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Tariff Authority for Major Ports

G. No. 339 **New Delhi,** **26 December 2013**

NOTIFICATION

In exercise of the powers conferred by Sections 48, 49 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from the Mumbai Port Trust (MBPT) for fixation of reference tariff for the proposed Multipurpose Offshore Cargo Berth at Mumbai Port Trust under the revised guidelines for Determination of Tariff for Projects at Major Ports, 2013, which were notified vide Notification No.TAMP/18/2013-Misc. dated 30 September 2013 vide Gazette No. 254 as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports
Case No. TAMP/47/2013-MBPT

Mumbai Port Trust **- - - - -** **Applicant**

O R D E R
(Passed on this 12th day of December 2013)

This case relates to the proposal received from the Mumbai Port Trust (MBPT) for fixation of reference tariff for proposed Multipurpose Offshore Cargo Berth at MBPT.

2.1. The MBPT vide its letters dated 18 September 2013 and 19 September 2013 has filed a proposal for fixation of Reference tariff for proposed Multipurpose Offshore Cargo Berth.

2.2. The highlights of the project as furnished by the MBPT are summarized below:

(i). The proposed multipurpose Offshore Cargo Berth at Mumbai Port will have a length of 550 meters and width of 100 meters with an alongside depth of 13.5 MCD to cater 60000 DWT vessels.

(ii). The approach trestle is with length of 1405 m and width of 16 m.

(iii). The license is for a period of 30 years on DBFOT basis.

(iv). The total cost of the project is ₹696 crores.

2.3. The main submissions made by the MBPT in its proposal dated 18 September 2013 are summarised below:

(i). The cargo proposed to be handled at the facility are Iron & Steel & Project cargo, Automobiles and General Cargo.

(ii). The Optimal Terminal Capacity calculation is as follows:

Sl. No.	Type of Cargo	% Share of Capacity	Handling Rate	Optimal Berth Capacity		
				1 Berth	***2 Berths***	***Units***
(i).	Iron & Steel	87%	10000	2.22	4.4	MTPA
(ii).	Automobiles	9%	3000	66652	133304	Units/Year
(iii).	General Cargo	4%	10000	0.11	0.2	MTPA

Share of Cargo (87%, 9% & 4%) has been taken based on the Detailed Project Report (DPR). The optimal terminal capacity for two berths is 4.4 MTPA for Iron & Steel, 0.13 million passenger car units (PCU's) for Automobiles and 0.2 MTPA for General Cargo.

(iii). The capital cost of the project is estimated as ₹ 685.07 Crores, as per TAMP Guidelines. The item wise quantities are as per DPR while unit rates have been updated based on WPI Index of primary commodities 2011-12 and 2012-13 as 9% and 11% respectively. The capital cost comprising of civil works cost, mechanical works cost and berth cost are as follows:

Sl. No.	Item Description	Quantity	Unit	Unit Cost (₹)	Total Amount (Crs)
A	**Cargo Handling – Civil Works 1**				
1	Approach Trestle	21680	Sq.m	49000	106.23
2	Administrative Building	200	Sq.m	15900	0.32
3	Construction of Storage Area (550m X 75m)	41250	Sq.m	61300	252.86
4	Workshop, Shop & Stores	100	Sq.m	12300	0.12
5	Miscellaneous Buildings	150	Sq.m	12300	0.18
6	Add for				
	(a) Detailed Engineering, Soil Investigation				25.18
	(b) Contigencies @ 3%				10.79
	(c) Works Contract tax @ 2.8%				10.07
	(d) Environmental mitigation cost @ 0.5%				1.80
	Sub Total (A)				**407.56**
B	**Mechanical & Electrical Works**				
B-I	**Mechanical Works**				
1	Elec Wharf Cranes – 30 MT	3	Nos.	183900000	55.17
2	Mobile Harbour Cranes	1	Nos.	245200000	24.52
3	Forklifts of 3T Capacity	1	Nos.	2500000	0.25
4	Forklifts of 5T Capacity	1	Nos.	3100000	0.31
5	Rubber Tyred Crane	1	Nos.	12900000	1.29
6	Total Electrical Work Estimates				5.33
7	Add for				
	(a) Detailed Engineering, soil investigation and Project Supervision @ 7%				6.08
	(b) Contigencies @ 3%				2.61
	(c) Works Contract tax @ 2.8%				2.43
	(d) Environmental mitigation cost @ 0.5%				0.43
	Sub Total (B)				**98.43**
C	**Utilities**				
1	Water Supply		LS		2.46
2	Sewerage		LS		0.61
3	Communication & IT		LS		2.45
4	Bunkering		LS		2.45
5	Storm Water Drainage		LS		0.61
6	Disaster Management Plan		LS		0.31
7	Environmental Protection Equipments		LS		0.61
8	Fire fighting facilities		LS		0.61
9	Miscellaneous Items				1.23
10	Add for				
11	(a) Detailed Engineering soil investigations and Project Supervision @ 7%				0.79
	(b) Contigencies @ 3%				0.34
	(c) Works Contract tax 2.8%				0.32
	(d) Environmental mitigation cost @ 5%				0.06
	Sub Total (C)				**12.86**
D	**Miscellaneous**				
	Add 5% for towards interest during construction				22.06
	Add for				
	(a) Detailed Engineering soil investigations and Project Supervision @ 7%				1.54
	(b) Contigencies @ 3%				0.66
	(c) Works Contract tax @ 4% on 70% of the project cost				0.62
	(d) Environmental mitigation cost @ 0.5%				0.11
	Sub Total (D)				**25.00**
	Total Cost for Cargo Handling Activity (A+B+C+D)				**543.85**
E	**Berth Hire Activity**				
1	Construction of berth (550m x 25m)	13750	Sq.m	61300	84.29
2	Dredging cost (capital dredging in maneuvering area)	1186927	cum.	245	29.08
3	Fenders @ 35 m	25	Nos.	1471000	3.68
4	Bollards @ 25 m	25	Nos.	367700	0.92

	Add for				
	(a) Detailed Engineering, soil investigations and Project Supervision @ 7%				8.26
	(b) Contigencies @ 3%				3.54
	(c) Works Contract tax @ 2.8%				3.30
	(d) Environmental mitigation cost @ 0.5%				0.59
	Sub Total (E)				15.69
	Cost of Berthing Activity				**133.65**
F	**Miscellaneous**				
	Add 5% for towards interest during construction				6.68
	Add for				
	(a) Detailed Engineering, soil investigations and Project Supervision @ 7%				0.47
	(b) Contigencies @ 3%				0.20
	(c) Works Contract tax @ 4% on 70% of the project cost				0.19
	(d) Environmental mitigation cost @ 0.5%				0.03
	Sub Total (F)				**7.57**
	Total Cost of Berthing Activity				**141.22**
G	**Total Capital Cost (A+B+C+D+E+F)**				**685.07**

(iv). The details of the Annual Operation & Maintenance Cost estimates is given below:

Sl. No.	Item Description	Capital Cost (₹ in Crs.)	Norms	Cost (₹ in Crs.)
A	**Cargo Handling**			
	Operation & Maintenance costs			
1	Power (100 Units/Hour/Crane)*(3 Cranes)*(4000 Working Hours)*(7.9 ₹ /Unit)			0.95
2	Fuel Cost (TAMP Guidelines)			0.92
3	Repairs and Maintenance Cost			
	(A) Civil Works	407.56	1% of capital cost	4.08
	(B) Mechanical & Electrical Works	111.29	5% of capital cost	5.56
4	Insurance	543.85	1% of gross block assets	5.44
5	Depreciation			
	(A) Civil Works	407.56	3.34% of Civil Assets	13.61
	(B) Mechanical & Electrical Works	111.29	10.34% of Civil Assets	11.51
6	**License Fee**		50 ₹ /Sqm/Month	2.10
7	Other Expense on Civil & Mech	543.85	5% of capital cost	27.19
	Total Operation & Maintenance Costs			**71.36**
B	**Berth Activity**			
	Operation & Maintenance Costs			
1	Repairs and Maintenance Costs	141.22	1% of capital cost	1.41
2	Insurance	141.22	1% of gross block assets	1.41
3	Depreciation	141.22	3.34% of Civil Assets	4.72
4	Other Expenses on Civil & Mech	141.22	5% of capital cost	7.06
	Total Operation & Maintenance Costs			**14.60**

(v). The Annual Revenue Requirement has been estimated as follows:

(a). Cargo handling activity:

Sl. No.	Item Description	Total Amount (₹ in Crs.)
1	Return on Capital Employed (16% of Capital Cost)	87.02
2	Operation & Maintenance Cost	71.36
	Total Revenue Requirement	**158.37**
	Allocation of Revenue Requirement	
	Cargo Handling Charges (90%)	142.54
	Storage Charges (5%)	7.92
	Miscellaneous Charges (5%)	7.92
	Total Revenue Requirement (Cargo Handling)	**158.37**

(b). Berthing activity:

Sl. No.	Item Description	Total Amount (₹ in Crs.)
1	Return on Capital Employed (16% of Capital Cost)	22.60
2	Operation & Maintenance Cost	14.60
	Total Revenue Requirement	**37.20**

(vi). The rates proposed by the MBPT are as follows:

Proposed Charges	Iron & Steel	Automobiles	General Cargo	Units
WHARFAGE CHARGES				
Foreign	239.68	3840.96	68.91	Per MT or PCU
Coastal	14381	2265.18	41.33	Per MT or PCU
BERTH HIRE CHARGES	**Foreign**	**Coastal**		
	0.015$	**0.54 ₹**		₹ per GRT/ Hr
STORAGE CHARGES				
		For first to 20th day	**For 21st to 40th day**	**41st onwards**
Iron & Steel, General Cargo	Per tonne per day	5.27	7.90	10.53
Automobiles	Per Vehicle per day	56.18	140.44	280.88

(vii). The Performance Standards in the form of indicative norms for Gross Berth Output for different categories of cargo are as follows:

Cargo category	Indicative Norms
Iron and steel and project cargo	4000 T/ Day
Automobiles	3000 Units/ Day
General cargo	2500 T/ Day

3. In accordance with the consultative procedure prescribed, the proposal of MBPT received under cover of its letters dated 18 September 2013 and 19 September was circulated to the concerned users / user organisations and shortlisted bidders (as forwarded by the MBPT) for seeking their comments. The comments received from the concerned users / user organisations and shortlisted bidders were forwarded to the MBPT as feedback information. The MBPT, under cover of its letter dated 22 October 2013 has, interalia, responded to the comments of the users/ user organisations and shortlisted bidders.

