

Consultation Paper No. 28/ 2017-18

In the matter of Determination of Fuel Infrastructure Charges in respect of Mumbai Aviation Fuel Farm Facility Private Limited at CSI Airport, Mumbai for the Second Control Period (01.04.2016 – 31.03.2021)

20 September 2017

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

TABLE OF CONTENTS

1.	LIST OF ABBREVIATIONS.....	3
2.	BACKGROUND.....	4
3.	METHODOLOGY FOR TARIFF CALCULATION	5
4.	REGULATORY ASSET BASE (RAB) AND DEPRECIATION	8
5.	FAIR RATE OF RETURN (FRoR).....	14
6.	OPERATION AND MAINTENANCE EXPENDITURE.....	16
7.	TAXATION	20
8.	AGGREGATE REVENUE REQUIREMENT (ARR) AND ANNUAL FIC.....	21
9.	FUEL THROUGHPUT AND REVENUE FROM AERONAUTICAL SERVICES	23
10.	SUMMARY OF PROPOSALS	25

1. LIST OF ABBREVIATIONS

AAI	Airport Authority of India
AERA or the Authority	Airport Economic Regulatory Authority of India
Aero	Aeronautical
ARR	Aggregate Revenue Requirement
ATM	Air traffic movement
ATP	Annual Tariff Proposal
BPCL	Bharat Petroleum Corporation Limited
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CGF	Cargo Facility, Ground Handling and Fuel Supply services
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
CSIA	Chhatrapati Shivaji International Airport, Mumbai
E&Y	Ernst & Young
FIC or Infrastructure charge	Fuel Infrastructure Charge
FRoR	Fair Rate of Return
FY	Financial Year
GOI	Government Of India
HPCL	Hindustan Petroleum Corporation Limited

IND AS	Indian Accounting Standard
INR or ₹	Indian rupees
IOCL	Indian Oil Corporation Limited
IRR	Internal Rate of Return
ITP	Into Plane Service operators
JVC	Joint Venture Company
Ke	Cost of equity
Licence agreement	Licence Agreement between MAFFFPL and MIAL entered into on 30 th December 2014 till 02 nd May 2036
MAFFFPL/ Fuel Farm Operator	Mumbai Aviation Fuel Farm Facility Private Limited
MIAL	Mumbai International Airport Private Limited
MYTO	Multi Year Tariff Order
MYTP	Multi Year Tariff Proposal
O&M	Operating and Maintenance
OIL PSUs	IOCL, BPCL and HPCL
OPEX	Operating Expenditure
P&L	Profit and Loss
p.a.	Per annum
PAX	Passenger(s)
RAB	Regulated Asset Base
SLM	Straight Line Method
Sq.m.	Square Metre
YPP	Yield per passenger

2. BACKGROUND

- 2.1 MAFFFPL is a joint venture company (JVC) comprising of the Oil Public Sector Undertakings (PSUs) namely Indian Oil Corporation Limited (IOCL), Bharat Petroleum Corporation Limited (BPCL), Hindustan Petroleum Corporation Limited (HPCL) and Mumbai International Airport Private Limited (MIAL), each holding equal ownership. Pursuant to License Agreement between MAFFFPL and MIAL dated 30th December 2014 valid till 02nd May 2036, MAFFFPL was incorporated for the purpose of taking over and managing the current aviation fuel facilities of the Oil PSUs, creating an integrated aviation fuel facility at Terminal 2 of CSIA and operating the integrated aviation fuel facility on an open access model.
- 2.2 MAFFFPL had requested the Authority vide letter dated 14.11.2014 for interim tariff approval of ₹826/KL, as Fuel Infrastructure Charges (FIC). After multiple representations, discussions and user consultations, the Authority vide their order no. 01/ 2015-16 dated 27.03.2015 determined an ad-hoc infrastructure charge of ₹ 710/KL for the period 01.02.2015 i.e. the date of commencement of operations of MAFFFPL up to the date of implementation of tariff determined under the intrusive price cap regulation for MAFFFPL.
- 2.3 Subsequently, the Authority vide letter dated 28.01.2016 advised MAFFFPL to submit the MYTP for the second control period starting 01.04.2016 in order to have uniformity in submissions for the 2nd control period and further decided that tariff levied for the interim period from 1st February 2015 up to 31st March 2016 will be trued up while considering tariff determination for the forthcoming control period.
- 2.4 As per MAFFFPL submissions, currently all the Oil PSUs namely HPCL, BPCL and IOCL are operating from their respective facilities located at Sahar and Santa Cruz areas on the land provided by CSIA. The planned integrated Fuel Farm Facility (built on an area of approximately 30,000 square meters and having static storage capacity of 47,500 kilolitres of ATF) will operate from a single point (i.e., at the site of the existing facilities of IOCL and HPCL near the Domestic terminal 1A, Santa Cruz) to bring in the efficiencies of the integrated operations. It has been further stated that, the existing assets acquired from the Oil PSUs will be disposed-off once the Integrated Fuel Farm is operational.
- 2.5 MAFFFPL has approached the Authority with its MYTP seeking approval on tariff for FIC of ₹882/ KL. MAFFFPL filed its MYTP submissions for the second control period from 01.04.2016 to 31.03.2021, vide their letter dated 10.03.2016. Subsequently, MAFFFPL filed auxiliary submissions dated 30.09.2016, 11.11.2016, 14.11.2016, 23.02.2017, 24.02.2017 and 03.03.2017.
- 2.6 Further, vide Order No. 19/ 2016-17 dated 20th March, 2017 issued by the Authority, MAFFFPL 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 MAFFFPL's submission, materiality index (based on the fuel throughput at IGI Airport in comparison to fuel throughput at other major airports) 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 At present, the fuel farm services at CSIA are being provided by solely by MAFFFPL. 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 In pursuance of the same, MAFFFPL submitted Minutes of the User Consultation Meeting agreeing on the proposed FIC of ₹828/ KL for the second control period ending on 31.03.2021.

