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Consultation Paper No. 16/ 2018-19



सत्यमेव जयते

Airports Economic Regulatory Authority of India

**In the matter of Determination of Aeronautical Tariffs in respect of Kannur
International Airport Limited (KIAL)
For the first Control Period (01.04.2018 – 31.03.2023)**

14 September 2018

**AERA Building
Administrative Complex
Safdarjung Airport
New Delhi – 110 003**

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1. LIST OF ABBREVIATIONS

AAI	Airport Authority of India		Operators) Guidelines, 2011 dated 28 February 2011
AERA or the Authority	Airport Economic Regulatory Authority of India	GOI	Government Of India
AECOM	AECOM India Private Limited	GOK	Government of Kerala
Aero	Aeronautical	Inflation	Based on RBI Survey Dated 07th Dec, 2016
ARR	Aggregate Revenue Requirement	IRR	Internal Rate of Return
ATM	Air traffic movement	JVC	Joint Venture Company
BRS	Baggage Reconciliation System	MOU	Memorandum of Understanding
CAGR	Compounded Annual Growth Rate	MYTO	Multi Year Tariff Order
CAPEX	Capital Expenditure	MYTP	Multi Year Tariff Proposal
CUTE	Common User Terminal Equipment	NAR	Non-Aeronautical Revenue
CUSS	Common-Use Self-Service	Non-Aero	Non-Aeronautical
KIAL/Airport Operator	Kannur International Airport Limited	NCAP	National Civil Aviation Policy 2016
KINFRA	Kerala Industrial Infrastructure Development Corporation	OPEX	Operating Expenditure
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation	P&L	Profit and Loss
F&B	Food and Beverages	p.a.	Per annum
FRoR	Fair Rate of Return	PAX	Passenger(s)
FY	Financial Year	PSF	Passenger Service Fee
Airport Guidelines	AERA (Terms and Conditions for Determination of Tariff for Airport	RAB	Regulated Asset Base
		INR or ₹	Indian rupees
		SLM	Straight Line Method
		Sq.m.	Square Metre
		UDF	User Development Fee
		K_e	Cost of equity

2. INTRODUCTION

- 2.1. Kannur International Airport Limited (KIAL) was incorporated as a Public Limited Company on 3 December 2009 with the objective of building, owning and operating the Kannur International Airport. It is the second Greenfield Airport in Kerala set up under the Public Private Partnership (PPP) model, located close to Mattannur in Kannur district of Kerala. KIAL is expected to commence operations from 01.10.2018 with the first control period commencing from 01.04.2018 to 31.03.2023.
- 2.2. KIAL's equity shareholding is as follows: Government of Kerala (GoK) (35.0%), qualified institutional investors, individuals, co-operative banks/ societies/ commercial banks and other legal entities (31.0%), Bharat Petroleum Corporation Limited (BPCL) (24.0%), and the Airports Authority of India (AAI) (10.0%).
- 2.3. KIAL initially acquired 1,192.18 acres of land at a value of ₹316 crores for development of phase 1 of the airport from the GoK through Kerala Industrial Infrastructure Development Corporation (KINFRA), the nodal agency for land acquisition appointed by the Government. This investment has been treated as equity from the GoK.
- 2.4. KIAL has proposed to take additional land of approximately 1,176.48 acres for future development of the airport which is under acquisition by KINFRA. It has been proposed that KIAL shall take the additional land on token rent of ₹100 per acre per annum from KINFRA for sixty years.
- 2.5. Presently, 500 acres of land out of 1,192.18 acres has been utilized for the Airport project.

Table 1: Technical details

<ul style="list-style-type: none"> • Total area of Integrated Terminal Building is 9 lakhs sq. ft. • Capacity 5 Million passengers /annum. • Car Parking for 700 cars and 25 Buses • Technical block with ATC Tower 30 Mt. Height. • CCTV/FIDS/ Signage. • Peak Hour Passenger capacity (Arrival & Departure) 1000 + 1000 • Check –in Counters (24 +24) Nos • Immigration Counters 32 no • Customs Counters 16 no • Two Category 9 Fire stations <ul style="list-style-type: none"> • ILS Category 1, DVOR, Automatic Dependent Surveillance Broadcast 	<ul style="list-style-type: none"> • Airport Code 4E with orientation 07/25 • Critical Aircraft- B 777-300 ER • Runway Physical Length: <ul style="list-style-type: none"> • Phase I: 3,050Meters • Upto Phase II: 3,400 meters • Upto Phase III: 4,000 meters • Apron- Phase-I can accommodate 20 code Caircrafts or as in the configuration below: <ul style="list-style-type: none"> • 8 Nos B737/AB 320 • 5 Nos Code E(MARS) B777-300 ER • 1 No Code F (MARS) AB 380 /B747-800 • Apron Phase II can accommodate another 21 Aircraft. • Full length Parallel Taxiway & Rapid Exit/Taxi Links
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- 2.6. Kannur International Airport is designed to handle more than 1.5 million passengers and therefore was notified as a major airport vide order of the Authority dated 22.06.2016. Since KIAL is expected to commence commercial operations from 01.10.2018, the first control

period for the purposes of tariff determination in respect of KIAL shall be from 01.04.2018 to 31.03.2023.

- 2.7. KIAL is mandatorily required to follow the Guidelines issued by the Authority and submit its tariff proposal before the Authority.

3. MULTI YEAR TARIFF PROPOSAL SUBMITTED BY KIAL

- 3.1. KIAL filed its MYTP submissions for the first control period on 22.04.2016. Subsequently, KIAL filed revised submissions dated 31.08.2016, 25.11.2016, 22.02.2018 and 29.05.2018 and additional justifications/ clarifications dated 31.05.2016, 25.10.2016, 07.11.2016, 17.04.2018, 09.05.2018, 07.07.2018, 08.07.2018, 10.07.2018, 12.07.2018 and 14.07.2018.
- 3.2. KIAL in its submissions has provided the projected capital expenditure during the first control period. KIAL has also furnished component-wise breakup of the revenue and expenditure and a brief note giving the basis of growth rates assumed and details of the item wise capital cost, along with their means of finance.

4. METHODOLOGY FOR TARIFF CALCULATION

- 4.1. The methodology adopted by the Authority to determine tariff is based on AERA Act, 2008 and the AERA (Terms and Conditions for Determination of Tariff for Airport Operators) Guidelines, 2011 dated 28 February 2011. Wherein, the present value of total aeronautical revenue that is estimated to be realized each year during the control period at proposed tariff levels is compared with the present value of the Aggregate Revenue Requirement (ARR) during the control period. In case the present value of aeronautical revenue during the control period is lower than the present value of ARR during the control period, the airport operator may opt to increase the proposed tariff. In case the present value of aeronautical revenue is higher than the present value of the ARR then the airport operator will have to suitably reduce its tariff.
- 4.2. 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).
- 4.3. The Authority shall determine the ARR for the current control period on the basis of the following Regulatory Building Blocks:
- 4.3.1. Regulatory Asset Base (RAB)
- 4.3.2. Depreciation (D);
- 4.3.3. Fair Rate of Return applied to the Regulatory Asset Base (FRoR x RAB);
- 4.3.4. Operation and Maintenance Expenditure (O);
- 4.3.5. Taxation (T);
- 4.3.6. Revenue from services other than aeronautical services (NAR).
- 4.4. Based on the building blocks provided above, the formula for determining ARR under Hybrid Till is as follows:

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

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

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'

- 4.5. The detailed submissions provided by KIAL in respect of the opening RAB, additions to RAB, and other items of the Regulatory Building Blocks have been discussed in the subsequent sections.

