IT companies after Bangalore and Mysore. Traditionally being a tourism destination Mangaluru has been shortlisted under the Government's Smart City Mission programme and is one among the 100 smart cities to be developed.

1.2. The Government of India (GoI), in an attempt to bring expertise, enterprise, professionalism, investments, and efficiency in service delivery to airports, decided to privatize the operations, management, and development of Mangaluru International Airport (IXE), Mangaluru.

1.3. Accordingly, the Airports Authority of India (hereinafter referred to as "AAI") invited proposals, through a global competitive bidding process, for the operations, management, and development of IXE, while prescribing technical and commercial terms and conditions. In a competitive bidding, Adani Enterprises Limited (AEL) emerged as the highest bidder to operate, manage, and develop Mangaluru International Airport.

1.4. Having evaluated the bids and having received security clearance from the Ministry of Home Affairs, GoI, the AAI accepted the bid of Adani Enterprises Limited, and issued a Letter of Award (LOA)[1]. As per the Concession Agreement, Adani Enterprises Limited has promoted and incorporated the Special Purpose Vehicle (SPV) – Adani Mangaluru International Airport Limited (AMIAL), as the concessionaire under the Companies Act, 2013. AMIAL signed the Concession Agreement with AAI on 14th February 2020 for exclusive right to operate, manage and develop Mangaluru Airport for a period of 50 (fifty) years from Commercial Operations Date (COD).

[1] LoA No. AAI/KID/PPP/06 APTS/LOA/Mangaluru/2019/93 on 15th July 2019

1.5. Subsequently, AEL has incorporated a 100% subsidiary named Adani Airport Holdings Limited (AAHL). As on date, AEL holds 100% shareholders equity in AMIAL, directly or indirectly through AAHL.

1.6. AMIAL has achieved Commercial Operations Date (COD) on 31st October 2020.

1.7. The Concession Agreement between AAI and AMIAL (refer Annexure – A) and Memorandum of Understanding between GoI and AMIAL (refer schedules in Annexure – A) provide AMIAL the right to levy aeronautical and non-aeronautical charges from various users from the COD.

1.8. With respect to AMIAL's right to demand User Fees for aeronautical and non-aeronautical services, the Concession Agreement[2] states that:

"On and from COD and till the Transfer Date, the Concessionaire has the sole and exclusive right to demand, collect and appropriate Fees from the Users for the provision of the Aeronautical Services and Non-Aeronautical Services, including the airlines and passengers, in accordance with the provisions of the Regulatory Framework and this Agreement including the terms set out in Schedule R (Memorandum of Understanding), provided that the Concessionaire may determine and collect Fees at such lower rates as may be agreed with the Users or any category of Users in accordance with the Applicable Laws and Applicable Permits."

Additionally, the Memorandum of Understanding[3] entitles AMIAL to levy, collect and appropriate aeronautical charges from the COD, from the users of the IXE, Mangaluru at the tariff rates approved by AERA.

1.9. In accordance with the same, AAI issued notification dated 09th November 2020 to all the stakeholders of the Mangaluru Airport informing that AMIAL, from 31.10.2020 commenced operation of the Mangaluru Airport and shall be entitled to demand and collect fees in accordance with the provisions of the Concession Agreement.

[2] Clause 28.1.1. of the Concession Agreement
[3] Clause 2.2.5 of the Memorandum of Understanding

1.10. As mentioned above, AMIAL has an exclusive right to demand, collect and appropriate fees from COD onwards at the rates determined by AERA. As an interim measure, AMIAL applied to AERA vide letter with reference no. AMIAL/CO/AERA-IT/2020/1 dated 17th September, 2020 to allow the existing rates at IXE from the COD till 31st Mar 2021. Subsequently, AERA vide order No. 48/2020-21 dated 29th October 2020 stated the following: -

(i) The Airport Operator, Adani Mangaluru International Airport limited (AMIAL) is allowed to continue to levy and collect the existing Aeronautical tariff issued vide Order No. 46/2020-21 dated 29.09.2020 w.e.f. 31.10.2020 to 31.03.2021 or till the determination of new tariffs in respect of Mangaluru Airport for AMIAL for the First Control Period, whichever is earlier.

(ii) The Airport Operator shall submit MYTP as per the provisions of AERA Regulatory Guidelines

1.11. Subsequently AMIAL has asked for an extension of existing rates till 30 September 2021 and received approval from the Authority as per Order No. 65/2020-21[4] dated 24th March 2021.

1.12. AMIAL through this document aims to submit a detailed Multi Year Tariff Proposal (MYTP) for the 1st Control Period from 1st April 2021 to 31st March 2026 (FCP) of IXE, Mangaluru, as directed by the Authority in the letter FS/AERA/20010/MYTP/Adani-Mangaluru (AMIAL)/2020-21[5] dated 24th November 2020. This MYTP appropriately includes the true-up for the interim period between 31st October 2020 (COD) and 31st March 2021.

[4] Refer Annexure - G
[5] Refer Annexure - C

Confidential Information

1.13. With reference to this MYTP, AMIAL will make various submissions/providing information, including but not limited to the information being submitted along with this MYTP, from time to time to the Authority.

1.14. AMIAL would request the Authority to maintain the confidentiality of financial information and commercial agreements by not sharing any such information in the public domain. AMIAL would not have objections with the Authority publishing documents that should be available to public under any other law or are already under public domain. AMIAL's MYTP business plan containing financials are requested not to be placed in public. The following legal agreements which contain commercially sensitive data for which parties have the responsibility to maintain confidentiality and/or are the property of parties signing them should not be published for common access:

- Concession Agreements (along with Schedules)
- Any communication between AEL/AAHL/AMIAL and AAI/Authority
- Chartered Engineer Reports
- Cost of Equity Report
- Commercial arrangements with Non-Aero concessionaires

Features of the Airport:

1.15. Located about 15 kilometres north-east of the city centre near Bajpe / Kenjar Mangaluru has an international airport and it operates regular scheduled flights to major cities in India and to the Middle East. IXE, Mangaluru is an old airport, having started its operations in December 1951. It is one of the few airports in the world with a tabletop runway.

1.16. The traffic handled by IXE between 2016-17 and 2020-21 is given in the table below:

Year	Dom. Pax	Int. Pax	Total Pax	Dom. ATMs*	Int. ATMs	Total ATMs
2016-17	1,026,897	707,913	1,734,810	10,294	5,111	15,405
2017-18	1,500,002	769,947	2,269,949	14,383	5,253	19,636
2018-19	1,518,411	722,253	2,240,664	14,597	4,768	19,365
2019-20	1,305,068	571,226	1,876,294	11,903	3,782	15,685
2020-21	462,411	152,434	614,845	5,539	1,125	6,664

*Above table includes total domestic ATMs, which comprise of ATMs less than 80-seater and ATMs more than 80-seater. Less than 80-seater aircraft movements accounted for 40%-50% of total domestic ATMs. AMIAL requests AERA to kindly take cognizance of the fact.

1.17. Technical and Terminal building details of IXE are provided in the table below:

Particulars	Details
Total airport area	583.77 acres
Total covered area of Terminal Building (ITB)	Existing area 37,322 sq.mtr.
Passenger Capacity	Existing 2 mppa
Main Runway orientation and length	Runway 06/24, dimension 2450m x 45m Category 4
Apron	15 nos. stands (Code C compliant 11 nos. on Terminal side + 4 nos. on old apron for international cargo use)
Taxiway	Parallel Taxi track construction is on-going
Boarding Bridges	4 Numbers
Security checks	Domestic - 2 & International - 2

2. Methodology to determine Aggregate Revenue Requirement (ARR)

2.1. The Concession Agreement[6] defines the regulator and regulatory framework as the following:

""Regulator" means AERA or any other entity as may be designated by GoI for determination of Aeronautical Charges for the Airport as per Applicable Laws, as the case may be."

""Regulatory Framework" means the framework adopted by the Regulator as per the Applicable Laws, including the AERA Act and Airports Economic Regulatory Authority (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011."

2.2. As per the Concession Agreement[7]:

"The GOI has, through the National Civil Aviation Policy, dated June 16, 2016, approved, ("Shared-Till Approval") the 30% (thirty percent) shared-till framework for the determination and regulation of the Aeronautical Charges for all airports in India, and the same shall be accordingly considered by the Regulator for the purposes of the determination of the Fees/Aeronautical Charges pursuant to the provisions of this Agreement."

2.3. As per clause 13 (1) of the AERA Act, 2018, the authority shall determine the tariff for aeronautical services taking into consideration "the concession offered by the Central Government in any agreement or memorandum of understanding or otherwise."

2.4. The methodology adopted by the Authority to determine tariff is based on AERA Act, 2008 (AERA Act) and the AERA (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28th February 2011 (Tariff Guidelines).

[6] As per definitions of Concession Agreement
[7] Clause 28.3.2. of the Concession Agreement

2.5. Further, tariff is based on 'hybrid till' method wherein 30% of non-aeronautical revenues is used to cross-subsidize ARR (Order No. 14/ 2016-17 "In the matter of aligning certain aspects of AERA's Regulatory Approach (Adoption of Regulatory Till) with the provisions of the National Civil Aviation Policy-2016 (NCAP-2016) approved by the Government of India" dated 12.01.2017).

2.6. The Authority shall determine the ARR for the current control period on the basis of the following Regulatory Building Blocks:

- Regulatory Asset Base (RAB)
- Depreciation (D);
- Fair Rate of Return applied to the Regulatory Asset Base (FRoR x RAB);
- Operation and Maintenance Expenditure (O);
- Taxation (T);
- Revenue from services other than aeronautical services (NAR).

2.7. Based on the building blocks provided above, the formula for determining ARR under Hybrid Till is as follows:

$$ARR = \sum_{t=1}^{5} (ARR_t) \; and$$

$$ARR_t = (FRoR \times RAB_t) + D_t + O_t + T_t - 30\% \; of \; NAR_t$$

Where:

- 't' is the Tariff Year in the Control Period;
- ARR_t is the Aggregate Revenue Requirement for year 't';
- FRoR is the Fair Rate of Return for the control period;
- RAB_t is the Regulatory Asset Base for the year 't';
- D_t is the Depreciation corresponding to the RAB for the year 't';
- O_t is the Operation and Maintenance Expenditure for the year 't', which includes all expenditures incurred by the Airport Operator(s) including expenditure incurred on statutory operating costs and other mandate operating costs;

- T_t is the corporate tax for the year 't' paid by the airport operator on the aeronautical profits; and
- NAR_t is revenue from services other than aeronautical services for the year 't'

2.8. AMIAL has adopted a similar approach for determination of aeronautical revenues as stated in the guidelines of AERA, as also in line with AERA Act and as mandated under the Concession Agreement.

2.9. A true up of all regulatory blocks in the next control period is required as per AERA methodology. In respect to the true-up till COD, it is to be provided by AAI to AERA for consideration. Further AMIAL has done calculations of true-up of the period from COD to 31st March 2021 which is submitted along with this MYTP.

2.10. AMIAL has capitalised financing allowance using the formula provided by the Guidelines, 2011:

$$Financing\ Allowance = R_d \times (WIPA_{t-1} + \frac{Capex - SC - CA}{2})$$

Where

(i) R_d is the cost of debt determined by the Authority

(ii) SC are the capital receipts

(iii) CA are the commissioned assets

3. Impact of Covid-19

3.1. The Covid-19 virus has spread worldwide without acknowledging borders. Spread of this virus has disrupted the internal and international trade activities of various economies thereby distorting their economic growth. Several countries across the world have, in the past year announced travel restrictions, and continue to do so this year, besides partial or complete lockdown to contain the spread of virus and to avoid the pandemic to escalate. The outbreak simultaneously disrupted the supply chains and sharply curtailed demand in various industries. The wide geographical spread of the virus has resulted in challenges for some industries and opportunities for other industries to adapt and improve their business models and to prepare themselves to be resilient to such shocks.

3.2. The Indian economy was rattled, at the onset of the financial year 2020-21 as the entire country went into a complete lockdown for 21 days in the first phase and continued partially till end-May 2020. Different states followed different lockdown protocols thus affecting travel and tourism for longer period. All business activities barring few essentials came to a grinding halt abruptly and caused severe damages to the consumption and new investments. The extended three-month lockdown period witnessed an adverse impact on industries as also the economy. The gradual reopening of activities across the country has seen some improvement in the economy, The impact continues in 2021-22. Resurgence of cases all across the country through a second wave and full/partial lockdowns in several states starting mid-April 2021 casts doubts on the speed and timing of the anticipated recovery.

3.3. As per estimates of International Monetary Fund (IMF), recovery of economic activities will take anywhere between 12 to 24 months. This is expected to be revised further as key indicators denote that the recovery period may take longer time.

3.4. As per IMF's April 2021 Economic Outlook, the expected medium-term output losses from the pandemic are substantial with output for the world in 2024 expected to be lower than the anticipated pre-pandemic levels. IMF's Economic Outlook emphasizes on how sectoral spill overs have been less severe compared to previous financial crises.

However, the COVID-19 shock has made sectoral spill overs sizeable and amplified the disruption. Additionally, IMF states that given the nature of the pandemic, emerging and developing economies will have deeper scars than advanced economies. Various economic growth drivers such as production, financial markets, supply chains, demand/consumption, labour markets etc. are in disarray and are only slowly picking up. Further, resumption of activities and eventual recovery are expected to be different for different segments. Therefore, transformed business continuity plans and adaption of the new normal will be key to get back to pre-Covid-19 levels across industries.

Impact on Aviation Industry

3.5. The airlines and airports industries have been one of the worst effected sectors due to Covid-19 as countries across the World have been imposing travel restrictions and going into complete lockdown in different phases. The second wave has led to more travel restrictions. Restricted passenger movement, therefore, is putting pressure on financials of both airlines and airports simultaneously.

3.6. Although the expected recovery when the pandemic struck global markets was 1-2 years, Fitch Ratings' latest quarterly Global Airport Tracker report forecasts that it may not be before Q4 2023 to 2025 that we return to 2019 air traffic levels[8]. The global aviation industry has witnessed certain fundamental shifts because of the pandemic – one of which is a reduction in business travel. With changing business dynamics, it may take even more time for business travel to catch up to pre-pandemic levels – if it fully recovers at all.

Impact on Traffic in India

3.7. India's aviation sector faced an unprecedented situation in March 2020, when the government grounded all scheduled domestic and international air services. While it took two months for domestic operations to recommence (domestic operations recommenced on 25th May 2020), international travel recommenced largely on

[8] https://www.fitchratings.com/research/us-public-finance/global-airport-traffic-rebounds-full-recovery-still-years-away-13-04-2021

account of repatriations, chartered, and bubble flights by both Indian and foreign operators still leaving travel operations out of ambit. Further, in 2021 the Central Government has put restrictions on operations of international flights upto 30th June 2021.

3.8. According to CAPA India, in FY 2019-20, the market comprised of 205 million passengers (140 million domestic passengers and 65 million international passengers). However, CAPA India estimates that for FY 2020-21, the market would comprise of 50-60 million passengers (40-50 million domestic passengers and less than 10 million international passengers), about one-fourth the figures of 2019-20.

3.9. CAPA analysis suggests that discretionary domestic travel segments (business, institutional, MICE, leisure and foreigners travelling on domestic network) accounted for approximately 55% (fifty five percent) of the market before the pandemic. It is estimated that most of the abovementioned segments have diminished and are unlikely to return to the pre-pandemic figures until the pandemic is under greater control or until widespread use of vaccine is administered. Current shortage of supply of vaccines in India may extend by 5-6 months thus adversely impacting discretionary travel.

3.10. The abovementioned discretionary travel segments are likely to face an impact not only of the pandemic, but also of the economic conditions as a result of pandemic. While the impact of the pandemic on various travel segments can already be seen, the full impact of the economic conditions is perhaps likely to be yet felt.

3.11. Although, it was estimated that an increase in business and leisure traffic would be noticed from end of calendar year 2020, the second wave in 2021 and an anticipated third wave (by doctors and virologists) coupled with economic slowdown are likely to impact a number of travel segments and the aviation sector as a whole. Emergence of the second wave with different variants of the virus and wider population still uncovered by vaccination suggests that business and leisure segments must wait longer.