4. Based on a preliminary scrutiny of the proposal, the MBPT was requested vide our letter dated 3 October 2013 to furnish additional information/ clarifications. The MBPT vide its letter dated 8 October 2013 has responded to our queries. A summary of the queries raised by us and the response of MBPT thereon are tabulated below:

Sl. No.	Queries raised by us	Reply received from MBPT
I.	**<u>General:</u>**	
(i).	MBPT to list down the names of the cargo items covered under the cargo item 'General cargo'.	General Cargo covers all items under the category except containers, coal and cruises which has been specifically excluded from the proposed Offshore Multipurpose Cargo Berth. In this regard, point 5.4 (identification of key commodity for assessment) of DPR in page No. 35, may also be referred to. (Point 5.4 of the DPR states that the Key commodities for the proposed offshore multipurpose cargo berth development are identified as follows: - Fertilisers

		Fertilizer Raw Materials Iron & Steel Pulses Other Miscellaneous Cargo Automobiles It also states that some of the commodities handled in the past like food grains, sugar, oil cakes, etc. which are not handled currently at MBPT have been excluded. Also, the stream cargo, liquid and dry bulk cargo and container cargo get excluded.)
(ii).	MBPT to certify that the operator of the facility would not be allowed to handle any other cargo other than iron & steel & project cargo, automobiles and general cargo (as mentioned in the list to be furnished by MBPT with reference to above query).	It is certified that operator would not be allowed to handle the cargoes specifically excluded as stated at (i) above. Further, Iron & Steel & Project Cargo and Automobiles are specifically included as prime cargo, which will be handled at the terminal.
(iii).	The MBPT to furnish the details of the total area proposed to be allotted for the facility, its allocation for the various ancillary purposes and the actual area that would be available for stacking.	A water area of 41,250 sq.m. (550 x 75m) of berth and 35000 sq.m. at Indira Docks is envisaged for allotment. Further water area of 21680 sq.m. for approach trestle is also to be given.
(iv).	The MBPT to also confirm that the proposed allotment of the land is in line with the Land use plan of the Port.	It is confirmed that this is in conformity with the land use plan.
II.	**Optimal capacity:**	
(i).	MBPT to furnish the basis for considering the share of iron & steel & project cargo, automobiles and general cargo at 87%, 9% and 4% respectively, with analysis.	The throughput of iron & steel and project cargo, automobiles and other cargo has been considered at 4.00 MTPA, 0.4 MTPA and 0.2 MTPA. Considering the total throughput as 4.60 and individual throughput of iron & steel as 4 MTPA, percentage capacity works out to 87.96%. Similarly, considering the total throughput and individual throughput of automobiles and other cargo, percentage capacity works out to 8.70% and 3.34% respectively.
(ii).	(a). The handling rate of 10000 tonnes per day for dry bulk cargo prescribed in the 2008 guidelines for a multipurpose berth is with reference to deployment of 3 nos. of 20 tonne ELL cranes. However, the MBPT has considered deployment of 3 nos. of higher capacity wharf crane of 30 tonne each at the proposed facility. Considering that the higher capacity cranes would be in a position to achieve better handling rate, the handling rate for iron & steel & project cargo and general cargo considered by the MBPT at 10000 tonnes per day at one berth to be reviewed and modified suitably.	The capacity of 4.6 MTPA has been worked out based on the facility provided in the DPR. The capacity of crane of 30 tonnes has been provided to handle peak weight of cargo like project cargo. Hence fixing up productivity above norms specified under 2008 guidelines was not envisaged. Hence the standard output of 10000 TPD is appropriate.

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<td></td>
<td>(b). While fixing the ceiling rates following normative approach for use of MHC of 100 tonne capacity for common application without reference to individual service providers at the Paradip Port Trust (PPT), Tuticorin Port Trust (TPT), New Mangalore Port Trust (NMPT) and Visakhapatnam Port Trust (VPT) as well as in the fixation of upfront tariff for the multipurpose berth at other ports where deployment of 100 tonne capacity MHC was envisaged, the benchmark level of productivity has been considered at 12500 tonnes for handling of dry bulk cargo. In this connection, the MBPT to revise the optimal capacity of both iron & steel & project cargo and general cargo by considering a ship day output of 12500 tonnes per day per berth.</td>
<td>Proposal is as per 2008 guidelines and not for approval of Reference Tariff based on specific conditions of any other port. Hence observation is felt not relevant. Further, the project envisages one MHC as an essential equipment and capacity of MHC is not specified. Hence assuming that 87% of Cargo throughput will be handled by MHC and productivity will be 12500 tonnes is not correct. Hence performance parameters considered in the proposal is reasonable and may be accepted.</td>
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<td>(iii).</td>
<td>The actual handling rate in respect of iron & steel & project cargo, automobiles and general cargo achieved at MBPT in a berth during the last three years viz., 2010-11 to 2012-13, to be furnished separately for each cargo for each of the above mentioned years.</td>
<td>Average handling rates for Iron & Steel, Project Cargo, Automobiles /RORO, General Cargo are as follows :
<table>
<tr><th>Sl. No.</th><th>Commodity</th><th>2010-11</th><th>2011-12</th><th>2012-13</th></tr>
<tr><td>1.</td><td>Iron & Steel</td><td>5423</td><td>5770</td><td>5492</td></tr>
<tr><td>2.</td><td>Project Cargo</td><td>711</td><td>739</td><td>960</td></tr>
<tr><td>3.</td><td>Automobiles/RORO</td><td>2781</td><td>2565</td><td>1998</td></tr>
<tr><td>4.</td><td>General Cargo</td><td>1843</td><td>1962</td><td>1884</td></tr>
<tr><td>5.</td><td>Total Break Bulk</td><td>2612</td><td>2508</td><td>2755</td></tr>
</table>
It is stated that majority of Steel Cargo is presently handled by ships own derrick. The berthing facility, average parcel size, etc., are also not on par in the proposed project. Hence the productivity level of port is not relevant for the project.</td>
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<td>(iv).</td>
<td>The basis for considering the handling rate of Automobiles at 3000 units per day at a berth may be justified. In this connection, it is relevant to mention here that in the Order no. TAMP/26/2012-CHPT dated 17 August 2012, disposing the proposal received from the Chennai Port Trust (CHPT) for fixation of upfront tariff for the proposed of Ro-Ro cum multi-purpose berth and multilevel car park to be developed at Chennai Port, a handling rate of 3264 cars per day has been considered. The MBPT to, therefore, review the optimal capacity in respect of the automobiles, in the light of the CHPT Order.</td>
<td>The productivity levels of automobiles per day for the financial year 2010-11, 2011-12, 2013-13 are 2781, 2565 and 1998 respectively. The performance parameter of 3264 is stated to be fixed by TAMP in Chennai Port. Unlike Cochin and Chennai Port, the proposed Multipurpose Cargo Berth at MBPT is placed at 1 km away from the shore. With multiple vessels berthed at Proposed berth, the productivity level with lead of 1 km can be considered at 90% of the Chennai Port. Hence the proposed handling rate of 3000 cars per day may be considered reasonable.</td>
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<td>(v).</td>
<td>Considering that the MBPT has taken into account the handling rate of 10000 tonnes per day per berth in respect of iron & steel & project cargo and general cargo, based on the deployment of 3 nos. of 30 tonne</td>
<td>As stated above at para 2(ii)(b) mobile harbour crane has been proposed as an essential equipment considering heavy lift project cargo through the facility. Hence provision of MHC is justified with specific requirement of Terminal.</td>
</tr>
</table>

	Wharf cranes in the capacity calculation, considering deployment of one no. of Mobile Harbour Crane (MHC) at the facility, to be justified. It is understood that the purpose of deployment of wharf crane and HMC are for ship shore transfer of cargo. MBPT to note that 2008 guidelines do not permit simultaneous deployment of wharf cranes and HMCs for ship shore transfer of cargo.	
(vi).	There appears to be a mistake in the computation of capacity of automobiles. By considering the parameters as furnished by the port, the capacity of the facility to handle automobiles works out to 68695 units and not 66652 units, as furnished by the port. The MBPT to rectify the mistake in this regard and correctly assess the optimal capacity.	Considering throughput of commodities to be handled at proposed Offshore Berth, percentage capacity works out to 86.96% for iron, steel and other cargo, 8.7% as automobiles and others as 4.35% (general cargo). Considering the automobiles as 8.7%, handling capacity works out to 0.7 x 365 x 8.7% x 3000 =66652 units. Hence, no correction is necessary.
III.	**<u>Capital costs:</u>**	
(i).	The MBPT has stated that the item wise unit rates for estimation of capital costs of the projects have been updated based on WPI index of primary commodities at 9% and 11% for the years 2011-12 and 2012-13 respectively. In this context, the MBPT to clarify/ furnish the following: (a). The reason for updating the unit capital cost estimates instead of considering current unit capital cost. Considering the gestation period of the project, the MBPT to consider the current unit capital cost in the estimation of its civil and equipment costs and revise the cost estimates suitably, supported by documentary evidence.	The subject DPR was prepared during 2011. Updating the cost based on WPI index of primary commodities is justified rather than insisting on recasting of entire project cost based on current unit capital cost which will lead to delay and losing of relevance of project. Hence, may be accepted.
	(b). The workings for updating the unit capital cost.	Working of updation of capital cost has already been forwarded alongwith proposal dated 18.09.2013 with DPR. However a copy of working is attached for ready reference. (The workings for updation of capital costs was neither furnished alongwith the proposal dated 18 September 2013 nor now alongwith the replies to the queries.)
	(c). The rationale for considering WPI index of primary commodities for updating the capital cost estimates.	The component of project facility includes steel, cement, labour, bought out items, etc. The project report was prepared in 2011, hence updation of cost with WPI index is reasonable and justified.
	(d). The basis for considering 9% and 11% for the years 2011-12 and 2012-13 respectively as the WPI index of primary commodities may be	The Wholesale Price Index of RBI has been considered as base for considering 9% and 11% for the years 2011-12 and 2012-13 respectively.

	explained.	
(ii).	The MBPT to furnish the basis for the quantum of each item of civil work considered by it to estimate the civil capital costs under both viz., cargo handling activity and berthing activity.	Kindly refer section 11.2 (project cost) of DPR. The quantum as proposed in DPR has been considered in calculation of total project cost.
(iii).	With reference to the estimation of dredging cost, the MBPT to clarify/ furnish the following: (a). The unit cost of dredging considered at ₹245/- per cubic metre to estimate the capital dredging cost of about ₹29 crores to be validated with documentary proof. (b). MBPT to confirm that the successful BOT operator would be the sole beneficiary of the capital dredging envisaged in the manoeuvring area. (c). MBPT to clarify whether the capital dredging considered in the manoeuvring area is akin to capital dredging carried alongside the berth, as stipulated in the guidelines.	The estimated rate/M^3 for capital dredging for soil is ₹ 144/- per cu.mtr. excluding mobilization cost. Considering the possibility of stiff clay, an approximate cost of Rs.200/- has been estimated in the DPR in 2011. Further, same has been updated with WPI index of 9% and 11% for the years 2011-12 and 2012-13 respectively and same works out to ₹ 245/- (approx.). It is confirmed that the successful BOT operator would be the sole beneficiary of the capital dredging envisaged in the maneuvering area. In section 11.2.1 (Marine Development Works) of DPR, it is stated that dredging costs of triangular portion nearby turning circle only has been considered. The capital dredging considered in the maneuvering area is akin to capital dredging carried alongside the berth, as stipulated in the guidelines.
(iv).	The basis for the lumpsum considered for electrical work under mechanical costs and all the items considered under the head 'utilities', to be furnished justifying the cost considered in the estimates.	Section 10.2 (page-127) of DPR gives detailed bifurcation of electrical cost estimate of ₹4.35 crores. Section 10.3 to 10.9 give details of equipment required under the utilities and cost estimate for the same is provided at section 10.10 of DPR. Further, it is to be stated that estimated electrical cost and utilities works out to approximately 0.6% and 1.3% respectively of total estimated cost of the projects and is reasonable.
(v).	MBPT to list down the nature of utilities covered under 'Miscellaneous items'.	The lumpsum of ₹1 crore as brought out in utilities has been considered to accommodate the items not covered in the utilities table and to give a realistic approximate picture and is justified considering total project cost.
(vi).	The equipping plan proposed for the facility is not in line with the equipping plan for the multipurpose terminal as prescribed in the Upfront Guidelines. In this regard, the MBPT to furnish an analysis supported with workings to justify the number of each type of equipment envisaged to be used at the facility to handle iron & steel & project cargo, automobiles and general cargo, to show that given the productivity of each type of the	Please refer Chapter 8 (page-102) of DPR, (cargo handling equipment) wherein different parameters such as design size, parcel size, berth capacity, handling rate, working hours, berth occupancies, etc., and the detailed calculation has been considered for finalizing the equipment. It is further felt that equipment has been prescribed for the Terminal considering the type of cargo, which includes projects cargo unlike many other Terminals, which does not handle projects cargo. Hence, one to one comparison is not justified.

