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Consultation Paper No. 29/2017-18



Airports Economic Regulatory Authority of India

**In the matter of Determination of Fuel Infrastructure Charges in respect of Indian Oil
Skytanking Limited at KIA airport, Bengaluru
(01.04.2016 – 31.03.2021)**

20 September 2017

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

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1. LIST OF ABBREVIATIONS

AERA or the Authority	Airport Economic Regulatory Authority of India	IND AS	Bengaluru Indian Accounting Standard
Aero	Aeronautical		5% per annum for 5 years from 01.04.2017 as per RBI's Survey of Professional Forecasters on Macroeconomic Indicators – Results of the 45th Round dated 6th April 2017
ARR	Aggregate Revenue Requirement	Inflation CPI	
ATF	Aviation Fuel		
ATM	Air traffic movement	INR or ₹	Indian rupees
ATP	Annual Tariff Proposal	IOCL	Indian Oil Corporation Limited
BPCL	Bharat Petroleum Corporation Limited	IOSL	Indian Oil SkyTanking Limited
CA	Concession & Operating Agreement between IOSL and BIAL	IRR	Internal Rate of Return
CAGR	Compounded Annual Growth Rate	ITP	Into Plane Service Provider
CAPEX	Capital Expenditure	JVC	Joint Venture Company
CGF	Cargo Facility, Ground Handling and Fuel Supply services	Ke	Cost of equity
CGF Guidelines	Airports Economic Regulatory Authority of India [Terms and Conditions for Determination of Tariff for Services Provided for Cargo Facility, Ground Handling and Supply of Fuel to the Aircraft) Guidelines, 2011 dated 10.01.2011	KL	Kilo litre
Concession period	Concession term is for 20 years from date of commencement of operations i.e. 24.05.2008	MAT	Minimum Alternate Tax
CSR	Corporate Social Responsibility	MYTO	Multi Year Tariff Order
IOSL/ Fuel Farm Operator	Indian Oil Skytanking Private Limited	MYTP	Multi Year Tariff Proposal
BIAL/ Airport Operator	Bangalore International Airport Limited	NAR	Non-aeronautical revenues
FIC or Infrastructure charge	Fuel Infrastructure Charge	O&M	Operating and Maintenance
FRoR	Fair Rate of Return	OPEX	Operating Expenditure
FY	Financial Year	P&L	Profit and Loss
GOI	Government Of India	p.a.	Per annum
KIA	Kempegowda International Airport,	PAX	Passenger(s)
		PV	Present value
		RAB	Regulatory Asset Base
		SLM	Straight Line Method
		Sq.m.	Square Metre
		YPP	Yield per passenger

2. BACKGROUND

- 2.1. Indian Oil Skytanking Private Limited (IOSL) is a JVC between IOCL (50%) and Skytanking Holdings GmbH, Germany (50%). Pursuant to Concession & Operating Agreement between IOSL and BIAL for 20 years from 24.05.2008, IOSL handles the fuel farm facility and ITP services at Kempegowda International Airport, Bangalore. IOSL has submitted that the fuel farm facility is based on open access model wherein airlines may source their own fuel from any oil company and use the fuel farm's storage facilities at agreed price levels.
- 2.2 The Authority had considered the MYTP (for the first Control Period from 01.04.2011 to 31.03.2016) submitted by IOSL for providing fuel farm services at KIA Airport and issued Order No. 05/2013-14 dated 04.04.2013 which, inter alia, provided the following:
- 2.2.1 The infrastructure charge in respect of the fuel farm services provided by IOSL at KIA Airport for the first control period from 01.04.2011 to 31.03.2016 would be determined under 'Light Touch Approach'.
- 2.2.2 The Authority noted that the tariff item, i.e., "Fuel Throughput Fee" has two components: "Airport Operator Fee" and "Operating Cost & Reserve Fund." The Authority decided to determine the "Airport Operator Fee" component of the tariff items, "Fuel Throughput Fee" as part of the exercise of determination of tariffs for aeronautical services provided by BIAL at KIA, Bengaluru.
- 2.2.3 The Authority decided that, purely for that time being, the "Airport Operator Fee" component of "Fuel Throughput Fee" would be determined at ₹1067/KL, till its appropriate final determination as part of aeronautical tariffs in respect of Bangalore International Airport - based on the tariffs proposal submitted by BIAL. "Airport Operator Fee" is charged by BIAL, towards the aeronautical service of supply of fuel provided by it.
- 2.2.4 The Authority determined the "Operating Cost and Reserve Fund" component of the "Fuel Throughput Fee" tariff item as ₹433/KL for Fuel Farm Services provided by IOSL at KIA, Bengaluru for the first control period (i.e., from 1.4.2011 to 31.3.2016).
- 2.3 Subsequently IOSL has approached the Authority with its MYTP seeking approval on increase in tariff for "Operating Cost and Reserve Fund" component of the "Fuel Throughput Fee" (referred to as FIC in this consultation paper) by ₹200/ KL (revised fee would be Rs.633/KL), "Airport Operator Fee" component of FIC shall continue to be charged at ₹1067/ KL. Accordingly, the revised FIC proposed by IOSL is ₹1700/ KL for the second control period from 01.04.2016 to 31.03.2021.
- 2.4 IOSL has filed its MYTP submissions vide their letter dated 8th March 2016 before the Authority. IOSL filed auxiliary submissions dated 22.02.2017, 03.03.2017, 19.04.2017, 02.05.2017 and 10.07.2017.