3.12. International Air Transport Association's (IATA) air passenger market analysis confirms that January 2021 experienced a renewed weakness in air travel was caused by new variants of the coronavirus. According to the report, an increase in new cases in India witnessed in March 2021 along with a compounded economic impact from the second wave will delay the return to strong growth rates of the recent past. Additionally, the report states that in the Asia-Pacific region, improvement in international travel is unlikely in the coming months due to slower vaccination rates.

3.13. With respect to the outlook for cargo activity, IATA identified that the operating backdrop for air cargo depended on the robustness of the manufacturing sector. Despite improvements in international cargo traffic, Asia-Pacific region's cargo traffic is still lower than what it was in the same month of the previous year.

3.14. AMIAL has considered necessary impact for Covid-19 on various building blocks and projections while preparing this MYTP.

4. Passenger Traffic, Air Traffic Movements (ATMs) and Cargo forecasts

4.1. The traffic at IXE, Mangaluru increased at a CAGR of 9.3% to 1.9 million in FY 2020 from 0.8 million passengers in FY 2011. Of the total traffic in FY 2020, 88% was domestic. **However, due to the impact of Covid-19 in FY 2021 CAGR may not be a good metric to gauge the growth of passenger traffic.**

4.2. Passenger, ATM, and Cargo traffic have been adversely impacted because of Covid-19 in FY 2020-21. Total ATMs at IXE, Mangaluru between FY20-21 were 57% less than ATMs of the same period in FY19-20. Similarly, total passenger traffic at IXE, Mangaluru between FY20-21 was 67% less than that of the same period in FY19-20. Considering the Covid-19 impact, historical benchmarking growth methodology may not applicable. The following table illustrates the adverse impact that the pandemic had on IXE's traffic:

Particular	April 2019 - March 2020	April 2020 - March 2021	% Change
Passenger Traffic	1,876,294	614,845	(67%)
Air Traffic Movements (ATM)	15,685	6,664	(57%)
Cargo (in MT)	4,605	2,186	(53%)

4.3. IATA's analysis points towards a renewed weakness in air travel in early 2021. Given that discretionary travel segments account for a significant portion of the market, air traffic is unlikely to achieve its pre-pandemic levels. It is estimated that most of the abovementioned segments have diminished and are unlikely to return to the pre-pandemic figures until the pandemic is under greater control or until a widespread use of vaccine is administered.

4.4. The abovementioned discretionary travel segments are likely to face an impact not only from the pandemic, but also from the economic conditions. While the impact of the pandemic on various travel segments can already be seen, the full impact of the economic conditions is perhaps likely to come.

4.5. Additionally, it was also estimated that though an increase in business and leisure traffic would be noticed from November 2020 onwards, the increase would be marginal. However, the second wave has faded the hope of increase in business and leisure traffic.

4.6. Traffic projections submitted by AMIAL are based on a study by CAPA Centre for Aviation. It is to be noted that the impact of Covid-19 on the aviation sector and traffic has been incorporated into the study.

4.7. As per the aforementioned CAPA study[9], the traffic growth rates and traffic forecasts for the FCP for IXE, Mangaluru are as follows:

Air Traffic Movements (ATM) and ATM growth rate forecasts for IXE for FCP

ATM						
Year	**Dom**	**Intl**	**Combined**	**Dom**	**Intl**	**Combined**
2021-22	6,995	2,178	**9,173**	26.29%	93.60%	37.65%
2022-23	10,537	3,295	**13,832**	50.64%	51.28%	50.79%
2023-24	12,911	4,622	**17,533**	22.52%	40.28%	26.75%
2024-25	15,192	5,791	**20,983**	17.67%	25.30%	19.68%
2025-26	17,585	6,967	**24,552**	15.75%	20.31%	17.01%

Traffic and traffic growth rates forecasts for IXE for FCP

Passengers						
Year	**Dom**	**Intl**	**Combined**	**Dom**	**Intl**	**Combined**
2021-22	800,000	330,000	**1,130,000**	73.16%	117.11%	84.04%
2022-23	1,230,000	500,000	**1,730,000**	53.75%	51.52%	53.10%
2023-24	1,537,500	702,500	**2,240,000**	25.00%	40.50%	29.48%
2024-25	1,845,000	881,638	**2,726,638**	20.00%	25.50%	21.72%
2025-26	2,177,100	1,062,373	**3,239,472**	18.00%	20.50%	18.81%

4.8. **Further it is to be noted that IXE, Mangaluru handles large volumes of ATM which are less than 80-seater capacity , some of which are under RCS category. Based on**

[9] Refer Annexure - B

historical trend, less than 80-seater capacity and RCS category ATMs accounts for approx. 40% and 2% of domestic ATMs respectively.

4.9. AMIAL appreciate the RCS scheme initiated by government to boost the regional connectively whereby no landing charges are charged to Airlines and also no UDF is charged to the departing passenger. Secondly ATMs having less than 80-seater capacity are also exempted from landing charges. Lastly, there are certain categories of passengers which are exempted from user charges being infant, transit etc.

4.10. Therefore, while calculating the revised aeronautical charges , the ATM and Passenger traffic is suitably adjusted to account for only billable ATMs and billable Passengers. The adjusted billable ATM and Passengers after excluding exempted categories is as follows:

Adjusted Billable Air Traffic Movements (ATM) forecasts for IXE for FCP:

Year	Dom	Intl	Combined
2021-22	4,197	2,178	**6,375**
2022-23	6,850	3,295	**10,144**
2023-24	9,038	4,622	**13,660**
2024-25	10,635	5,791	**16,426**
2025-26	12,310	6,967	**19,277**

Adjusted Billable Traffic forecasts for IXE for FCP

Year	Dom	Intl	Combined
2021-22	784,000	323,400	**1,107,400**
2022-23	1,205,400	490,000	**1,695,400**
2023-24	1,506,750	688,450	**2,195,200**
2024-25	1,808,100	864,005	**2,672,105**
2025-26	2,133,558	1,041,126	**3,174,684**

4.11. The following table summarizes the Cargo forecasts for IXE, Mangaluru for FCP:

Year	Domestic	Intl	Combined	Domestic	Intl	Combined
2021-22	1,704	2,614	4,318	6.97%	340.81%	97.53%
2022-23	2,130	3,872	6,002	25.00%	48.13%	39.00%
2023-24	2,662	4,588	7,250	24.98%	18.49%	20.79%
2024-25	3,328	5,437	8,765	25.02%	18.50%	20.90%
2025-26	4,160	6,443	10,603	25.00%	18.50%	20.97%

4.12. AMIAL is expected to process certain cargo volumes out of the total volume on its own as discussed in Chapter 12.

5. Airport Service Quality

5.1. With respect to the Airport Service Quality, the Concession Agreement states in relation to the obligations of AMIAL that they have been defined *"as set forth in Annex I of Schedule H;"* (Annexure – A).

5.2. These service qualities have been summarized on the basis of performance indicators, measures, measurement mechanisms and measurement frequency. AMIAL is committed to abide by the following ASQ performance indicators mentioned in Annex I of Schedule H:

S. No.	Performance Indicator	Performance Measure	Minimum Performance Standard
1	**Car Parking**	a) Average time taken to find parking space including the time taken for payment of parking fee or collection of ticket b) Average time from parking slot to the exit gate including the time for payment of parking fee	a) 95% of drivers take less than 5 minutes b) 95% of drivers take less than 5 minutes
2	**Security Check**	Waiting time in queue	95% of the Peak Hour passengers wait less than 5 minutes
3	**Check-in**	Waiting time in queue	a) 95% of business class passengers wait less than 5 minutes b) 95% of economy class passengers wait less than 20 minutes
4	**Immigration**	Waiting time in queue	95% of passengers wait less than 10 minutes
5	**Baggage delivery domestic**	Time taken for baggage delivery from aircraft arrival	a) First baggage will arrive on baggage belt within 10 minutes of aircraft on blocks time, and b) Last baggage will arrive on baggage belt within 30 minutes for Code C aircraft

			45 minutes for Code E of aircraft on-blocks time
6	**Baggage delivery domestic**	% time available	Each baggage belt should be available at least 95% of the time
7	**Baggage delivery international**	Time taken for baggage delivery from aircraft arrival	a) First baggage will arrive on baggage belt within 15 minutes of aircraft onblocks time, and b) Last baggage will arrive on baggage belt within 40 minutes for Code C aircraft 45 minutes for Code E of aircraft on-blocks time
8	**Baggage delivery international**	% time available	Each baggage belt should be available at least 95% of the time
9	**Passenger arrival process**	Time taken from aircraft arrival to kerbside	a) International – 95% of passengers take less than 45 minutes b) Domestic – 95% of passengers take less than 35 minutes
10(a)	**Passenger boarding bridges**	Percentage time available	Each Passenger boarding bridge should be available at least 95% of the time
10(b)		Availability for % of aircraft movements to meet airline request	The Passenger boarding bridges should be available to 90% of international passengers and to 90% of domestic passengers travelling on aircrafts B737/A320 or larger unless not required by airlines.
11	**Parking bays**	Percentage time available	Each parking bay stand should be available at least 99% of the time.
12	**Availability of Flight Information Display Systems (FIDS)**	Percentage time available	Each FIDS should be available at least 98% of the time.
13	**Availability of baggage trolleys**	Percentage time available	Baggage trolleys should be available 100% of the time.

14	**Passengers requiring wheel chairs**	Waiting time for provision of assistance	100% of departing Passengers, needing a wheel chair, should not wait longer than 5 minutes
15	**Transit/transfer Passengers**	Minimum connect time for transit/transfer Passengers (i) domestic / domestic or (ii) domestic / international or (iii) international / international	a) Minimum connect time to be not more than 60 minutes for 80% of the domestic / domestic Passengers , b) Minimum connect time to be not more than 75 minutes for 80% of the domestic / international Passengers c) Minimum connect time to be not more than 60 minutes for 80% of the international / international Passengers
16	**Escalators, elevators, & travellators**	Percentage time availability	Escalators, elevators & travellators should be available 98% of the time.
17	**Automated services**	Percentage time availability	Automated services should be available 98% of the time. "Automated services" shall include but not limited to inbound baggage system, outbound baggage system, X-Ray machines and public announcement system.
18	**Information /complaint desks**	Availability of personnel at the information/ complaint desk	Information/complaint desks should be manned 100% of the time.
19	**Ambient conditions in the Passenger Terminals**	Maintenance of ambient conditions in the Passenger Terminals	a) Temperature range in a Passenger Terminal to be 21-25 degree Celsius during operational hours in the Passengers areas, and b) Relative humidity levels – correlated relative humidity to specified temperature range
20	**Runway operational safety**	Number of runway incursions	Recording, investigating and minimizing runway incursions
21	**ARFF**	Response time to incident	a) As specified by ICAO achieve a response time not exceeding 3 minutes to any

			point of each operational runway, and to any other part of the movement area in optimum visibility and surface conditions b) Any other vehicles required to deliver the amounts of extinguishing agents should arrive no more than 1 minute after the first responding vehicle(s) (i.e. no more than 4 minutes after the first call) so as to provide continuous agent application.
22	**Availability of taxi**	Waiting time in queue	Queuing time for taxis will not be more than 5 minutes for 95% of the passengers.
23	**Handling of complaints**	Percentage of complaints responded within specified time	100% of complaints responded within 2 working days.
24	**Repair completion Time**	Percentage of repairs done within specified time	a) 95% of high priority repair works should be addressed within 4 hours, b) 95% of others should be addressed within 24 hours
25	**Cleanliness**	Ratings during cleanliness surveys	Achieve a satisfactory cleanliness rating for 95% of all inspections
26	**Gate lounges**	Seating availability	As per IATA Optimum Level of Service
27	**Buggy Services**	Availability of buggies	Buggy service should be available 98% of the time

5.3. **It is expected that adherence and maintenance of these standards will require a creation of significant infrastructure, ramp-up of human resource and increase in operations and maintenance costs. AMIAL has considered the cost implications suitably while preparing future projections as provided in this MYTP submission.**

5.4. AMIAL has been accredited in the Airports Council International (ACI) Airport Health Accreditation (AHA) programme in Jan 2021. The ACI programme enables airports to

demonstrate to passengers, staff, regulators, and governments that they are prioritising health and safety in a measurable and established manner.

6. Initial Regulatory Asset Base (RAB) and CWIP taken from AAI

Disclaimer

AMIAL has received invoices from AAI for Estimated Deemed Initial RAB, Initial Non-Aeronautical Investments and CWIP (inclusive of GST) dated 31st March 2021 and 01st December 2020 respectively. AMIAL has contested the GST amount based on various opinions obtained from independent tax consultants. AMIAL is in discussion with AAI to resolve the matter. In case AMIAL is eventually required to bear the GST amount, it will be added to the Initial RAB and CWIP. For the time being, the numbers provided below for Initial RAB and CWIP are exclusive of GST for the purpose of this MYTP calculation. AMIAL hereby, reserves the right to include the GST and revise the Initial RAB and CWIP and thereby the MYTP, depending on the outcome of the same.

Initial Regulatory Asset Base:

As per the provisions of the Concession Agreement, AMIAL needs to pay to AAI the amount of WDV (Written Down Value Method of Depreciation) of assets as on COD. The amount to be paid for assets as at 31st March 2018 (Deemed Initial RAB) is INR 71 Crores for Aeronautical Assets and INR 3.5 Crores for Non-Aeronautical Assets (the relevant provisions of Concession Agreement are provided below).

6.1. The Concession Agreement[10], with respect to AMIAL's liability towards AAI states: per clause 28.11 of the Concession Agreement:

*"(a) It is agreed by the Parties that the Concessionaire shall be liable to pay to the Authority an amount equivalent to the investments made by the Authority in the Aeronautical Assets as of the COD and considered by the Regulator as part of the Regulatory Asset Base, subject to requisite reconciliation, true-up and final determination by the Regulator of the quantum of such investment ("**Deemed Initial RAB**").*

*(b) The estimated depreciated value of investments made by the Authority in the Aeronautical Assets at the Airport as on March 31, 2018 is Rs. 71,00,00,000 crores (Seventy-One Crores) ("**Estimated Deemed Initial RAB**"). It is agreed by the Parties*

[10] Clause 28.11. of the Concession Agreement

that the Estimated Deemed Initial RAB shall be due and payable by the Concessionaire to the Authority within 90 (ninety) days of COD

*Pursuant to the payment of the Estimated Deemed Initial RAB, and upon the reconciliation, true-up and final determination by the Regulator of the quantum of the investment under 28.11.3(a), any surplus or deficit in the Estimated Deemed Initial RAB with respect to the Deemed Initial RAB shall be adjusted as part of the Balancing Payment that becomes due and payable as per Clause 31.4 after the expiry of 15 (fifteen) days from such final determination by the Regulator, with due adjustment for the following ("**Adjusted Deemed Initial RAB**"):*

(a) reduced to the extent of over-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as a downward adjustment while determining Aeronautical Charges for the next Control Period; or

(b) increased to the extent of under-recoveries, if any, of Aeronautical Revenues by the Authority until the COD, that the Regulator would provide for as an upward adjustment while determining Aeronautical Charges for the next Control Period.

The amount(s) to be paid by the Authority or Concessionaire shall be the present value of Adjusted Deemed Initial RAB calculated using the fair rate of return as determined by the Regulator for the time period from the COD to the date of actual payment of the Adjusted Deemed Initial RAB.

Upon reimbursement of such amount by the Concessionaire to the Authority, the Deemed Initial RAB will, in addition to the investments made by the Concessionaire, be considered for the purpose of determination of Aeronautical Charges by the Regulator.

(a) The Authority undertakes to make any required supporting submissions to the Regulator towards such consideration and determination by the Regulator.

(b) The Parties shall submit to and request the Regulator to separately identify the Deemed Initial RAB in future determinations of Aeronautical Charges with regard to consideration of depreciation, required returns, etc.