However the Authority noted that MAFFFPL 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 MAFFFPL at CSIA 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 MAFFFPL 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.

MAFFFPL's submission – RAB and Depreciation

- 4.3 Capital expenditure during the control period proposed by MAFFFPL is shown below:

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

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Building – RCC	1,518	1,827	582	-	-
Building - Non RCC	-	-	-	-	-
Roads	266	320	102	-	-
Lab equipment	-	-	-	-	-
Plant & machinery-others	2,759	3,209	1,023	-	-
Storage tanks	4,631	5,571	1,776	-	-
Pipeline	1,621	1,951	622	-	-
Furniture	-	-	-	-	-
Vehicles	-	-	-	-	-
Office equipment	-	-	-	-	-
Computers	-	-	-	-	-
Electric installations	462	556	177	-	-
Deadstock	-	-	687	-	-
Ancillary borrowing costs capitalized	1,046	879	-	-	-
Total	12,303	14,314	4,970	-	-

4.4 MAFFFPL's submissions in relation to components of project costs are given below:

Item	Assumption and basis																						
Basis of capital expenditure proposed to be incurred during the second control period	<ul style="list-style-type: none"> M/s Mott Macdonald India has assessed the cost of the proposed new integrated common user tank farm and allied facilities. Proposed project cost has been based on such report as detailed below: <table border="1"> <thead> <tr> <th>Project Cost - Integrated Facility</th><th>₹ in Lakhs</th></tr> </thead> <tbody> <tr> <td>Common User Tank Farm (including Pumps / Filters)</td><td>18,715</td></tr> <tr> <td>Hydrant Feed / Connector line</td><td>2,690</td></tr> <tr> <td>T2 New Fuel Hydrant System</td><td>13,049</td></tr> <tr> <td>Control room / Instrumentation</td><td>620</td></tr> <tr> <td>Buildings & Civil Works</td><td>4,553</td></tr> <tr> <td>Fire Systems (including pump)</td><td>873</td></tr> <tr> <td>Electrical Installations</td><td>430</td></tr> <tr> <td>Total</td><td>40,931</td></tr> <tr> <td>(Less): T2 New fuel Hydrant System (already capitalized in the books)</td><td>13,049</td></tr> <tr> <td>Total</td><td>27,882</td></tr> </tbody> </table> 	Project Cost - Integrated Facility	₹ in Lakhs	Common User Tank Farm (including Pumps / Filters)	18,715	Hydrant Feed / Connector line	2,690	T2 New Fuel Hydrant System	13,049	Control room / Instrumentation	620	Buildings & Civil Works	4,553	Fire Systems (including pump)	873	Electrical Installations	430	Total	40,931	(Less): T2 New fuel Hydrant System (already capitalized in the books)	13,049	Total	27,882
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Transfer of existing assets of Oil PSUs	<ul style="list-style-type: none"> The cost of assets being transferred from Oil PSUs is based on the valuation of an independent party, M/s EIL and in line with the MOU and Feasibility Study carried out by M/s E&Y 																						
Transfer of assets of MIAL	<ul style="list-style-type: none"> Basis the cost incurred by MIAL and certified by EIL, pertaining to Hydrant infrastructure at Mumbai Airport. This was primarily because the new terminal had to be completed and the Hydrant Refueling System work could not be kept pending. 																						
Ancillary Borrowing cost:	<ul style="list-style-type: none"> All expenditure which are directly attributable and incremental to the origination of a borrowing (e.g. loan processing fees paid to banks) may be required to be reduced from the borrowing at inception and recognized as finance cost with reference to the effective interest rate (amortization may be on a straight line basis in case of variable rate bearing loans). Basis the above: MAFFFPL has accounted for the General borrowing cost and ancillary cost is being capitalized for the period of construction. 																						