- 2.5 Further, vide Order No. 19/ 2016-17 dated 20th March, 2017 issued by the Authority, IOSL may be allowed to continue levy of the tariffs existing as on 31.03.2016 till determination of tariffs for the second control period.

3. METHODOLOGY FOR TARIFF CALCULATION

- 3.1 As stipulated in the CGF Guidelines, the Authority shall follow a three stage process for determining its approach to the regulation of a regulated service -
 - 3.1.1 Materiality Assessment;
 - 3.1.2 Competition Assessment;
 - 3.1.3 Assessment of reasonableness of the User Agreements between the service providers and the users of the regulated services.
- 3.2 Based on the Authority's review as described above where the Regulated Service(s) provided are deemed:
 - 3.2.1 '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
 - 3.2.2 'material but competitive', the Authority shall determine Tariff(s) for Service Provider(s) based on a light touch approach for the duration of the Control Period
 - 3.2.3 'material and not competitive' but where the Authority is assured of the reasonableness of the existing User Agreement(s), the Authority shall determine Tariff(s) for Service Provider(s) based on a light touch approach for the duration of the Control Period
 - 3.2.4 'material and not competitive' and where the Authority is not assured of the reasonableness of the existing User Agreement(s), the Authority shall determine Tariff(s) based on price cap approach for the duration of the Control Period.
- 3.3 Based on IOSL's submission, the materiality index with respect to services provided for supply of fuel to aircraft at KIA, is more than 5% materiality index fixed for assessing the materiality of the subject regulated service. Hence the service is deemed to be "material".
- 3.4 The CGF Guidelines provide that where a Regulated Service is being provided at a major airport by two or more Service Provider(s), it shall be deemed "competitive" at that airport and if such service is provided by less than two Service Provider(s), it shall be deemed "not competitive". The Guidelines also provide that the Authority may in its discretion consider such other additional evidence regarding reasonableness of competition, as it may deem fit and the determination of number of Service Provider(s) at a major airport shall include the Airport Operator, if the Airport Operator is also providing Regulated Service(s) at that major airport.
- 3.5 In the instant case, the Fuel Farm services at KIA is being provided by solely by IOSL. Hence, the service is deemed to be "not competitive".
- 3.6 The Authority has noted that as per the CGF Guidelines, based on the assessment of materiality and competition, when such regulated service is deemed "material and not competitive", the Authority shall then assess the reasonableness of existing User

Agreement(s) and where the Authority is assured of the reasonableness of the existing User Agreement(s), the Authority shall determine Tariff(s) for the service providers based on a light touch approach.

- 3.7 Regarding Reasonableness of User Agreement(s), the CGF Guidelines provide that the Authority shall consider the existing User Agreement(s) as reasonable provided that:

3.7.1 *"(i) The service provider submits existing User Agreement(s) between the Service Provider and all the User(s) of the Regulated Service(s), clearly indicating the tariff(s) that are agreed to between the Service Provider and the User(s) of the Regulated Service(s), and*

(ii) The User(s) of the Regulated Service(s) have not raised any reasonable objections or concerns in regard to the existing User Agreement(s), which have not been appropriately addressed.

Provided that the Authority may in its discretion consider such other additional evidence regarding reasonableness of User Agreement(s), as it may deem fit."

- 3.8 The Authority noted that IOSL was set up essentially to provide common access to all suppliers of fuel and remains a monopoly provider of infrastructure of fuel supply. Hence, the Authority has decided to determine tariff for fuel supply service provided by IOSL at KIA, Bengaluru under price cap regulation for the second control period.

- 3.9 For Regulated Service(s) deemed 'material and not competitive' and where the Authority is not assured of the reasonableness of the existing User Agreement(s), the Authority shall calculate the Aggregate Revenue Requirement (ARR) for the second control period on the basis of the following Regulatory Building Blocks:

3.9.1 Fair Rate of Return applied to the Regulatory Asset Base (FRoR x RAB)

Plus

3.9.2 Operation and Maintenance Expenditure (O)

Plus

3.9.3 Depreciation (D)

Plus

3.9.4 Taxation (T)

Minus

3.9.5 Revenue from services other than aeronautical services (NAR).

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

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

$$ARR_t = (FRoR \times RAB_t) + D_t + O_t + T_t - NAR_t$$

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 the revenue from services other than aeronautical services for the year 't'

- 3.11 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 ARR during the control period. In case the present value of estimated 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 estimated aeronautical revenue is higher than the present value of the ARR then the airport operator will have to reduce its proposed tariff.
- 3.12 The detailed submissions provided by IOSL in respect of the Regulatory Building Blocks have been discussed in the subsequent sections.