5. REGULATORY ASSET BASE (RAB) AND DEPRECIATION

KIAL's submission – Additions to RAB

5.1. Capital expenditure proposed to be incurred during the first control period as per KIAL is as shown in Table 2 below.

Table 2: Capital expenditure during the first control period as per KIAL (in ₹ crores)

Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Land	316.00	-	-	-	-
Buildings and civil work	1,007.85	-	-	-	-
Plant & machinery	504.23	-	-	-	-
Runway, Roads & Culverts	374.19	-	490.00	-	-
Total	2,202.27	-	490.00	-	-

Table 3: Details of capital expenditure incurred upto and including FY 18-19 as per KIAL (in ₹ crores)

Category	Description	Amount (₹ crores)
Buildings	Civil, Plumbing works etc.	363.22
Buildings	Earthwork, Earth cutting filling	313.69
Buildings	Additional Buildings & Civil Works	102.38
Buildings	Other works - Airside	34.70
Buildings	Ancillary buildings in Operational area	27.07
Buildings	Boundary Wall	9.72
Buildings	Car, Bus and Taxi parking	8.33
Buildings	Watch Tower, Security post	0.62
Buildings Total		859.73
IDC	Interest during construction	172.21
IDC Total		172.21
Land	Land	316.00
Land Total		316.00
P&M	Other Equipment	160.42
P&M	Additional Electrical Installations	66.40
P&M	Electrical/ Lighting works	50.75
P&M	Electrical/ Lighting works	45.11
P&M	Air-conditioning - HVAC	29.14
P&M	Baggage Handling system	15.49
P&M	Electrical meters/ boards etc.	15.00
P&M	Networking, EPABX, Access control	11.55
P&M	Water Management system	10.00
P&M	BMS, Public address system etc.	8.67
P&M	Escalators	6.42
P&M	Elevators	6.17
P&M	FIDS, Baggage info, Digital signs	3.76
P&M	Signages, pavement marking, bird hazard reduction	1.25

P&M Total		430.13
Pre-op	Pre-operative cost	60.00
Pre-op	Consultancy	30.00
Pre-op	Additional Preoperative expenses	15.00
Pre-op Total		105.00
Runway	Runway, Isolation bay and Turning pads	100.63
Runway	Apron	58.99
Runway	Approach Road, Internal Road, Service Road, Perimeter Road	56.21
Runway	Drain and Culvert	38.17
Runway	Additional Runway, Roads & Culverts	32.00
Runway	Crash fire tenders	15.23
Runway	Passenger Boarding Bridges	9.60
Runway	Firefighting, Fire alarm and equipment	8.37
Runway Total		319.20
Grand Total		2,202.27

5.2. Further, KIAL in its submission has classified total proposed capital expenditure incurred during the first control period into aeronautical and non-aeronautical in the ratio of 95:05.

5.3. Table 4 below summarizes the additions to RAB as per KIAL including land cost of ₹131.67 crores out of ₹316 crores (representing cost for 500 acres utilized for current development of the Airport) and allocation of other capital expenditure (including interest during construction) between aeronautical and non-aeronautical in the ratio of 95:05 during the first control period as additions to RAB:

Table 4: Additions to RAB during the first control period as per KIAL (in ₹ crores)

Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Land	131.67	-	-	-	-
Buildings and civil work	957.45	-	-	-	-
Plant & machinery	479.02	-	-	-	-
Runway, Roads & Culverts	355.48	-	465.50	-	-
Total	1,923.63	-	465.50	-	-

Authority's Examination – Additions to RAB

5.4. The Authority has noted that, in the absence of detailed area allocations and plan details, entire proposed capital expenditure during the control period has been allocated into aeronautical and non-aeronautical in the ratio of 95:05. The Authority has proposed to accept such allocation submitted by KIAL. However the same shall be revised in the next control period based on a study of actual area allocation and plan details.

5.5. The Authority has noted that out of total land cost of ₹316.00 crores an amount of ₹131.67 crores (representing cost towards utilized land for development of airport) has been considered as an aeronautical asset while computing RAB. The Authority has proposed to exclude cost of land from RAB until a decision on the treatment of land cost is finalized pursuant to Consultation Paper No. 04/2018-19 "In the matter of Determination of Fair Rate

of Return (FRoR) to be provided on Cost of Land incurred by various Airport Operators of India” dated 23.04.2018.

- 5.6. Further, cost of ₹490 crores appearing under the head ‘Runway, Roads & Culverts’ pertains to cost proposed to be incurred in FY 20-21 towards extension of runway from existing length of 3,050 metres to 4,000 metres. Since incurrence of such cost is not certain yet, the Authority has proposed to exclude this amount while computing RAB.

Table 5: Additions to RAB during the first control period as per the Authority (in ₹ crores)

Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Land	-	-	-	-	-
Buildings and civil work	957.45	-	-	-	-
Plant & machinery	479.02	-	-	-	-
Runway, Roads & Culverts	355.48	-	-	-	-
Total	1,791.96	-	-	-	-

KIAL submission - Depreciation on RAB

5.7. KIAL has followed straight line method of depreciation and depreciation rates applied to various assets are as per AERA Order No. 35/ 2017-18 "In the matter of Determination of Useful life of Airport Assets" dated 12.01.2018.

Table 6: Depreciation on assets forming part of RAB as per KIAL (in ₹ crores)

Rate	Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
1.67 %	Buildings and civil work	(7.96)	(15.96)	(15.96)	(15.96)	(15.96)
6.67 %	Plant & machinery	(15.92)	(31.93)	(31.93)	(31.93)	(31.93)
3.33%	Runway, Roads & Culverts	(5.91)	(11.85)	(27.37)	(27.37)	(27.37)
	Total	(29.79)	(59.74)	(75.26)	(75.26)	(75.26)

Authority's Examination – Depreciation on RAB

5.8. Depreciation as per the Authority after excluding proposed runway extension costs has been summarized in Table 7:

Table 7: Depreciation on assets forming part of RAB as per the Authority (in ₹ crores)

Rate	Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
1.67 %	Buildings and civil work	(7.96)	(15.96)	(15.96)	(15.96)	(15.96)
6.67 %	Plant & machinery	(15.92)	(31.93)	(31.93)	(31.93)	(31.93)
3.33%	Runway, Roads & Culverts	(5.91)	(11.85)	(11.85)	(11.85)	(11.85)
	Total	(29.79)	(59.74)	(59.74)	(59.74)	(59.74)

KIAL's submission – Average RAB

5.9. RAB during the first control period as per KIAL has been summarized in Table 8 below:

Table 8: RAB as per KIAL's submission (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Opening RAB as on 01.04.2018	0.00	2,170.92	2,108.03	2,045.14	2,455.92
Closing RAB	2,170.92	2,108.03	2,045.14	2,455.92	2,376.70
Average RAB	1,085.46	2,139.47	2,076.59	2,250.53	2,416.31
Land value adjustment	(184.33)	(184.33)	(184.33)	(184.33)	(184.33)
Average RAB adjusted for Land not used	901.12	1,955.14	1,892.25	2,066.20	2,231.98
Average RAB for working period after considering aeronautical portion	901.12	1,955.14	1,892.25	2,066.20	2,231.98