	equipment, the quantity of different equipment commensurate with the quantity of each cargo estimated to be handled. While doing so, the MBPT to take into account the revision in the optimal capacity of the facility to be effected by MBPT for the reasons brought out earlier.	
(vii).	MBPT to furnish documentary evidence in support of the cost of each type of equipment. Also, furnish workings to determine the cost of each type of equipment as considered by MBPT in its calculations.	Cost as proposed in DPR and accepted by the Board has been taken as base for the cost of equipment. At the time of preparation of DPR, it was based on market survey done by consultant. Further it has been updated considering WPI index. Cost of equipments proposed is ₹86.87 crores and same works out to 12.48% of total estimated cost of the project and is reasonable and justified.
(viii).	The MBPT to also justify consideration of cost towards Detailed Engineering soil investigations and Project Supervision @ 7%, Contingencies @ 3%, Works Contract tax @ 2.8% and Environmental mitigation cost @ 0.5% each under civil costs and mechanical costs, given that the Feasibility Report does not reflect such nature of expenditure.	Section 11.2 of the feasibility report provides for ₹108 crores for preliminary, pre-operative expenses, contingency and margin money. For the purpose of tariff, Port has considered ₹63.83 crore against contingency, supervision, WCT and environmental mitigation cost. Same is approximately 9.17% of the total estimated cost of the project and hence is justified.
(ix).	Generally, the cost of utilities form part of the civil costs. The MBPT has, however, considered it as part of the mechanical works cost. Though the total capital cost would not undergo a change due to change in the categorisation, it would have an impact on the operating costs, as the mechanical works enjoy a higher percentage of repairs and depreciation as compared to the civil costs. The MBPT to, therefore, categorise the cost of utilities as part of the civil costs and modify the operating cost estimates suitably.	Utility is only 1.3% of total project cost and observation even if corrected will be negligible and have no material effect of the tariff proposed. Further, many utilities consist of civil and mechanical components and are indivisible in a lumpsum estimate.
(x).	The MBPT has considered interest during construction (IDC) separately in the estimation of capital cost. This is not seen to be in line with the Upfront tariff guidelines of 2008.	5% considered towards interest during construction under the Miscellaneous cost is for upfront payments, working capital margin and IDC are as per guidelines.
(xi).	Further, the MBPT has considered cost towards Detailed Engineering soil investigations and Project Supervision, Contingencies, Works Contract tax and Environmental mitigation cost with respect to the cost of interest during construction. The rationale behind considering these cost components to be justified, given that the said cost components already form part of the civil and the mechanical capital costs.	Misc. expenses has been considered in lumpsum. Certain misc. works do arise during execution. Provision for this is necessary to include all extra works and incidental works. Hence, may not be considered as double counting.

	Consideration of the said cost again under 'Miscellaneous category' would amount to double counting.	
(xii).	Under the capital cost relating to the 'utilities', the MBPT has considered an item of cost relating to 'Environmental Protection Equipment' at ₹0.61 crores. This is seen to be over and above the environmental mitigation cost at 0.5% considered by MBPT under each of the capital costs viz., civil works, mechanical and electrical works, utilities and miscellaneous. Therefore, the amount of ₹0.61 crores considered in the capital cost estimation may be justified.	Impact of the observation is negligible. In fact for fixation of tariff no sensitivity analysis has been considered. Hence, the observation does not affect the objective and the level of tariff. Hence, no correction be insisted.
IV.	**<u>Operating Costs:</u>**	
(i).	Power cost:	
	(a). The power consumption of 100 units per hour per crane as prescribed in the Guidelines is for use of 3 no. of ELL crane, each of 20 tonne capacity. However, the MBPT has envisaged the same quantum of power consumption for use of higher capacity wharf crane each of 30 tonne capacity. The MBPT to review the power consumption, if it so desires.	Although MBPT has considered ELL cranes of 30 tonnes, it has considered handling rates as per TAMP guidelines for 20 tonnes crane and has not revised its capacity hence no review in power consumption is felt necessary. It is expected that the BOT operator shall bring state of art technology equipment for deployment. Further, capacity of terminal is pitched at 4.6 MTPA. Considering the above, it is not required to review power consumption.
	(b). If the MBPT reviews the power consumption, as mentioned above, then the MBPT to furnish the basis of the power consumption, so reviewed.	In view of (a) above, (b) is not required.
	(c). Considering the position that each of the wharf crane would be in operation for a period of 6132 hours (24 hours x 365 days x 70% utilisation), the basis for considering usage of power for 4000 hours may be furnished. It is noteworthy that in the fixation of upfront tariff for the multipurpose berths at other major port trusts, operational hours at 6132 hours have been considered for operation of equipment involved in the ship shore transfer of cargo.	Table 3 to section 5 to Annexure V (Norms for fixation of Upfront Tariff for services rendered at Multipurpose Berth) provides 4000 hours of working in a year for consideration, hence 4000 hours for power has been considered.
	(d). MBPT to furnish documentary evidence in support of per unit cost of electricity considered at ₹7.90.	Average per unit cost of power consumption works out to approximately Rs.6.86 per unit. Further considering transmission and distribution losses of 15%, the cost per unit works out to ₹7.90. Photocopies of bills showing the cost of electricity is attached for reference. (The copy of the electricity bill is not found attached.)

<table>
<tr><td>(ii).</td><td>Fuel expenses:
The MBPT to furnish the workings with regard to the fuel expenses estimated at ₹0.92 crores.</td><td>Table showing workings of 0.92 crores is as given below :
<table>
<tr><th>Equipment</th><th>Fuel consumed (Ltrs/hr)</th><th>No. of Hours</th><th>Rate (₹ / Ltr)</th><th>Amount (In lacs)</th></tr>
<tr><td>Mobile Harbour Cranes</td><td>15</td><td>4000</td><td>56</td><td>33.60</td></tr>
<tr><td>Forklifts of 3 Capacity</td><td>7</td><td>4000</td><td>56</td><td>15.68</td></tr>
<tr><td>Forklifts of 5T Capacity</td><td>7</td><td>4000</td><td>56</td><td>15.68</td></tr>
<tr><td>Rubber Tyred Crane</td><td>12</td><td>4000</td><td>56</td><td>26.88</td></tr>
<tr><td>Total</td><td></td><td></td><td></td><td>91.84</td></tr>
</table></td></tr>
<tr><td>(iii).</td><td>Licence fees:
The MBPT has indicated the licence fee as ₹50/- per sq.m per month. It has, however, not indicated the quantum of area considered for calculation of licence fees. Further, in the absence of requisite details/ workings, it is not found possible to check the correctness of the licence fee amount of ₹2.10 crores. The MBPT to, therefore, furnish the basis for considering the said rate by giving reference to its Scale of Rates and supported by necessary workings.</td><td>The rate of ₹50/- per sq.mtr. per month is as per section 3.3 (A) (I) of MBPT Scale of Rates prescribed for open area. Detailed working are as below :

(35000 Sq.mtr area X rate ₹ 50/- per sq.mtr. per month X 12 months = 2.10 Crores)</td></tr>
<tr><td>V.</td><td><u>Apportionment of Annual Revenue Requirement:</u></td><td></td></tr>
<tr><td>(i).</td><td>Though the MBPT has apportioned the Annual Revenue Requirement (ARR) relating to the Cargo handling activity among handling charges, storage charges and miscellaneous charges in the ratio of 90:5:5, the MBPT has not furnished workings, showing the further apportionment of the ARR to determine the handling charges, storage charges and miscellaneous charges for each of the cargo item. The MBPT to, therefore, furnish detailed workings in this regard.</td><td rowspan="2">Copies showing workings of Apportionment of Annual Revenue Requirement to determine various charges and working of proposed berth hire charges have been furnished.</td></tr>
<tr><td>(ii).</td><td>Similarly, the MBPT has not furnished workings to arrive at the proposed berth hire charges from the ARR relating to the berthing activity. MBPT to furnish the same.</td></tr>
<tr><td>VI.</td><td><u>Scale of Rates:</u></td><td></td></tr>
<tr><td>(i).</td><td>In the proposed tariff Schedule furnished by MBPT, the following deficiencies are noticed:

(a). No definitions for the terms used in the Scale of Rates have been proposed.

(b). No conditionalities with reference to levy of berth hire have</td><td>A complete Tariff Schedule including definitions and conditionalities as proposed by TAMP has been furnished.

Wharfage covers services such as Labour, management and supervision of labour,</td></tr>
</table>

	been proposed.	control and supervision of cargo, operation and maintenance of cargo handling equipment etc. Berth Hire covers operating and maintenance of berth, marine structure, dredging etc.
	(c). A note listing down the services that would be covered under the proposed handling charges may be proposed.	The said note has been incorporated in the proposed tariff schedule.
	(d). Under the storage charges schedule, a note to the effect that no storage charge shall accrue for the period during which the terminal operator is not in a position to deliver cargo when requested by the user for reasons attributable to the terminal operator, as prescribed in the Scale of rates relating to upfront tariff fixed at other major port trusts, may be incorporated.	A miscellaneous charge of ₹ 16.96 per metric tonne has been proposed in proposed scale of rate. Calculation showing the same has been incorporated in the workings.
	(e). The rate towards 'Miscellaneous charges' have not been proposed.	In view of (e) above, (f) is not applicable.
	(f). The list of services covered by the levy of miscellaneous charges may be prescribed.	
	(g). A general note prescribed in the tariff schedule with regard to indexation of the tariff caps to inflation has not been proposed by the Port.	
	The MBPT to take note of the above said deficiencies and propose a complete tariff Schedule.	
(ii).	In the proposed tariff Schedule, the MBPT has proposed a free period of 3 days for the import cargo and 7 days for the export cargo. This is not seen to be in line with the free period prescribed in the upfront guidelines. The MBPT to propose the free days, as stipulated in the guidelines.	(The MBPT has now revised the conditionality in such a manner that the note prescribes a free period of 15 days for the export cargo.)
VII.	**Performance Standards:**	
	The MBPT has furnished the Performance Standards. The indicative norms as prescribed are 4000 tonnes per day in case of Iron & Steel & General Cargo, 3000 units per day in case of Automobiles and 2500 tonnes per day in respect of General cargo. These indicative norms are seen to be on a lower side when compared to the per day output considered by the MBPT in the optimal capacity calculation. The MBPT to, therefore, review the	The norms used for calculation of optimal capacity is based on the maximum rate of the proposed equipments. However, the norms proposed for Performance Standards are minimum of what the Concessionaire is required to maintain and is taken from Appendix 15 of Model Concession Agreement provided by Ministry of Shipping. Hence no review of performance standards is considered. Further, considering multiple cargos and terminal facilities of the project, adopting the minimum performance standards specified in Model Concession Agreement is

	performance standards. The conditionalities governing the performance standards for the various cargoes also to be proposed.	felt appropriate.

5.1. A joint hearing in this case was held on 18 October 2013 at the Office of this Authority. The MBPT made a power point presentation of its proposal. At the joint hearing, the MBPT and the concerned users and user organisation bodies have made their submissions.