4. REGULATORY ASSET BASE (RAB) AND DEPRECIATION

- 4.1 As per clause 9.2 of the CGF guidelines, RAB assets shall be all fixed assets proposed by the Service Provider(s), after providing for such exclusions therefrom or inclusions therein as may be determined by the Authority.
- 4.2 The assets that substantially provide services not related to or not normally provided as part of Regulated Service(s) may be excluded from the scope of RAB by the Authority, in its discretion.

IOSL's submission – RAB and Depreciation

- 4.3 IOSL's submissions w.r.t components of project costs are given below:

Table 1: Capital Expenditure during the control period (in ₹ lakhs)

Particulars	Added upto 31.03.16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Land & Building	649	325	-	-	-	-
Plant & machinery (including deadstock)	8,229	2,947	2,022	200	10,000	-
Computer & IT assets (including software)	19	320	-	-	-	-
Office equipment	10	25	-	-	-	-
Vehicles	13	45	-	-	-	-
Furniture & fittings	11	-	-	-	-	-
Total	8,931	3,662	2,022	200	10,000	-

- 4.4 An estimated total investment of ₹15,884 lakhs is planned during the second control period for facility augmentation to meet the demand growth rate at Bengaluru airport. Overview of the planned investment in plant and machinery of ₹15,169 lakhs during the second control period is as follows:

Table 2: Details of capital expenditure during the second control period (in ₹ lakhs)

Year	Capital Projects to be undertaken	Estimated amount (in ₹ lakhs)
FY16-17	Various Capital Works	2,947
FY17-18	New storage tank-Tank 22, 23.	2,022
FY18-19	Valve Chambers covers replacement.	2,00
FY19-20	T 2 Phase 1 A.	10,000
Total		15,169

- 4.5 Details of estimated expenditure of ₹10,000 lakhs during FY19-20 pertaining to augmentation of facilities at fuel farm to accommodate hydrant expansion at BIAL Apron are given below:

Table 3: Details of capital expenditure during FY19-20 (in ₹ lakhs)

Sr. No.	Description	Amount (in ₹ lakhs)
1	Estimated cost for Design Construction and commissioning of above ground ATF storage tank of capacity 3300 KL, 2 nos.	2,022
2	Estimated cost for Design Construction and commissioning of above ground Fire Water storage tank of capacity 1140 KL, 2 nos.	800
3	Estimated cost for Upgradation of SCADA Software and PLC Hardware systems and Associated integration works at Fuel Farm control room.	700
4	Estimated cost for Construction of 10 ft. Boundary wall with barbed wire fence as per PESO Requirement	250
5	Estimated cost for Supply and installation of 2000 KVA stand-by transformer.	500
6	Estimated cost for Replacement of existing Fire Pump with higher capacity; (3 fire pumps and 1 jockey pump).	65
7	Estimated cost for Supply and Installation of Fuel Hydrant pumps (2 Nos).	70
8	Estimated cost for Supply and Installation of VFD and Associated Switch gear for Hydrant Pumps (2 Nos).	100
9	Estimated cost for Design and installation of firefighting facility at Tank Truck parking terminal.	30
10	Estimated cost for Renovation of Control Room to accommodate PLC cabinets.	35
11	Estimated cost for Expansion of Substation Building to accommodate additional switch gear, electric panels and cabling works.	250
12	Estimated cost for Supply and installation of additional MLDBs for substation.	25
13	Estimated cost for Construction of a maintenance workshop at Fuel Farm.	32
14	Estimated cost for Painting of four above ground ATF storage tanks.	40
15	Estimated cost for West Apron Expansion Phase 3 (9 Stands)	1,111
16	Estimated cost for Terminal T2 Phase 1a (19 stands)	3,618
	Sub - total	9,648
	GST @ 18%	1,737
	Grand total	11,385

4.6 As per IOSL, value of minimum level of fuel or deadstock ('Deadstock') stored in fuel storage tanks to be capitalized during the second control period shall be ₹440 lakhs. Deadstock has been considered as a part of plant & machinery and is being depreciated at the rate of depreciation of plant & machinery during the control period.

4.7. The straight line method of depreciation has been adopted. The useful life of assets are based on the guidelines provided in Schedule II of the Companies Act, 2013.