Authority's Examination – Average RAB

5.10. RAB as per the Authority during the first control period has been summarized in Table 9 below:

Table 9: RAB as per the Authority (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Opening	-	1,762.17	1,702.43	1,642.69	1,582.94
Additions	1,791.96	-	-	-	-
Depreciation	(29.79)	(59.74)	(59.74)	(59.74)	(59.74)
Closing	1,762.17	1,702.43	1,642.69	1,582.94	1,523.20
Average RAB	881.08	1,732.30	1,672.56	1,612.82	1,553.07

Proposal No. 1 Regarding RAB

- 1.a. The Authority has proposed to remove land cost from RAB.
- 1.b. The Authority has proposed to exclude cost of ₹490 crores pertaining to cost towards runway extension proposed to be incurred in FY 20-21 as incurrence of such cost is not certain yet.
- 1.c. The Authority has tentatively accepted the allocation of assets in to aeronautical and non-aeronautical assets in the ratio 95:5. A detailed study will be conducted to determine the actual usage before true up in the next control period.
- 1.d. The Authority has proposed to consider RAB during the first control period for calculation of ARR as shown in Table 9.
- 1.e. The Authority proposes to true up Average RAB and depreciation based on the actual date of capitalization.

6. FAIR RATE OF RETURN (FRoR)

6.1. KIAL in its submission has proposed the capital structure, funding mechanism, and FRoR as provided in Table 10 below:

Table 10 : Capital structure and FRoR as submitted by KIAL (in ₹ crores)

Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Average
Average Equity	979.57	1162.29	1407.29	1488.92	1488.92	
Average Debt	990.00	1200.00	1172.73	1090.91	981.82	
Total	1969.57	2362.29	2580.02	2579.83	2470.74	
Cost of Debt	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%
Cost of Equity	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Debt equity ratio	50:50	51:49	45:55	42:58	40:60	45:55
FRoR						13.30%

Authority's Examination

6.2. The Authority notes that with equity infusion, debt-equity ratio comes down during the first control period. KIAL has clarified that the proposed funding of runway extension is by way of equity in the second phase of airport development. Further, loan repayments also contribute to the reduction in debt-equity ratio.

6.3. Since the Authority has proposed to exclude capital investment of ₹490 crores pertaining to runway extension it will not be considered for calculation of FRoR.

6.4. Cost of debt has been assumed at 10.05% p.a. which is marginally lower than the 10.40% p.a. as specified in the joint lender agreement dated 20.05.2015 signed by KIAL with Canara Bank, The South Indian Bank Limited and The Federal Bank Limited considering current interest rate trends. The Authority has accordingly proposed to accept KIAL's submission in relation to cost of debt.

6.5. Regarding cost of equity, the Authority examined prevalent FRoR at major airports as per the airports' respective tariff orders (summarized in Table 11 below). Further, the Authority notes that KIAL is exposed to high risks due to intense competition and first-time operations. Accordingly, the Authority has proposed to accept KIAL's request for cost of equity at 16% p.a.

Table 11 : Airport-wise cost of equity and FRoR comparison (%)

Airport	Delhi	Mumbai	Hyderabad	Bengaluru	Cochin
Cost of equity	16%	16%	16%	16%	14%
FRoR	9.94%	11.78%	10.01%	11.55%	11.17%
Control period	01.04.2014 to 31.03.2019	01.04.2014 to 31.03.2019	01.04.2011 to 31.03.2016	01.04.2011 to 31.03.2016	01.04.2016 to 31.03.2021

6.6. After considering impact of RAB as per the Authority and impact of internal accruals in the overall capital structure, FRoR as per the Authority has been computed in Table 12 below:

Table 12 : Capital structure and FRoR as per the Authority (in ₹ crores)

Asset head	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Average
Average Equity	979.57	998.92	998.92	998.92	998.92	
Average Retained Earnings	7.92	35.52	87.47	168.69	285.22	
Average Debt	990.00	1,200.00	1,172.73	1,090.91	981.82	
Total	1,977.49	2,234.44	2,259.12	2,258.52	2,265.96	
Cost of Debt	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%
Cost of Equity	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Debt equity ratio	50:50	54:46	52:48	48:52	43:57	49:51
FRoR						13.06%

Proposal No. 2 Regarding FRoR

- 2.a. The Authority has proposed to consider the Cost of Equity at 16% p.a. and FRoR at 13.06% p.a. for KIAL for the first control period.
- 2.b. FRoR will be trued up based on actual cost of debt and cost of equity which will be decided upon after the proposed study on the cost of equity at major airports.

7. OPERATION AND MAINTENANCE EXPENDITURE

7.1. KIAL's submission on details and assumptions of operation and maintenance expenditure proposed to be incurred during the first control period are provided in Table 13 below:

Table 13: Assumptions made by KIAL for each item of Operation and Maintenance Expenditure

Item	Assumption
Land Lease	It is assumed that 1176.48 acres of land will be leased in from M/s KINFRA at the rate of Rs.100 per acre per annum.
Security	Security expenses assumed at Rs.30 per passenger based on the benchmarks. An annual escalation of 8% is provided for.
Repair and Maintenance	Repairs to buildings, plants, equipment and runways is considered at the rate of 1% of civil cost and 1% of equipment cost for the year in which the airport operations are commenced. An annual escalation of 8% is considered for the subsequent years.
Power, Water and Fuel Charges	Based on the benchmarks, power, water and fuel charges is assumed at Rs.20 per passenger with a year on year increase of 8%.
Admin Expenses	Admin expenses is assumed at Rs.30 per passenger based on the benchmarks. An escalation of 8% is assumed every year.
Marketing Costs	Marketing costs is assumed as 1% of total revenues excluding UDF.
Stores and Spares	Stores and spares cost is assumed as 0.5% of all equipment cost with a year on year increase of 8%.
Employee's Salary	Based on the benchmarks, employee's salary has been worked out as Rs.54 per passenger. An annual increase of 8% is considered.

7.2. KIAL has apportioned total expenditure incurred during the first control period into aeronautical and non-aeronautical in the ratio of 95:05. Below Table 14 summarizes the operation and maintenance expenditure after considering 95% of the total expenditure incurred during the first control period as aeronautical expenditure:

Table 14: Projected O&M expenditure by KIAL for the first control period (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Land Lease Rental	0.01	0.01	0.01	0.01	0.01
Employee Costs	4.34	10.56	12.79	15.37	18.44
Power & Water	1.61	3.91	4.74	5.69	6.83
Repair and Maintenance	-	18.86	20.37	27.72	29.93
Administration	2.41	5.86	7.10	8.54	10.24
Marketing Costs	0.37	0.86	1.00	1.16	1.34
Security	18.19	36.10	35.91	35.85	35.93
Stores and Spares	-	2.52	2.72	2.94	3.18
Total	26.91	78.68	84.64	97.3	105.9

Authority's Examination

7.3. Table 15 shows Authority's analysis of O&M expenditure per passenger (domestic + international) projected for airports at Kochi, Trivandrum and Calicut with KIAL's submission:

Table 15: Airport-wise comparative O&M expenditure per passenger for FY18-19 (in ₹ per pax)

Particulars	KIAL	Kochi	Trivandrum	Calicut
Land Lease Rental	0.07	19.49	NA	NA
Employee Costs	54.00	77.01	73.00	104.25
Power & Water	20.00	44.45	13.96	22.88
Repair and Maintenance	0.00	48.10	11.94	31.05
Administration	30.00	20.56	28.25	54.58
Marketing Costs	4.58	0.00	NA	NA
Security	226.59	6.94	NA	NA
Stores and Spares	0.00	5.55	0.83	0.65
Total	335.24	222.10	127.98	213.40

7.4. The Authority has noted that KIAL has included CISF cost as part of security expenses while computing operation and maintenance expenditure proposed to be incurred during the first control period. Since CISF costs form part of PSF (security), the Authority has proposed to exclude such amounts from security expenses while computing O&M expenditure proposed to be incurred during the first control period.