5.2. During the joint hearing, it was brought to the notice of MBPT that some information gaps are found in the reply furnished by the Port under cover of its letter dated 08 October 2013 in response to the information sought by us vide our letter of even number dated 03 October 2013. The MBPT, during the hearing, agreed to furnish the requisite information/ clarification immediately. Accordingly, the MBPT vide its letter dated 22 October 2013 has made its submissions. The information sought by us during the joint hearing and the response of MBPT thereon are tabulated below:

Sl. no.	Information sought by us during the hearing	Response of MBPT
(i).	MBPT to furnish the details of the allocation of the total area proposed to be allotted for the facility in terms of stacking area and the area required for the various ancillary purposes.	An area of 55000 sq,mtrs (550mtrs X 100 mtrs) on berth and 35000 sq,mtrs area at Indira Dock are proposed to be allotted. Section 7.5 of DPR deals with storage area required for the proposed project. All the area will be allotted to prospective bidder and bidder will segregate the area of storage into ancillary purpose as per actual requirement. Further storage of automobiles is proposed in open area. The storage area shown are indicative only. It is felt appropriate to give flexibility to the BOT operator.
(ii).	The reply of MBPT does not furnish the basis for considering the share of iron & steel & project cargo, automobiles and general cargo at 87%, 9% and 4% respectively. The basis for the types of cargo proposed to be handled at the facility to be furnished.	Commodity wise traffic handled at MBPT for 7 financial years from 2003-04 to 2009-10, their CAGR, share of various commodities in total traffic at MBPT over these financial years, composition of imports and exports of total traffic at MBPT, industrial trend & statistics of commodities proposed to be handled, future outlook, feedback on growth of import and export of major players of commodities, future regional & national developments in terms of infrastructure investments etc. has been considered for arriving at basis for considering share of iron & steel & project cargo, automobiles & general cargo. Chapter 5 of DPR (Traffic Scenario at Mumbai Port Trust) deals with the basis considered while considering the total traffic and individual traffic at the proposed Offshore Multipurpose Cargo Berth.
(iii).	Considering that the handling rate of 10000 tonnes per day for dry bulk cargo prescribed in the 2008 guidelines for a multipurpose berth is with reference to deployment of 3 nos. of 20 tonne ELL cranes and that since the MBPT has considered deployment of 3 nos. of higher	Deployment of 3 nos of higher capacity wharf crane of 30 tonnes each at the proposed facility has been considered based on the proposed project requirement which would also be dealing with loading and unloading of heavy lift, over dimensional cargo, project cargo etc. Since these cranes

	capacity wharf crane of 30 tonne each at the proposed facility, which would be in a position to achieve better handling rate, the MBPT was requested to review the handling rate for iron & steel & project cargo and general cargo considered by the MBPT at 10000 tonnes per day at one berth. In this regard, the MBPT has replied that the capacity of crane of 30 tonnes has been provided to handle peak weight of cargo like project cargo. In this connection, the MBPT to justify deployment of higher capacity cranes with reference to the share of project cargo in the cargo mix proposed to be handled at the facility. Such share of project to be also indicated.	would be handling project cargo apart from cargo being handled by ships own cranes, the handling rate for the cargo has been considered at 10000 tonnes a day as per the guidelines of TAMP considering 20 tonnes wharf cranes. Further, the capacity cannot be increased with arithmetical proportion.
(iv).	Given that the MBPT has envisaged deployment of MHC, the MBPT was requested to consider the benchmark level of productivity at 12500 tonnes in the determination of optimal capacity of both iron & steel & project cargo and general cargo, as has been considered in other cases where deployment of MHC is envisaged. The reply of MBPT does not respond to the query raised. Therefore, the MBPT to consider productivity at 12500 tonnes in the determination of optimal capacity of both iron & steel & project cargo and general cargo.	This office has already stated that the mobile harbour crane has been proposed as an essential equipment considering the heavy lift and project cargo through the facility. Further it is to be stated that handling rate cannot be considered in isolation & depends on many other factors as well. This crane can also be considered against one ELL crane. The capital cost of ELL crane and Mobile Harbour Crane are ₹18/- crores and ₹20/- crores respectively.
(v).	By calculating the capacity of one berth based on 3 nos. of wharf cranes, the MBPT has calculated the capacity of two berths, by multiplying the capacity of one berth by 2. In other words, this would amount to deployment of 6 nos. of Wharf cranes at the facility. Instead, the MBPT has envisaged deployment of 3 nos. of wharf cranes only. The equipment plan for the operation of second berth may be indicated. Since the specific purpose of the HMC has not been indicated, the MBPT to confirm whether the deployment of one MHC is in lieu of 3 nos. of wharf cranes in the second berth.	The facility of the proposed Ro-Ro cum multipurpose berth and multilevel car park to be developed at Chennai Port and proposed Offshore Multipurpose Cargo Berth at Mumbai Port are two distinct project with different features as regards to total traffic, capacity, capex, opex, cargo mix and ship sizes etc.. Hence the comparison is unjustified. The handling rate of 3000 units per day for automobiles has been considered based on detailed analysis carried out by consultant and provided in DPR (Page XXI). Further, it is to be stated that placing of proposed Offshore Multipurpose Cargo berth at Mumbai Port Trust 1 km away from shore, has its effect on the handling of cars when compared with Ro-Ro cum multipurpose berth and multilevel car park to be developed at Chennai Port. Handling rate of 3000 PCU is reasonable. Response of the port is not relevant to the query raised.
(vi).	The proposal envisages deployment of 3 no. of higher capacity cranes (30 tonnes) instead of 3 no. of 20 tonne cranes stipulated in the guidelines. That being so, consideration of handling rate of 12500 tonnes per day for 3 wharf cranes appears to be appropriate in the capacity calculation per berth, instead of 10000 tonnes per day.	Reason for deployment of mobile harbour crane has already been stated earlier in our reply dated 8th October, 2013. Chapter 8.2 of DPR gives details of parameter which has been considered for arriving at the requirement. MHL has been considered as an essential requirement considering heavy lift, over dimensional cargo, project cargo

<table>
<tr><td></td><td></td><td>etc. Hence, is justified for the project specific requirement</td></tr>
<tr><td>(vii).</td><td>It is not clear how the placing of the proposed Multipurpose Cargo Berth at MBPT at 1 km away from the shore, justifies consideration of the proposed handling rate of 3000 cars per day (90% of the handling rate considered in the CHPT case). The MBPT to clarify the position.</td><td>(The MBPT has not responded to this point.)</td></tr>
<tr><td>(viii).</td><td>The workings for updation of capital costs has neither been furnished along with the proposal dated 18 September 2013 nor along with the replies to the queries, as reported by the MBPT. The MBPT to furnish the requisite information.</td><td>Working for updation of capital cost was forwarded alongwith DPR at the time of submission of this office proposal dated 18th September, 2013. However, a copy of working for updation of capital cost is attached.</td></tr>
<tr><td>(ix).</td><td>Inspite of a specific query, the MBPT has not furnished any analysis supported with workings to justify the number of each type of equipment envisaged to be used at the facility to handle iron & steel & project cargo, automobiles and general cargo and to show that given the productivity of each type of the equipment, the quantity of different equipment commensurate with the quantity of each cargo estimated to be handled. The reply furnished by MBPT is general in nature. The MBPT is, therefore, again requested to furnish the requisite information in this regard.</td><td>Parameters considered for finalizing the equipment are as under :
a) Design ship size
b) Parcel size
c) Berth Capacities
d) Handling rate
e) Effective working hours per day
f) Peripheral time requirement
g) Accepted level of berth occupancy
<u>Design ship size</u>
<table>
<tr><td>Type of Cargo</td><td>Ship size considered</td></tr>
<tr><td>Iron & Steel</td><td>60000 DWT</td></tr>
<tr><td>Project Cargo</td><td>60000 DWT</td></tr>
<tr><td>Automobiles</td><td>8000 PCU (max)</td></tr>
<tr><td>General Cargo</td><td>45000 DWT</td></tr>
</table>
<u>Parcel size</u>
<table>
<tr><td>Type of Parcel</td><td>Parcel size considered</td></tr>
<tr><td>Iron & Steel</td><td>25000 Tonnes to 45000 Tonnes</td></tr>
<tr><td>Automobiles</td><td>3000 PCU to 4000 PCU</td></tr>
<tr><td>Other (Gen)</td><td>Less than 10000 Tonnes</td></tr>
</table>
<u>Phase-wise Equipment Requirement</u>
The project is planned to be divided in phases as traffic picks up. The equipment is to be deployed phase-wise.
<table>
<tr><td>Cargo Equipment on Quay</td><td>Annual Thru'put</td><td>Rate of handling</td><td>Ship to shore and elsewhere</td><td>Equipment at storages</td></tr>
<tr><td>Iron & Steel</td><td>3 MTPA</td><td>10000 TPD</td><td rowspan="2">Rail mounted & electrically operated wharf cranes- 30 MT 5 Nos. Mobile Harbour Crane- 1 No.</td><td rowspan="2">Mobile Cranes- 2 Nos.
Fork Lift Trucks
1) 5 Tonnes- 2 Nos.
2) 3 Tonnes- 2 Nos.</td></tr>
<tr><td>Project Cargo</td><td>0.40 MTPA</td><td>10000 TPD</td></tr>
<tr><td>Automobiles
Others</td><td>300000 units 0.20 MTPA</td><td>3000 units/day 5000 TPD</td><td>Self loading as required</td><td></td></tr>
</table>
</td></tr>
<tr><td>(x).</td><td>Except for stating that consideration of 4000 operational hours for estimating power cost is as per guidelines, MBPT has not explained why 6132 operational hours cannot be considered, in the calculation of power cost. MBPT to explain the position.</td><td>Norms of 4000 working hours were considered in our proposal dt. 18.09.2013. However considering the operational hours of 6132 working hours, Annual Operational & Maintenance Cost Estimate, Allocation of revenue requirement and proposed SOR has been revised & attached. Workings of proposed SOR are also attached.</td></tr>
<tr><td>(xi).</td><td>The copy of the electricity bill is not found attached. MBPT to furnish the same.</td><td>Photocopies of electricity bills are attached.
(The copies of the electricity bills are not found to be attached.)</td></tr>
</table>

(xii).	The list of services covered for the levy of miscellaneous charges has not been prescribed. MBPT to propose a suitable conditionality in this regard.	Miscellaneous charges prescribed above is a composite charge for provision of all miscellaneous services such as sweeping of cargo on the wharf, weighment of cargo, dust suppression etc.
(xiii).	The MBPT has prescribed a general note in the tariff schedule with regard to indexation of the tariff caps to inflation to the effect that the tariff caps would be indexed to the extent of 60% of the variation in WPI occurring between 1 January 2011 and 1 January of the relevant year. When the capital cost estimates have been updated with reference to the year 2013, the reason for considering the year 2011 for the purpose of indexation is not clear. The MBPT to clarify the position.	General note in tariff schedule with reference to indexation of tariff capacity to inflation is as under: "The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January, 2013 and 1^{st} January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1^{st} April of the relevant year to 31^{st} March of the following year."