*For the purpose of this Clause 28.11, "**Control Period**" and "**Regulatory Asset Base**" shall have the meaning set forth in Airports Economic Regulatory Authority (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011."*

6.2. The Concession Agreement[11], with respect to AMIAL's liability towards AAI states: per clause 28.12 of the Concession Agreement:

"*It is agreed by the Parties that the Concessionaire shall pay to the Authority an amount equivalent to the estimated depreciated value of investments made by the Authority in the Airport as of the COD towards development of Non-Aeronautical Assets ("Initial Non-Aeronautical Investments").*

The estimated depreciated value of investments made by the Authority towards development of the Non-Aeronautical Assets at the Airport as on March 31, 2018 is Rs. 3,50,00,000 (Rupees Three Crore and Fifty Lakh) ("Estimated Initial Non-Aeronautical Investments"). It is agreed by the Parties that the Estimated Initial Non-Aeronautical Investments shall be due and payable by the Concessionaire to the Authority within 90 (ninety) days of COD.

28.12.3 Pursuant to the payment of the Estimated Initial Non-Aeronautical Investments, and upon the final determination by the Independent Engineer of the quantum of the Initial Non-Aeronautical Investments, any surplus or deficit amount(s) to be paid by the Authority to the Concessionaire or the Concessionaire to the Authority, as the case may be, shall be adjusted as part of the Balancing Payment that becomes due and payable as per Clause 31.4 after the expiry of 15 (fifteen) days from such final determination.

28.12.4 The amount(s) to be paid by the Authority or Concessionaire pursuant to Clause 28.12.3 shall be the present value of the same, calculated using the fair rate of return as determined by the Regulator for the time period from the COD to the date of actual payment of such amount(s).

6.3. **Further AMIAL has received Estimated Fixed Asset Register as on COD which accounts for tentative addition / deletions / depreciation & amortization from 31st March 2018 till COD.** As per Concession Agreement, this is subject to reconciliation, true-up and determination of final amount of Initial RAB by AERA as on COD. Following is the summary of the Estimated Fixed Asset Register as on COD for the assets transferred from AAI to AMIAL:

[11] Clause 28.12 of the Concession Agreement

S No.	Particulars (INR crore)	As on COD i.e. 31st Oct 2020	Additions from 31st Oct 2020 till 31st Mar 2021	Depreciation / Amortization for the period from 31st Oct 2020 till 31st Mar 2021	As on 31st March 2021
1	**Terminal Building (Aero)**	55.52		(1.38)	54.14
2	**Runway, Taxiway and Apron**	5.03		(0.11)	4.92
3	**Software**	0.02	0.47	(0.04)	0.45
4	**IT equipment**		0.08	(0.01)	0.07
5	**Plant and Machinery**	36.83		(3.82)	33.01
6	**Terminal Building (Non-Aero)**	3.50		(0.07)	3.43
7	**Furniture & fixtures**	0.95		(0.09)	0.86
8	**Vehicles**	5.19		(0.81)	4.38
9	**Office equipment**	0.13		(0.04)	0.09
10	**Intangible Assets**		17.23	(1.01)	16.22
11	**Total**	**107.17**	**17.78**	**(7.37)**	**117.58**

6.4. AEL itself or through its subsidiary AAHL has incurred expenses till COD. The expense incurred till COD have been apportioned as provided below in point 14.4.5 and 14.4.6. AMIAL has capitalised these expenses as Intangible Assets as they have contributed in the planning and execution of the proposed capital expenditure plan of IXE, Mangaluru. Apart from this, AMIAL since incorporation has itself incurred expenses till COD which includes expenses relating to employee cost, staff welfare, project management, travelling, various consultancies, etc to the tune of INR 3.42 Crores which are necessary for team creation and seamless transition of Mangaluru Airport from AAI to AMIAL. These are also capitalised as Intangible Assets in the books of accounts as per applicable accounting principles.

6.5. While preparing the MYTP, **Initial Regulatory Asset Base** has been comprising of following components: -

6.5.1. Estimated Fixed Asset Register obtained from AAI as on COD.

6.5.2. Add: - Assets, both tangible and intangible, capitalised during the period from COD till 31st March 2021

6.5.3. Less : - Depreciation and amortization on the above assets from COD till 31st March 2021.

The same can be referred from the assets as on 31st March 2021 in the audited financial statements. Refer Annexure - K for the audited financial statements.

6.6. AMIAL request AERA to kindly perform the necessary reconciliation to arrive at the final RAB as on COD which will accordingly change the Initial Regulatory Asset Base.

Capital Work in Progress (CWIP):

6.7. With respect to AMIAL's obligations to pay AAI any amount incurred by AAI as on COD with respect to the contracts related to works-in progress, the Concession Agreement states the following[12]:

"Notwithstanding anything to the contrary in this Clause 6.4, the Concessionaire shall be liable to pay to the Authority such amounts as may have been incurred by the Authority as on the COD in respect of the contracts relating to works-in-progress as have been set forth in Schedule T. Such amounts shall be intimated by the Authority with supporting documents and details within 30 (thirty) days of COD and shall be due and payable by the Concessionaire to the Authority within a period of 90 (ninety) days thereon.

The Parties shall constitute a committee comprising representatives of the Concessionaire, Authority and each of the counterparties under such contracts, which committee shall be responsible for: (a) facilitating any discussions and/ or interactions amongst AAI, the Concessionaire and the counterparties under such contracts, including in respect of any modifications to the works , and (b) coordinating, facilitating, and monitoring the progress of such works-in-progress. The Concessionaire shall be responsible to incur any additional cost towards completion of such work-in-progress assets after COD.

Upon reimbursement by the Concessionaire to the Authority, of amounts as may have been incurred by the Authority as on the COD for such work-in-progress assets as provided for above, and completion of such works-in-progress by the Concessionaire, such works-in-progress assets shall form part of the Airport.

[12] Clause 6.4.5. of the Concession Agreement

The amounts reimbursed by the Concessionaire to the Authority and additional amounts incurred by the Concessionaire for completion of such work-in-progress assets shall be considered as investments made by the Concessionaire in creation of such assets for the purpose of determination of Aeronautical Charges by the Regulator. In the event that any part of the amounts reimbursed by the Concessionaire to the Authority pursuant to this Clause 6.4.5 are not considered for pass-through by the Regulator due to any act or omission on the part of the Authority, the adjustment towards any differences in the amounts reimbursed by the Concessionaire to the Authority and the amounts considered for pass-through by the Regulator shall be undertaken as part of the Balancing Payment that becomes due and payable as per Clause 31.4 immediately after the determination of the Aeronautical Charges by the Regulator."

6.8. AMIAL received the CWIP invoice[13] from AAI totalling Rs 147 crores (excluding GST) (as per the above clause it will be paid to AAI). In addition, there will be additional amounts of approx. INR 135 Crores to be incurred by AMIAL from COD for completion of work-in-progress assets. Capital Works in Progress of INR 167.93 Crores as on 31st March 2021 largely consist of the obligated CWIP under concession agreement and further CWIP created during the period from COD till 31st March 2021. Apart from the ongoing work-in-progress assets, there will be new capex as per the master plan, which is detailed in the Capital Expenditure chapter.

[13] Annexure - I

7. Capital Expenditure

Disclaimer

AMIAL is required to pay the stamp duty and registration charges on the Concession Agreement. AMIAL would be required to bear the stamp duty and registration charges based on decision of the state authorities, and it will be added to the capital expenditure. For the time being, the numbers provided below for capital expenditure are exclusive of stamp duty and registration charges for the purpose of this MYTP calculation. AMIAL hereby, reserves the right to include the stamp duty and registration charges and revise the Capital Expenditure.

7.1. The objectives of AMIAL for the development of IXE are summarised below:

- Deliver additional airfield, terminal and landside capacity in a timely way to accommodate increasing passenger growth.
- Improve the passenger experience to deliver a competitive offer, that includes best in class processes, a modern terminal ambience and a range of services that meets the needs of all passenger groups.
- Improve the sustainability credentials of the airport such as efficient resource management.

7.2. The main focus of the development strategy is to provide additional terminal and airside capacities (and the airport supporting infrastructure for safe operations) in a cost-effective way to meet forecast demand.

7.3. Schedule T and U of the Concession Agreement (Annexure – A) provides a list of works proposed by AAI that are in execution and/ or planning stages. As per the Concession Agreement, AMIAL is obligated to complete the works proposed in Schedule T and U of the Concession Agreement[14].

[14] Clause 4.1.3. of the Concession Agreement

7.4. Following is the summary of the proposed works that AMIAL is obligated to carry out as per the abovementioned clause of the Concession Agreement:

Proposed Work	Estimated Cost (INR Crores)	Schedule T/U
Modification / Expansion of existing Integrated Terminal Building	116*	Schedule T
Construction of Link Parallel Taxi Track (Phase-II) and Grading of Basic Strip at South Side	120*	Schedule – T
Widening and strengthening of perimeter Road	5	Schedule – T
Project Management Consultancy for supervision of Expansion / Modification of Existing Integrated Terminal Building	4	Schedule – T
Passenger Boarding Bridges	7.5	Not part of Schedule – T, but required for ongoing terminal works. Yet to be awarded
Baggage Conveyor	8	Not part of Schedule – T, but required for ongoing terminal works. Works to be re-awarded
VGDS	2	Not part of Schedule – T, but required for ongoing terminal works. Yet to be awarded
Various systems (Substation equipment's, Lift & Travellator, PA System), NITB Information Technology (IT) Works, CCTV Cameras, FIDS, Network Panel, Joint Filling work for Runway & Taxiway, Strom Water Drain, Face Lift work for NITB and other works	20	Works of value @ INR 10 Crores awarded by AAI, works related to IT for NITB yet to be awarded.
Total	**282**	

*As on COD i.e. 31st October 2021, AMIAL has received CWIP invoice of totalling INR 147 Crores (excluding GST) from AAI which includes INR 58 Crores and INR 83 Crores towards Modification / Expansion of existing Integrated Terminal Building and Construction of Link Parallel Taxi Track (Phase-II) respectively. It is evident that when AMIAL took over the operations of the Airport from COD onwards, the major projects

have achieved significant progress. These projects are expected to be completed by FY2022.

7.5. The expansion of the terminal and the opening up of the full-length parallel taxiway to the runway will enhance the passenger handling capacity of IXE. This will help IXE to accommodate passenger growth during the control period.

7.6. Under the Concession Agreement, AMIAL is mandated to adhere to best-in-class standards, safety & security of passengers and convenience of user communities. AMIAL has done the detailed analysis of the various deficiencies at Mangaluru Airport in terms of safety, security, passenger processing and convenience. In addition to on-going works inherited from AAI, AMIAL will be undertaking additional capital expenditure of approx. INR 400 Crores (escalations, pre-operative cost, contingencies interest during construction etc. will be extra and are not included in INR 400 Crores listing) over the period of next 5 years.

7.7. The key infrastructure works proposed in FCP are summarized in the table below: :-

Sr. No.	Facility	Description	Projects Proposed	Expected Timelines for Completion
1.	Airside Improvement Works totalling INR 94 Crores	Airside Improvement Works are very important at IXE to ensure operational compliance, safety of operation and enhancing runway capacity. One of the major issues in IXE airfield is the inadequate safety distance at runway 24 end, with RESA limited to 200m. This safety issue has been raised by DGCA. Shifting of runway thresholds impact the existing taxiways and they need to be built at new locations. Apart from this work, completion of on-going work of parallel taxiway is necessary to enhance peak hour runway capacity and operational safety. In addition to these, other urgent airside improvements works are required.	➢ Runway Improvement Works Provision of full RESA at 24 end of existing Runway is required for DGCA compliance and to ensure safety of flight operations	To be completed by FY2023
			➢ Entry Taxiway at Runway ends New Entry/Exit Taxiways are required to be constructed on Western & Eastern Runway ends due to shifting of runway towards NE by 70 m, to make the RESA 240 m at 24 end. This is also a DGCA requirement.	To be completed by FY2023
			➢ Construction of Taxiway - Code C (along with West Apron) Taxiway construction is required for aircraft to approach west apron and to increase the operational flexibility and allow for proper buffering and aircraft sequencing to resolve any bottleneck issue.	To be completed by FY2023
			➢ Apron Expansion - West Side Current GSE area is inadequate, and additional GSE area is required to accommodate the demand	To be completed by FY2023
			Head of Stand Road is presently not existing at this location. It is required for airside vehicles to operate safely without conflicting with apron operations	To be completed by FY2026
			➢ Relocation of Bomb Cooling Pit Current Bomb Cooling pit is located close which is less than the radius of 100 m required) to Commercial Apron of Terminal therefore needs to be relocated at safe distance from other airport facilities.	To be completed by FY2026

			➢ Construction of New Airside Security Gates Current Airside Gates come in the footprint of proposed airport development. Therefore, need to be built at new location with required upgrades.	To be completed by FY2026
			➢ Employee Canteen Airside Staff needs facility for lunch/dinner while on duty, therefore this facility is proposed within existing ARFF.	To be completed by FY2025
			➢ In-to Plane Facility In-to Plane Facility is presently not existing and is required for Refuelers	To be completed by FY2025
			➢ Rainwater Harvesting Ponds Airport does not have Municipal water supply. Therefore, rainwater needs to be harvested for non-potable uses at airport	To be completed by FY2025
			➢ Airside Boundary Wall Certain Sections of Airport Boundary wall need to be rebuilt for airport security	To be completed by FY2026
			➢ Miscellaneous & Enabling Works Being a brownfield airport development, several minor enabling works are required	To be completed by FY2026

2.	Terminal Improvement Works totalling INR 77 Crores	An extension to the existing terminal building on its western side (arrivals side) is currently under construction which will add approx. 10,142 sqm to existing approx. 37,322 sqm of terminal area. This on-going expansion is expected to be completed in FY2022. It is largely planned to cater to international arrival processes. However, the international passenger flows in the exiting terminal are to be reoriented for best utilization and optimization. International departure processes are at extreme east of the terminal whereas international arrival processes are planned towards extreme west of the terminal. This leads to mixing of domestic and international passengers in common departure/arrival corridor area. To effectively utilize the ongoing terminal expansion area, relocation of international emigration, security lanes, boarding gate lounges, arrival flows in exiting	➢ Shifting International Processors (Emigration, Customs & Security) towards West side of Check-in hall ➢ Shifting of International Boarding Gate Lounge towards West side ➢ Shifting International Arrivals Vertical Core (Elevator, Escalator, Staircase) into ongoing International Arrival expansion area towards extreme West side ➢ Shifting 2 nos. Baggage Reclaim Carousels towards West side and realignment of Arrival Concourse area ➢ Domestic Security Lanes realignment ➢ Departure Kerb widening and addition / modification of Vestibules to improve operational efficiency ➢ Hold Baggage Inline Screening and associated BHS works ➢ Dry cladding of Exterior Columns ➢ Upgradation of public areas within existing terminal to the extent shifting of processes is planned	All works pertaining to on-going Terminal expansion works are expected to be completed by FY2022 While works for Upgradation / Modification in Existing Terminal Phase I - International Processes & Departure Kerb are expected to be completed by FY 23

		terminal needs to be reconsidered. As international passenger flows need relocation, domestic passenger flows including security, boarding gate lounges, bus gates etc., will also need to be realigned. This will help to increase the capacity from 2 mppa to approx. 3 mppa		
3	Landside Improvement Works totalling INR 51 Crores	Landside Improvement Works proposed on landside of existing terminal building involve demolishing, grading, drainage, construction of at-grade roads and landscaping etc. All the proposed works will be divided into different sections, so that will be no disruption to landside operation.	➢ Road Improvements (West Side) including Drainage ➢ Landside Fuel Station (Petrol Pump) ➢ Nursery Development	To be completed by FY2026
4	Cargo Terminal Development totalling INR 17 Crores	Existing Cargo Facility at IXE located in eastern (old airport area) part has been retained by AAI as Carved Out Asset, therefore AMIAL needs to build its Cargo Facility. AMIAL therefore needs to develop new cargo terminal complex for domestic +	➢ The cargo complex being developed by AMIAL will be an Integrated Cargo Terminal (ICT) of 1890 sqm of constructed built up area, with both International (Import and Export) and Domestic (Inbound and Outbound) under single roof. ➢ The cargo terminal will be state of the art facility having modern equipment's, forklifts, advanced security systems, firefighting equipment, x ray machines etc.	To be completed by mid of FY2023

		international cargo, for its operations.		
5.	Aviation Fuel totalling INR 22 Crores	AMIAL will introduce operational improvements by creating a more efficient way of storage and dispensing of aviation fuel. In the short term, certain existing facilities belonging to the Oil Marketing Companies (OMC) will be taken over, and Open Access Fuel Facility operations will commence. In the long term, an integrated facility will be planned to consolidate the fuel facility operation in to one location.	➢ The current fuel Farm Facility is proposed to be expanded in phases, at the current location of existing facility. ➢ 1st Phase of Fuel Farm expansion, by adding 500 KL of fuel storage capacity and a 5-bay TT/refueller gantry along with TT parking space	To be completed by FY2022
6	Utility Improvements totalling INR 28 Crores	As no major utility infrastructure improvements have been undertaken in recent past at IXE, it now necessary to undertake very basic improvements to existing utility infrastructure in next five-year period, to demand in FCP	➢ Development of Rainwater Harvesting Pond ➢ Airside Utility Improvements • Water tank with Pump House • Substation (RSS/DSS) Building • STP & Storage Tanks, Pump House associated Buildings • Solid Waste Facility • Triturator • Hazardous Waste Storage ➢ Landside Utility Improvements • Water tank with Pump House	To be completed by FY2026