7.5. Further since other expenses proposed by KIAL are within the benchmark range in comparison to per passenger costs at other airports, the Authority has proposed to allow such expenses for the current control period.

7.6. Below Table 16 summarizes the operation and maintenance expenditure after considering 95% of the total expenditure incurred during the first control period as aeronautical expenditure:

Table 16: O&M expenditure for the first control period as per the Authority (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Land Lease Rental	0.01	0.01	0.01	0.01	0.01
Employee Costs	4.12	10.03	12.15	14.60	17.52
Power & Water	1.53	3.71	4.50	5.41	6.49
Repair and Maintenance	-	17.92	19.35	20.90	22.57
Administration	2.29	5.57	6.75	8.11	9.73
Marketing Costs	0.84	1.92	2.18	2.47	2.80
Security	2.29	5.57	6.75	8.11	9.73
Stores and Spares	-	2.40	2.59	2.79	3.02
Total	11.06	47.13	54.27	62.42	71.88

Proposal No. 3 Regarding Operation and Maintenance expenditure

3.a. The Authority has proposed to exclude expenses relating to the staff of CISF.

3.b. The Authority has proposed to accept allocation of aeronautical and non-aeronautical expenses in the ratio of 95:05.

- 3.c. The Authority has proposed to consider the operational and maintenance expenditure as given in Table 16, for the purpose of determination of aeronautical tariffs for the first Control Period.**
- 3.d. The Authority also proposes to true up the Operating expenses based on the actual expenditure during the first control period.**

8. REVENUE FROM SERVICES OTHER THAN AERONAUTICAL SERVICES

8.1. KIAL has submitted the forecasts of various components of non-aeronautical revenue streams as well as the assumptions underlying the forecast.

Table 17: Assumptions made by KIAL for each item of Non-Aeronautical Revenue

Item	Assumption
F&B services	Revenue from F&B services has been assumed at 25% of revenue from duty free services
Flight catering systems	4% of total aeronautical revenue has been assumed as royalty from flight catering services.
Land Lease Revenue	Land lease revenue is assumed at Rs.5000 per acre per annum for 280 acres of land to be leased for flight catering center, aircraft maintenance, logistics and redistribution center and fuel farm.
Space Lease Income	Space lease rentals based on estimated commercial, retail & hospitality spaces that will be provided. The rate is arrived at by benchmarking with other operational airports.
Car Park Income	It is assumed that 25% of passengers will opt for car parking slots. Car park rate is assumed at Rs.60/- per vehicle as prevailing in the other Kerala airports. An annual escalation of 8% is considered.
Entry Ticket Income	Entry tickets to the terminal area are assumed at the rate of Rs.25/- at domestic terminal and Rs.50/- for international terminal. It is assumed that there will be two visitors per passenger and out of which 5% of visitors will enter into the terminal building by paying entry ticket fee.
DFS Royalty	It is assumed that the duty free activities of the airport will be outsourced. Royalty of 25% is assumed on the revenues from duty-free shopping. Revenue from duty free shopping has been assumed to be \$35 per passenger for 10% of total international passengers in a year. An annual escalation of 8% is considered.
Advertising Income	Advertisement income is assumed at a rate of Rs.2.5 lakhs per advertisement with an annual escalation of 10%. 10 such advertisement boards are considered per year.

8.2. Since it is a new airport and there is no confirmed trends on the traffic of passengers and ATMs and Non-Aero Revenues, KIAL submits that the Non Aeronautical Revenues estimated herein may be tried up based on actuals at the end of the current control period.

8.3. Revenue from Non-Aeronautical Services for the first control period submitted by KIAL are as shown in Table 18 below:

Table 18: Revenue from non-aeronautical services for the first control period as per KIAL (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
F&B services	1.04	2.53	3.07	3.69	4.43
Flight Catering Services	0.67	1.51	1.68	1.91	2.11
Land Lease Revenue	0.00	0.00	0.00	0.00	0.00
Space Lease Rental	0.59	1.30	1.44	1.58	1.74
Car Park Revenue	1.20	2.93	3.55	4.27	5.12
Public Admission Charges	0.38	0.93	1.13	1.36	1.63
Duty Free Shop	4.17	10.14	12.27	14.76	17.72
Advertising	0.12	0.28	0.30	0.33	0.37
Total	8.19	19.62	23.44	27.90	33.12

Authority's Examination

8.4. The Authority noted that land lease revenue, considered as part of non-aeronautical revenues, includes revenue from lease of land for aeronautical activities namely, Aircraft Maintenance Centre, Logistics and Redistribution Centre and Fuel Farm. Therefore, the Authority has proposed to consider such lease rental revenue as revenue from aeronautical services.

8.5. Below Table 19 shows Authority's analysis of non-aeronautical revenue per passenger (domestic + international) projected for airports at Kochi, Trivandrum and Calicut with KIAL's submission:

Table 19: Airport-wise comparative non-aeronautical revenue per passenger for FY18-19 (in ₹ per pax)

Particulars	KIAL	Kochi	Trivandrum	Calicut
F&B services	6.46	7.67	47.78	12.75
Flight Catering Services	6.96	3.18	0.00	15.69
Land Lease Revenue	0.43	9.53	18.54	6.21
Space Lease Rental	3.66	85.20	5.85	45.10
Car Park Revenue	7.45	9.70	14.37	7.19
Public Admission Charges	2.36	11.02	15.38	4.58
Duty Free Shop	25.90	100.99	40.65	57.84
Advertising	0.75	6.42	3.72	7.52
Total	53.98	233.72	146.28	156.86

8.6. Since non aeronautical revenues proposed by KIAL are within the benchmark range in comparison to non-aeronautical revenue per passenger at other airports, the Authority has proposed to allow such revenues for the current control period.

Table 20: Revenue from non-aeronautical services for the first control period as per the Authority (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
F&B services	1.04	2.53	3.07	3.69	4.43
Flight Catering Services	0.64	1.46	1.65	1.86	2.10
Land Lease Revenue	0.00	0.00	0.00	0.00	0.00
Space Lease Rental	0.59	1.30	1.44	1.58	1.74
Car Park Revenue	1.20	2.93	3.55	4.27	5.12
Public Admission Charges	0.38	0.93	1.13	1.36	1.63
Duty Free Shop	4.17	10.14	12.27	14.76	17.72
Advertising	0.12	0.28	0.30	0.33	0.37
Total	8.16	19.57	23.41	27.85	33.11

Proposal No. 4 Regarding Non Aeronautical Revenues

- 4.a. The Authority has proposed to exclude lease rental revenue from Aircraft Maintenance Centre, Logistics and Redistribution Centre and Fuel Farm and consider it as part of revenue from aeronautical services.
- 4.b. The Authority has proposed to consider the Non Aeronautical Revenue as given in Table 20 for determination of aeronautical tariffs for the first control period.