5.3. While responding to the points made by us during the joint hearing vide its letter dated 22 October 2013, the MBPT has updated its proposal with regard to the power and the fuel costs forming part of the Operating Costs. This has led to change in the Annual Revenue Requirement and the corresponding change in the proposed rates. A comparative position between the parameters contained in the original proposal of MBPT submitted vide its letter dated of statements are given below:

Sl. No.	Estimates contained in the MBPT proposal dated 18 September 2013		Revised Estimates furnished by MBPT under cover of its letter dated 22 October 2013	
	Particulars	₹ in crores	**Particulars**	₹ in crores
OPERATION & MAINTENANCE COST RELATING TO CARGO HANDLING ACTIVITY				
1	Power (100 Units/Hour/Crane)* (3 Cranes) * (4000 Working Hours) * (7.9 ₹ /Unit)	0.95	Power (100 Units/Hour/Crane)* (3 Cranes) * (6132 Working Hours) * (7.9 ₹ /Unit)	1.45
2	Fuel Cost	0.92	Fuel Cost	1.41
3	Repairs and Maintenance Cost		Repairs and Maintenance Cost	
	(a) Civil Works	4.08	(a) Civil Works	4.08
	(b) Mechanical & Electrical Works	5.56	(b) Mechanical & Electrical Works	5.56
4	Insurance	5.44	Insurance	5.44
5	Depreciation		Depreciation	
	(a) Civil Works	13.61	(A) Civil Works	13.61
	(b) Mechanical & Electrical Works	11.51	(B) Mechanical & Electrical Works	11.51
6	License Fee	2.10	License Fee	2.10
7	Other Expenses on Civil & Mech	27.19	Other Expenses on Civil & Mech	27.19
	Total Operating & Maintenance Costs (Cargo Handling)	**71.36**	**Total Operating & Maintenance Costs (Cargo Handling)**	**72.35**
ANNUAL REVENUE REQUIREMENT RELATING TO CARGO HANDLING ACTIVITY				
1	Return on Capital Employed (16% of Capital Cost)	87.02	Return on Capital Employed (16% of Capital Cost)	87.02
2	Operation & Maintenance Cost	71.36	Operation & Maintenance Cost	72.35
	Total Revenue Requirement	**158.37**	**Total Revenue Requirement**	**159.37**
ALLOCATION OF REVENUE REQUIREMENT				
	Cargo Handling Charges (90%)	142.54	Cargo Handling Charges (90%)	143.43
	Storage Charges (5%)	7.92	Storage Charges (5%)	7.97
	Miscellaneous Charges (5%)	7.92	Miscellaneous Charges (5%)	7.97
	Total Revenue Requirement (Cargo Handling)	**158.37**	**Total Revenue Requirement (Cargo Handling)**	**159.37**
PROPOSED SCALE OF RATES				
	Wharfage Charges		Wharfage Charges	

Type of Vessel	Iron & Steel	Automobiles	General Cargo	Units
Wharfage Charges				
Foreign	239.68	3840.96	68.91	Per MT or PCU
Coastal	143.81	2265.18	41.33	Per MT or PCU
Storage Charges				
Commodities	Unit	For first to 20^{th} day	For 21^{st} to 40^{th} day	From 41^{st} day onwards
Iron & Steel, General Cargo	Per tonne per day	5.27	7.90	10.53
Automobiles	Per Vehicle per day	56.18	140.44	280.88

Type of Vessel	Iron & Steel	Automobiles	General Cargo	Units
Wharfage Charges				
Foreign	241.18	3865.08	69.34	Per MT or PCU
Coastal	144.71	2279.41	41.59	Per MT or PCU
Storage Charges				
Commodities	Unit	For first to 20^{th} day	For 21^{st} to 40^{th} day	From 41^{st} day onwards
Iron & Steel, General Cargo	Per tonne per day	5.30	7.95	10.60
Automobiles	Per Vehicle per day	56.53	141.32	282.65

6.1. From the submissions made by the MBPT under cover of its letter dated 22 October 2013, it was seen that the MBPT has not addressed all the issues raised during the joint hearing. Accordingly, the MBPT was requested vide our letter dated 23 October 2013 to furnish requisite information/ clarification. The MBPT has responded under cover of its letter dated 28 October 2013. The information sought by us and the response of MBPT thereon are tabulated below:

Sl. no.	Information sought by us	Response of MBPT
(i).	Considering that the handling rate of 10000 tonnes per day for dry bulk cargo prescribed in the 2008 guidelines for a multipurpose berth is with reference to deployment of 3 nos. of 20 tonne ELL cranes and that since the MBPT has considered deployment of 3 nos. of higher capacity wharf crane of 30 tonne each at the proposed facility, which would be in a position to achieve better handling rate, the MBPT was requested to review the handling rate for iron & steel & project cargo and general cargo considered by the MBPT at 10000 tonnes per day at one berth. In this regard, the MBPT has replied that the capacity of crane of 30 tonnes has been considered to deal with loading and unloading of heavy lift, over dimensional cargo, project cargo etc. In this connection, the MBPT to justify deployment of higher capacity cranes with reference to the share of heavy lift, over dimensional cargo, project cargo etc. in the cargo mix proposed to be handled at the facility. Such share of the heavy lift, over dimensional cargo, project cargo etc., also to be indicated.	This office has already stated that cranes of 30 tonnes capacity has been considered to deal with loading and unloading of heavy lift, over dimensional cargo, project cargo etc. besides other cargo. Further, mobile harbour crane has been considered considering the flexibility provided by it as they are mobile and can move around from one berth to another when compared to wharf crane which moves along a dedicated rail track fixed on berths. Flexibility in operations provided by Mobile Harbour crane will be of much use as the proposed berths are offshore berths connected to the main land/ main area of port through a trestle with no yard behind the berth to stock the cargo. Share of heavy lift cargo, over dimensional cargo has already been considered in share of iron and steel cargo. Cargo mix has been dealt in chapter 7.2.1,7.2.3 and also in executive summary (page XVIII and XX, XXI).
(ii).	By calculating the capacity of one berth based on 3 nos. of wharf cranes, the MBPT has calculated the capacity of two berths, by multiplying the capacity of one berth by 2. In other words, this would amount to deployment of 6 nos. of Wharf cranes at the facility. Instead, the MBPT has envisaged deployment of 3 nos. of wharf cranes only. The equipment plan for the operation of second berth may be indicated. Since the specific purpose of the HMC has not been indicated, the MBPT to confirm whether the deployment of one MHC is in lieu of 3 nos. of wharf cranes in the second berth.	Guidelines issued by TAMP provides for deployment of 3 Nos 20 Tonnes capacity crane for 1 berth. Cargo handling equipment requirement of 3 Nos 30 Tonnes cranes, 1 mobile harbour crane has been considered in proposed project considering the 2 berths. Hence the contention of TAMP requesting MbPT to indicate the equipment plan for the operation of the 2nd berth is not in order. As regards to specific purpose for deployment of mobile harbour crane, it is to be stated that mobile harbour cranes provides better flexibility on operations as they are mobile and can move around from one berth to another when compared to wharf cranes which moves along a dedicated rail track fixed on berths. Flexibility in operations provided by Mobile Harbour crane will be of much use as the proposed berths are offshore berths connected to the main land/ main area of port through a trestle with no yard behind the berth to stock the cargo. Further, higher capacity cranes are also important for handling higher peak loads, loading and unloading of project cargo and

		over dimensional cargo. The hoisting capacity of Mobile Harbour Crane is approximately 40 tonnes to 60 tonnes. Thus deployment of mobile harbour crane cannot be considered in isolation.
(iii).	The MBPT has indicated the parameters considered for finalizing the equipment. However, the MBPT has not furnished any analysis to justify the number of each type of equipment envisaged to be used at the facility to handle iron & steel & project cargo, automobiles and general cargo and to show that given the productivity of each type of the equipment, the quantity of different equipment commensurate with the quantity of each cargo estimated to be handled. The MBPT to, therefore, again furnish the requisite information in this regard.	Parameters considered for finalizing the equipment inter-alia include berth capacity as one of the parameters. While working out the berth capacities, ship size, parcel size and rate of handling have been considered. This has been brought out in detail under chapter no.8.2.3 of DPR. Further, cargo handling equipments requirement have been worked out in the DPR based on the approximate quantity estimated to be handled. This has been discussed in detail in Chapter 8.2 and 8.3 of DPR. Thus chapter 8.2 and 8.3 of DPR gives analysis to justify the no of each type of equipment envisaged to be used at the facility to handle iron & steel & project cargo, automobiles and general cargo and to show that given the productivity of each type of the equipment, the quantity of different equipment commensurate with the quantity of each cargo estimated to be handled.
(iv).	The copy of the electricity bill, though stated to have been attached by MBPT, is not found attached. MBPT to furnish the same.	Copy of few electricity bill have already been forwarded vide our letter dtd. 8th October, 2013 and 22nd October, 2013. Photocopies were also given during joint hearing held on 18th October, 2013. However photocopies of few electricity bills are attached herewith.

6.2. Subsequently, at our request with reference to construction of storage area in the berth, the MBPT vide its e-mail dated 07 November 2013 has clarified that the area of 550m x 75m is area of the berth as shown in the Feasibility Report.

7. The proceedings relating to consultation in this case are available on records at the office of this Authority. An excerpt of arguments made by the concerned parties will be sent separately to the relevant parties. These details will also be made available at our website http://tariffauthority.gov.in.

8. With reference to the totality of the information collected during the processing of the case, the following position emerges:

(i). The proposal is to fix reference tariff for handling Iron & Steel & Project cargo, Automobiles and General Cargo envisaged to be handled at the proposed Multipurpose Offshore Berth to be developed at the Mumbai Port Trust (MBPT) under Public Private Partnership (PPP) mode on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

The proposal is based on the Revised Guidelines for Determination of Tariff for Projects at Major Ports, 2013, effective from 9 September 2013, issued by the Ministry of Shipping. Clause 2.4 of the said guidelines stipulates that if in the view of the Major port Trust, the tariff determined for a particular commodity under 2008 guidelines at that Major Port Trust or any other Major Port Trust is not a representative Reference Tariff for that commodity, then the Major Port is free to approach this authority with a proposal to re-fix Reference Tariff under 2008 guidelines for the project giving detailed and sufficient justification.

Since the upfront tariff for the proposed combination of the multi cargo is not available neither in MBPT nor in any other major port, the MBPT has come up with a proposal for fixation of Reference tariff for the proposed combination of the multi cargo, generally following the principles of 2008 Guidelines.

(ii). The MBPT has filed its proposal in September 2013. Subsequently, based on the information/ clarifications sought by us during the processing of the case and based on the decisions taken during the joint hearing on 18 October 2013, the MBPT under cover of its letter dated 22 October 2013 has updated its proposal. The updation is only with reference to change in the power cost and fuel cost forming part of the operating cost. The other parameters like optimal capacity and capital costs remain unchanged. The updated proposal of the MBPT dated 22 October 2013 along with the information/ clarification furnished by MBPT during the processing of the case in reference are considered in this analysis.

(iii). Optimal Terminal Capacity:

(a). By considering the percentage share of each type of cargo viz., iron & steel & project cargo, automobiles and general cargo and the handling rate of each of the above mentioned cargo based on deployment of 3 nos. of wharf cranes, the MBPT has determined the optimal capacity of each of the cargo proposed to be handled at one berth. Based on the capacity of one berth, the MBPT has derived the capacity of two berths, by applying the multiplication factor of 2. Thus, the MBPT has calculated the optimal capacity of the facility at 4.44 MMTPA in respect of iron & steel & project cargo, 133371 units of cars per annum and 2.22 MMTPA in respect of General cargo.

(b). The MBPT has considered the share of iron & steel & project cargo, automobiles and general cargo at 86.95%, 8.70% and 4.35% respectively. This position is reported to be based on the commodity wise traffic during the years from 2003-04 to 2009-10, their compounded annual growth, import export ratio, industrial trend & statistics of commodities proposed to be handled, future outlook, feedback on growth of import and export of major players of commodities, future regional & national developments in terms of infrastructure investments etc. Based on the reasoning furnished by the MBPT and given that none of the users/ prospective bidders have objected to the proposed cargo mix, the share of each cargo in the total cargo capacity is relied upon in the analysis.

(c). As stated earlier, based on the capacity of one berth determined considering the deployment of 3 nos. of wharf cranes, the MBPT has derived the capacity of two berths. In other words, the capacity for the facility is theoretically based on requirement of 6 nos. of Wharf cranes at the facility. However, the equipping plan considered by the MBPT for the proposed multipurpose berth of 550 metres (2 berth configuration), interalia, considers use of 3 numbers of 30 tonne capacity Wharf Cranes instead of 3 Nos of 20 tonne wharf cranes as prescribed in 2008 guidelines and one number of Mobile Harbour Crane with a hoisting capacity of about 40 – 60 tonnes.

(d). In this regard, if 3 nos. of 20 tonne cranes are required in a multipurpose berth, then technically, 6 nos. of 20 tonne cranes would be required for two berths, thereby leading to an aggregate hoisting capacity of cranes of about 120 tonnes for two number of berths put together. By proposing 3 numbers of 30 tonne capacity Wharf Cranes and one number of say 40 tonne Mobile Harbour Crane, an aggregate hoisting capacity of about 130 tonnes would be available for two number of berths at the proposed facility.