4.5 As per MAFFFPL, value of minimum level of fuel or deadstock ('Deadstock') stored in fuel storage tanks forming part of RAB during the second control period will be ₹4,563 lakhs (₹3,876 lakhs added during first control period + ₹687 lakhs added during second control period). Deadstock has been considered as a part of plant & machinery however the same is not being depreciated during the second control period.

4.6 RAB during the control period as per MAFFFPL has been summarized in the table below:

Table 2: RAB as per MAFFFPL's submissions (in ₹ lakhs)

Particulars		Upto 31.03.16	FY 16- 17	FY 17- 18	FY 18- 19	FY 19- 20	FY 20- 21
Opening CWIP	OW	-	661	13,605	29,870	-	-
Capital expenditure during the period	CE	38,615	12,303	14,314	4,970	-	-
Financing Allowance	$FA = Rd * (OW + (CE - CA - CR) / 2)$	13	640	1,952	1,522	-	-
Financing Allowance Commissioned	FAC	-	-	-	4,128	-	-
Commissioned Assets	CA	37,967	-	-	32,326	-	-
Closing CWIP	$CW = OW + CE + FA - CA$	661	13,605	29,870	-	-	-
Opening RAB	OR	-	32,110	27,637	23,165	43,024	39,835
Commissioned assets	CA + FAC	37,967	-	-	36,453	-	-
Depreciation	DR	5,229	4,472	4,472	3,665	3,188	3,024
Disposals	DI	629	-	-	12,930	-	-
Closing RAB	$CR = OR + CA - DR - DI + IA$	32,110	27,637	23,165	43,024	39,835	36,811
Average RAB	$RAB = (OR + CR) / 2$	28,669	29,873	25,401	33,095	41,430	38,323

Authority's Examination – RAB and Depreciation

4.7 The Authority noted that MAFFFPL has capitalized ancillary borrowing costs pertaining to the construction during the control period as prescribed under IND AS. However, since MAFFFPL has separately considered financing allowance as per clause 9.2.7 of the CGF guidelines as part of RAB, such ancillary borrowing costs should be excluded from RAB.

4.8 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:

4.8.1. **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.

4.8.2. **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.

- 4.9 The Authority in this regard has proposed to treat deadstock as a non-depreciable asset and will consider an 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.
- 4.10 The Authority notes that on some of the assets the depreciation charged by MAFFFPL 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
- 4.11 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.
- 4.12 Revised depreciation rates during the control period are as follows:

Table 3: Revised depreciation rates for the second control period (in %)

Particulars	As per MAFFFPL			As per Authority		
	Useful life (# years)	Residual value	Rate	Useful life (# years)	Residual value	Rate
Building- RCC	17	10%	5.19%	60	0%	1.67%
Building- Non-RCC	17	10%	5.19%	30	0%	3.33%
Roads	5	10%	18.00%	5	0%	20.00%
Lab equipment	-	-	-	10	0%	10.00%
Plant & Machinery- Others	15	10%	6.00%	15	0%	6.67%
Deadstock	-	-	-	-	-	-
Storage tanks	15	10%	6.00%	15	0%	6.67%
Pipeline	15	10%	6.00%	15	0%	6.67%
Furniture	-	-	-	10	0%	10.00%
Vehicles	8	10%	11.25%	8	0%	12.50%
Office equipment	-	-	-	5	0%	20.00%
Computers	3	10%	30.00%	3	0%	33.33%
Electrical installations	10	10%	9.00%	10	0%	10.00%