- 4.c. The Authority has proposed to true-up the Non Aeronautical Revenue based on the actual Non Aeronautical Revenue earned during the first control period.**

9. TAXATION

9.1. Clause 5.5.1 and Clause 5.5.2 of the Airport Guidelines state that:

“Taxation represents payments by the Airport Operator in respect of corporate tax on income from assets/ amenities/ facilities/ services taken into consideration for determination of Aggregate Revenue Requirement.”

“The Authority shall review forecast for corporate tax calculation with a view to ascertain inter alia the appropriateness of the allocation and the calculations thereof.”

9.2. As per the Airport Guidelines any interest payments, penalty, fines and other such penal levies associated with corporate tax, shall not be taken into consideration as expenditure or cost.

9.3. Tax liability during the first control period considered by KIAL is provided in Table 21 below:

Table 21: Tax liability as per KIAL’s submission (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Return on RAB	113.83	246.97	239.02	260.99	281.94
Less: Interest on Loan	-61.81	-122.38	-121.17	-111.67	-100.89
Estimated profit	52.01	124.59	117.85	149.33	181.05
Tax rate (incl gross up)	26.52%	26.52%	26.52%	26.52%	26.52%
Estimated tax cost	13.79	33.04	31.25	39.60	48.01

Authority’s Examination

9.4. The Authority has noted that KIAL has calculated corporate tax liability @ 26.52% p.a. on return on RAB less interest on loan. Tax should be calculated on Aeronautical profit, Aeronautical profits should be derived from revenues expected to be earned (i.e. based on estimated traffic multiplied by proposed tariff). Further, impact of benefit from unabsorbed tax losses and unabsorbed depreciation and MAT liability on net tax liability should also be considered.

9.5. Accordingly, the Authority has recalculated the net tax liability on KIAL’s revised profit from aeronautical services after taking into account the impact of benefit from unabsorbed tax losses and unabsorbed depreciation. Table 22 below depicts the net tax liability on profit from aeronautical services:

Table 22: Net tax liability as per the Authority (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Aeronautical revenue	79.88	182.13	206.29	232.64	262.05
Less: Operating expenses	(11.06)	(47.13)	(54.27)	(62.42)	(71.88)
EBIDTA	68.82	135.00	152.01	170.22	190.17
Less: Book depreciation	(29.79)	(59.74)	(59.74)	(59.74)	(59.74)
Less: Interest - RTL	(60.30)	(120.60)	(119.23)	(109.64)	(98.67)
Less: Banking and Financing Charges	(1.13)	(1.13)	(1.13)	(1.13)	(1.13)
Less: Interest on WC Loan	(1.08)	(2.17)	(2.44)	(2.74)	(3.07)
PBT	(23.49)	(48.64)	(30.54)	(3.04)	27.56

Tax	-	-	-	-	(5.71)
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Proposal No. 5 Regarding Taxation

- 5.a. **The Authority has proposed to consider tax as given in Table 22.**
- 5.b. **The true up amount shall be based on actual tax paid during the first control period**

10. AGGREGATE REVENUE REQUIREMENT

10.1. The Aggregate Revenue Requirement (ARR) computed by KIAL for the first control period is as shown in Table 23 below:

Table 23: ARR and shortfall for the first control period as per KIAL (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Total
Average Regulatory Asset Base	901.12	1,955.14	1,892.25	2,066.20	2,231.98	
Weighted Average Cost of Capital	13.17%	13.17%	13.17%	13.17%	13.17%	
RAB * WACC	112.74	244.61	236.74	258.50	279.24	
Depreciation	29.79	59.74	59.74	75.26	75.26	
Operating Expenses	26.09	75.91	81.67	93.85	102.16	
Tax cost	13.36	32.10	30.30	38.55	46.88	
Less: Non-Aero Revenue	-2.48	-5.93	-7.07	-8.41	-9.98	
Aggregate Revenue Requirement	179.51	406.43	401.39	457.75	493.56	
Aeronautical Revenues	-83.99	-188.08	-209.69	-238.06	-263.97	
UDF collections proposed	-37.52	-84.50	-94.75	-105.50	-117.25	
Gap to be bridged (shortfall)	58.00	133.85	96.94	114.19	112.34	515.32

Authority's Examination

10.2. The Authority has proposed that the date of order shall be considered as 1 October 2018 for calculating discounting factors.

10.3. ARR as per the Authority after considering the above changes is provided in Table 24 below:

Table 24: ARR and shortfall for the first control period as per the Authority (in ₹ crores)

Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	Total
Average RAB [1] as per Table 9	881.08	1,732.30	1,672.56	1,612.82	1,553.07	
FRoR [2] as per Table 12	13.06%	13.06%	13.06%	13.06%	13.06%	
Discount Factor	0.94	0.84	0.74	0.66	0.58	
Return on Average RAB [3] = [1] * [2]	115.06	226.22	218.41	210.61	202.81	
Add: Depreciation [4] as per Table 7	29.79	59.74	59.74	59.74	59.74	
Add: Operating expenses [5] as per Table 16	11.06	47.13	54.27	62.42	71.88	
Add: Taxation [6] as per Table 22	-	-	-	-	5.71	
Add: Under / (Over) Recovery from Previous Control Period [7]						
Less: 30% of non - aeronautical revenue [8] as per Table 20	(2.45)	(5.87)	(7.02)	(8.36)	(9.93)	
ARR [9] = [3] + [4] + [5] + [6] + [7] - [8]	153.46	327.21	325.41	324.42	330.21	
PV (Discounted ARR) [10]	144.40	272.24	239.46	211.16	190.10	1,057.37
Aeronautical revenues as per Table 29	79.88	182.13	206.29	232.64	262.05	
PV (Discounted aeronautical revenues)	75.16	151.53	151.81	151.42	150.86	680.78

Shortfall	69.24	120.71	87.66	59.74	39.24	376.58
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Proposal No. 6 Regarding ARR and its resultant shortfall/ excess calculations

- 6.a. The Authority has proposed to consider the ARR and its resultant shortfall of ₹376.58 crores as provided in Table 24 for determination of aeronautical tariffs for the first control period.**
- 6.b. True up of all the building blocks shall be considered in the next control period**