Clause 3.2. of the guidelines for upfront tariff setting gives flexibility to this authority to make necessary adjustment in the norms based on the justification furnished by the port in view of the port's specific conditions having impact on the norms prescribed in the guidelines. Recognising that deployment of MHC is essential given that it would be handling heavy lift project cargo at the proposed facility, as clarified by the MBPT and since, none of the users/ prospective bidders have objected to the equipping plan envisaged by the MBPT, this Authority is inclined to consider deployment of wharf cranes and MHC, as proposed by the MBPT at the proposed facility. Incidentally, the equipping plan proposed by the MBPT does not in any way exceed the equipping plan prescribed in the Guidelines for calculation of optimum capacity of the facility.

(e). As brought out earlier, instead of the 20 tonne ELL cranes as prescribed in the 2008 guidelines, the MBPT has proposed deployment of 30 tonne wharf cranes at the facility. However, the handling rate of 10000 tonnes per day as prescribed in the 2008 guidelines for handing dry bulk cargo based on 3 nos. of 20 tonne ELL cranes in a multipurpose berth, has been retained by the MBPT as the handling rate for the iron & steel & project cargo and general cargo in its capacity calculation, even with the 3 nos. of higher capacity wharf crane of 30 tonne each.

As clarified by the MBPT, provision of higher capacity wharf crane is mainly to enable handling heavy lift, over dimensional cargo and project cargo etc. at the facility. It is relevant to mention here that the handling rate of 10000 tonnes per day with 20 tonne ELL cranes is for handling dry bulk cargo like food grains and fertilizers only. While prescribing handling rate of 10,000 tonnes per day with 20 tonnes wharf cranes for handling of dry bulk cargo of food grains and fertilizers, the Guidelines are silent about the handling rate for heavy lift, over dimensional cargo and project cargo with the use of 20 tonne ELL cranes.

In this regard, it is relevant to mention here that the productivity of 10000 tonnes per day by deployment of 20 tonne ELL cranes is with reference to the said equipment being deployed at one berth only. In the case in reference, given that the 3 nos. of 30 tonne cranes and 1 no. of MHC would be put to use in both the berths, it would involve regular movement of cranes in between the berths. Thus, even though slightly higher capacity cranes have been envisaged at the facility, it may not contribute to the productivity in excess of 10000 tonnes per day. The MBPT has also opined that capacity of the crane cannot be increased with arithmetical proportion.

In view of the above position, the handling rate of 10000 tonnes per day in respect of Iron & Steel & Project cargo and General cargo is considered in the analysis, as proposed by the MBPT.

(f). With regard to Automobiles, the MBPT has considered the handling rate of 3000 units per day at a berth, based on the position that it is as per the Feasibility Report. In this connection, it is relevant to mention here that in another case relating to fixation of upfront tariff for the proposed Ro-Ro cum multi-purpose berth and multilevel car park to be developed at Chennai Port vide tariff Order no. TAMP/26/2012-CHPT dated 17 August 2012, a handling rate of 3264 cars per day has been considered. For consideration of productivity of 3000 cars per day, the MBPT has sought to argue that the project at MBPT and at CHPT are distinct with different features and thus, the handling rate of CHPT cannot be adopted. Further, the MBPT has stated that given the proposed facility of MBPT is around 1 km away from shore, it would not be possible for it to achieve the handling rate of 3264 cars per day, as has been considered in the case of CHPT.

However, it has not explained with an analysis how the features of its project would have an impact on the handling rate of the automobiles. Further, the MBPT has also not explained how the placing of the facility around 1 km away from shore would have an impact on the handling rate. As can be seen from the CHPT Order, the handling rate of 136 cars per hour (which works out to 3264 cars in a day of 24 hours) in the upfront tariff fixation, has been considered based on the average of actual performance statistics at the CHPT in the past, as reported by CHPT. Given that the consideration of handling rate of 3264 cars in a day in the case of CHPT is not based on project specific parameters of the facility, but based on past trends at CHPT, the MBPT has not established why the handling rate of 3264 cars cannot be considered in its case. Therefore, the handling rate of 3264 cars in a day is considered in the analysis, following the position accepted in the CHPT case.

(g). Based on the percentage share of traffic and the handling rates in respect of iron & steel & project cargo, automobiles and general cargo, as discussed in the preceding paragraphs, the optimal capacity of the facility works out to 4.44 MMTPA in respect of iron & steel & project cargo, 145108 units of cars per annum and 2.22 MMTPA in respect of General cargo, at 70% utilization. Thus, it can be seen that only the optimal capacity in respect of automobiles has been revised to 145108 units from 133371 units of cars per annum estimated by the MBPT.

(iv). Capital costs:

(a). The capital cost as estimated by the MBPT in its proposal is ₹685.05 crores of which ₹141.23 crores is for berthing activity and ₹543.82 crores is estimated for cargo handling services. Further, out of the ₹543.82 crores estimated for the cargo handling activity, ₹407.55 crores is towards civil works, ₹98.42 crores towards Equipment cost, ₹12.85 crores towards cost of utilities and ₹25.00 crores towards Miscellaneous capital costs.

(b). Civil Cost:

(i). Berth Activity:

(a). As per 2008 upfront tariff guidelines, the capital cost for berth hire services includes cost of construction of berth and cost of dredging, if any, carried out alongside the berth. The guidelines require to consider the cost as estimated by the port.

(b). The capital cost under the berthing activity amounting to ₹141.23 crores is towards cost of Construction of berth in the wharf area, cost of dredging, Fenders and Bollards. The items of civil works estimated by MBPT broadly adhere to list of civil works items stipulated in the guidelines. Further, the MBPT has taken into account the estimated cost towards Detailed engineering, Soil Investigation and Project supervision @ 7%, Contingencies @ 3%, Works Contract Tax @ 2.8% and Environmental Mitigation cost @ 0.5%.

(c). Given that the Feasibility Report of the Project has been prepared during the year 2011, the unit cost for the cost estimates as reflected in the Feasibility Report has been updated by MBPT by considering an escalation factor of about 9.81% for the year 2012 and 11.63% for the year 2013, so as to arrive at the unit cost estimates prevailing during the year 2013. The MBPT has opined that recasting of entire project cost based on current unit capital cost will lead to delay. With reference to the escalation factor considered by MBPT, it is relevant here to mention that an escalation factor of 6.5% and 7% was applied for expenditure projections in all tariff cases of major port trusts and private terminals operators decided during the year 2012-13 and 2013-14 following tariff guidelines of 2005. There may be an argument that the escalation factor considered by MBPT for updating the capital cost estimates is on the higher side. In this regards, it is to be kept in view that while the escalation factor of 6.5% and 7% are based on the Whole Sale Price Index (WPI) for all commodities as stipulated in clause 2.5.1 of the guidelines of 2005, the WPI considered by MBPT is for primary commodities. Given that the Government has attached priority for award of PPP projects and considering that the MBPT has proposed to award the project in November 2013, which may be possible only after the Reference tariff has been fixed and conveyed to the port and since the MBPT has updated the cost estimates by applying the escalation factor, which may reasonably reflect the prevailing market rates, the estimated capital cost of the berthing activity as furnished by the port is considered relying upon the escalation factor adopted by MBPT.

(d). The dredging cost considered by the MBPT is with reference to dredging to be carried out in the triangular portion nearby turning circle. In this regard, the MBPT has confirmed that the capital dredging considered in the said maneuvering area is akin to capital dredging carried alongside the berth, as stipulated in the upfront guidelines and also that the successful BOT operator would be the sole beneficiary of the capital dredging envisaged in the maneuvering area. This position is taken into account.

As far as the estimated dredging cost is concerned, the MBPT has considered unit rate of ₹245 per cubic meter for a quantity of 1186927 cubic meter. The rate of ₹245 per cu.m is also the updated rate derived based on the rate for dredging mentioned in the Feasibility Report at ₹200 per cu.m.

(e). Provisions have been made by the MBPT in the capital cost estimates towards Detailed engineering, Soil Investigation and Project supervision, Contingencies, Works Contract Tax and Environmental Mitigation cost. Similar cost components have been considered while fixing the upfront tariff in respect of multipurpose berth of KOPT also, hence considered.

(f). The port has also estimated miscellaneous capital cost at 5% of the total berth construction cost plus dredging cost including the various provisions as listed above, towards upfront payment, working capital margin and Interest during construction. The 2008 upfront tariff guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in case of the upfront tariff proposals determined for various projects of VPT, Coal terminal at VOCPT, multipurpose berths at KOPT and MOPT, this Authority has considered the miscellaneous capital cost at 5% to meet contingencies under the Berthing Service. Keeping in view the decision taken by this Authority in the above mentioned cases, it may not be unreasonable to allow 5% of the berth construction cost plus dredging cost towards miscellaneous capital cost, in this case also.

(g). However, the MBPT has considered cost towards Detailed Engineering soil investigations and Project Supervision, Contingencies, Works Contract tax and Environmental mitigation cost with respect to the miscellaneous capital cost also, on the ground that such provision is necessary for all the extra and incidental works that arise during execution. In this regard, it is to be noted that the miscellaneous capital cost itself has been derived as a percentage of the berthing capital cost, which, interalia, includes the above said cost components. If the same cost components are again considered under the component of miscellaneous capital cost, then it would amount to double counting. Therefore, the cost towards Detailed Engineering soil investigations and Project Supervision, Contingencies, Works Contract tax and Environmental mitigation cost with respect to the miscellaneous capital cost of the berthing activity are not considered in the analysis.

(ii). Cargo handling activity:

(a). The upfront tariff guidelines broadly indicate the civil works involved for the multipurpose berth and require the port to estimate civil cost. The items of civil works considered by MBPT are towards Approach Trestle, Administrative Building, Construction of berth area for Storage (550m x 75m), Workshop, Shop & Stores, and Miscellaneous Buildings. The said civil works generally adhere to the list of civil works stipulated in the guidelines for the multipurpose berth. Further, the MBPT has estimated cost towards Detailed engineering, Soil Investigation and Project supervision @ 7%, Contingencies @ 3%, Works Contract Tax @ 2.8% and Environmental Mitigation cost @ 0.5%.

(b). Here also, the unit cost for the cost estimates as reflected in the Feasibility Report has been updated by MBPT by considering an escalation factor of about 9.81% for the year 2012 and 11.63% for the year 2013, and then rounded off to the nearest 1000's so as to arrive at the unit cost estimates prevailing during the year 2013. For the reasons stated earlier, the capital cost of the handling activity as furnished by the Port is relied upon.

(c). Provisions made by the MBPT in the capital cost estimates towards Detailed engineering, Soil Investigation and Project supervision, Contingencies, Works Contract Tax and Environmental Mitigation cost, are also considered.

(c). The MBPT has considered the cost of utilities in the capital cost estimation. The said capital cost of utilities is towards Water Supply, Sewerage, Communication & IT, Bunkering, Storm Water Drainage, Disaster Management Plan, Environmental Protection Equipment, Firefighting facilities and Miscellaneous Items. Further, the MBPT has also considered cost towards Detailed engineering, Soil Investigation and Project supervision @ 7%, Contingencies @ 3%, Works Contract Tax @ 2.8% and Environmental Mitigation cost @ 0.5%.

As stipulated in the guidelines, the cost of utilities like water supply, sewage form part of the civil construction costs. The MBPT has, however, considered it as part of the mechanical works cost. Though the total capital cost would not undergo a change due to change in the categorisation, it would have an impact on the operating costs, as the mechanical works enjoy a higher percentage of repairs and depreciation as compared to the civil costs. The MBPT was, therefore, requested to categorise the cost of utilities as part of the civil costs and modify the operating cost estimates suitably. However, the MBPT has not carried out any modification to its operating cost estimates on the ground that Utility is a miniscule component of total project cost and even with the changes it would not have any material effect on the proposed tariff. Further, the MBPT has stated that many utilities consist of civil and mechanical components and are indivisible. Given that the 2008 upfront guidelines stipulate consideration of items forming part of utilities under the civil costs, the same is considered as part of civil costs only.