4.13 The Authority has proposed to revise estimates for capital expenditure during FY16-17 based on audited figures provided by MAFFFPL:

Table 4: Revised capital expenditure during the second control period as per Audited financial statements of FY16-17 considered by the Authority (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Building – RCC	212	1,894	1,822	-	-
Building - Non RCC	-	-	-	-	-
Roads	37	332	319	-	-
Lab equipment	-	-	-	-	-
Plant & machinery-others	385	3,331	3,275	-	-
Deadstock	-	-	687	-	-
Storage tanks	647	5,776	5,556	-	-
Pipeline	226	2,022	1,945	-	-
Electric installations	65	576	554	-	-
Total	1,572	13,932	14,157	-	-

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

Particulars		FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Opening WIP	OW	661	2,370	17,180	-	-
Capital expenditure	CE	1,572	13,932	14,157	-	-
Financing Allowance	$FA = Rd * (OW + (CE - CA - CR) / 2)$	136	878	851	-	-
Financing Allowance Commissioned	FAC	-	-	1,879	-	-
Commissioned Assets	CA	-	-	30,401	-	-
Closing WIP	$CW = OW + CE + FA - CA$	2,370	17,180	-	-	-
Opening RAB	OR	31,987	27,362	22,737	38,258	34,875
Commissioned assets	CA + FAC	-	-	32,279	-	-
Depreciation	DR	4,625	4,625	3,828	3,384	3,195
Disposals	DI	-	-	12,930	-	-
Closing RAB	$CR = OR + CA - DR - DI + IA$	27,362	22,737	38,258	34,875	31,680
Average RAB	$RAB = (OR + CR) / 2$	29,675	25,050	30,498	36,567	33,277

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 provided by MAFFFPL.

1.b. The Authority has proposed to exclude ancilliary borrowing cost from RAB, since MAFFFPL has separately capitalized financing allowance in lieu of borrowing costs during the construction period.

- 1.c. The Authority has proposed to treat deadstock (the minimum level of fuel in the pipeline) as a non-depreciable asset and consider an 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.d. The Authority has proposed to true up the 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.e. 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.**

5. FAIR RATE OF RETURN (FRoR)

MAFFFPL's submission - FRoR

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

Table 6 : Capital structure, funding mechanism and FRoR of MAFFFPL during the control period (in ₹ lakhs)

Particulars	FRoR = (WG * Rd) + ((1-WG) * Re)		FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Internal Accruals		₹ lakhs	10,643	5,918	4,526	-	-
Debt	D	₹ lakhs	19,102	22,452	20,715	17,647	14,580
Equity	E	₹ lakhs	16,015	19,622	20,005	20,005	20,005
Debt + Equity	C	₹ lakhs	35,117	42,074	40,720	37,653	34,585
Cost of debt	kd	%	9.40%	9.40%	9.40%	9.40%	9.40%
Cost of equity	ke	%	21%	21%	21%	21%	21%
Individual year gearing	G	%	54%	53%	51%	47%	42%
Weighted average gearing	WG	%	50%				
Weighted average cost of debt	Rd	%	9.40%				
Cost of equity	Re	%	21%				
Fair Rate of Return	FRoR	%	15.24%	15.24%	15.24%	15.24%	15.24%

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. Further, the Authority has proposed to consider internal accruals during the control as part of equity to arrive at the debt equity ratio.

5.4. FRoR on the basis of revised return on equity at 14% p.a. works out to 11.87% p.a. as shown below:

Table 7: Revised capital structure, funding mechanism and FRoR of MAFFFPL during the second control period (in ₹ lakhs)

Particulars	FRoR = (WG * Rd) + ((1-WG) * Re)		FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Internal Accruals		₹ lakhs	1,803	11,536	2,783	-	-
Debt	D	₹ lakhs	18,043	18,653	24,012	20,788	17,564
Equity	E	₹ lakhs	15,309	17,089	22,229	22,229	22,229
Debt + Equity	C	₹ lakhs	35,154	47,278	49,024	43,018	39,794
Cost of debt	kd	%	9.40%	9.40%	9.40%	9.40%	9.40%
Cost of equity	ke	%	14%	14%	14%	14%	14%
Individual year gearing	G	%	51%	39%	49%	48%	44%
Weighted average gearing	WG	%	46%				
Weighted average cost of debt	Rd	%	9.40%				
Cost of equity	Re	%	14%				
Fair Rate of Return	FRoR	%	11.87%	11.87%	11.87%	11.87%	11.87%

Proposal No. 2 Regarding FRoR

- 2.a. The Authority has proposed to consider the Cost of Equity at 14% p.a., internal accruals as equity for computing debt-equity ratio and FRoR at 11.87% p.a. for MAFFFPL 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 incurred by the Service provider(s) including expenditure incurred on security operating costs, other mandated operating costs and statutory operating costs.