			• Substation (RSS/DSS) Building • STP & Storage Tanks, Pump House associated Buildings	
7	Operational Capital Expenditure totalling INR 108 Crores	Operational capex covers the minor capital expenditure works, , at Mangaluru International Airport, which are required over the control period. Although these minor works have relatively small individual project costs, the nature of the projects are critical to airport operations. These projects will ensure business continuity, operational readiness and passenger satisfaction. • Some of the projects will improve the security preparedness and the physical & network connectivity at the airport. • The operational capex will also address observations of regulatory agencies such as DGCA (e.g. threshold lights) and	➢ Airside • Threshold lights, essential looping cables etc. Safety needs as per DGCA Safety needs as per DGCA – CAR Section 4, Series B, Part I • Extension of existing MT workshop • VDGS hardware life enhancement • Enhancement of Boundary Wall • Equipment For Operation & ARFF and EV charging for airside vehicles • Infrastructure for GHA ➢ Security • Regulatory & Infrastructure - As per • BCAS – BDDS, QRT, police outpost, AHCR etc. (refer AVSEC circular 14 & 20/2010 and 13/2017) ➢ Terminal & landside projects • Misc. Equipment for terminal • Passenger facilitation • EV charging and enviro display ➢ IT & data systems • IT Infra, Asset level refresh, strategic projects- AOCC.	Majority of works are expected to be completed by FY2022

		BCAS (e.g. availability of BDDS equipment or protection kits for Quick Reaction Teams). • IT infrastructure betterment is another objective, for instance by improving the FIDS and technological upgradation of AOCC.	➢ Engineering projects • Electrical Substation (GIS s/s) • Power reticulation from SS to new infrastructures • Road - exit & entry • Road from city side to old terminal area • Storm water reticulation system • Waste disposal system • External water supply system • Modifications in existing STP	

7.8. One of the major non-compliance issues in IXE airfield is inadequate clearance on southern side from centreline of runway 06/24. Due to the narrow landform of the airport site at this location, required separation of 200 m from the runway centreline to airside perimeter road / airport boundary wall is not available. To rectify this non-compliance, land needs to be made available through land acquisition, and large quantity of filling needs to be done from the valley below upto the airfield level which is supported by a retaining structure to create airfield platform to provide required separation distance.

Under the Perspective Plan provided in the Concession Agreement (refer Annex II (Schedule A) to Concession Agreement), it is mentioned that AAI had initiated discussion with local state authorities for the purchase of approx. 36 Acres of land. After privatization, AMIAL has actively carried forward those discussions with the state authorities (refer Annexure - L attached) for purchase of land.

AMIAL acknowledges that land acquisition is time consuming. It involves multiple stakeholders, various processes and procedures which have variability on the timing of the purchase of land. Considering these factors, AMIAL has not considered the land acquisition cost and necessary construction works as part of the capital expenditure in this MYTP. Therefore, AMIAL request the AERA to kindly consider the necessary true-ups for the same in the next control period, to provide for eligible return on land acquisition cost and associated construction works, along with carrying cost, in case it gets fructified during the FCP. AMIAL will keep AERA informed on the developments of the matter from time to time.

7.9. The total Project Cost is proposed to be financed at a debt equity ratio of 65%:35% which is in line with funding plan generally considered by various institutions for infrastructure assets.

7.10. Following is the Capital Work In Progress (CWIP)

S. No	Particulars (INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
1	Opening balance	167.74	65.92	(0.00)	16.16	66.11	**167.74**

2	Additions to CWIP	336.69	145.34	41.19	53.16	85.54	**661.92**
3	Transfer to gross block	(438.51)	(211.26)	(25.03)	(3.21)	(151.65)	**(829.66)**
4	Closing block	65.92	(0.00)	16.16	66.11	(0.00)	**(0.00)**

7.11. Following is the summary of capital expenditure (additions to CWIP) of first control period for the airport as prepared by in-house experts:

S No.	Particulars (INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
1	Terminal Building (Aero)	131.82	53.53	0.63	3.21	2.58	**191.77**
2	Runway, Taxiway and Apron	36.02	86.59	1.37	3.66	5.94	**133.58**
3	Cargo building	16.04	-	-	-	-	**16.04**
4	Cargo Equipment	5.62	-	-	-	-	**5.62**
5	Boundary wall	10.49	-	0.37	0.99	1.61	**13.46**
6	IT equipment	18.60	-	-	-	-	**18.60**
7	Security equipment	12.27	-	-	-	-	**12.27**
8	Plant and Machinery	47.16	2.60	2.15	10.28	17.92	**80.10**
9	Other Buildings	15.30	-	28.53	13.37	22.35	**79.55**
10	Access Road	14.81	-	8.13	21.65	35.15	**79.74**
11	Terminal Building (Non-Aero)	6.32	2.62	-	-	-	**8.94**
12	**Total (without fuel)**	**314.45**	**145.34**	**41.19**	**53.16**	**85.54**	**639.68**
13	Fuel	22.24	-	-	-	-	**22.24**
14	**Grand Total (12+13)**	**336.69**	**145.34**	**41.19**	**53.16**	**85.54**	**661.92**

7.12. Total capitalised amount (deletions from CWIP)

S No.	Particulars (INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
1	Terminal Building (Aero)	(143.41)	(95.62)	(0.63)	(3.21)	(2.58)	**(245.45)**
2	Runway, Taxiway and Apron	(139.97)	(86.59)	0.00	0.00	(10.98)	**(237.54)**
3	Cargo building	0.00	(16.04)	0.00	0.00	0.00	**(16.04)**
4	Cargo Equipment	0.00	(5.62)	0.00	0.00	0.00	**(5.62)**
5	Boundary wall	(10.49)	0.00	0.00	0.00	(2.97)	**(13.46)**
6	IT equipment	(22.96)	0.00	0.00	0.00	0.00	**(22.96)**
7	Security equipment	(12.27)	0.00	0.00	0.00	0.00	**(12.27)**
8	Plant and Machinery	(49.87)	(2.60)	0.00	0.00	(30.35)	**(82.82)**
9	Other Buildings	(15.30)	0.00	(24.39)	0.00	(39.85)	**(79.55)**
10	Access Road	(15.08)	0.00	0.00	0.00	(64.93)	**(80.01)**
11	Terminal Building (Non-Aero)	(6.91)	(4.79)	0.00	0.00	0.00	**(11.70)**
12	**Total (without fuel)**	**(416.27)**	**(211.26)**	**(25.03)**	**(3.21)**	**(151.65)**	**(807.42)**

13	Fuel	(22.24)	0.00	0.00	0.00	0.00	**(22.24)**
14	**Grand Total (12+13)**	**(438.51)**	**(211.26)**	**(25.03)**	**(3.21)**	**(151.65)**	**(829.66)**

Airport Users Consultative Committee (AUCC): AMIAL conducted Airports Users Consultative Committee with all relevant stakeholders on 28th May 2021. Need and costs for all the projects above INR 6 Crores (minimum of 5% of opening RAB, 50 Cr whichever is lower) were discussed in AUCC. The minutes of the meeting of AUCC are being submitted to AERA separately.

8. Allocation Methodology

Common Assets Fixed Asset Allocation:

8.1. AMIAL has appointed a chartered engineer whose report will be the basis for allocation of common assets into aeronautical and non-aeronautical categories. The area in terminal has been bifurcated based on the chartered engineer's report where commercial area in the terminal has been identified (refer to Annexure – D).

8.2. The technical evaluation process followed to summarize current possession status of the area within the terminal building is as follows:

8.2.1. Physical inspection and measurements of area occupied by tenants

8.2.2. Detailed discussions with the Projects, Finance & Engineering and Maintenance teams

8.2.3. Verification of space occupied by outlets

8.2.4. Understanding and experience of the independent technical consultant

8.3. Based on the report of the chartered engineer, a list of areas classified under commercial area and sub-categorized with location in airport premises has been provided in Annexure D:

Category	Area in sq.mt
Rental airlines	230.41
Advertising	246.86
Duty Free	145.75
Food and beverages	364.35
Ground transportation	11.00
Rentals government unit	251.33
Rentals – Others	50.04
Services	65.01
Retail	38.86
Proposed vacant area	424.00
Total commercial area	**1,828**

Total Built-up area	**37,322**
% of commercial area	**5%**

8.4. Accordingly, AMIAL has considered 5% of terminal area as non-aeronautical for MYTP submission purposes.

Operating Expense Allocation:

8.5. Based on the above allocation of fixed assets and common area into aeronautical and non-aeronautical percentages, the following allocation strategy will be adopted to segregate operating expenses into aeronautical and non-aeronautical expenses:

Expenses	Aero Opex Allocation	Basis
Manpower expenses (AMIAL)	90.0%	Based on department wise cost
Manpower expenses (AAI)	100.0%	It is an obligated cost as per concession agreement (Clause 6.5 of CA)
Utility expenses (net of recovery)	100.0%	Aeronautical expense
IT expenses	95.0%	As per Initial RAB ratio*
Rent & Lease	95.0 %	As per Initial RAB ratio*
Security expenses	95.0%	As per Initial RAB ratio*
Corporate Allocation	95.0 %	As per Initial RAB ratio*
Administrative Expenses	95.0 %	As per Initial RAB ratio*
Insurance	95.0 %	As per Initial RAB ratio*
R&M	95.0%	As per terminal area
Others	95.0%	As per terminal area

*Initial RAB ratio means ratio calculated by dividing aero assets worth INR 71 Crores by total assets of INR 74.5 Crores received from AAI (as on 31st March 2018).

9. Fair Rate of Return

Equity Contribution

9.1. The entire equity requirement for the Project will be arranged through a mix of equity share capital and other equity linked instruments.

9.2. AMIAL believes that, IXE, Mangaluru, being a relatively small international airport is more susceptible to various risks and external shocks than larger airports, as given below:

Risks:

9.3. Construction Risk: Delays in completion of expected capital expenditure (both CWIP and capex) may adversely impact revenues.

9.4. Traffic Risk: Volatility in traffic is expected to be higher than the pre-pandemic years. It is expected to take years for pre-pandemic trends in passenger traffic and ATM to return. This may also adversely impact revenues.

9.5. Competition Risk: There is a potential risk of loss of business to competing airports. In IXE, Mangaluru's case, the new Kannur Airport is just 168 kilometres away. Thus, there is a risk of diversion of traffic away from IXE, Mangaluru. This is likely to impact revenues.

9.6. Event Risk: Unforeseen events such as the Covid-19 pandemic severely impact the cash flows of IXE, Mangaluru. The Covid-19 pandemic is expected to be a continuous risk as discoveries and research regarding new strains of the virus have adversely impacted various economic forecasts as well as confidence levels in the market.

Cost of Equity (CoE)

9.7. Since a smaller airport is expected to get more impacted by risks than larger airports as discussed above AMIAL is of the opinion that a foundation has to be laid through a well-defined systematic approach for defining reasonable rate of CoE and suggests that

CoE should be allowed at 17.5% for AMIAL for the FCP, based on report by PWC[15] which recommended CoE at 17.32% to 17.49%.

9.8. The methodology used to compute the Cost of Equity of the Mangaluru Airport is the Capital Asset Pricing Model (CAPM). The three components to be estimated in the CAPM are (a) the beta of the Mangaluru Airport, (b) the risk-free rate and (c) the equity risk premium. The process is elaborated in the table below:

Estimated parameter	Methodology/Approach	Result
Beta	Identification of comparable airports: Various airports were identified which are listed on stock exchanges across the globe or have regulated betas. A set of airports were removed from the list because of either lack of data for the required time period or unreliable data.	-
	Determination of equity and asset beta for the selected airports: Beta is indicative of the systematic risk of the project. In order to calculate this, the analysis regresses the movement of the stock prices (of respective airports) on the movement of an index representing the market portfolio. The beta values pertaining to this regression are called the 'equity' betas. Once the equity beta is calculated, the analysis 'un-levers' the beta (i.e., purges off the effects of the capital structure) by using the Hamada equation: $\beta_U = \frac{\beta_L}{(1+(1-t)(\frac{D}{E}))}$, where t is the tax rate, D and E are debt and equity respectively. This unlevered beta is called the 'asset' beta for the respective airports.	-
	Computing the proximity scores for each airport and asset beta of Mangalore airport: Once the asset betas have been computed, quantifiable assessment has been undertaken for identified airports to determine the proximity/ relevance scores. All the airports have been compared with Mangaluru airport based on the following airport characteristics: a) Regulatory Environment	0.81 to 0.83

[15] Refer Annexure E

	b) Operational Structure c) Payment Structure d) Ownership Structure Numeric values of 1 to 3 have been assigned to each factor wherein lower the score, more comparable is the airport to the Mangaluru Airport. Furthermore, an inverse of the proximity scores are used to calculate the 'asset' beta the Mangaluru Airport.	
	Re-lever the asset beta to obtain the equity beta: The asset beta of the Mangaluru Airport is relevered using the Hamada equation to obtain the equity (re-levered) beta. As the re-levered beta is a function of D/E or gearing ratio, the beta value changes whenever the D/E or gearing ratio changes. A gearing ratio of 48:52 is considered. This has been derived from the gearing ratios set by the regulators at different comparable international airports.	1.38-1.40
Risk Free Rate	An average of daily yield for 10 years of the 10-year Government of India security has been considered as the risk-free rate.	7.57%
Equity Risk Premium	To avoid any bias, an average of equity risk premiums computed by a list of studies and standard market indices are taken for the analysis. The list of the same is provided as follows: ► Prof Damodaran's estimate of ERP as of January 2021based on ratings of sovereign bonds. ► Prof Damodaran's estimate of ERP as of January 2021based on ratings of sovereign bonds. ► Forward looking ERP of India as estimated in a study conducted in April 2019 by Grant Thornton ► ERP published by Incwert Valuation Chronicles in June 2020 ► ERP computed based on Nifty 50 ► ERP computed based on Sensex.	7.06%

9.9. After computing the parameters as mentioned in the table above, the inputs are fed into the CAPM:

$$R_e = R_f + \beta * (R_m - R_f)$$

Where,

R_e is the Cost of Equity

R_f is the risk-free rate

β is the equity beta of Mangaluru Airport

$(R_m - R_f)$ is the equity risk premium

9.10. After incorporating the above estimated figures in the CAPM equation, the computed CoE is 17.32%-17.49%. The following table summarizes the sensitivity of the gearing ratio:

Gearing Ratio	CoE
48:52	17.32% - 17.49%
60:40	19.80% - 20.02%
65:35	21.34% - 21.59%
70:30	23.40% - 23.68%

Cost of Debt

9.11. Debt requirement of the Project is proposed to be arranged mainly through debts provided by the banks or by the shareholders. The tenure of the loan is expected to be over 15 years with a bullet repayment at the end of the tenure. The debt is expected to carry an interest of 12% p.a.