(d). Equipment Cost:

(i). The position regarding deployment of 3 number of 30 tonne Wharf cranes and one no. of MHC has already been dealt in the earlier paragraphs.

(ii). Further, the MBPT has envisaged deployment of 1 number each of 3 tonne Forklift, 5 tonne Forklift and Rubber Tyred Crane. The said fleet of equipment proposed to be deployed at the facility is not seen to be in line with fleet of equipment prescribed in the 2008 upfront guidelines for the multipurpose berth.

(iii). Inspite of a repeated request to furnish an analysis to justify the number of each type of equipment envisaged to be deployed at the facility to show that given the productivity of each type of the equipment, the quantity of different equipment commensurate with the quantity of cargo estimated to be handled, the MBPT has not furnished such an analysis except for indicating the parameters considered for finalizing the equipment. The said parameters do not throw light on the adequacy or inadequacy of the fleet of equipment proposed to be used at the facility. Further, no justification has been furnished with reference to deployment of the above said equipment and the respective numbers.

Since the deployment of the above mentioned equipment is as per the Feasibility Report and also since, none of the users/ prospective bidders have objected to the equipping plan envisaged by the MBPT, this Authority is inclined to consider the equipping plan as envisaged by the MBPT, keeping in view clause 3.2 of the 2008 guidelines.

(iv). As has been done by the MBPT in the estimation of civil costs, the unit cost of each of the Equipment as reflected in the Feasibility Report has been taken as base and updated by considering an escalation factor of about 9.81% for the year 2012 and 11.63% for the year 2013 and then rounded off, so as to arrive at the unit cost estimates prevailing during the year 2013. Based on the position that the updation of the cost estimates by MBPT by applying the escalation factor may reasonably reflect the prevailing market rates, the unit cost of each of the Equipment under the Cargo handling activity, as furnished by the Port, is relied upon.

(c). The miscellaneous capital cost is estimated at 5% on civil and equipment cost excluding the cost of utilities and cost of electrical works, towards upfront payment, working capital margin and Interest during construction, which is as per the norms prescribed in the guidelines for multipurpose cargo terminal as well as other cargo terminals.

(v). Return on capital employed is calculated at 16% of the estimated capital cost as per the norms prescribed in the guidelines.

(vi). Operating Cost:

(a). Power cost:

The power cost has been estimated based on the power consumption of 100 units per hour per crane for 3 cranes for operation of 6132 hours and at the cost of electricity at ₹7.90 per unit.

The upfront guidelines for the multipurpose berth prescribe the norm for calculating the power cost at 100 units for a 20 tonne ELL crane. However, the MBPT has envisaged the same quantum of power consumption for use of higher capacity wharf crane each of 30 tonne capacity. When the MBPT was requested to review the power consumption, the MBPT has stated that since the handling rates as per TAMP guidelines for 20 tonnes crane has been considered in its proposal, it feels that review in power consumption is not necessary. Based on the reasoning furnished by the port, the calculation of power cost based on the power consumption of 100 units per hour per crane, as estimated by the MBPT, is considered in the analysis.

The operation of each of the crane for 6132 hours is at 70% utilization (i.e. 24 hours x 365 days x 70% utilization).

As per the documentary proof furnished by the MBPT in support of the unit cost of electricity, the unit cost works out to ₹7.52 per unit. Hence, the same is considered in the analysis, instead of ₹7.90 per unit, considered by the MBPT.

(b). Fuel costs:

(i). The MBPT has stated that the fuel costs have been calculated for the MHC, 3 tonne Forklift, 5 tonne Forklift and Rubber tyred crane based on the TAMP Guidelines. In this regard, it is relevant to mention here that out of the list of equipment as given above, the upfront guidelines for the multipurpose berth prescribe fuel consumption only in respect of the 5 tonne Forklifts at 7 litres per hour, which has been correctly adopted by the MBPT. However, the MBPT has not explained how it has arrived at the fuel consumption of 15 litres per hour in respect of MHC, 7 litres per hour in respect of 3 tonne forklift and 12 litres per hour in respect of Rubber tyred crane. In the absence of fuel consumption norms for the list of equipment given above, this Authority is constrained to rely upon the position as reported by MBPT, in this analysis.

(ii). The consideration of fuel consumption for operation of each of the equipment for 6132 hours is at 70% utilization (i.e. 24 hours x 365 days x 70% utilization).

(iii). The unit rate of fuel at ₹56/- per litre considered by MBPT has been updated with the prevailing rate of diesel at ₹59.46 per litre, which has been considered in the estimation of fuel cost of all the equipment in the analysis.

(c). Repairs and maintenance cost on civil work is estimated by MBPT at 1% on the civil cost and 5% on mechanical equipment and electrical equipment cost, which is in line with the norms prescribed in the guidelines. However, for the reasons stated earlier, cost of utilities has been considered as part of the Civil Works and Repairs and Maintenance has been considered @ 1% as applicable for civil works instead of 5% considered by MBPT by treating it as part of Mechanical works.

(d). Insurance cost is estimated at 1% of the gross fixed assets and other expenses are estimated at 5% of the gross value of fixed assets by MBPT, which is in line with the norms prescribed in the guidelines.

(e). Depreciation is computed @ 3.34% on civil cost and 10.34% on equipment cost as per the rates prescribed in the Companies Act, 1956 under the Straight Line Method for the relevant group of assets and is in line with the guidelines for upfront tariff fixation.

However, for the reasons stated earlier, cost of utilities has been considered as part of the Civil Works and Depreciation has been considered @ 3.34% as applicable for civil works instead of 10.34% considered by MBPT by treating it as part of Mechanical works.

Further, the MBPT is not seen to have calculated depreciation on Miscellaneous assets. Therefore, depreciation on the miscellaneous assets is considered at 3.34% on the component of civil assets and 10.34% on the component of mechanical works, forming part of the miscellaneous assets.

(f). The guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts. Licence fee has been estimated by the MBPT for 35000 sq. metres of land area at the rate of ₹.50/- per sq.m. The rate of ₹.50/- per sq.m. is stated to be the rate of licence fee for open area prescribed in Section 3.3 of the Scale of Rates of MBPT relating to Licence Fees for storage / cargo operation with or without installation of facilities, cargo handling equipment by the users for offshore activities. This position is considered in the analysis.

(vii). The guidelines require the operating cost for berthing service to be estimated at 1% of the berth cost.

The MBPT has considered insurance @ 1%, depreciation @ 3.34% and other expenses @ 5% on the aggregate capital cost relating to construction of berth and dredging while estimating the annual revenue requirement of berthing service apart from the prescribed norm of 1% towards maintenance.

Although the guidelines restrict the operating cost at 1% of the berth cost, the asset requires adequate insurance coverage and the fact that the value of the asset will depreciate due to wear and tear can also not be denied. While fixing upfront berth hire at the other Major Port Trusts, this position was recognised and the cost of insurance and depreciation were considered to assess the annual revenue requirement from berthing service.

In view of the position explained above, the element of insurance cost and depreciation cost are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service.

However, in no upfront tariff case of other major port trusts, other expenses to the tune of 5% of the berth cost is considered while determining the operating expenses relating to the berthing activity. Hence, the same is not considered in this case also.

(viii). The statement for fixing upfront tariff submitted by the MBPT has been modified in line with the above analysis. A copy of the modified statement is attached as **Annex - I**.

(a). The annual revenue requirement for the Cargo handling activity which is the sum of the operating cost and return on capital employed is estimated at ₹158.23 crores as against ₹159.37 crores estimated by the port.

(b). As stipulated in the upfront guidelines for multipurpose cargo terminal, MBPT has apportioned 90% of the total revenue requirement to handling charge and 5% each towards storage charge and miscellaneous charge

(c). With regard to calculation of per tonne handling charges, the MBPT, by taking into account its existing wharfage rates in respect of Iron & Steel, Automobiles and General Cargo and based on the position that the existing wharfage rate is not in a position to meet the estimated revenue requirement, the MBPT has determined the percentage of shortfall in the estimated revenue requirement based on the existing rates and sought the said percentage of increase over the existing rates. In this regard, it is relevant to mention here that consideration of existing rate of wharfage prevailing at MBPT as a base to determine the reference tariff for the operator may not be correct as the existing rates at MBPT are not based on the activity/ cargo based costing. Therefore, flow of cross subsidization from one cargo item to another cargo item cannot be ruled out. The legacy cost may also form part of the existing rates at MBPT, whereas legacy cost does not form part of costing of the new operator. Therefore, it is felt appropriate that the per tonne handling rates in respect of Iron & Steel and Other cargo and the per unit rate in respect of Automobiles may be arrived based on the handling rates for each cargo category and the ratio of foreign and coastal cargo at 74 : 26 to meet the estimated revenue requirement, as has been considered while arriving at the per tonne handling rates in respect of various other multipurpose cargo berths. While doing so, the slight change in the capacity of the automobiles and the slight variation in the annual revenue requirement, as explained in the earlier paragraphs, have been taken into account.

(d). As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) and coastal vessels not exceeding 60% of the normal cargo/ vessel related charges. Accordingly, the MBPT has proposed concessional rates for handling Iron & Steel & Project cargo, Automobiles and General Cargo in line with the Government policy.

(e). The MBPT has stated that the Wharfage charges cover services such as Labour, management and supervision of labour, control and supervision of cargo, operation and maintenance of cargo handling equipment etc. This provision is inserted as a Note in the Scale of Rates below the Wharfage Schedule.

(f). In the proposed Scale of Rates, the MBPT has proposed a free period of 5 days for all the import cargo and 15 days in respect of export cargo. Prescription of free period of 5 days in respect of import cargo and 15 days in respect of export cargo is as per the norms prescribed for the import and export cargo in the multipurpose berth.

The port has considered 30.70% of the cargo share capacity of Iron & Steel & Project cargo and General cargo and 6.60% of the cargo share capacity of Automobiles, to attract storage charge beyond the proposed free period of 5 days. The MBPT in its calculations has shown that the Iron & Steel & Project cargo and General cargo would earn storage revenue for a period of 11.46 days and that the Automobiles would earn storage revenue for a period of 6.34 days.

With regard to calculation of storage charges also, the MBPT had based its calculation based on the existing storage charges in respect of Iron & Steel, Automobiles and General Cargo. For the reasons explained in the earlier paragraph, it may not be correct to consider the existing storage charges prevailing at MBPT as a base to determine the reference tariff for the operator. Based on the information relating to dwell time, percentage of cargo to attract storage charges as furnished by the MBPT, the storage charges in respect of Iron & Steel, Automobiles and General Cargo have been reworked. Based on the above position and in view of modification in the estimated annual revenue requirement, the rate for the first slab of 20 days after the expiry of free days is calculated at ₹4.20 per tonne per day in respect of Iron & Steel & Project Cargo and General Cargo. Similarly, the rate for the first slab of 20 days after the expiry of free days is calculated at ₹102.67 per vehicle per day in respect of Automobiles. The rate for the subsequent slabs is prescribed at 1.5 times and 2 times the rate of the first slab, as proposed by MBPT.

(g). The revenue requirement from berthing service is estimated at ₹29.96 crores by the port. The MBPT has proposed berth hire in dollar terms for foreign going vessel at $0.015 per GRT per hour or part thereof and in rupee terms for the coastal vessel at ₹0.54 per GRT per hour or part thereof.

The approach adopted by the MBPT to determine the berth hire is also based on the approach adopted by it to determine the handling and storage charges i.e. based on the percentage of increase required over the existing rates. However, in the case of berth hire charges, the charge is leviable on the vessel irrespective of its contents. Hence, the berth hire charges are calculated in the case in reference based on the normative approach adopted by this Authority in other upfront tariff cases.