11. TRAFFIC FORECAST

- 11.1. As per the Airport Guidelines, the airport operator is required to submit traffic forecasts as part of the MYTP submissions. The Airport Guidelines further provide that the Authority would reserve the right to review such forecast assumptions, methodologies and processes to determine the final forecast to be used for determination of tariffs. The Guidelines further state that the Authority will also use forecast correction mechanism if the actual traffic happens to fall outside the prescribed bands whilst keeping the upper and lower band percentages equal. As part of the tariff determination process, the Authority would require Airport Operators to provide proposals for the values of the upper and lower bands, support of evidence for the rationale of such bands and will review the operation of the bands and determine the final bands for tariff determination. As per the Guidelines (Clause 6.15.2), any variation outside these bands would be shared equally between the Airport Operator and users.
- 11.2. Traffic projections submitted by KIAL are based on study conducted by AECOM India Private Limited (AECOM). The study is based on top-down approach for traffic forecast analysis. First, traffic forecasts have been made for Kerala based on the historical trend analysis of the passenger, air traffic movement and cargo traffic for scheduled operations at other international airports in Kerala, viz. Cochin, Calicut and Trivandrum and use of regression technique for forecasting. The results have then been used to arrive at the forecast for Kannur International Airport based on assumptions for likely share of Kannur Airport in the Kerala aviation market.
- 11.3. KIAL has informed the Authority that traffic has been projected based on the assumption that Kannur Airport shall be included as a point of call for foreign carriers. However till now there is no confirmation in this regard. In case Kannur Airport is not accorded point of call for foreign airlines, passenger and ATM traffic may not reach the projected figures. Since the costs and revenue have been forecast based on traffic estimates it is important to have reliable traffic projections during the control period.
- 11.4. Based on the above, KIAL has requested that the traffic estimates submitted as part of tariff proposals may be trued up based on actual traffic, in the next control period. Further, the projected Passenger & ATM traffic along with their Y-o-Y growth rates as considered by KIAL is provided in Table 25 and Table 26 below:

Table 25: Projected annual passenger traffic as per KIAL submission

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY 18-19*	140,000	-	1,470,000	-
FY 19-20	160,000	14.29%	1,650,000	12.24%
FY 20-21	180,000	12.50%	1,850,000	12.12%
FY 21-22	200,000	11.11%	2,060,000	11.35%
FY 22-23	220,000	10.00%	2,290,000	11.17%

Table 26: Projected annual ATM traffic as per KIAL submission

Financial Year	Domestic	Y-o-Y growth (Domestic)	International	Y-o-Y growth (International)
FY 18-19*	2015		13372	
FY 19-20	2246	11.46%	14746	10.28%
FY 20-21	2481	10.46%	16139	9.45%
FY 21-22	2737	10.32%	17637	9.28%
FY 22-23	3014	10.12%	19251	9.15%

**Traffic for FY18-19 has been considered proportionately (i.e. for 6 months) for operational period starting from 01.10.2018*

Proposal No. 7 Regarding Traffic Forecast

- 7.a. The Authority has proposed to consider KIAL's submission of projected passenger traffic as given in Table 25 and projected ATM traffic as given in Table 26.
- 7.b. True up decision shall be based on the actual traffic during the first control period.

12. ANNUAL TARIFF PROPOSAL

KIAL via its submission proposed the following tariffs (excluding taxes/levies) for the control period from 01.04.2018 to 31.03.2023.

12.1. Landing charges

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
International						
Up to 100 MT	INR/MT	369	387	406	426	448
Above 100 MT	INR/MT	36,900 + 495 in excess of 100 MT	38,700 + 520 in excess of 100 MT	40,600 + 546 in excess of 100 MT	42,600 + 573 in excess of 100 MT	44,800 + 602 in excess of 100 MT
Other than international						
Up to 100 MT	INR/MT	268	281	295	310	325
Above 100 MT	INR/MT	26,800 + 358 in excess of 100 MT	28,100 + 376 in excess of 100 MT	29,500 + 395 in excess of 100 MT	31,000 + 415 in excess of 100 MT	32,500 + 436 in excess of 100 MT
Domestic aircrafts up to 21 MT	INR/MT	162	170	179	179	179
Notes:						
<p>1a. Charges shall be calculated on the basis of nearest MT (i.e. 1,000 Kgs)</p> <p>1b. A minimum fee of Rs. 2,000/- shall be charged per single landing</p> <p>1c. For flight operations with Aircraft registered in India, the flight is classified Domestic or International based on the immediate previous station, irrespective of the flight number assigned to such flights.</p> <p>1d. All flight operations with Aircraft not having India as state of registry will be considered International for calculation of airside user charges irrespective of immediate previous station.</p> <p>1e. All domestic legs of international routes flown by Indian Operators will be treated as domestic flights as far as landing charges is concerned, irrespective of flight number assigned to such flights</p> <p>1f. No landing charges shall be payable in respect of a) aircraft with a maximum certified capacity of less than 80 seats being operated by domestic scheduled operators at airport and b) Helicopters of all types.</p> <p>1g. Charges shall be calculated on the basis of nearest MT (i.e. 1,000 kg)</p> <p>1h. Flight operating under Regional Connectivity Scheme will be completely exempted from landing charges from the date the scheme is operationalized by GOI.</p>						

12.2. Housing charges

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Up to 100 MT	INR/hour/MT	12	13	14	15	16
Above 100 MT	INR/hour/MT	1,200 + 17 in excess of 100 MT	1,300 + 18 in excess of 100 MT	1,400 + 19 in excess of 100 MT	1,500 + 20 in excess of 100 MT	1,600 + 21 in excess of 100 MT

12.3. Parking charges

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Up to 100 MT	INR/hour/MT	6.0	6.5	7	7.5	8
Above 100 MT	INR/hour/MT	600 + 8.0 in excess of 100 MT	650 + 8.5 in excess of 100 MT	700 + 9.0 in excess of 100 MT	750 + 9.5 in excess of 100 MT	800 + 10.0 in excess of 10 MT
<p>3a. When an aircraft is parked in the open, only the housing charges specified above shall be levied, provided that no parking charges shall be levied for the first two hours.</p> <p>3b. For calculating chargeable parking time, part of an hour shall be rounded off to the next hour</p> <p>3c. Charges shall be calculated on the basis of nearest MT.</p> <p>3d. Charges for each period of parking shall be rounded off to nearest Rupee.</p> <p>3e. At the in- contact stands, after free parking, for the next two hours normal parking charges shall be levied. After this period, the charges shall be double the normal parking charges.</p> <p>3f. No landing charges will be levied in respect of Military Aircraft (Government of India) including para-military forces such as BSF, Coast Guard etc. Military aircrafts as mentioned above are also exempted from payment of parking charges.</p>						

12.4. Night parking charges (between 2200 hours to 0600 hours)

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Up to 100 MT	INR/hour/MT	3	3.5	4	4.5	5
Above 100 MT	INR/hour/MT	300 + 4.0 in excess of 100 MT	350 + 4.5 in excess of 100 MT	400 + 5.0 in excess of 100 MT	450 + 5.5 in excess of 100 MT	500 + 6.0 in excess of 100 MT

12.5. Passenger service fees

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Domestic	INR/dep/PAX	200	200	200	200	200
Security	INR/dep/PAX	130	130	130	130	130
Facilitation	INR/dep/PAX	70	70	70	70	70
International	USD/dep/PAX	5	5	5	5	5
Security	USD/dep/PAX	3.25	3.25	3.25	3.25	3.25
Facilitation	USD/dep/PAX	1.75	1.75	1.75	1.75	1.75
<p>5a. PSF SC Rates as determined/revised by Ministry of Civil Aviation will be made applicable from time to time.</p> <p>5b. Exemption to Infant (Under 2 Years age), Transit /Transfer passengers.</p> <p>5c. Exemption to Airlines from paying PSF for Sky Marshals.</p> <p>5d. Crew on duty exempted from paying PSF.</p> <p>5e. PSF would be based on country of registry of Aircraft, For Indian Registered aircraft, the charges would be in INR and Aircraft registered outside India charges would be in USD.</p> <p>5f. No landing charges will be levied in respect of Military Aircraft (Government of India) including para-military forces such as BSF, Coast Guard etc. Military aircrafts as mentioned above are also exempted from payment of parking charges.</p>						