FRoR

9.12. The following table summarizes the FRoR at AMIAL for FCP. AMIAL has calculated FRoR/WACC on the basis of a debt-equity ratio of 48:52 which is consistent with debt-equity ratio considered as a base case scenario in the computation of Cost of Equity by an independent consultant.

Particulars	FY22	FY23	FY24	FY25	FY26
Cost of Debt	12.0%	12.0%	12.0%	12.0%	12.0%
Cost of Equity	17.50%	17.50%	17.50%	17.50%	17.50%
D/E Ratio	48:52	48:52	48:52	48:52	48:52
FRoR	14.9%	14.9%	14.9%	14.9%	14.9%

10. Regulatory Base for the Airport Related Assets for the Control Period

10.1. Based on the fixed asset allocation methodology (mentioned in Chapter 7), following is the summary of the RAB for the airport related assets:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26
Opening RAB	111.15	487.53	643.74	612.19	566.13
Closing RAB	487.53	643.74	612.19	566.13	659.46
Average RAB	**299.34**	**565.63**	**627.96**	**589.16**	**612.79**

11. Fuel

11.1. With respect to AMIAL's obligations towards providing aircraft fuelling services, the Concession Agreement[16] states that:

"The Concessionaire shall provide, or cause to be provided, the infrastructure required for operation of fuelling services on equal access basis for all the aircrafts at the Airport in a transparent and non-discriminatory manner. Such infrastructure shall include tank farms and associated facilities in accordance with the provisions of this Agreement, Applicable Laws and Good Industry Practice."

11.2. Previously, when the airport was operated by AAI various OMCs were providing fuelling services at the airport using their own respective infrastructure.

11.3. As mandated by the CA, AMIAL will be required to build an open access facility. Further AMIAL plans to provide Into-Plane Services (ITP) at IXE, Mangaluru by itself. Operations are likely to start by 01st April 2022.

11.4. In order to start Open Access, AMIAL needs to create Fuel Farm/Tank Farm and also needs to have a fleet of bowsers for carrying out refuelling. In order to make proper utilization of existing assets and optimizing them, the plan is to acquire the existing assets of IOCL (which is built at the airport land) and upgrade it with additional tankage, gantry etc. and start Open Access. The discussions for same has already started. Other Oil Marketing Companies (OMCs) also have their facilities, but they all are beyond airport limits. The cost of purchase of the existing facility is expected to be INR 10 Crores and the cost for expansion is expected to cost INR 12 Crores excluding inflation, pre-operatives and interest during construction. The existing fuel facility within the Airport has a storage capacity of approx. 500 KL which will be increased to approx. 1,000 KL.

11.5. Finally, AMIAL is expected to outsource its operations of the fuel farm to an O&M service provider. Operations for first year of operations are based on internal estimation exercise undertaken by AMIAL and all expenses except manpower costs for

[16] Clause 19.3. of the Concession Agreement

future years are expected to increase with fuel throughput volumes. Manpower expenses for fuel operations have been assumed to increase by 10% per annum.

11.6. Following is the summary of fuel farm operation and maintenance costs as per AMIAL for the FCP:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Fuel Farm expenses	-	3.67	4.37	5.03	5.70	**18.77**

11.7. The Fuel throughput forecast has been ascertained using ATM traffic forecast by CAPA. Following are the expected fuel throughput volumes (y-o-y):

Particulars (in KL)	FY22	FY23	FY24	FY25	FY26	Total
Total	-	43,441	55,817	66,743	77,638	**243,639**

12. Cargo

12.1. AMIAL, as airport operator of Mangaluru International Airport also intends to develop, manage and operate the cargo facility at Mangaluru International Airport.

12.2. Cargo facility at Mangaluru airport is likely to be commissioned by 01st October 2022 and facility will have approx. 1,900 sq. m. of office and warehouse space dedicated for cargo operations. It will have annual cargo handling capacity of 9,000 tons.

12.3. As per the Guidelines, 2011 for Cargo Facilities, AERA states the following:

"The Authority shall follow a three stage procedure for determining its approach to the regulation of Regulated Service(s) as under:

***Stage 1:** The Authority shall first assess 'materiality' according to provisions of Clause 4;*

***Stage 2:** The Authority shall then assess 'competition' according to provisions of Clause 5;*

***Stage 3:** The Authority shall then assess the reasonableness of existing User Agreement(s), according to the provisions of Clause 6."*

12.4. The materiality index of cargo at IXE, Mangaluru is lesser than the threshold limit of 2.5%[17] fixed for cargo handling services thereby implying that the cargo services are not material.

12.5. According to Clause 3.2. (i) of the AERA Guidelines, 2011:

"…where the Regulated Services provided are deemed:

(i) 'not material', the Authority shall determine Tariff(s) for Service Provider(s) based on a light touch approach for the duration of the Control Period…"

12.6. AMIAL requests the Authority to determine the cargo tariff using a "light touch" approach. The proposed submission is in line with Clause 3.2 (ii) and (iii) of the Guidelines, 2011 where regulated service provided may be deemed "not material". As per the Guidelines, 2011 the Authority shall determine the tariff based on a light touch

[17] As per Clause 4.3 (ii) of the Guidelines, 2011

approach for the duration of the control period according to the provisions of Chapter V.

12.7. AMIAL's cargo operating expenses are projected to be as follows:

Operating expense (INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
Insourced salary	-	0.31	0.68	0.75	0.83	**2.57**
Outsourced salary	-	0.22	0.48	0.53	0.58	**1.81**
Utility Charges	-	0.03	0.06	0.07	0.07	**0.23**
Administrative Expenses	-	0.03	0.08	0.08	0.09	**0.29**
O&M Expenses	-	0.01	0.03	0.03	0.03	**0.10**
Others	-	0.04	0.09	0.10	0.11	**0.34**
Customs Cost Recovery	-	0.49	1.08	1.19	1.31	**4.07**
Total	**-**	**1.14**	**2.50**	**2.75**	**3.03**	**9.41**

12.8. Following table summarises the cargo volumes to be handled by AMIAL itself during FCP:-

Volume (MT)	FY22	FY23	FY24	FY25	FY26	**Total**
Domestic cargo	-	720	1,740	2,104	2,545	**7,109**
International cargo	-	1,681	4,060	4,908	5,938	**16,587**
Total cargo	**-**	**2,401**	**5,800**	**7,012**	**8,482**	**23,695**

12.9. The yield per tonne has been considered as INR 5,400/ton with year on year increase by inflation of 5%. Based on the same, following are the projected revenues:

Revenue (INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
Domestic cargo	-	0.41	0.99	1.19	1.44	**4.03**
International cargo	-	0.95	2.30	2.78	3.37	**9.40**
Total cargo	**-**	**1.36**	**3.29**	**3.98**	**4.81**	**13.44**

13. Ground Handling

13.1. Ground handling activity has been outsourced by AMIAL as per the Ground Handling regulations 2018. There are currently two service providers for Ground Handling services at the airport, namely; GSEC Bird Airport Services Limited (BWFS lead member of consortium) and AISATS. These providers make two payments:

1. Land Rentals; and
2. Concession fee expressed as a percentage of revenue

13.2. Concession fee payable is based on concession contract with Ground Handling service providers and are fixed until the end of concession term. The revenues from Ground Handling services to AMIAL are in the table as follows:

Revenue (INR crores)	FY22	FY23	FY24	FY25	FY26	**Total**
Ground Handling Revenues	0.99	1.35	1.66	1.94	2.24	**8.18**

13.3. Revenues from Lease Rentals and concession fees paid by ground handling service providers have been considered as Aeronautical revenues for tariff determination.

14. Operation & Maintenance

14.1. Introduction

14.1.1. AMIAL is committed to abide by the provisions of the Concession Agreement in totality and ensure a smooth transition and transformation of IXE, Mangaluru from AAI to AMIAL.

14.1.2. With respect to the O&M obligations of AMIAL, the Concession Agreement[18] states that:

"…the Concessionaire shall operate and maintain the Airport in accordance with this Agreement, Applicable Laws and Applicable Permits, either by itself, or through O&M Contractors and if required, modify, repair or otherwise make improvements to the Airport to comply with the provisions of this Agreement, Applicable Laws and Applicable Permits, and conform to Specifications and Standards and Good Industry Practice. The obligations of the Concessionaire hereunder shall include but not limited to:

(a) ensuring to provide the Aeronautical Services, Non-Aeronautical Services and such other services, as are required as per the terms of this Agreement and Good Industry Practice;

(b) permitting safe, smooth and uninterrupted movement of Users and flow of traffic on the Airport, including prevention of loss or damage thereto, during normal operating conditions;

(c) collecting and appropriating the Fee;

(d) minimising disruption to the operation of the Airport, including airside, Terminal Building and land side, in the event of accidents or other incidents affecting the safety and use of the Airport by providing a rapid and effective response and maintaining liaison with emergency services of the State;

(e) carrying out periodic preventive maintenance of the Airport;

(f) ensuring that the Aeronautical Assets, including Runway, taxiways, aprons and approach areas are maintained and operated in accordance with the provisions

[18] Clause 18.1. of the Concession Agreement

contained in Applicable Laws, Applicable Permits and relevant ICAO Documents and Annexes;

(g) ensuring that Runway, including the strips, shoulders, stop way and runway end safety area for Runway and strips and shoulders for taxiways and isolation bays are maintained in accordance with the provisions contained in Applicable Laws, Applicable Permits and relevant ICAO Documents and Annexes;

(h) ensuring that the obstacle limitation surfaces of the Airport and the approach and take-off areas are free from obstructions or that the obstructions shall be limited to the permissible limits specified in Applicable Laws, Applicable Permits and relevant ICAO Documents and Annexes;

(i) undertaking routine maintenance including prompt repairs of cracks, joints, drainage systems, embankments, structures, buildings, pavement markings, signaling systems, communication systems, lighting, signage and other equipment;

(j) undertaking major maintenance such as repairs to structures, repairs and refurbishment of equipment, signaling and communication system and major overhaul of equipment;

(k) ensuring that the sensitive and critical areas, as identified by the Authority or the Designated GOI Agency, as the case may be, for the operation of CNS/ATM Equipment and facilities shall be maintained free of any obstructions and that no obstruction which may hamper the safety or functioning of these equipment and facilities or endanger the safety of aircraft operations shall be permitted;

(l) ensuring that appropriate arrangements and precautions have been undertaken at the Airport to prevent bird and animal nuisance in and around the Airport, in accordance with the Applicable Laws and Good Industry Practices;

(m) maintaining the Airfield Lighting System and the main and standby power supply systems in accordance with the standards prescribed in Applicable Laws and relevant ICAO Documents and Annexes, and DGCA Civil Aviation Requirements, as may be issued or updated from time to time, and relevant codes and standards;

(n) preventing, with the assistance of the concerned law enforcement agencies, any encroachments on, unauthorised entry to or unauthorised use of the Airport;

(o) protection and conservation of the environment and provision of equipment and materials therefor;

(p) operation and maintenance of all communication, control and administrative systems necessary for the efficient operation and management of the Aeronautical Services and Non-Aeronautical Services;

(q) maintaining a public relations unit to interface with and attend to suggestions from the Users, Government Instrumentalities, media and other agencies in accordance with the Applicable Laws, for providing the requisite information;

(r) complying with Safety Requirements in accordance with Article 18;

(s) operation and maintenance of all Project Assets diligently and efficiently and in accordance with Good Industry Practice;

(t) maintaining punctuality and reliability in operating the Airport;

(u) maintaining a high standard of cleanliness and hygiene on the Airport including disposal of all kinds of waste at an appropriate location;

(v) taking all measures relating to fire precautions in accordance with relevant ICAO standards or appropriate international guidelines, Applicable Laws, Applicable Permits and Good Industry Practice;

(w) providing all the requisite information, data, operating statistics, etc., as may be required by the Authority, any of the Government Instrumentality, DGCA, State Government or GOI, from time to time."

14.1.3. Additionally, with respect to AMIAL's obligations towards *IATA Level of Service Optimum*, the Concession Agreement[19] states that:

"Commencing from the date which is 1 (one) year from the COD, the Concessionaire agrees and undertakes to achieve IATA Level of Service Optimum at the Airport. In the event it is observed that the level of service is inferior to IATA Level of Service Optimum during Peak Hours in any quarter and the Concessionaire does not cure the same within 90 (ninety) days from the occurrence of such degradation of level of service in any Concession Year, the Concessionaire shall pay Damages to the Authority which shall be determined at the rate of 0.5% (zero point five percent) of the total revenue from Fees for the immediate preceding quarter."

Where,

[19] Clause 19.6.9. of Concession Agreement

"IATA Level of Service Optimum" means the minimum service requirements at various airport subsystems as set out in the 'Optimum' category in the 10th edition of IATA's Airport Development Reference Manual, as may be amended, modified or supplemented from time to time, and shall, for the avoidance of doubt, mean any similar level of service framework in the event of IATA discontinuing publication of the Airport Development Reference Manual;"

14.1.4. In addition to the abovementioned clause, the Concession Agreement further elaborates on the service level monitoring obligations of AMIAL. The Concession Agreement[20] states that:

"The Concessionaire shall:

(a) throughout the Concession Period, regularly monitor traffic flows at the Airport and regularly examine levels of service at the Airport;

(b) after achieving the COD, regularly monitor and count Peak Hour passengers enplaning to and deplaning from aircraft at the Airport;

(c) by the 7th (seventh) day after the end of each quarter, provide to the Authority, a detailed report: (i) confirming that the levels of service at the Airport over the preceding quarter (or part thereof) never fell below IATA Level of Service Optimum or describing the dates on or periods of time during which the levels of service at the Airport fell below IATA Level of Service Optimum, and (ii) setting forth its analysis (along with any and all supporting data) of the level of service anticipated at the Airport over the reporting quarter, including any period of time when the level of service at the Airport is projected to fall below IATA Level of Service Optimum; and

(d) promptly advise the Authority in writing, if it otherwise determines that the level of service at the Airport is projected to fall or has fallen below IATA Level of Service Optimum at any time and provide to the Authority any and all data related to such determination along with the mitigation plan for such deficiency."

14.1.5. The abovementioned clauses of the CA illustrate AMIAL's obligations towards maintaining superior service standards. In addition to these obligations, an on-going expansion of the terminal building area and development of additional facilities,

[20] Clause 21.3. of the Concession Agreement

warrants an increase in AMIAL's O&M expenses. **The following O&M expense estimates take into consideration the obligations of AMIAL as per the Concession Agreement as well as the expansion of the terminal building area.**

14.1.6. In this MYTP, AMIAL has adopted following aspects and principles to determine efficient aeronautical operating and maintenance cost:

14.1.6.1. Upcoming expansion at Mangaluru Airport: As explained in Chapter 7, Mangaluru Airport is going ahead with terminal expansion as obligated under the Concession Agreement which has already achieved significant progress. The overall terminal area will increase by approx. 10,142 sq. m. from 37,322 sq. m. to 47,464 sq. m. This translates to increase of 27% in terminal area over the existing area. Accordingly, there will be correspondingly increase in costs of various services like IT, Security, Utility, Housekeeping, Others etc.

14.1.6.2. Inflationary Increase: AMIAL has considered inflationary increase of 5% towards all expenses which is considered basis the projections provided in Chapter 15 below.

14.1.6.3. Real Increase: Considering the current economic scenario, concession agreement obligations and upcoming expansion AMIAL has considered 10% real increase in the expenses.

14.1.6.4. Base Year: FY22 considered as the base year and applied relevant growth percentages over it.

14.1.6.5. Airports have high fixed costs associated with the provision and maintenance of infrastructure and services such as safety and security. These are incurred regardless of traffic levels. Airport operators, therefore, have limited scope to curtail costs when facing a downturn in demand.