4.8. IOSL in its submission has depreciated various assets as follows:

Table 4: Depreciation on assets during the second control period (in ₹ lakhs)

Particulars	Upto 31.03.16	FY 16- 17	FY 17- 18	FY 18- 19	FY 19- 20	FY 20- 21
Land & Building	42	56	68	68	68	68
Plant & machinery (including deadstock)	702	821	1,053	1,058	1,306	2,096
Computer & IT assets (including software)	6	54	102	102	51	0
Office equipment	2	6	6	5	5	5
Vehicles	9	9	6	6	6	6
Furniture & fittings	3	2	2	1	0	0
Intangible assets	-	-	-	-	-	-
Total	765	949	1,237	1,239	1,437	2,176

Table 5: RAB during the second control period as per IOSL (in ₹ lakhs)

Particulars	Upto 31.03.16	FY 16- 17	FY 17- 18	FY 18- 19	FY 19- 20	FY 20- 21
Opening RAB	8,692	8,166	10,879	11,664	10,625	19,188
Additions	239	3,662	2,022	200	10,000	-
Less: Depreciation on assets	765	949	1,237	1,239	1,437	2,176
Closing RAB	8,166	10,879	11,664	10,625	19,188	17,013
Average RAB	8,429	9,522	11,271	11,144	14,907	18,101

Authority's Examination – RAB and depreciation

4.9 The Authority has proposed to revise estimates for capital expenditure during FY16-17 based on audited figures provided by IOSL.

Table 6: Revised capital expenditure during the control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Land & Building	12	325	-	-	-
Plant & machinery	508	4290	105	9846	-
Deadstock	95	95	95	154	-
Computer & IT assets (including software)	2	1,120	-	-	-
Office equipment	-	25	-	-	-
Vehicles	12	45	-	-	-
Furniture & fittings	0	-	-	-	-
Intangible assets	-	320	-	-	-
Total	629	5,901	200	10,000	-

- 4.10 The Authority noted that certain minimum level of fuel ('Deadstock') is to be stored in fuel storage tanks at all times for uninterrupted operations of the fuel farm. There are 2 possible accounting treatments for cost of Deadstock as observed in case of other fuel farms:
- 4.10.1. **Deadstock is treated as depreciable capital asset:** Cost of Deadstock is added to the capital asset (storage tank/ pipeline) cost and is depreciated at the rate of the capital asset since the fuel farm operator is required to transfer all assets at zero cost to the airport operator at the end of concession period.
- 4.10.2. **Deadstock is treated as non-depreciable capital asset:** Cost of Deadstock is accounted for as a separate capital asset (as 'Deadstock') which is not considered for depreciation since it is not possible to estimate the residual value of Deadstock and it might not also fall below 5% of the original cost. Hence depreciation is not provided for Deadstock in accordance with the provisions of the Companies Act, 2013.
- 4.11 The Authority in this regard has proposed to treat deadstock as a non-depreciable asset and consider appropriate adjustment in tariff at the time of disposal of such Deadstock in the last control period related to the concession period of the fuel farm operator.
- 4.12 The Authority notes that on some of the assets the depreciation charged by IOSL is not in line with the Companies Act 2013. The Authority is of the view that adoption of depreciation rates as prescribed under the Companies Act at any point of time is appropriate, considering the variation in policies adopted by the fuel farm operators.
- 4.13 In this regard, the Authority has issued a consultation paper titled "Consultation Paper No. 9/ 2017-18 in the matter of Determination of Useful life of Airport Assets" dated 19th June 2017, to determine appropriate depreciation rates in line with the provisions of the Companies Act 2013. Accordingly, the Authority has proposed to revise the useful life and depreciation rates in line with the proposals set out in such consultation paper. The Authority will consider changes/ revisions (if any) in the order pursuant to the aforementioned consultation paper for adjustment in RAB or true up.

4.14. Revised depreciation during the control period is as follows:

Table 7: Revised Depreciation on assets during the second control period (in ₹ lakhs)

Particulars	Rate	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Land & Building	3.3%	23	29	34	34	34
Plant & machinery	6.7%	623	789	942	1,282	1,615
Deadstock	0.0%	-	-	-	-	-
Computer & IT assets (including software)	33.3%	0.2	187	374	374	374
Office equipment	20%	2	5	7	7	7
Vehicles	10%	3	6	8	8	8
Furniture & fittings	10%	1	1	1	1	1
Intangible assets	-	-	-	-	-	-
Total		649	1,007	1,350	1,682	2,010

4.15. Revised RAB as per the Authority after considering the above proposals is shown below:

Table 8: Revised RAB during the second control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Opening RAB	8,166	8,145	13,039	11,889	20,207
Additions	629	5,901	200	10,000	0
Less: Depreciation on assets	649	1,007	1,350	1,682	2,010
Closing RAB	8,145	13,039	11,889	20,207	18,197
Average RAB	8,156	10,592	12,464	16,048	19,202

Proposal No. 1 Regarding RAB and depreciation

- 1.a. The Authority has proposed to revise estimates for capital expenditure during FY16-17 based on audited figures.
- 1.b. The Authority in this regard has proposed to treat deadstock (the minimum level of fuel in the pipeline) as a non-depreciable asset and consider appropriate adjustment in tariff at the time of disposal of such Deadstock in the last control period related to the concession period of the fuel farm operator.
- 1.c. The Authority has proposed to true up depreciation as and when the decision to revise the depreciation rates is taken at the time of determination of tariff for the third control period.
- 1.d. The Authority has proposed to true up the average RAB to be based on the actual date of capitalization at the time of determination of tariff for the third control period.