12.6. Aerobridge charges

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
International						
<u>Single Aerobridge used by an Aircraft</u>						
Up to 90 minutes	USD	60	60	60	60	60
For every 30 min beyond 90 min	USD	20	20	20	20	20
<u>Two Aerobridges used by an Aircraft</u>						
Up to 90 minutes	USD	90	90	90	90	90
For every 30 min beyond 90 min	USD	30	30	30	30	30
Domestic						
Up to 90 minutes	INR	2,500	2,500	2,500	2,500	2,500
For every 30 min beyond 90 min	INR	1,000	1,000	1,000	1,000	1,000
6a. Aerobridge charges are payable by Airline Operators to Kannur International Airport Limited						
6b. The Aerobridge charges are payable based on the time of usage.						
6c. Usage charges will be billed on the basis of the data recorded by the Aerobridge operator.						
6d. The conversion rate for US Dollar shall be the rate as on 1st of every month for the billing for the first fortnight and the rate applicable on 16th for the billing for second fortnight of every month.						
6e. No Exemptions.						

12.7. Inline X ray charges

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
International						
<u>Aircraft capacity</u>						
1-100	USD			150		
101-150	USD			180		
151-180	USD			220		
181-300	USD			250		
Above 300	USD			300		
Domestic						
<u>Aircraft capacity</u>						
1-100	INR			5,000		
101-150	INR			7,000		
151-180	INR			9,000		
181-300	INR			11,000		
Above 300	INR			13,000		

12.8. Fuel throughput charges

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Fuel throughput charges	INR/kl	976.58	1,018.62	1,062.75	1,105	1,149

12.9. CUTE/CUSS/BRS

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Domestic	USD per dep pax			1.15		
International	USD per dep pax			1.25		

12.10.UDF

Particulars	Unit	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
Domestic embarking passenger	INR			250		
International embarking passenger	INR			1,000		

Authority's Examination

12.11. The Authority has observed that there is a shortfall between the ARR and the projected aeronautical revenue during the control period and therefore the Authority has proposed to accept KIAL's Annual Tariff Proposal as in para 12.

12.12. Further, the Authority has proposed to consider 01.10.2018 as the date of implementation of the proposed tariff rates

12.13. However, in respect of ATP submitted by KIAL, the Authority is of the opinion that PSF (F) and Aerobridge charges may be merged with UDF. Further, the Authority also opines that except PSF (S) other charges (such as CUTE charges, Aerobridge charges, Inline X ray charges) may be expressed in INR.

Proposal No. 8 Regarding Annual Tariff Proposal

8.a. It has been observed that there is a shortfall between the ARR and the projected aeronautical revenue during the control period and therefore the Authority has proposed to accept KIAL's Annual Tariff Proposal as in para 12.

8.b. The Authority has proposed to consider 01.10.2018 as the date of implementation of the proposed tariff rates.

13. REVENUE FROM AERONAUTICAL SERVICES

13.1. As per section 2(a) of the AERA act, aeronautical services include services for Landing, Housing or Parking, Ground handling services, services for Cargo facility, and services for supplying fuel to the aircraft at an airport.

Table 27: Assumptions made by KIAL for each item of Aeronautical Revenue

Item	Assumption
Landing Fee	Landing rates have been assumed as per rates mentioned in ATP. An annual escalation of 5% is assumed based on escalation in tariff orders of AERA.
Parking and Housing Fee	Parking and housing charges are based on the number of hours the flight is parked in airport. Since it is difficult to arrive at standard waiting hours for each category of flight, this has been computed at 10% of landing charges each.
PSF Charges	Revenue from PSF (Facilitation) has been assumed at ₹70 per departing domestic passenger and 1.75 USD per departing international passenger. Departing passengers have been assumed as 50% of domestic and international projected passenger traffic.
Aerobridge charges	Aerobridge charges have been assumed at ₹2,500 per domestic ATM and ₹4,200 per international ATM. Aerobridge usage has been assumed at 50%
X-Ray Fee	X-Ray charges have been computed as per rates mentioned in ATP.
Fuel Throughput Charges	Fuel throughput charge is assumed at 7 kilo liters of fuel supplied per ATM (departure). The current fuel throughput observed at Kochi Airport per ATM (departure) for FY 11 and FY 12 is in the range of 9.5-10 KL/ ATM (departure). While this is likely to go up further, a conservative estimate has been taken in financial model. Fuel throughput charges have been considered at ₹976.58 per KL for FY18-19 with an annual escalation as mentioned in the ATP.
CUTE/ CUSS/ BRS	CUTE/ CUSS/ BRS will be charged at 1.15 USD per domestic departing passenger and 1.25 USD per international departing passenger.
User Development Fee	UDF is assumed in the base case as per the rates approved by KIAL Board – at ₹250 for domestic & ₹1,000 for International passengers has been considered.
Royalty from Cargo	Cargo activities of the airport are expected to be outsourced. The infrastructure will be constructed by the airport operator and operational activities will be outsourced. It is estimated that Rs.2500 per metric tons will be generated by the outsourced parties and out of which 20% of which will be collected as royalty to the airport operator with an annual escalation of 5% per annum. These rates are multiplied by the forecasted year on year cargo traffic to arrive at the cargo income. The rate has been estimated based on average charge for export, import & transshipment at Trivandrum airport.
Royalty from Ground Handling	It has been assumed that 40% of the total ATMs will avail ground handling services while computing revenue from ground handling services. Royalty to be received by the airport operator is considered at the rate of 20% of such ground handling revenue. Further, annual escalation of 8% has been considered.

13.2. KIAL has submitted that Passenger Service Fee (Facilitation) or PSF (F) forming part of ATP shall be merged with UDF in the first control period. Further no UDF shall be charged in case PSF (F) is continued to be levied in the first control period.

Table 28: Projected revenue from aeronautical services as furnished by KIAL for first control period (in ₹ crores)

S.no	Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
1	Revenue from Landing Charges	17.26	40.08	46.07	52.86	60.68
2	Housing Charges	1.73	4.01	4.61	5.29	6.07
3	Parking Charges	1.73	4.01	4.61	5.29	6.07
4	Passenger Service Fee -Facilitation	4.73	10.67	11.96	13.32	14.80

S.no	Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
	Component					
5	Aerobridge Charges	0.76	1.69	1.85	2.02	2.21
6	X-Ray screening	4.14	9.17	10.04	10.98	11.99
7	Fuel Throughput charges	2.62	6.06	6.93	7.88	8.95
8	CUTE/CUSS/BRS	3.49	7.86	8.82	9.82	10.90
9	UDF	37.52	84.50	94.75	105.50	117.25
10	Cargo and Ground Handling Revenue share estimated	10.00	20.00	20.00	25.00	25.00
	Total	83.99	188.05	209.63	237.95	263.93

Authority's Examination

13.3. After careful examination of the various assumptions relating to aeronautical revenues, the Authority has proposed to consider revenue from lease of land for Aircraft Maintenance Centre, Logistics and Redistribution Centre and Fuel Farm as revenue from aeronautical services (as discussed in Proposal 4.a).