14.2. Employees Cost

14.2.1. Manpower is a crucial resource of service-oriented industries such as airports. AMIAL considers manpower as its biggest asset. Total employee costs covered under this section include salaries, wages and bonuses, contribution to PF, gratuity expenses, and staff welfare and training costs.

AAI Employees

14.2.2. With respect to AMIAL's obligations towards AAI employees, the Concession Agreement states the following[21]:

"With the exception of the Select Employees, the Concessionaire shall have no obligations in relation to the existing employees of the Authority serving in connection with the Airport."

Where,

""Select Employees" shall mean those employees of the Authority as set forth in Schedule S[22] (of the rank of assistant general manager and below) who are posted at the Airport by the Authority and shall be deployed at the Airport for the duration of the Joint Management Period and Deemed Deputation Period."

14.2.3. With respect to the obligations of AMIAL towards Select Employee Costs, the Concession Agreement[23] states that:

"The Concessionaire shall bear the Select Employee Costs for the Joint Management Period and Deemed Deputation Period.

… the Concessionaire shall pay to the Authority, on a monthly basis, such amounts as may be indicated in an invoice to be raised by the Authority on the Concessionaire with regard to the emoluments payable by the Authority to the Select Employees."

Where,

""Joint Management Period" shall mean the period commencing from the COD and ending on the date which is 1 (one) calendar year after the COD."

And,

""Deemed Deputation Period" shall mean the period commencing from the expiry of the Joint Management Period and ending on the date which is 2 (two) calendar years therefrom."

[21] Clause 6.5.2. of Concession Agreement
[22] Annexure - A
[23] Clauses 6.5.4. and 6.5.5.

14.2.4. With respect to AMIAL's association with AAI's senior personnel, the Concession Agreement[24] states that:

"The senior management staff of the Authority of the rank of deputy general manager and above ("Senior Personnel") shall remain deputed at the Airport for a period not exceeding 3 (three) months from the COD.

(i) On the expiry of such 3 (three) month period, the Senior Personnel shall be transferred out of the Airport and redeployed by the Authority.

(ii) It is clarified that the Concessionaire shall not be liable to bear any costs in respect of the Senior Personnel, which costs shall be borne entirely by the Authority."

14.2.5. There are 108 Select Employees[25] (as on date 107[26] employees) from AAI at IXE (level of AGM and below) whose employee costs are to be incurred by AMIAL as stated in the abovementioned clauses of the Concession Agreement. In addition to this, a growth assumption of annual escalation of salaries was taken at 15% (real growth 10% plus inflation 5%).

14.2.6. With respect to AMIAL's retention obligations of during the Joint Management Period, the Concession Agreement[27] states that:

"At any time during the Joint Management Period, but no later than 90 (ninety) days from the COD, the Concessionaire shall make offers of employment ("Employment Offers") to a minimum of 60% (sixty percent) of the Select Employees.

(i) It is clarified that, in the event of reduction in the number of Select Employees in the manner set forth in Clause 6.5.1, the minimum number of Select Employees to whom Employment Offers are required to be made shall stand correspondingly reduced, with any fractions thereof rounded off to the nearest whole number.

[24] Clause 6.5.3. of the Concession Agreement
[25] Section – S of Concession Agreement (Annexure – A)
[26] Refer Annexure - F
[27] Clause 6.5.6. of the Concession Agreement

(ii) The terms and conditions of the Employment Offers shall, in terms of salary, position, etc., be the same as the current employment terms of the Select Employees on an annual cost-to-company basis."

14.2.7. As per the abovementioned clauses of the Concession Agreement, AMIAL is required to provide offer of employment to at least 60% of Select Employees of AAI. However, it has to bear the cost of 100% of Select Employees of AAI for a period of 3 years. This cost will reduce to 60% of the employees after 3 years of COD in line with provisions of the Concession Agreement.

14.2.8. Moreover, in such a case where less than 60% of the Select Employees accept offers from AMIAL, the Concession Agreement[28] states that:

"If, at the expiry of the Deemed Deputation Period, the number of Accepting Employees is less than 60% (sixty) percent of the Select Employees (the "Deficit Employees"), the Concessionaire shall, commencing from the expiry of the Deemed Deputation Period, pay to the Authority, on a monthly basis, such amounts as may be indicated in an invoice to be raised by the Authority on the Concessionaire with regard to the emoluments payable by the Authority in respect of such Deficit Employees (the "Deficit Employee Costs").

(i) The Select Employees in respect of which the Deficit Employee Costs are payable shall be mutually identified by the Parties no later than 3 (three) months prior to the expiry of the Deemed Deputation Period."

(ii) The Deficit Employee Costs shall be considered for pass-through in the determination of the Aeronautical Charges.

(iii) The provisions of sub-clauses 6.5.5 (i), 6.5.5 (ii), 6.5.5 (iii), and 6.5.5(iv) shall, mutatis mutandis, apply to payment of the Deficit Employee Costs.

(iv) The Deficit Employee Costs shall be payable until retirement or other separation from Authority's services of the Deficit Employees, whichever is earlier."

14.2.9. As mentioned in the above clauses of the Concession Agreement, AMIAL is obligated to bear the Deficit Employee Cost as well. As stipulated above, Deficit Employee Cost

[28] Clause 6.5.10. of the Concession Agreement

shall be considered for pass-through in the determination of the aeronautical charges.

14.2.10. On 28th January 2021, AMIAL made the offer to all 108 AAI employees with substantial increase in their remuneration packages. The offer was valid till 30th Mar 2021. It is noted that none of the AAI employees have accepted the offer till the validity of the offer date.

14.2.11. Airports are national assets and need to be operated with utmost care and security. It is also a known fact that aviation industry in India is short of skilled manpower (which is also critically mentioned in the Vision 2040 for the Civil Aviation in India[29]). AMIAL is impacted from both the sides i.e. AAI employees want to continue with AAI and there is shortage of skilled manpower in the market. Further due to ongoing pandemic COVID-19, the risk factor of the Aviation sector has substantially increased, as a result people from other industries are hesitant about joining the Aviation industry at the moment.

AMIAL is ramping up its own manpower through all means, irrespective of the adverse circumstances, so that necessary on-the-job-training, know-how transfer and skill enhancement is done before the Joint Management Period and the Deemed Deputation Period (total 3 years from COD) get completed.

AMIAL Employees

14.2.12. In addition to absorbing AAI's Select Employees, AMIAL will also employ its own employees for the airport operations at IXE, Mangaluru. AMIAL workforce planning is based keeping in mind the following:

(i) AMIAL is committed to maintain the highest service standards and ensure highest level of user experience;

(ii) Therefore, there is a need to hire, train, and maintain a greater number of employees. As explained above, there is uncertainty over the actual number of Select Employees who will be joining AMIAL.;

[29] https://dag.um.dk/~/media/danishaviationgroup/market%20information/vision-2040-for-the-civil-aviation-industry-in-india.pdf?la=en

(iii) Senior Personnel of AAI will not remain deputed at IXE after 3 months from the COD as per the Concession Agreement; therefore, there is a need for AMIAL to replace as also train the replacements;

(iv) an increase in the area of the terminal building from FY 2021-22 is likely to warrant an increase in the expenses that AMIAL shall incur on its employees;

(v) high attrition rates in the aviation sector with a recent increase in privatisation of airports;

(vi) with suitable talent in the aviation sector being scarce, AMIAL's expenses at seeking, hiring, and retaining suitable employees is estimated to increase;

14.2.13. AMIAL employee costs are assumed to increase by 5% on account of inflation and by 10% on account of real increase. .

14.2.14. Based on the above assumptions, AMIAL proposes the following projections for employee costs:

Particulars	FY22	FY23	FY24	FY25	FY26	**Total**
AAI Employees (Nos.)	107	107	107 for 7 months	-	-	
AAI Employees cost (INR Crores)	20.00	23.00	22.06	18.19	20.92	**104.18**
AMIAL Employees (Nos.)	50	75	125	125	125	
AMIAL Employees (INR Crores)	10.00	17.25	33.06	38.02	43.73	**142.06**
Total Employees (Nos.)	157	182	232 for 7 months and 125 for 5 months	125	125	
Total Employee cost (INR Crores)	**30.00**	**40.25**	**55.13**	**56.22**	**64.65**	**246.24**

14.3. **Electricity, Fuel Water**

14.3.1. Electricity and water costs are calculated at net level, i.e. gross expenses less recovery from the airlines and concessionaires.

14.3.2. AMIAL expects a total of 9 mn units of electricity to be consumed in 2021-22. With the electricity regulator rate (MESCOM) at Mangaluru being INR 10 per unit, AMIAL's expenses on electricity for 2021-22 is estimated to be INR 9 Crores. Growth rate of 27% has been assumed in electricity consumption by AMIAL due to the planned expansion of the terminal building in line with increase in area of terminal building.

14.3.3. Apart from electricity , AMIAL needs to incur expenses on water and fuel for running of airport and convenience of passengers. AMIAL is expected to incur INR 0.1 Crore on water and INR 0.5 Crore on fuel in FY22. Growth rate of 27% has been assumed by AMIAL due to the planned expansion of the terminal building in FY23.

14.3.4. Utility expenses are expected to increase by 5% on account of inflation, 10% on account of real increase and one time increase in consumption in line with upcoming expansion at Mangaluru Airport.

14.3.5. Based on the above assumptions, AMIAL proposes the following projections for electricity and water costs (net of recoveries):

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Electricity cost (net of recoveries)	8.73	11.65	12.24	12.85	13.49	**58.95**
Water and Fuel cost (net of recoveries)	0.66	0.87	0.91	0.96	1.01	**4.41**
Total (net of recoveries)	**9.38**	**12.52**	**13.15**	**13.81**	**14.50**	**63.36**

14.4. **Corporate Allocation**

14.4.1. It is to be noted that Adani Group is the largest infrastructure player in India and has executed, operated and managed the assets of varied complexities. Its execution and management capabilities are ably backed by its corporate resources which provide Leadership & Governance, Business Sustenance support and Functional & Managerial support to various group businesses. The cost pertaining to group resources of Adani Group, which are utilized by all Adani Group companies, is required to be allocated on all such companies.

14.4.2. In respect of corporate services, AMIAL is expected to receive corporate support from the common resources available at the Adani Group, in respect to Human resource management, Administration, Treasury, Taxation, Fund Raising, Information Technology, Master Data Migration, Management Audit and Assurance, Governance Risk and Compliance, Corporate Communication, Crisis Management, Central Procurement, etc. Even if these services were procured from, say, external agencies / consultants, they will bill the charges for their services.

14.4.3. It is well accepted fact that various efficiencies as mentioned above and also assistance in fund raising will ensure sustainable business operations in longer term due to improved efficiency.

14.4.4. Based on above logic the cost is being allocated to all businesses including AMIAL. It is worthwhile to mention that it has been a common practice across all the industries operated by big business houses including private Airport entities and AAI, whereby cost allocation process is prevalent.

14.4.5. **Expenses incurred by AEL up to the date of LoA (July 2019) for Ahmedabad, Lucknow, and Mangaluru Airports** are divided equally among Adani's six Airport SPVs (i.e. for Ahmedabad, Lucknow, Mangaluru, Jaipur, Guwahati, and Trivandrum Airports) as these costs are incurred for all SPVs. Such costs include expenses pertaining to bidding, review of past tariff filing, RfP submission, bid advisory services, financial advisory services etc. The following table summarizes the allocation of expenses incurred by AEL across Adani's six SPVs:

Particulars (in INR Crores)	Total	Mangaluru
Before LOA	**10.35**	1.72

14.4.6. **The common cost incurred by AEL and AAHL after the date of LoA till COD** is to be allocated based on the asset ratio (Initial RAB + CWIP) of three Airport SPVs (i.e. Ahmedabad, Lucknow and Mangaluru). The following table summarizes the cost allocation of AEL's and AAHL`s expenses from LoA to COD:

Particulars (INR Crores)	Total	Mangaluru
Initial Regulatory Asset Base (RAB) – AERO	485	71.00
Initial Regulatory Asset Base (RAB) - Non – AERO	14.8	3.50
CWIP	685	146.93
Total of RAB + CWIP	1184.8	221.43
Total Amount Allocated	**63.96**	**11.95**

14.4.7. The cost allocation arrived in point 14.4.5 and 14.4.6 above are capitalised as Intangible Assets in the books of accounts as per necessary accounting standards. Refer the financial statements as on 31st March 2021.

14.4.8. **Allocation of cost after COD**: Cost of resources from AEL and AAHL will be allocated to various airport entities including AMIAL. AEL has allocated its cost to airport business, more specifically AMIAL based on methodology followed by AEL for allocating its cost to various Adani group entities. AAHL cost has been allocated in proportion to the revenue of the respective Airport.

14.4.9. The same is escalated by 15% on YoY basis due to an inflation of 5% and real increase of 10%.

14.4.10. Based on the above assumptions, AMIAL proposes the following projections for corporate allocation as an operating expenditure:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
Corporate allocation	6.00	6.90	7.94	9.13	10.49	**40.45**

14.5. **Repairs & Maintenance expenses**

14.5.1. AMIAL aims at maintaining best-in-class service quality levels through the best upkeep and maintenance of the buildings, equipment and other infrastructure to ensure hassle-free, safe and smooth operations. Repairs and Maintenance includes civil, electrical and mechanical works for the maintenance of the airport including the terminal, runways, taxiways, parking bays, aprons, aerobridges, power substations, IT and other plants and machinery.

On Existing Assets

14.5.2. The estimated expenses that will be incurred by AMIAL on the repairs and maintenance works of existing assets (transferred from AAI to AMIAL) at IXE, are expected to increase by inflation 5% and real increase of 10%.

14.5.3. In relation to AMIAL's obligations with respect to existing contracts with AAI, the Concession Agreement[30] states that:

[30] Clause 6.4. from the Concession Agreement

"The Authority shall, during the Inception Period, perform and comply with all its obligations under the Existing Contracts, and shall, at its own cost and expense, procure novation of such contracts and agreements in favour of the Concessionaire, to take effect from the COD and remain in force for the remaining term thereunder. The Parties agree to execute the documents necessary for novation of the Existing Contracts ("Novated Contracts") as contemplated under this Clause 6.4.1. The Concessionaire shall bear and pay all stamp duties payable in connection therewith.

In the event the Authority is unable to procure novation of any Existing Contract in accordance with the foregoing ("Non-Novated Contracts"), it shall execute a power of attorney, effective on and from the COD, designating the Concessionaire (acting through its authorised representative) as its attorney and agent with powers to act on its behalf for all intents and purposes to the extent of the scope of the Non-Novated Contracts, including the power to appropriate all benefits which may accrue to the Authority from time to time under any such Non-Novated Contract, and terminate such Non-Novated Contracts in accordance with their terms. The Concessionaire shall bear and pay all stamp duties payable in connection with such power(s) of attorney.

On and from the COD, the Concessionaire shall, at its own risk and cost, perform and comply with (i) all its obligations under the Novated Contracts; and (ii) all obligations of the Authority under the Non-Novated Contracts, as if the Concessionaire were an original party to such contracts. The Concessionaire agrees and undertakes to indemnify, defend, save and hold harmless the Government Indemnified Persons against any and all suits, proceedings, actions, demands and claims for any loss, damage, cost and expense of whatever kind and nature under or in connection with any Novated Contract or the Non-Novated Contract arising after the COD save and except any loss, damage, cost and expense arising after the COD but relating to any act or omission of the Authority prior to the COD. It is clarified that, unless they are terminated earlier in accordance with the terms of such agreements, the Novated Contracts and Non-Notated Contracts shall subsist until their expiry. Pursuant to such expiry or termination, the Concessionaire may, at its own discretion, enter into any contract with respect to the subject matter of the relevant Novated Contract and/ or Non-Notated Contract, with any third party, on such terms and conditions as it may deem fit."