- 1.e. The Authority has proposed to consider revised average RAB during the control period for calculation of ARR as shown in Table 8.

5. FAIR RATE OF RETURN (FRoR)

IOSL's submission - FRoR

- 5.1 IOSL in its submission has proposed the capital structure, funding mechanism, and FRoR as provided below:

Table 9: Capital structure, funding mechanism and FRoR of IOSL during the second control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Equity	4,033	4,033	4,033	7,033	7,033
Debt	5,873	4,375	3,750	9,250	7,750
Debt + Equity	9,906	8,407	7,782	16,282	14,782
Cost of Debt	11.30	11.30	11.30	11.30	11.30
Cost of Equity	17.15	17.15	17.15	17.15	17.15
Individual Year Gearing	59	52	48	57	52
(Debt + Equity)*Gearing	5,873	4,375	3,750	9,250	7,750
Weighted Average Gearing	54				
Debt* Cost of Debt	664	494	424	1,045	876
Weighted Average Cost of Debt	11.30				
Cost of Equity	17.15				
Fair Return of Return	13.98				

Authority's Examination – FRoR

- 5.2. The Authority has proposed to consider fair return on equity at 14% p.a. since the business operations of fuel farms are inherently monopolistic with virtually no risk where returns are guaranteed by back to back agreements. The above rate shall be considered in the tariff determination process for other fuel farms as well.
- 5.3. The Authority noted that IOSL has considered interest cost of borrowings at 11.30% per annum during the second control period. However the Authority has proposed to consider interest cost of borrowings at 9.40% per annum as the interest cost for all the years during the second control period.
- 5.4. Further, the Authority has proposed to consider internal accruals during the control as part of equity to arrive at the debt equity ratio.
- 5.5. FRoR on the basis of revised return on equity at 14% p.a. and after considering internal accruals as part of equity for computing debt-equity ratio works out to 12.15% p.a. as shown below:

Table 10: Revised capital structure, funding mechanism and FRoR of IOSL during the second control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Debt	5,873	4,375	3,750	9,250	7,750
Equity	4,033	4,033	4,033	7,033	7,033
Internal accruals	2,061	3,200	4,278	4,832	5,404
Total	11,967	11,608	12,061	21,115	20,187
Cost of Debt (% p.a.)	9.40	9.40	9.40	9.40	9.40
Cost of Equity (% p.a.)	14.00	14.00	14.00	14.00	14.00
Individual Year Gearing	49.08	37.69	31.09	43.81	38.39
(Debt + Equity) * Gearing	5,873	4,375	3,750	9,250	7,750
Weighted Average Gearing (%)	40.29				
Debt * Cost of Debt	552	411	353	870	729
Weighted Average Cost of Debt (%)	9.40				
Cost of Equity (%)	14.00				
Fair Return of Return (%)	12.15				

Proposal No. 2 Regarding FRoR

- 2.a. The Authority has proposed to consider the cost of equity at 14% p.a., interest cost of borrowings at 9.40% p.a., internal accruals as equity for computing debt-equity ratio and FRoR at 12.15% p.a. for IOSL for the second control period.
- 2.b. The FRoR will be trued up based on the actual debt-equity ratio and the cost of debt and equity as determined at the time of tariff determination for the third control period.

6. OPERATION AND MAINTENANCE EXPENDITURE

- 6.1. As provided in Clause 9.4 of the CGF Guidelines, the operational and maintenance expenditure shall include all expenditures incurred by the Service Provider(s) including expenditure incurred on statutory operating cost and other mandated operating costs.

IOSL's submission - Operating and Maintenance expenditure

- 6.2 IOSL has submitted details and basis for each of the proposed O&M expenditure in their submission. The details of the assumptions made by IOSL for each item of operation and maintenance expenditure are provided in the following paras.
- 6.3 Items considered for operating costs are those based on past trend of the company. Most items of cost have been escalated at the rate of 5.33% p.a. in line with past trend. Salaries have been escalated by 12%. The basis of increase in salaries is on past trend and that adopted by IOSL. The gross emoluments of the employees of Indian Oil Corporation have to be compensated by IOSL based on debit notes raised by IOCL each year. Some other expenses like repairs and maintenance has been escalated at 10.33%, utilities at 8.33% and insurance at 10%.
- 6.4 Concession fee to airport operator (Airport Operator Fee): The fee payable by the IOSL to BIAL for each litre ATF delivered through the Facility monthly basis and the current rate is ₹1067/ KL and has not been changed since 2009.