MAFFFPL's submission - Operating and Maintenance expenditure

6.2 Operation and Maintenance expenditure submitted by MAFFFPL has been segregated into:

6.2.1 Employee costs

6.2.2 Utilities and Outsourcing Expenditure

6.2.3 Repair and Maintenance Expenditure

6.2.4 Administration and General Expenditure

6.2.5 Other O&M Expenditure

6.3 MAFFFPL has submitted details and basis for each of the above proposed expenditure in their submission. The details of the assumptions made by MAFFFPL for each item of operation and maintenance expenditure are provided in the following paras.

Table 8: Actual and projected aeronautical O&M expenditure by MAFFFPL for the second control period (in ₹ lakhs)

S. No.	Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
A	Employee cost	172	247	262	508	550
B	Utilities and Outsourcing Expenditure	1,373	1,483	1,603	1,732	1,872
C	Repair and Maintenance Expenditure	60	64	67	71	76
D	Admin and General Expenditure	887	1,020	1,302	993	1,047
E	Other O&M Expenditure	209	224	239	256	273
	Total (A+B+C+D)	2,701	3,037	3,474	3,559	3,817

Table 9: Assumptions considered by MAFFFPL for each item of Operation and Maintenance Expenditure

S. No.	Item	Assumption and basis
A	Employee cost	<ul style="list-style-type: none"> Annual increment of 8% has been considered, in line with the normal increments. Further as per discussions with MAFFFPL, the high increase in employee costs from FY 18-19 to FY 19-20 is on account of integrated fuel farm becoming operational during that period.
B	Utilities and Outsourcing Expenditure	<ul style="list-style-type: none"> The fuel farm operations are outsourced and the operator has been selected through a competitive bidding by way of public tender. The rates considered and escalation in the model are as per the tender conditions. The requirements of office staff etc. are presently outsourced and the charges considered are as per the work orders placed. Utility charges estimated basis trend of actual expenditure incurred.

S. No.	Item	Assumption and basis
C	Repair and Maintenance Expenditure	<ul style="list-style-type: none"> The existing facilities have been taken over and require urgent action in various areas to ensure safe and smooth operations. This is one time major costs, in the first year of operation, towards the refurbishment of existing assets. Subsequent years, the expenses are towards the mandatory requirements. The estimate for the cost is based on prevailing market rates.
D	Admin and General Expenditure	<ul style="list-style-type: none"> Facility related expenses like Property Tax, application fees for various licenses, rates and taxes are based on the charges payable to the authorities. Insurance Cost- the Insurer has been selected on the basis of tender, the cost is as per premium charged by the Insurer. Consulting/audit/legal fees – as per the requirements of the Companies Act, MAFFFPL would require to engage the services of – cost audit, secretarial audit, internal audit, statutory audit, IND-AS consultancy, various mandatory technical audits, and annual certification by the credit rating agency, consultancy for filing returns with AERA etc. Legal firms are engaged for legal vetting of tenders & other important documents, due diligence exercise etc. The charges considered based on actual expenditure of FY 15-16 with an escalation of 6% on year on year basis. Membership of IATA, JIG and other aviation fueling related organizations – the charges of membership considered are as published by these agencies. Bank Guarantee Charges – normal charges as payable for bank guarantee are considered. Stamp duty & Registration Charges: The stamp duty and registration charges for various agreements executed by MAFFFPL with various parties are accounted under this head. The stamp duty and registration charges are as per Bombay Stamp Act, 1958. License Fee to Airport Operator: License Fees is estimated based on the License Agreement signed with MIAL.
E	Other O&M Expenditure	<ul style="list-style-type: none"> ITP revenue share to MIAL – As per the ITP agreement, 5% of the gross revenue of the ITP operation is payable to MIAL. The increase is considered at 6% (which includes cost of inflation at 5% plus Swachha Bharat Cess & Krishi Vikas Cess .05% each)

Authority's Examination - Operating and Maintenance expenditure

Revision in license fees (land lease rental rates)