14.5.4. In respect to Repairs and Maintenance, AMIAL has been inherited over 50 contracts from AAI. These contracts are of varied nature, including but not limited to: -

a. Electrical
b. Civil
c. HVAC
d. PBB
e. BHS
f. Airside
g. PA System
h. STP
i. Water Management
j. Waste Management
k. UPS
l. Lift
m. Escalator

On New Assets

14.5.5. Repairs and maintenance expenses that are to be incurred by AMIAL for new assets have been calculated as 1% of the opening gross block of new assets of the respective years.

Total R&M Expenditure

14.5.6. Based on the above assumptions, AMIAL proposes the following projections for repair and maintenance:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
R&M (Initial assets)	15.00	17.25	19.84	22.81	26.24	**101.14**
R&M (New Assets)	-	6.68	6.93	6.96	8.47	**29.03**
Total R&M cost	**15.00**	**23.93**	**26.76**	**29.77**	**34.71**	**130.17**

14.6. **Insurance**

14.6.1. With respect to AMIAL's insurance obligations, the Concession Agreement states that:

*"**Insurance Obligations***

The Concessionaire shall effect and maintain at its own cost, during the Concession Period, such insurances for such maximum sums as may be required under the Financing Agreements and Applicable Laws, and such insurances as may be necessary or prudent in accordance with Good Industry Practice. The Concessionaire shall also effect and maintain such insurances as may be necessary for mitigating the risks that may devolve on the Authority as a consequence of any act or omission of the Concessionaire. The Concessionaire shall procure that in each insurance policy, the Authority shall be a co-assured and that the insurer shall pay the proceeds of insurance into the Escrow Account. The Parties agree that the level of insurance to be maintained by the Concessionaire after repayment of Senior Lenders' dues in full shall be determined on the same principles as applicable for determining the level of insurance prior to such repayment of Senior Lenders' dues.

Insurance Cover

Without prejudice to the provisions contained in Clause 30.1, the Concessionaire shall, during the Concession Period, procure and maintain Insurance Cover including but not limited to the following:

(a) loss, damage or destruction of the Project Assets, including assets handed over by the Authority to the Concessionaire, at replacement value;

(b) comprehensive third party liability insurance, including injury to or death of personnel of the Authority or others who may enter the Airport;

(c) the Concessionaire's general liability arising out of the Concession;

(d) liability to third parties for goods or property damage;

(e) workmen's compensation insurance; and

(f) any other insurance that may be necessary to protect the Concessionaire and its employees, including all Force Majeure Events and not otherwise covered in items (a) to (e) above."

Being an airport operator, AMIAL is expected to take various insurances for property damage, business interruption, third party liabilities, and terrorism. AMIAL has

assumed insurance expenses at INR 1.09 Crores p.a. for 2021-22 for the initial asset base. Insurance expenses expected to increase by inflation 5% and real increase of 10%

The insurance expenses for new assets have been calculated as 0.1% of the new additions to the gross block based on market rates.

14.6.2. Based on the above assumptions, AMIAL proposes the following projections for insurance:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Existing Assets	1.09	1.55	1.78	2.05	2.36	**8.83**
New Assets	0.46	0.67	0.69	0.70	0.85	**3.36**
Total Insurance cost	**1.55**	**2.22**	**2.47**	**2.75**	**3.20**	**12.19**

14.7. **Rates and taxes**

14.7.1. Rent and taxes costs contain several costs such as property tax, payments to municipalities.

14.7.2. AMIAL is expected to pay INR 0.36 Crores as property taxes and other statutory obligations in FY22. Future projections are based on this amount. AMIAL has considered real increase of 10% in rates and taxes along with inflationary increase of 5%. AMIAL has considered on time increase of 27% in FY23, the year in which expanded terminal will be made operational.

14.7.3. Based on the above assumptions, AMIAL proposes the following projections for rates and taxes:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Rates and taxes	0.36	0.51	0.59	0.68	0.78	**2.92**

14.8. **Security Expenses**

14.8.1. Security related operating expenses are dynamic in nature and the requirement of the same varies with perceived security threat and mandates from various agencies.

AMIAL expects to incur significant security expenses with the expansion of the terminal building area. AMIAL's security expenses includes security guards, security operation maintenance, surveillance vehicles, access controls and expenses related to other automation systems like X-ray, DFMD, HHMD, ETD. Total cost is estimated to be INR 2.25 Crores which is expected to increase by inflation rate of 5%, real increase of 10% and one time increase of 27% in FY23 due to operationalisation of expanded terminal.

14.8.2. Unmanned Aircraft (UA) or Remotely Piloted Aircraft System (RPAS), commonly known as "Drone" is a game-changer technology in modern life. Drones are being extensively used for various applications. However, drones may also be used for destructive purposes such as delivering explosives and harmful cargo for creating havoc etc.

14.8.3. Drones also have the potential for disrupting manned aircraft movements especially in the proximity to the national assets like refining plant, airports etc. In September 2019 the world`s largest oil refining plant in Buqyaq, Saudi Arabia was attacked by drones. In June 2019, Drone sightings at Changi Airport forced closure of one runway, and nearly 40 flights were cancelled. There are numerous examples of hours-long hold up of airport operations due drone sightings like Gatwick, Dubai and Indira Gandhi International Airport, New Delhi. Such incidents have led the security agencies, specially aviation community to consider the deployment of counter-drone systems by airport operators to protect airports and their proximities from rogue drones.

14.8.4. Till now, the drone detection was primarily done by not so advanced methodologies like PTZ Cameras, human watch, etc. But there are limitations in terms of accuracy, range, success, and neutralization effectiveness. With changing times, drones have also advanced technologically and in view of the above, Bureau of Civil Aviation Security (BCAS) has directed the Indian Airports to implement sophisticated, reliable, robust and highly effective Counter drone technology/solution for Surveillance, detection and Neutralization of drones/ UAVs vide AVSEC Circular no 02/2020[31] dated 11th February, 2020. Further, vide addendum dated 09th February 2021 to

[31] Refer Annexure – J

the said circular, BCAS has re-emphasised the importance of the matter and advised Airports to implement the Counter Drone technology / solutions for surveillance, detection and neutralization of drones within the prescribed timelines from the date of the addendum. AMIAL has taken cognizance of this important security requirement and is planning to implement Multi-Layered Comprehensive Counter Drone Solutions in FY 22.

14.8.5. AMIAL proposes to implement the Counter Drone solution having the following features: -

i. Multiple detection methodology that can detect at >10km range like SIGINT, Electro-Optics and Infra-Red, Radars, etc.
ii. 3D radar 360-degree long range detection, classification of drones and operators
iii. Accurate Direction, Location, Tracking of Drones/ operators, maintaining the drone libraries, neutralizing the SWARM of drones
iv. Jamming - Smart COMJAM Mitigation communication and GNSS
v. Quick Installation and Easy Operation Manual or Auto
vi. Fully autonomous Command and Control Centre
vii. The technology and systems are highly sensitive, delicate, need high degree of maintenance, frequent program updates and spares replacement.

AMIAL is expecting to outsource the solution design, implementation, maintenance of this critical activity on long term basis to a professional and qualified company. The scope of the works includes solution design, financing, implementation, testing, training, skill transfer, documentation, routine maintenance and 24X7 helpdesk and availability. AMIAL is expected to incur approx. INR 14 Crores p.a. (exclusive of taxes) as cost for the services. The cost will be subject to annual escalation based on inflation of 5%. AMIAL is expected to start availing these services from June-2021 onwards.

14.8.6. Based on the above assumptions, AMIAL proposes the following projections for security:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Security expenses	2.25	3.20	3.68	4.23	4.87	**18.22**
Counter Drone System	11.67	14.70	15.44	16.21	17.02	**75.03**
Total Security Cost	**13.92**	**17.90**	**19.11**	**20.44**	**21.88**	**93.25**

14.9. **IT Expenses**

14.9.1. With respect to AMIAL's obligations with respect to setting up of an Airport Operation Data Base, the Concession Agreement[32] states that:

"The Concessionaire shall set up Airport Operation Data Base ("AODB") consisting of an airport operations database, communications layer and visual system that link various systems in the Airport together. The AODB must provide all operations data at the Airport including but not limited to the data related to objective service quality requirement and parameters defining level of service of the Terminal Building and any other such information as may be required by the Authority and/ or any Designated GOI Agency pursuant to this Agreement. AODB shall generate daily, weekly, monthly, quarterly and annual reports as per the requirements of this Agreement. The AODB system should be capable to provide historical, real time data to assist in strategic decision making as well as to help the Concessionaire for various compliance requirements. The Concessionaire shall provide AODB access to the Authority for periodic review and generation of reports."

14.9.2. To ensure world-class IT infrastructure, AMIAL intends to revamp the existing IT capacity and efficiency. IT expenses incurred by AMIAL include the following:

- System license costs
- IT consumables
- IO/AO support
- Digitization, travel, and group governance
- Operating cost of servers, website, and other systems
- Maintenance costs (office, cables, and DC room)
- IT resources
- AMC for airport systems
- AAI end user system support

[32] Clause 21.1. of the Concession Agreement

14.9.3. For the forecasts, IT expenses are expected to increase by an inflation rate of 5%, real increase of 10% and one time increase of 27% in FY23 due to operationalisation of expanded terminal.

14.9.4. Based on the above assumptions, AMIAL proposes the following projections for IT expenses:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
IT expense	5.00	7.11	8.18	9.40	10.81	**40.50**

14.10. **Administrative and General Expenses**

14.10.1. Administrative costs contain expenses such as consultancy expenses, advertisement, travel and communication costs, business promotion etc. These costs are necessary for the efficient working of the Airport. The initiatives include industry outreach programs, meeting various stakeholders, participation in various domestic and international forums and catchment area programs. AMIAL is transforming the Mangaluru Airport into a smart and futuristic airport.

14.10.2. Admin and General expenses expected to increase by inflation 5% and real increase of 10%

14.10.3. Based on the above assumptions, AMIAL proposes the following projections for admin expenses:

Particulars (in INR Crores)	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**Total**
Admin expenses	4.75	5.46	6.28	7.22	8.31	**32.03**

14.11. **Other Operating Expenses**

14.11.1. Other operating expenses include expenses such as (i) housekeeping and upkeep expenses; (ii) horticulture expenses; and (iii) hire charges. The main expenditure under housekeeping and upkeep expenses include terminal housekeeping expenses and housekeeping of airside and runway. Hire charges include expenses such as operations of Bird Scarers for WHM, outsourced manpower such as Customer

Service Executive, Guest Relation Executive etc. and a trolley management O&M contract.

14.11.2. In line with growth assumptions mentioned earlier, other operating expenses are expected to increase by an inflation rate of 5%, real increase of 10% and one time increase of 27% in FY23 due to operationalisation of expanded terminal.

14.11.3. AMIAL proposes the following projections for other operating expenses:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Other operating expenses	6.62	9.41	10.82	12.45	14.31	**53.62**

14.12. **Financing Charges**

14.12.1. Financing charges includes debt charges and processing fees payable to lenders. Under this, AMIAL is required to pay 1.5% of the debt amount plus GST to lenders.

14.12.2. AMIAL has also tendered a Performance Bank Guarantee to AAI as mandated by the CA[33] as follows:

"The Concessionaire shall, for the performance of its obligations during Phase I hereunder, provide to the Authority, no later than 120 (one hundred and twenty) days from the date of this Agreement, an irrevocable and unconditional guarantee from a Bank for a sum equivalent to Rs. 120,00,00,000 (Rupees One Hundred and Twenty Crore) in the form set forth in Schedule E ("Performance Security"). Until such time the Performance Security is provided by the Concessionaire pursuant hereto and the same comes into effect, the Bid Security shall remain in force and effect, and upon such provision of the Performance Security pursuant hereto, the Authority shall release the Bid Security to the Concessionaire."

14.12.3. A fee equivalent to 0.5% of the Performance Bank Guarantee is to be paid to the lenders.

[33] Clause 9.1.1.

14.12.4. Additionally, a working capital loan and loan for cash short-fall has been taken at an interest rate of 12% per annum of average balance.

The following table provides a summary of the various financing charges that are incurred by AMIAL:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Debt arrangement fees	4.68	1.42	0.40	0.52	0.83	**7.85**
Fee for Performance BG	0.60	0.60	0.60	0.60	0.60	**3.00**
Working Capital interest and other interest	5.19	10.42	6.93	4.06	5.39	**31.99**
Total Finance Charges	**10.47**	**12.43**	**7.94**	**5.18**	**6.82**	**42.85**

14.13. **Summary of O&M Expenses**

14.13.1. After applying the allocation ratio, the summary of aeronautical operation and maintenance expenditure for the FCP is as follows :

S No.	Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
1	Manpower expenses - AAI employees	20.00	23.00	22.06	18.19	20.92	**104.18**
2	Manpower expenses - Adani employees	9.00	15.83	30.44	34.97	40.18	**130.42**
3	Utility expenses	9.38	12.55	13.21	13.87	14.57	**63.59**
4	IT expenses	4.75	6.75	7.77	8.93	10.27	**38.47**
5	Rates & taxes	0.34	0.49	0.56	0.64	0.74	**2.77**
6	Security expenses	13.22	17.00	18.16	19.42	20.79	**88.59**
7	Corporate Allocation	5.70	6.56	7.54	8.67	9.97	**38.43**
8	Administrative Expenses	4.51	5.22	6.04	6.95	7.99	**30.71**
9	Insurance	1.47	2.11	2.35	2.61	3.04	**11.58**
10	R&M	14.25	22.73	25.43	28.28	32.97	**123.66**
11	Others	6.29	9.70	11.96	13.67	15.63	**57.26**
12	Financing Charges	10.15	12.26	7.77	4.98	6.58	**41.73**
13	**Total (Airport related)**	**99.07**	**134.21**	**153.29**	**161.18**	**183.65**	**731.40**
14	Fuel Farm Expenses	-	3.67	4.37	5.03	5.70	**18.77**
15	**Grand Total (13 + 14)**	**99.07**	**137.88**	**157.66**	**166.21**	**189.35**	**750.17**

Concession Fee

14.14. Clause 27.3.1. of the Concession Agreement states that "the Parties hereto acknowledge and agree that the Per Passenger Fee for Domestic Passengers and Per Passenger Fee for International Passengers shall be applicable from the COD and shall be revised annually on each anniversary of the COD to take account of the variation in the CPI (IW)."

14.15. As per the abovementioned clause, the per passenger fee for domestic passengers in the first 15 (fifteen) concession years shall be revised in accordance with the following formula:

$$PPF\ for\ Dom.Pass._{(CY)} = PPF\ for\ Dom.Pass._{(CY-1)} \times (1 + 85\%\ of\ Delta\ CPI\ (IW))$$

14.16. Additionally, the per passenger fee for domestic passengers in the remaining concession years shall be revised in accordance with the following formula:

$$PPF\ for\ Dom.Pass._{(CY)} = PPF\ for\ Dom.Pass._{(CY-1)} \times (1 + 50\%\ of\ Delta\ CPI\ (IW))$$

Where,

- $PPF\ for\ Dom.Pass._{(CY)}$ means the revised Domestic Per Passenger Fee to be paid by the Concessionaire in the new Concession Year;
- $PPF\ for\ Dom.Pass._{(CY-1)}$ means Per Passenger Fee being paid by the Concessionaire in the previous Concession Year;
- $Delta\ CPI\ (IW)$ shall be calculated as follows:

$$\frac{\text{[Latest available monthly CPI (IW) as of the date of calculation]} - \text{[CPI (IW) pertaining to 12 (twelve) months prior to such latest available monthly CPI (IW)]}}{\text{CPI (IW) pertaining to 12 (twelve) months prior to such latest available monthly CPI (IW)}}$$

15. Inflation

15.1. Despite measures to control and mitigate the spread of Covid-19 pandemic by large economies and India, there are concerns of inflation rising sharply. For the monetary policy to remain accommodative in response to a further sustained period of low-inflation, inflation risks need to be weighed carefully. Many commentators have argued that the pandemic may lead to higher inflation than what has been witnessed over the past decade. Commentators have also cautioned on a sustained period of above-target inflation.[34]

15.2. The following table summarizes the inflation as per CPI[35] from 2021-2026:

Calendar Year	CPI	Source
FY2021-22 (CPI Combined General)	Q1 – 5% Q2 – 4.9% Q3 – 4.3% Q4 – 5%	Survey of Professional Forecasters on Macroeconomic Indicators– Results of the 69th Round released on 07th April, 2021
CY2021	4.6%	Oxford Economics Forecast
CY2022	4.8%	
CY2023	5.1%	
CY2024	5.3%	
CY2025	5.2%	
CY2026	5.0%	

*FY represents Financial year and CY represents Calendar year

Based on the above data, AMIAL is using a 5.0% inflation rate for all operating expenses including manpower expenses, utility expenses, IT expenses, rent and lease expenses, security expenses, corporate allocation, administrative expenses, repair and maintenance, and other operating expenses.