Table 11: Actual and projected aeronautical O&M expenditure by IOSL for the second control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Payroll Costs	261	293	328	367	411
Administrative and General Costs	883	457	488	521	556
Utilities and Outsourcing costs	140	151	164	178	192
Concession Fee & Airport Operator Fees	6,230	6,292	6,355	6,419	6,483
Repair and Maintenance Costs	293	360	392	433	477
Total	7,807	7,554	7,727	7,917	8,120

Authority's Examination - Operating and Maintenance expenditure

- 6.5. The Authority has proposed to consider annual increment of 8% in case of payroll costs instead of IOSL's proposed annual increment of 12% to reflect a more conservative impact of inflation.
- 6.6. Further the Authority has proposed to exclude CSR expenses from operating and maintenance expenses as the same are in the nature of appropriation of profits rather than an expense related to operations.
- 6.7. Accordingly, the reworked Operating and Maintenance expenditure is shown in the table below.

Table 12: Operation and Maintenance Expenditure as per the Authority (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Payroll Costs	253	273	295	318	344
Administrative and General Costs	833	405	433	463	495
Utilities and Outsourcing costs	140	151	164	178	192
Concession Fee & Airport Operator Fees	6,230	6,542	6,869	7,212	7,573
Repair and Maintenance Costs	293	360	392	433	477
Total	7,748	7,731	8,152	8,603	9,081

- 6.8. The Authority has proposed to true up the Operating and Maintenance expenditure in the third control period based on the actual expenditure during the second control period.

Proposal No. 3 Regarding Operating and Maintenance expenditure

- 3.a. The Authority has proposed to revise operating and maintenance expenditure as shown in Table 12.
- 3.b. The Authority has proposed to true up the Operating and Maintenance expenditure in the third control period based on the actual expenditure during the second control period.

7. TAXATION

7.1 As per clause 9.5 of CGF Guidelines, taxation represents payments by the Service Provider in respect of corporate tax on income from assets and services taken into consideration for determination of Aggregate Revenue Requirement.

7.2 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.

IOSL's submissions - Taxation

Table 13: Tax liability as per IOSL's submission

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Profit before Tax	507	740	736	-172	-842
Less: Current Tax	175	256	255	-	-
Total	331	484	481	-172	-842

Authority's examination – Taxation

7.3. The Authority has proposed to revise tax as per the provisions of Income Tax Act, 1961. For FY16-17, tax has been computed on actual revenue as per audited financial statements of FY16-17 as submitted by IOSL and revised book depreciation as considered by the Authority. For FY17-18 to FY20-21, tax has been computed on revised revenue based on revised tariff and revised book depreciation.

7.4. Revised taxation considering revisions in other building blocks is shown below:

Table 14: Revised tax liability as per the Authority

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Profit before Tax	1,338	1,854	1,714	892	867
Add: Depreciation – Companies Act	649	1,007	1,350	1,682	2,010
Less: Depreciation - I T Act	(74)	(795)	(1,226)	(1,597)	(2,025)
Profit chargeable to tax	1,913	2,066	1,839	977	852
Average corporate tax rate	34.61%	34.61%	34.61%	34.61%	34.61%
Tax - Normal provisions (a)	662	715	636	338	295
Average MAT rate	21.34%	21.34%	21.34%	21.34%	21.34%
Tax – MAT (b)	286	396	366	190	185
Higher of a & b	662	715	636	338	295

7.5. The Authority has proposed to consider tax as given in Table 14.

7.6. The Authority has proposed to true up amount of tax in the third control period based on the actual tax liability during the second control period.

Proposal No. 4 Regarding taxation

- 4.a. The Authority has proposed to consider tax as given in Table 14.**
- 4.b. The Authority has proposed to true up amount of tax in the third control period based on the actual tax liability during the second control period.**

8. AGGREGATE REVENUE REQUIREMENT (ARR) AND ANNUAL FIC

IOSL's submissions – ARR, annual FIC and shortfall

Table 15: ARR as per IOSL for the second control period (in ₹ lakhs)

Particulars		FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
RAB for calculating ARR	[A]	9,522	11,271	11,144	14,907	18,101	64,945
Fair Rate of Return (%)	[B]	13.98%	13.98%	13.98%	13.98%	13.98%	
Fair Rate of Return on RAB	[C] = [A * B]	1,331	1,575	1,558	2,084	2,530	9,078
Depreciation	[D]	949	1,237	1,239	1,437	2,176	7,037
Operating Expenditure	[E]	7,807	7,554	7,727	7,917	8,120	39,125
Tax	[F]	175	256	175	256	255	1,117
Aggregate Revenue Requirement	[G] = [C+D+E+F]	10,262	10,623	10,699	11,693	13,080	56,357
Discount factor (#)	[H]	1.00	0.88	0.77	0.68	0.59	
Present Value (PV) of ARR	[I] = [G*H]	10,262	9,320	8,236	7,897	7,750	43,465
Annual FIC sought by IOSL	[J]	1,700	1,700	1,700	1,700	1,700	
Fuel throughput (KL lakhs)	[K]	5.84	5.90	5.96	6.02	6.08	
Revenue from annual FIC as sought by IOSL	[L] = [J*K]	9,926	10,025	10,126	10,227	10,329	50,634
PV of Revenue from annual FIC as sought by IOSL	[M] = [L*H]	9,926	8,796	7,794	6,907	6,121	39,544
Shortfall	[N] = [I-M]	(336)	(524)	(441)	(990)	(1,630)	(3,921)

Authority's Examination

- 8.1 The Authority has proposed that the date of order shall be considered as 01.11.2017 for calculating discount factors.