- 6.4 The Authority has noted that MAFFFPL will be required to pay the additional land lease rentals on behalf of the ITP operators. The revised rental is based on AAI carved out land rentals + 20% Development charges to get a total of ₹ 8,127 (₹ 6,300 per Sq/Mt/P.A.*120%+*7.5% Escalation)
- 6.5 The Authority, after analyzing the details and various underlying Agreements, has proposed to include incremental land lease rentals pertaining to land leased to ITP operators as part of MAFFFPL's operating and maintenance expenditure as calculated in table below:

Table 10: Impact of estimated increase in license fees (land lease rentals)

	Particulars	Units	FY 17-18	FY 18-19	FY 19-20	FY 20-21
A	Rate as per ITP agreement	per Sq. Mt	1,863	2,003	2,153	2,315
B	Rates as per MIAL	per Sq. Mt	9,392	10,096	10,853	11,667
C = (B-A)	Incremental lease rent rate	per Sq. Mt	7,528	8,093	8,700	9,352
D	Area required by ITP operators	Sq. Mt	4,000	4,000	4,000	4,000
E = (C * D)	Incremental lease rent	in ₹ lakhs	301	324	348	374

Table 11: Summary of license fees (land lease rentals) (in ₹ lakhs)

Particulars	FY16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
License fees as per MAFFFPL before considering incremental lease rent	248	300	524	627	658
License fees as per the Authority after considering incremental lease rent	248	601	848	975	1,032
Difference	0	301	324	348	374

- 6.6. The Authority has proposed to revise operating and maintenance expenditure as shown in Table 12.

Table 12: Revised O&M expenditure for the second control period (in ₹ lakhs)

S. No.	Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
A	Employee cost	172	247	262	508	550
B	Utilities and Outsourcing Expenditure	1,373	1,483	1,603	1,732	1,872
C	Repair and Maintenance Expenditure	60	64	67	71	76
D	Admin and General Expenditure (including license fees/ land lease rentals)	887	1,321	1,626	1,341	1,421
E	Other O&M Expenditure	209	224	239	256	273
	Total (A+B+C+D)	2,701	3,339	3,798	3,908	4,191

Proposal No. 3 Regarding Operating and Maintenance expenditure

- 3.a. The Authority has proposed to include incremental land lease rentals pertaining to land leased to ITP operators as part of MAFFFPL's operating and maintenance as shown in Table 10**
- 3.b. The Authority has proposed to consider MAFFFPL's O&M expenditure as shown in Table 12.**
- 3.c. 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.

MAFFFPL's submissions - Taxation

Table 13: Tax liability as per MAFFFPL's submission (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Earning Before Tax	5,693	5,666	4,242	5,912	6,420
Add: Book Depreciation	4,472	4,472	3,665	3,188	3,024
Less: IT Depreciation	3,860	3,305	3,842	5,402	4,624
Taxable Profit / Loss	6,305	6,833	4,065	3,698	4,820
Less: Brought Forward Losses	(64)	-	-	-	-
Taxable Profit adjusted for Loss CF	6,241	6,833	4,065	3,698	4,820
Corporate Tax	2,160	2,365	1,407	1,280	1,668.2

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 MAFFFPL 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 (in ₹ lakhs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Earning Before Tax	3,017	3,777	1,859	3,227	3,749
Add: Book Depreciation	4,625	4,625	3,828	3,384	3,195
Taxable income before tax depreciation	7,642	8,402	5,687	6,610	6,944
Less: IT Depreciation	(3,860)	(3,305)	(3,743)	(5,417)	(4,637)
Taxable Profit / Loss	3,782	5,097	1,944	1,193	2,307
Net tax as per Income Tax Act	933	1,764	673	689	800

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

MAFFFPL's submission – ARR

Table 15: ARR as per MAFFFPL 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]	29,873	25,401	33,095	41,430	38,323	1,68,123
FRoR [2]	15.24%	15.24%	15.24%	15.24%	15.24%	
Return on Average RAB [3] = [1] * [2]	4,551	3,870	5,042	6,312	5,839	25,614
Add: Depreciation [4]	4,472	4,472	3,665	3,188	3,024	18,822
Add: Operating expenses [5]	2,701	3,038	3,474	3,560	3,817	16,590
Add: Taxation [6]	2,160	2,365	1,407	1,280	1,668	8,880
Add: Under / (Over) Recovery from Previous Control Period [7]	325	325	325	325	325	1,626
ARR [8] = [3]+[4]+[5]+[6]+[7]	14,209	14,070	13,913	14,666	14,674	71,531
Fuel throughput (in lakhs) [9]	15.59	15.90	16.22	16.54	16.87	81.13
Annual FIC (in INR) [8] / [9]	911	885	858	887	870	
Weighted average FIC (in INR) [10]		882				