13.4. Revenue from Aeronautical services as per the Authority after considering the above changes is provided in Table 29 below:

Table 29: Aeronautical revenues as per the Authority (in ₹ crores)

S.no	Particulars	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23
1	Landing Charges	17.26	40.11	46.12	52.95	60.72
2	Parking	1.73	4.01	4.61	5.29	6.07
3	Housing	1.73	4.01	4.61	5.29	6.07
4	Passenger service fee	4.73	10.67	11.96	13.32	14.80
5	Aerobridge charges	0.76	1.69	1.85	2.02	2.21
6	X-Ray charges	4.14	9.17	10.04	10.98	11.99
7	Fuel Throughput Charge	2.62	6.06	6.93	7.88	8.95
8	CUTE	3.49	7.86	8.82	9.82	10.90
9	UDF	37.52	84.50	94.75	105.50	117.25
10	Cargo and Ground Handling Revenue share estimated	5.82	13.92	16.46	19.44	22.94
11	Land Lease Revenue (Aeronautical)	0.07	0.14	0.14	0.14	0.14
	Total	79.88	182.13	206.29	232.64	262.05

Proposal No. 9 Regarding Aeronautical Revenues

- 9.a. The Authority has proposed to consider revenue from lease of land for Aircraft Maintenance Centre, Logistics and Redistribution Centre and Fuel Farm as revenue from aeronautical services
- 9.b. The Authority has proposed to consider the Aeronautical Revenue as given in Table 29. for determination of aeronautical tariffs for the first control period.
- 9.c. The Authority proposes to true up the Aeronautical Revenue based on actual revenue during the first control period.

14. QUALITY OF SERVICE

14.1. The Authority notes that Kannur International Airport will be a newly constructed Airport hence ASQ ratings shall not be available at present. The Authority will review the Quality of service parameters based on the ASQ ratings obtained by KIAL and any study that the Authority may undertake in the next control period.

15. SUMMARY OF PROPOSALS

Proposal No. 1 Regarding RAB..... 13

- 1.a. *The Authority has proposed to remove land cost from RAB. 13*
- 1.b. *The Authority has proposed to exclude cost of ₹490 crores pertaining to cost towards runway extension proposed to be incurred in FY 20-21 as incurrence of such cost is not certain yet. 13*
- 1.c. *The Authority has tentatively accepted the allocation of assets in to aeronautical and non-aeronautical assets in the ratio 95:5. A detailed study will be conducted to determine the actual usage before true up in the next control period. 13*
- 1.d. *The Authority has proposed to consider RAB during the first control period for calculation of ARR as shown in Table 9. ... 13*
- 1.e. *The Authority proposes to true up Average RAB and depreciation based on the actual date of capitalization. 13*

Proposal No. 2 Regarding FRoR 15

- 2.a. *The Authority has proposed to consider the Cost of Equity at 16% p.a. and FRoR at 13.06% p.a. for KIAL for the first control period. 15*
- 2.b. *FRoR will be trued up based on actual cost of debt and cost of equity which will be decided upon after the proposed study on the cost of equity at major airports. 15*

Proposal No. 3 Regarding Operation and Maintenance expenditure..... 17

- 3.a. *The Authority has proposed to exclude expenses relating to the staff of CISF. 17*
- 3.b. *The Authority has proposed to accept allocation of aeronautical and non-aeronautical expenses in the ratio of 95:05. 17*
- 3.c. *The Authority has proposed to consider the operational and maintenance expenditure as given in Table 16, for the purpose of determination of aeronautical tariffs for the first Control Period. 18*
- 3.d. *The Authority also proposes to true up the Operating expenses based on the actual expenditure during the first control period. 18*

Proposal No. 4 Regarding Non Aeronautical Revenues..... 20

- 4.a. *The Authority has proposed to exclude lease rental revenue from Aircraft Maintenance Centre, Logistics and Redistribution Centre and Fuel Farm and consider it as part of revenue from aeronautical services. 20*
- 4.b. *The Authority has proposed to consider the Non Aeronautical Revenue as given in Table 20 for determination of aeronautical tariffs for the first control period. 20*
- 4.c. *The Authority has proposed to true-up the Non Aeronautical Revenue based on the actual Non Aeronautical Revenue earned during the first control period. 21*

Proposal No. 5 Regarding Taxation..... 23

- 5.a. *The Authority has proposed to consider tax as given in Table 22. 23*
- 5.b. *The true up amount shall be based on actual tax paid during the first control period 23*

Proposal No. 6 Regarding ARR and its resultant shortfall/ excess calculations 25

- 6.a. *The Authority has proposed to consider the ARR and its resultant shortfall of ₹376.58 crores as provided in Table 24 for determination of aeronautical tariffs for the first control period. 25*

6.b. *True up of all the building blocks shall be considered in the next control period* 25

Proposal No. 7 Regarding Traffic Forecast 27

7.a. *The Authority has proposed to consider KIAL's submission of projected passenger traffic as given in Table 25 and projected ATM traffic as given in Table 26.* 27

7.b. *True up decision shall be based on the actual traffic during the first control period.* 27

Proposal No. 8 Regarding Annual Tariff Proposal..... 31

8.a. *It has been observed that there is a shortfall between the ARR and the projected aeronautical revenue during the control period and therefore the Authority has proposed to accept KIAL's Annual Tariff Proposal as in para 12.31*

8.b. *The Authority has proposed to consider 01.10.2018 as the date of implementation of the proposed tariff rates.*31

Proposal No. 9 Regarding Aeronautical Revenues..... 33

9.a. *The Authority has proposed to consider revenue from lease of land for Aircraft Maintenance Centre, Logistics and Redistribution Centre and Fuel Farm as revenue from aeronautical services* 33

9.b. *The Authority has proposed to consider the Aeronautical Revenue as given in Table 29. for determination of aeronautical tariffs for the first control period.* 33

9.c. *The Authority proposes to true up the Aeronautical Revenue based on actual revenue during the first control period.*.....33

16. **STAKEHOLDERS' CONSULTATION TIMELINE**

- 16.1. The Aggregate Revenue Requirement determined by the Authority is being put up for Stakeholder Consultation along with the ATP submitted by KIAL.
- 16.2. In accordance with the provision of Section 13(4) of the AERA Act, 2008, the proposals mentioned in the Section – Summary of proposals (Para 15 above) read with the relevant discussion in the other sections of the paper is hereby put forth for Stakeholders' Consultation. To assist the Stakeholders in making their submissions in a meaningful and constructive manner, necessary documents are enclosed as [Annexure](#). For removal of Doubts, it is clarified that the contents of this consultation paper may not be construed as any order or Direction of this Authority. The Authority shall pass an order, in the matter, only after considering the submissions of the Stakeholder's in response hereto and by making such decisions fully documented and explained in terms of the provisions of the Act.
- 16.3. The Authority welcomes written evidence- based feedback, comments and suggestions from Stakeholder's on the proposal made in (Para 15 above), latest by **05.10.2018** at the following address.

Secretary

Airports Economic Regulatory Authority of India

AERA Building, Administrative Complex

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New Delhi -110003

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Chairperson

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