Table 16: Comparison of fuel related charges borne by oil companies at major airports during FY 2015-16 (in ₹ / KL)

Airport	Airport operator fee (AOF)	Fuel infrastructure charge (FIC)	Total (AOF + FIC)	ITP fee for aircraft fuelling (ITP)	Total (AOF + FIC + ITP)
New Delhi	688	755	1,443	190	1,633
Mumbai	804	710	1,514	198	1,712
Bengaluru	1,067	433	1,500	268	1,768

- 8.2 The Authority noted that no license fee/ land lease rental is payable by the fuel farm operator to the airport operator at Bengaluru Airport. Further, FIC at New Delhi and Mumbai airports are higher as compared to FIC at Bengaluru airport because it includes license fee/ land lease rental payable by the fuel farm operator to the airport operator in the respective airports.

- 8.3 Below table provides estimated license fee/ land lease rentals payable to airport operators at Delhi and Mumbai airport during FY 2015-16.

Table 17: Estimated license fee/ land lease rentals payable to airport operators at Delhi and Mumbai airport during FY 2015-16

Airport	Licence fee	Licence fee - total (in ₹ lakhs)	Fuel throughput (in KL lakhs)	Licence fee (₹ per KL)
New Delhi	₹2,226 / sqm / p.a.	1,594.78	16.64	96
Mumbai	₹1,500 / sqm / p.a.	416.54	15.53	27
Bengaluru	Nil	-	-	-

- 8.4 The Authority has noted that AOF of ₹1,067/ KL at Bengaluru airport seems high when compared to fuel related charges at New Delhi and Mumbai airport after reducing the per KL license fee computed in the table above from such fuel related charges computed in Table 16. However, the Authority has noted that pass through payments such as AOF are based on long term concession agreements entered into on the basis of competitive bidding. Accordingly the Authority has proposed to allow the existing AOF at Bengaluru airport. However, the Authority will relook at such pass through payments when the order pursuant to consultation paper no. 8/ 2016-17 dated 31st March, 2017 on capping the percentage of Royalty / Revenue Share payable to Airport Operator as a “Pass Through” Expenditure for the Independent Service Providers providing Cargo facility, Ground Handling and Supply of Fuel to the Aircraft at Major Airports is finalized.
- 8.5 The Authority has further noted that as per IOSL’s calculations there is a shortfall between the present value of projected ARR and the present value of projected aeronautical revenue at FIC of ₹1,700/ KL during the second control period. Therefore, the Authority has proposed to accept IOSL’s request for increase in FIC from ₹1,500/ KL at present to ₹1,700/ KL for the second control period.

Table 18: Revised ARR, annual FIC and shortfall for the second control period (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Total
Average RAB [1] as per Table 8	8,156	10,592	12,464	16,048	19,202	66,461
FRoR [2] as per Table 10	12.15%	12.15%	12.15%	12.15%	12.15%	
Discount Factor (#)	1.07	0.95	0.85	0.76	0.68	
Return on Average RAB [3] = [1] * [2]	991	1,287	1,514	1,949	2,332	8,073
Add: Depreciation [4] as per Table 7	649	1,007	1,350	1,682	2,010	6,698
Add: Operating expenses [5] as per Table 12	7,748	7,731	8,152	8,603	9,081	41,316
Add: Taxation [6] as per Table 14	662	715	636	338	295	2,646
ARR [9] = [3] + [3A] + [4] + [5] + [6] + [7] - [8]	10,050	10,740	11,653	12,572	13,718	58,733
PV (Discounted ARR) [10]	10,752	10,245	9,912	9,533	9,276	49,719
Fuel throughput [11]	5.84	6.13	6.44	6.76	7.10	32
Annual FIC [12]	1,808	1,808	1,808	1,808	1,808	
Annual FIC sought by IOSL	1,500	1,700	1,700	1,700	1,700	
Revenue from annual FIC as sought by IOSL	8,758	10,423	10,944	11,491	12,065	53,681
PV of Revenue from annual FIC as sought by IOSL [13]	10,399	9,943	9,309	8,713	8,158	46,523
Shortfall/ (Excess recovery) [14] = [10] - [13]	(353)	(302)	(603)	(820)	(1,118)	3,196