Authority's Examination

- 8.1 The Authority has noted that revenue share from ITP operators has not been reduced from the recoverable ARR before calculating the Annual FIC based on yield per KL, accordingly the Authority has proposed to reduce revenue share from ITP operators from ARR computed as per CGF guidelines to arrive at the recoverable ARR.
- 8.2 Further, the Authority has proposed that the date of order shall be considered as 01.11.2017 for calculating discounting factors.

8.3 Accordingly, the Authority has proposed to revise the ARR and the Annual FIC for MAFFFPL as follows:

Table 16: Revised ARR and Annual FIC 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 5	29,675	25,050	30,498	36,567	33,277	1,55,066
FRoR [2] as per Table 7	11.87%	11.87%	11.87%	11.87%	11.87%	-
Discount Factor	1.07	0.95	0.85	0.76	0.68	-
Return on Average RAB [3] = [1] * [2]	3,523	2,974	3,621	4,342	3,951	18,411
Add: Depreciation [4] as per Table 5	4,625	4,625	3,828	3,384	3,195	19,657
Add: Operating expenses [5] as per Table 12	2,701	3,339	3,798	3,908	4,191	17,937
Add: Taxation [6] as per Table 14	933	1,764	673	689	800	4,858
Add: Under / (Over) Recovery from Previous Control Period [7]	178	178	178	178	178	890
Less: 30% of Other income and Interest income [8]	-	-	-	-	-	-
ARR [9] = [3] + [3A] + [4] + [5] + [6] + [7] - [8]	11,960	12,880	12,098	12,500	12,316	61,753
PV (Discounted ARR) [10A]	12,777	12,300	10,326	9,535	8,397	53,335
Revenue Share from ITP Operator	204	219	234	251	269	1,177
PV of revenue share from ITP operator [10B]	218	209	200	191	183	1,001
PV of recoverable discounted ARR [10] = [10A] - [10B]	12,559	12,091	10,126	9,343	8,214	52,333
Fuel throughput [11]	15.59	15.90	16.22	16.54	16.87	81
Annual FIC [12]	750	750	750	750	750	750
Revenue from FIC [13] = [12] * [11]	10,671	11,429	12,240	13,109	14,040	61,489
PV of revenue from FIC [14]	11,400	10,914	10,448	9,999	9,572	52,333

8.4 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

5.a. The Authority has proposed to consider ARR and recomputed annual FIC of ₹750/ KL as shown in Table 16.

5.b. 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

MAFFFPL's submissions - Fuel throughput and revenue from aeronautical services

Table 17: Projected fuel throughput during the control period as per MAFFFPL (lacs KL)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Uplift of fuel in a year	15.59	15.90	16.22	16.54	16.87

- 9.1 As per MAFFFPL, fuel throughput is projected to increase by 2% per annum during the control period based on historical growth in ATM traffic figures as advised by MIAL.

Table 18: Projected revenue from aeronautical services during the control period as per MAFFFPL's submissions (₹ lacs)

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Fuel Infrastructure charges	13,433	13,701	13,975	14,255	14,540
Revenue share from ITP operator	3,403	3,645	3,903	4,181	4,477
Total	13,637	13,920	14,210	14,506	14,809

Table 19: Assumptions made by MAFFFPL 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 ₹862
B	ITP Sub-Concession Fee	As per the ITP agreement between MIAL and MAFFFPL, MAFFFPL can appoint two sub-concessionaires. MAFFFPL shall be charging 6% of the Gross Revenue of the ITP operators as sub concession fee and in turn MAFFFPL will pay MIAL 5% of the Gross Revenue of ITP Operators Currently base Approved rate of Rs 198 per KL is considered in projection with 5% escalation year on year in the MYTP. As both sub-concessionaires will be independently filing MYTP returns, MAFFFPL's final revenue share will be based on approved rate.