[34] Oxford Economics report
[35] Source: Oxford Economics forecasts as on "20th May 2021"

16. Depreciation

16.1. With respect to assets taken over from AAI as on COD as per Estimate Fixed Asset Register, AMIAL proposes to calculate depreciation based on the remaining useful lives of the assets.

16.2. AMIAL has considered the depreciation for the new assets based on the useful life of the assets as per the Companies Act. AMIAL also submits that the same is consistent with Authority's Order No. 35/2017-18 dated 12th January 2018 and amendment to Order No. 35/2017-18 dated 09th April 2018.

16.3. Additionally, AMIAL has carried out an independent technical evaluation (Annexure – D) of the various assets and has arrived at different useful lives. The process followed for the technical evaluation of the useful lives of assets of AMIAL is as follows:

16.3.1. Physical inspection of assets

16.3.2. Detailed discussions with AAI pertaining to usage of various assets

16.3.3. Guidance for determination of Useful Life given in Depreciation under Companies Act, 2013 Schedule 2, AERA, Marshall & Swift Valuation Service (MVS) and American Society of Appraisers (ASA).

16.3.4. Reviewing break-up costs of various components within an asset class

16.4. Following are the useful life and depreciation rates assumed for the FCP (in%) as per the study conducted by technical consultant:

Particulars	Book Depreciation	Useful Life (Years)	Income Tax Rates
Terminal Building	4%	25	10.0 %
Runway, Taxiway and Apron	5%	20	10.0 %
Cargo building	4%	25	10.0 %
Cargo Equipment	13.3%	7.5	15.0 %
Boundary wall	20%	5	10.0 %
Software	33.3%	Not provided	40.0 %
IT equipment	33.3%	3	15.0 %
Security equipment	13.3%	7.5	15.0 %
Plant and Machinery	13.3%	7.5	15.0 %
Other Buildings	3.3%	30	10.0 %
Access Road	10%	10	10.0 %
Fuel Farm (considered same as Plant & Machinery)	13.3%	7.5	15.0%

Furniture & fixtures	14.3%	7	10.0%
Vehicles	20%	5	15.0%
Office equipment	20%	5	15.0%
Intangible Assets (not part of the Technical study)	14.3%	7	25.0%

Terminal Building

16.5. A reduction in the useful life of the terminal building has been arrived at as based on a review of the breakup of cost of construction of the terminal building. The following table provides a break-up of the terminal building cost. Based on the components' costs, their weighted contributions were calculated, thereby arriving at the revised useful life of the terminal building:

Component	Percent Contribution to total cost of TB (2)	Technical Useful Life Assessment in Years (3)	Weighted Contribution (2) x (3)
False Ceiling	3.34%	10	0.34
Sanitation	2.07%	10	031
Glass work & glass facades	6.40%	15	0.96
Flooring works	6.95%	10	0.70
Remaining components of the structure	81.19%	30	24.36
Total	**100%**		**26.56**
		Say	**25**

16.6. The useful lives of various components have been arrived at based on the renovation/reconfiguration works that are usually carried out for the abovementioned sub-components. Wear and tear of these components due to weather conditions has also been considered to calculate the useful life of the terminal building.

Runways, Taxiways, and Aprons

16.7. A reduction in the economic useful life of this class of assets is based on discussions with technical personnel from AAI. Additionally, the existing runway needs

modification works to cater to the changing visibility conditions in the Airport. There is a requirement for installation of Centreline Lighting; this requires surface preparation and laying adhesives to ensure sufficient bonding between existing surface which is of Pavement Quality Concrete with new layer of Bituminous Concrete. The Centreline Lighting will be provided on this new layer.

Plant & Equipment

16.8. Plant & Machinery, along with various equipment are broadly used for 24 hours, since there are arrivals and departures 24 hours a day. Considering these circumstances, these assets are used on three-shift basis. Due to higher usage of these equipment`s and associated wear and tear, lower economic useful life of 7.5 years is assumed.

16.9. The methodology used by AMIAL is supported by the Companies Act. Following is the note no. 6 given in Depreciation under Companies Act 2013, Schedule II:

"The useful lives of assets working on shift basis have been specified in the Schedule based on their single shift working. Except for assets in respect of which no extra shift depreciation is permitted (indicated by NESD in part C), if an asset is used for any time during the year for double shift, the depreciation will increase by 50% for that period and in case of the triple shift, the depreciation shall be calculated on the basis of 100% for that period."

16.10. Also, the Independent chartered engineer based on his experience in varied industries has concurred with the useful life adopted by AMIAL.

Following is the depreciation and amortization calculated by AMIAL based on above methodology and also after applying necessary aero allocation ratios: -

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Depreciation on Airports assets	31.30	51.39	55.70	51.00	52.81	**242.18**
Depreciation on Fuel assets	1.48	2.96	2.96	2.96	2.96	**13.34**
Total Depreciation	**32.78**	**54.35**	**58.66**	**53.96**	**55.77**	**255.53**

17. Income Tax

17.1. The computation of income tax on aeronautical income, has been made on the prevailing Income Tax laws and rules. Further, the aeronautical segment has been treated as a standalone entity with its own tax computations. This therefore, may not necessarily reflect the overall tax computation of AMIAL as a whole.

17.2. In line with this, all items excluded from the regulatory building blocks have been excluded from the regulatory tax computations. The items not considered while calculating aeronautical tax include:

- Non-aeronautical operating costs and/or depreciation
- Concession Fee

17.3. The following table summarizes the income tax projections that have been calculated as per the above assumptions for AMIAL:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
PBT	(66.88)	(9.93)	53.32	142.98	218.06	**337.54**
Add: -Depreciation & amortization	32.79	54.37	58.68	53.98	55.79	**255.60**
Taxable income before tax depreciation	(34.10)	44.43	111.99	196.96	273.85	**593.14**
Less: Tax Depreciation	(61.83)	(75.32)	(68.91)	(61.49)	(70.55)	**(338.10)**
Taxable income	(95.93)	(30.89)	43.08	135.47	203.29	**255.04**
Taxable income after set-off of business losses	(61.83)	(30.89)	8.99	135.47	203.29	**255.04**
Less: Carry-forward unabsorbed depreciation	(6.36)	(68.18)	(99.07)	(90.09)	0.00	
Taxable income under normal tax provisions	(68.18)	(99.07)	(90.09)	45.39	203.29	
Tax rate	**25.17%**					
Tax Expenses	**0.00**	**0.00**	**0.00**	**(11.42)**	**(51.16)**	**(62.59)**
Allocation of Taxes						
Airports Related	0.00	0.00	0.00	(11.14)	(49.86)	**(61.00)**
Fuel Farm Related	0.00	0.00	0.00	(0.28)	(1.30)	**(1.59)**

18. Non-Aeronautical Revenue

18.1. IATA reports suggest that the demand for air travel is expected to revive in the second half of 2021 following a weak first half. The twin impact of the pandemic and economic conditions is likely to continue on a number of travel segments as also the aviation sector as a whole for several years. Additionally, the second wave of Covid-19 has created fear in the mind of the passengers, as also airport staff and people are afraid to buy anything due to the fear of getting infected. Due to the impact of the pandemic and economic conditions on traffic and likely reduced consumer spending at airports, AMIAL is expecting an adverse impact on non-aeronautical revenue.

18.2. AMIAL has outsourced all non-aeronautical businesses to the Master Concessionaire with emphasis on : -

18.2.1. High standards of airport services, safety and security

18.2.2. Functionality and flexibility

18.2.3. Deployment of modern information technology systems and equipment

18.2.4. Environment friendliness

18.2.5. Cost effectiveness

18.2.6. Ability and willingness to provide a high level of customer service at competitive prices

18.2.7. Experience and expertise in provision of non-aeronautical services with innovation in concept and design

18.2.8. Experience and expertise in city side development to meet the requirements of the travellers

18.2.9. Follow good industry practice in performing the Airport Services

18.3. The process for selection and appointment of Master Concessionaire was carried out through a global competitive bidding process as per the terms of the Concession Agreement. The RfP for the tendering process was issued in March 2021 and a Master Concession Agreement has been signed on 18th May 2021.

18.4. The Master Concessionaire scope is to develop, operate, maintain, manage the following at IXE, Mangaluru in accordance with best-in-class standards and facilities at comparable airports and good industry practices:

- ► Duty free stores
- ► Food and beverages outlets
- ► Retail outlets
- ► Lounges
- ► Advertising, sponsorship and promotion opportunities
- ► Car parks and ground transportation facilities
- ► Airport hotels and transit hotels
- ► Preferred partners association for including but not limited to pouring rights, services in air (Wi-Fi, Bluetooth, aroma etc.), music and video rights, mobile wallet, payment gateway and other
- ► Business centre
- ► City side development
- ► Flight catering services
- ► Foreign exchange services
- ► Freight consolidators/forwarders or agents
- ► Left luggage, lost and found, excess baggage
- ► Messenger services
- ► Porter service
- ► Special assistance services
- ► Vending machines
- ► Meet and assist services
- ► Provision of land and space for various stakeholders at Airport
- ► Various passenger amenities, including but not limited to, foreign exchange, SIM card, child-care room, kids play areas, car rental and hotel reservation counters, digital wallet tie-ups, ATMs, spas, and entertainment areas
- ► Airport village comprising of various retail, food and beverage, entertainment and amenities options; and
- ► Any other services as may be permitted under the Concession Agreement or by applicable law.
- ► It is expected that all the existing non-aero contracts will be novated by AMIAL to Master Concessionaire under the Master Service Agreement

18.5. For each year during the term of the Agreement, Master Concessionaire will pay to airport operator an amount which is higher of the following:

- Minimum Guarantee amount of INR 6 Crores per annum; or

- Amount arrived by multiplying the revenue share percentage i.e. 10% as quoted by Master Concessionaire with Gross Revenue in that year.

18.6. Above mentioned Minimum guarantee amount will remain unchanged for first five years and will increase by 50% of CPI thereafter.

18.7. Following table summarizes the non-aeronautical revenues at AMIAL:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	Total
Total Non-Aeronautical Revenues	6.00	6.00	6.00	6.00	6.00	**30.00**

19. Truing up

19.1. AAI has appointed a consultant to determine Initial RAB as on COD and true-up for the period prior to COD. AAI will subsequently share the data on Initial RAB and true-ups with AERA.

19.2. As mentioned earlier, FCP is starting from FY2022-26. However, AMIAL started operations from COD i.e. 31st October 2020. Accordingly, AMIAL is entitled to a true-ups for the period between COD and FCP. The following table summarizes the submission of AMIAL under various regulatory blocks:

Particulars (in INR Crores)	FY21
Add: FRoR return @14.9% on avg. RAB	6.81
Add: Operating expenses	26.36
Add: Depreciation	7.03
Less: 30% of Non – Aero revenues	(1.30)
ARR - Aero (A)	**38.90**
Actual Aero Revenues earned (B)	11.28
True-up (A-B)	**27.62**
PV of true-up	**29.25**

20. Aggregate Revenue Requirement

20.1. Based on the above analysis, AMIAL estimates the present value of target revenue for the airport related services to be INR 1,083 Crores (*Rupees One Thousand and Eighty-Three Crores*). The following table summarizes the financial projections of AMIAL for the FCP:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
Add: FRoR return @14.9% on avg. RAB	44.48	84.05	93.32	87.55	91.06	**400.46**
Add: Operating expenses	99.07	134.21	153.29	161.18	183.65	**731.40**
Add: Depreciation	31.30	51.39	55.70	51.00	52.81	**242.18**
Add: Taxes	0.00	0.00	0.00	11.14	49.86	**61.00**
Add: True-up for next CP	29.25					**29.25**
Less: 30% Non – Aero revenues	(1.80)	(1.80)	(1.80)	(1.80)	(1.80)	**(9.00)**
ARR – Aero	202.30	267.85	300.50	309.07	375.58	**1,455.30**
PV Factor as on 1st April 2021	1.00	0.87	0.76	0.66	0.57	
PV of ARR	202.30	233.20	227.77	203.96	215.79	**1,083.02**
PV of ARR for Control Period	**1,083.02**					

In order to achieve the present value of INR 1,083 Crores (*Rupees One thousand and eighty three Crores*), AMIAL expects to earn various Aeronautical revenues as provided in the table below (assuming date of implementation of revised charges w.e.f. from 01st October 2021).

Particulars (in INR Crores)	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**Total**
Landing revenues	17.08	46.88	66.78	84.99	105.23	**320.97**
Parking & housing revenues	0.05	0.09	0.12	0.14	0.17	**0.57**
Ground Handling revenues	0.99	1.35	1.66	1.94	2.24	**8.18**
Passenger UDF*	62.64	166.15	235.02	304.99	383.20	**1,151.99**
CUTE Revenue	2.86	7.63	10.38	13.26	16.55	**50.68**
Cargo Revenues	-	1.36	3.29	3.98	4.81	**13.44**
Total Revenues from Aero activities	**83.62**	**223.46**	**317.24**	**409.30**	**512.20**	**1,545.82**
Discounted Revenue	83.62	194.55	240.46	270.11	294.28	**1,083.02**
PV of Revenues from Aero activities	**1,083.02**					

*AMIAL has subsumed the PSF charges to UDF charges.

20.2. AMIAL estimates the present value of target revenue for the fuel facility to be INR 33 Crores (*Rupees thirty three Crores*). The following table summarizes the financial projections of AMIAL for the FCP:

Particulars (in INR Crores)	FY22	FY23	FY24	FY25	FY26	**Total**
Opening RAB	-	20.75	17.79	14.82	11.86	
Closing RAB	20.75	17.79	14.82	11.86	8.89	
Average RAB	10.38	19.27	16.31	13.34	10.38	
Add: FRoR return @14.9% on avg. RAB	1.54	2.86	2.42	1.98	1.54	**10.35**
Add: Operating expenses	0.15	3.75	4.47	5.17	5.88	**19.42**
Add: Depreciation	1.48	2.96	2.96	2.96	2.96	**13.34**
Add: Taxes	-	-	-	0.28	1.30	**1.59**
ARR – Fuel	**3.18**	**9.58**	**9.86**	**10.40**	**11.69**	**44.71**
PV Factor as on 1 April 2021	1.00	0.87	0.76	0.66	0.57	**3.86**
PV of ARR	3.18	8.34	7.47	6.86	6.72	**32.57**
PV of ARR for Control Period	**32.57**					

21. Annexures

(A) Concession Agreement and its Schedules (https://www.aai.aero/en/system/files/resources/Mangaluru-Airport.pdf?download=1)

(B) CAPA India Report

(C) AERA Letter (F.No./AERA/20010/MYTP/Adani-Mangaluru (AMIAL)/2020-21)

(D) Chartered Engineer Reports (allocation and useful life)

(E) Cost of Equity Report

(F) Monthly Invoice from AAI (Employee Costs)

(G) AERA Letter (Tariff extension till September)

(H) IATA Reports

(I) Estimated Deemed Initial RAB and CWIP Invoice from AAI

(J) AVSEC Circular No. 02/2020 and its addendum

(K) Audited Financial Statements as on 31st March 2021

(L) Letters to the state authorities for land acquisition

(M) Forms as required under AERA guidelines