8.6 Further, the Authority has proposed to consider the true up of all building blocks in the third control period.

Proposal No. 5 Regarding ARR and annual FIC

The Authority has proposed to consider ARR as given in

- 5.a. Table 18.**
- 5.b. The Authority has proposed to accept IOSL's request for increase in FIC from ₹1,500/ KL at present to ₹1,700/ KL for the second control period since as per IOSL's calculations there is a shortfall between the present value of projected ARR and the present value of projected aeronautical revenue at FIC of ₹1,700/ KL during the second control period.**
- 5.c. The Authority has proposed to consider the true up of all building blocks in the third control period.**

9. FUEL THROUGHPUT AND REVENUE FROM AERONAUTICAL SERVICES

IOSL's submissions – Fuel throughput and revenue from aeronautical services

Table 19: Projected fuel throughput during the control period as per IOSL (lacs KL)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Uplift of fuel in a year	5.84	5.90	5.96	6.02	6.08

- 9.1 As per IOSL, fuel throughput is projected to increase by 1% per annum during the control period based on the historical CAGR of fuel volume at Bengaluru Airport.

Table 20: Projected revenue from aeronautical services during the control period as per IOSL's submissions (₹ lacs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Fuel Infrastructure charges	9,926	10,025	10,126	10,227	10,329
Total	9,926	10,025	10,126	10,227	10,329

Table 21: Assumptions made by IOSL for each item of revenue from aeronautical services

S. No.	Item	Assumption and basis
A	Fuel Infrastructure charges	Revenue from FIC has been calculated based on the projected fuel throughput multiplied by per KL charge of ₹1,700.

Authority's Examination – Fuel throughput and revenue from aeronautical services

- 9.2 However, the Authority has proposed to increase the growth rate assumed for projected fuel throughput from 1% per annum to 5% per annum based on high growth rate assumed for projected ATM traffic as per BIAL's submission for Bengaluru airport tariff review.

Table 22: Projected fuel throughput during the control period as per IOSL (lacs KL)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Uplift of fuel in a year	5.84	6.13	6.44	6.76	7.10

- 9.3 Further, the Authority notes that revenue from FIC is subject to change as and when the FIC being reviewed in this consultation paper is approved by the Authority. Hence, such revenues will be trued up in the third control period based on the actual revenue from aeronautical services during the second control period.

Proposal No. 6 Regarding fuel throughput and revenue from aeronautical services

- 6.a. The Authority has proposed to accept projected fuel throughput as given in Table 22.

10. SUMMARY OF PROPOSALS

Proposal No. 1 Regarding RAB and depreciation 13

1.a. The Authority has proposed to revise estimates for capital expenditure during FY16-17 based on audited figures..... 13

1.b. The Authority in this regard has proposed to treat deadstock as a non-depreciable asset and consider appropriate adjustment in tariff at the time of disposal of such Deadstock in the last control period based on the concession period of the fuel farm operator. 13

1.c. The Authority has proposed to true up depreciation as and when the decision to revise the depreciation rates is taken at the time of determination of tariff for the third control period. 13

1.d. The Authority has proposed to true up the average RAB to be based on the actual date of capitalization at the time of determination of tariff for the third control period. 13

1.e. The Authority has proposed to consider revised average RAB during the control period for calculation of ARR as shown in Table 8. 14

Proposal No. 2 Regarding FRoR 16

2.a. The Authority has proposed to consider the cost of equity at 14% p.a., interest cost of borrowings at 9.40% p.a., internal accruals as equity for computing debt-equity ratio and FRoR at 12.15% p.a. for IOSL for the second control period. 16

2.b. The FRoR will be trued up based on the actual debt-equity ratio and the cost of debt and equity as determined at the time of tariff determination for the third control period. 16

Proposal No. 3 Regarding Operating and Maintenance expenditure 18

3.a. The Authority has proposed to revise operating and maintenance expenditure as shown in Table 12. 18

3.b. The Authority has proposed to true up the Operating and Maintenance expenditure in the third control period based on the actual expenditure during the second control period. 18

Proposal No. 4 Regarding taxation 20

4.a. The Authority has proposed to consider tax as given in Table 14. 20

4.b. The Authority has proposed to true up amount of tax in the third control period based on the actual tax liability during the second control period. 20

Proposal No. 5 Regarding ARR and annual FIC 23

5.a. The Authority has proposed to consider ARR as given in Table 18. 23

5.b. The Authority has proposed to accept IOSL's request for increase in FIC from ₹1,500/ KL at present to ₹1,700/ KL for the second control period since as per IOSL's calculations there is a shortfall between the present value of projected ARR and the present value of projected aeronautical revenue at FIC of ₹1,700/ KL during the second control period. 24

5.c. The Authority has proposed to consider the true up of all building blocks in the third control period. 24

Proposal No. 6 Regarding fuel throughput and revenue from aeronautical services ... 25

6.a. The Authority has proposed to accept projected fuel throughput as given in Table 22. 25

11. STAKEHOLDERS' CONSULTATION TIMELINE

- 11.1. The Authority welcomes written evidence- based feedback, comments and suggestions from Stakeholder's on the proposal made in (Para 10 above), latest by **09.10.2017** at the following address.

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(S. Machendranathan)
Chairperson

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