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

- 9.2 The Authority has proposed to accept projected fuel throughput as given in Table 17.
- 9.3 Further, the Authority has proposed to accept revenue from ITP sub-concession fee as considered in Table 18. However, the Authority notes that revenue from FIC and sub-concession fee from ITP operators is subject to change as and when FIC and ITP sub-concession charges are 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 volume of fuel throughput as given in Table 17.**
- 6.b. The Authority has proposed to accept revenue from ITP sub-concession fee as considered in Table 18. However, revenue from aeronautical services will be trued up in the third control period based on the actual revenue from aeronautical services during the second control period.**

10. SUMMARY OF PROPOSALS

Proposal No. 1 Regarding RAB and Depreciation 12

1.a. The Authority has proposed to revise estimates for capital expenditure during FY16-17 based on audited figures provided by MAFFFPL. 12

1.b. The Authority has proposed to exclude ancillary borrowing cost from RAB, since MAFFFPL has separately capitalized financing allowance in lieu of borrowing costs during the construction period. 12

1.c. The Authority has proposed to treat deadstock as a non-depreciable asset and consider an 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.d. The Authority has proposed to true up the 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.e. 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

Proposal No. 2 Regarding FRoR 15

2.a. The Authority has proposed to consider the Cost of Equity at 14% p.a., internal accruals as equity for computing debt-equity ratio and FRoR at 11.87% p.a. for MAFFFPL for the second control period. 15

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. 15

Proposal No. 3 Regarding Operating and Maintenance expenditure..... 19

3.a. The Authority has proposed to include incremental land lease rentals pertaining to land leased to ITP operators as part of MAFFFPL's operating and maintenance as shown in Table 10 19

3.b. The Authority has proposed to consider MAFFFPL's O&M expenditure as shown in Table 11. 19

3.c. 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. 19

Proposal No. 4 Regarding taxation 20

4.a. The Authority has proposed to consider tax as given in Table 13. 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 22

5.a. The Authority has proposed to consider ARR and recomputed annual FIC of ₹750/ KL as shown in Table 15.22

5.b. The Authority has proposed to consider the true up of all building blocks in the third control period. 22

Proposal No. 6 Regarding fuel throughput and revenue from aeronautical services..... 24

6.a. The Authority has proposed to accept projected volume of fuel throughput as given in Table 16. 24

6.b. *The Authority has proposed to accept revenue from ITP sub-concession fee as considered in Table 17. However, revenue from aeronautical services will be trued up in the third control period based on the actual revenue from aeronautical services during the second control period.* 24

STAKEHOLDERS' CONSULTATION TIMELINE

- 10.1 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.

Secretary
Airports Economic Regulatory Authority of India
AERA Building, Administrative Complex
Safdarjung Airport
New Delhi -110003
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(S. Machendranathan)
Chairperson

Table 1: Capital Expenditure during the second control period (in ₹ lakhs)	8
Table 2: RAB as per MAFFFPL's submissions (in ₹ lakhs)	10
Table 3: Revised depreciation rates for the second control period (in %)	11
Table 4: Revised capital expenditure during the second control period as per Audited financial statements of FY16-17 considered by the Authority (in ₹ lakhs)	12
Table 5: Revised RAB during the second control period as per the Authority (in ₹ lakhs)	12
Table 6 : Capital structure, funding mechanism and FRoR of MAFFFPL during the control period (in ₹ lakhs)	14
Table 7: Revised capital structure, funding mechanism and FRoR of MAFFFPL during the second control period (in ₹ lakhs)	15
Table 8: Actual and projected aeronautical O&M expenditure by MAFFFPL for the second control period (in ₹ lakhs)	16
Table 9: Assumptions considered by MAFFFPL for each item of Operation and Maintenance Expenditure	16
Table 10: Impact of estimated increase in license fees (land lease rentals)	18
Table 10: Summary of license fees (land lease rentals) (in ₹ lakhs)	18
Table 11: Revised O&M expenditure for the second control period (in ₹ lakhs)	18
Table 12: Tax liability as per MAFFFPL's submission (in ₹ lakhs)	20
Table 13: Revised tax liability as per the Authority (in ₹ lakhs)	20
Table 14: ARR as per MAFFFPL for the second control period (in ₹ lakhs)	21
Table 15: <i>Revised ARR and Annual FIC for the second control period (in ₹ lakhs)</i>	22
Table 16: Projected fuel throughput during the control period as per MAFFFPL (lacs KL)	23
Table 17: Projected revenue from aeronautical services during the control period as per MAFFFPL's submissions (₹ lacs)	23
Table 18: Assumptions made by MAFFFPL for each item of revenue from aeronautical services	23