The MBPT has factored in unberthing time to the tune of 4.8 hours in respect of Iron & Steel & Project Cargo and General Cargo vessel and 1.8 hours in respect of vessel carrying automobiles. Since the vessel would attract berth hire charges for the period it is berthed, the additional hours towards unberthing have also been captured in the calculation by MBPT. The same is considered to arrive at the total GRT hours.

Based on the ratio of foreign vessels and coastal vessels at 74 : 26 and taking into account the revised revenue requirement from berthing service and considering the ratio of the GRT hours of the coastal vessels and GRT hours of foreign going vessels, the upfront berth hire rate works out to ₹1.4376 per GRT per hour or part thereof for foreign going vessels and ₹0.8625 per GRT per hour or part thereof for the coastal vessels. In this connection, it is relevant to mention here that the capital cost and operating costs under the berthing activity have all been considered with reference to two berths. Therefore, the berth hire derived as above is applicable for two berths. Incase of occupation of only one berth by a vessel, the rate relevant for one berth should only be applied. Thus, incase of occupation of only one berth by a vessel, the upfront berth hire rate of ₹0.7188 per GRT per hour or part thereof on foreign vessels and ₹0.4313 per GRT per hour or part thereof on coastal vessels will be applicable. A suitable note in this regard has been prescribed in the Reference tariff Schedule under the Berth hire charges. Such an approach has been adopted while fixing the upfront tariff for development of West Quay-North berth (WQ-7 and WQ-8) in the inner harbour of Visakhapatnam Port Trust for handling dry bulk cargo.

It has already been decided by this Authority while finalising the upfront berth hire at the other Major Port Trusts to approve the upfront berth hire charge in Rupee term only. Therefore, the berth hire charges for the foreign going vessel in MBPT is denominated in rupee, in line with the decision taken by this Authority in the other upfront tariff cases.

(ix). In the proposed reference tariff schedule, the MBPT has proposed definitions for the terms like 'coastal vessel', 'foreign vessel' and 'per day'. The said definitions are found to be in line with the definition prescribed for the said terms in the Scale of Rates of MBPT.

(x). In the proposed reference tariff schedule, the MBPT has proposed some conditionalities like conditionalities prescribing criteria for categorizing of a vessel as a foreign going vessel or coastal vessel, non levy of charges for delay beyond a reasonable level attributable to the terminal, conditionalities governing levy of interest on delayed payments/ refunds, rounding off the bills/ gross weight etc., which are found to be in line with the general conditionalities prescribed in the Scale of Rates.

(xi). Since no dollar denominated tariff is being prescribed, the conditionalities governing recovery of dollar denominated charges in Indian Rupees, as proposed by the MBPT are not approved.

(xii). The conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates as has been incorporated in other Scale of rates, have been included in the reference tariff schedule of MBPT.

(xiii). Under the Berth hire schedule, the MBPT has proposed conditionalities like calculation of period of berth hire from the time vessel occupies the berth, berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch etc., non-levy of berth hire for the period when the vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, Berth hire to stop 4 hours after the time of vessel signaling its readiness to sail, Exclusion of the ship's waiting time for want of favorable tide conditions, inclement weather, and due to lack of night navigation in the time limit of 4 hours prescribed for the cessation of berth hire, Penal Berth hire to be equal to one-day's (24 hours) berth hire charge for a false signal, definition for "False signal". These conditionalities are in line with the provisions prescribed in other upfront tariff schedules and hence prescribed in the reference tariff schedule of MBPT.

(xiv). Under the storage charges schedule, the MBPT has proposed conditionalities like exclusion of Sundays, customs notified holidays and port non workings days for the calculation of free period, storage charges to not accrue for period when the operator is not in a position to deliver the cargo due to reasons attributable to the operator, rounding off of demurrage charges, which are found to be in line with similar conditionalities prescribed in the other upfront tariff schedules..

(xv). Under the storage charges schedule, the MBPT has prescribed a note to the effect that no charge will be levied on shut out cargo and that the Demurrage shall be levied on Shut out cargo from the date of admission of cargo into Terminal till and including the date of removal. The note also states that Shut out cargo must be removed by shippers on receipt of three days' notice from the Terminal Operator and that in the case of non-compliance, the Terminal Operator would remove such goods to a place at expenses of shippers. In this regard, it is relevant to mention here that a similar conditionality exists in the Scale of Rates of MBPT. Hence, the prescription of the note in the reference tariff schedule is approved.

(xvi). Clause 2.2 of the revised tariff guidelines of 2013 requires this authority to prescribe the Reference Tariff along with the Performance Standards. Though the revised guidelines of 2013 do not require this authority to go into the Performance Standards proposed by the port it may not be unreasonable to assume that the ports would propose reasonable and achievable Performance Standard.

The MBPT has proposed the Performance Standards in respect of Iron & Steel, Automobiles and General cargo. The cargo items for which Performance Standards are proposed match with the cargo items for which tariff has been proposed in the Reference tariff schedule. The MBPT has proposed the Performance Standards by prescribing the indicative norms at 4000 tonnes per day in case of Iron & Steel, 3000 units per day in case of Automobiles and 2500 tonnes per day in respect of General cargo. Since these indicative norms were seen to be on a lower side when compared to the output of one berth at 10000 tonnes per day in case of Iron & Steel and 3264 units per day in case of Automobiles considered in the optimal capacity calculation, the MBPT was requested to review the performance standards. In this regard, the MBPT has stated that review of performance standards is not necessary as the norms proposed for Performance Standards are minimum of what the Concessionaire is required to maintain and is based on the Model Concession Agreement and that it would be more appropriate.

In this regard, it is relevant to mention here that Clause 2.5 of the 2013 revised tariff guidelines stipulates that the Reference Tariff and Performance Standards notified by TAMP would be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. As per the said guidelines, it is only on the achievement of the Performance Standards as incorporated in the Concession Agreement, that the operator would be eligible for any performance linked tariff. It is true that the revised 2013 guidelines only requires prescription of performance standards. It does not stipulate as to what constitutes performance standard. Since the MBPT has expressed its desire to prescribe the performance standards as proposed by it, the same are prescribed by this authority.

Inspite of a specific request to prescribe the conditionalities governing the performance standards for the various cargoes, the MBPT has not prescribed the same.

Since the Performance standards are reportedly stated to be based on the norms indicated in the Model Concession Agreement and also recognizing that clause 2.2. of the revised guidelines of 2013 requires this authority to notify the Performance Standards based on the proposal of the port, the Performance Standards as proposed by the port are notified along with the Reference Tariff Schedule.

9.1. Subject to above, the Reference Tariff Schedule along with conditionalities governing the Reference Tariff has been modified.

9.2. The modified Reference Tariff Schedule is attached as **Annex - II** and the Performance Standards for the Off-shore multipurpose cargo berth at MBPT as proposed by the MBPT is attached as **Annex - III**.

9.3. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves the Reference Tariff Schedule for the Off-shore multipurpose cargo berth at MBPT and notifies it alongwith the Performance Standards.

9.4. As per clause 2.5 of the Revised Tariff Guidelines 2013, the Reference Tariff and Performance Standards notified by this Authority shall be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. Accordingly, the MBPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Projects as agreed by the port.

10.1 From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire concession period.

However, the PPP operator would be free to propose a tariff along with Performance Standards (the "**Performance Linked Tariff**") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such **Performance Linked Tariff** shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the **Tariff Cap**). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

10.2. The proposal shall be submitted to TAMP along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Concession Agreement or for the actual number of months of operation in the first year of operation as the case may be.

10.3. On receipt of the proposal, TAMP will seek the views of the Major Port Trust on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

10.4. In the event of Operator not achieving the Performance Standards as incorporated in the Concession Agreement in previous 12 months, TAMP will not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Operator shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.

10.5. After considering the views of the Major Port Trust, if TAMP is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.

10.6. While considering the proposal for Performance Linked Tariff, TAMP will look into the Performance Standards and its adherence by the Operator. TAMP will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the operator. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013

10.7. From the third year of operation, the Performance Linked Tariff proposal from the PPP operator shall be automatically notified by TAMP subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The PPP operator, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and TAMP shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

10.8. In the event any user has any grievance regarding non-achievement by the PPP operator/ Major Port Trust of the Performance Standards as notified by the TAMP, he may prefer a representation to TAMP which, thereafter, shall conduct an inquiry into the representation and give its finding to the concerned Major Port Trust. The Major Port Trust will be bound to take necessary action on the findings as per the provisions of the respective Concession Agreement.

10.9. Within 15 (fifteen) days of the signing of the Concession Agreement, the concerned operator will forward the Concession Agreement to TAMP which will host it on its website.

10.10 The PPP operator shall furnish to TAMP quarterly reports on cargo traffic, ship berth day output, average turnaround time of ships, average pre-berthing waiting time as well as the tariff realized for each berth. The quarterly reports shall be submitted by the PPP operators within a month following the end of each quarter. Any other information which may be required by TAMP shall also be furnished to them from time to time.

10.11. TAMP shall publish on its website all such information received from PPP operator. However, TAMP shall consider a request from any PPP operator about not publishing certain data/ information furnished which may be commercially sensitive. Such requests should be accompanied by detailed justification regarding the commercial sensitiveness of the data/information in question and the likely adverse impact on their revenue/operation of upon publication. TAMP's decision in this regard would be final.

(T.S. Balasubramanian)
Member (Finance)

ANNEX - I

REFERENCE TARIFF CALCULATION FOR THE MULTIPURPOSE OFFSHORE CARGO BERTH AT MUMBAI PORT TRUST.

₹ in crores

Sr. No.	Particulars	Estimates furnished by MBPT	Estimates modified by TAMP
I	**Optimal capacity**		
	Optimal Quay Capacity		
(a)	Share of capacity of different cargo items		
	Percentage share of capacity of Iron & Steel (S1)	86.95%	86.95%
	Percentage share of capacity of Automobiles (S2)	8.70%	8.70%
	Percentage share of capacity of General cargo (S3)	4.35%	4.35%
(b)	Handling rate of Vessels		
	- Handling rate of vessels carrying Iron & Steel (P1)	20000	20000
	- Handling rate of vessels carrying Automobiles (P2)	6000	6528
	- Handling rate of vessels carrying General cargo (P3)	20000	20000
(c)	Optimal Capacity of the Terminal		
	- Iron & Steel 0.7 * S1 * P1 * 365 tonnes/ annum	**4443145**	**4443145**
	- Automobiles 0.7 * S2 * P2 * 365 units/ annum	**133371**	**145108**
	- General Cargo 0.7 * S3 * P3 * 365 tonnes/ annum	**222285**	**222285**
II	**Capital Cost**		
A.	**Cargo Handling Activity**	₹ in crores	
	(i). Civil Cost		
	- Approach Trestle	106.23	106.23
	- Administrative Building	0.32	0.32
	- Construction of berth apportioned to handling activity (550m x 75m)	252.86	252.86
	- Workshop, Shop & Stores	0.12	0.12
	- Miscellaneous Buildings	0.18	0.18
	- Detailed engineering, Soil Investigation and Project supervision @ 7%	25.18	25.18
	- Contingencies @ 3%	10.79	10.79
	- Works Contract Tax @ 2.8%	10.07	10.07
	- Environmental Mitigation cost @ 0.5%	1.80	1.80
	Total	**407.55**	**407.55**
	(ii). Equipment Cost		
	- Elec Wharf Cranes - 30 MT (3 nos.)	55.17	55.17
	- Mobile Harbour Cranes (1 no.)	24.52	24.52
	- Forklifts of 3T Capacity (1 no.)	0.25	0.25
	- Forklifts of 5T Capacity (1 no.)	0.31	0.31
	- Rubber Tyred Crane (1 no.)	1.29	1.29
	- Electrical Works	5.33	5.33
	- Detailed engineering, Soil Investigation and Project supervision @ 7%	6.08	6.08
	- Contingencies @ 3%	2.61	2.61
	- Works Contract Tax @ 2.8%	2.43	2.43
	- Environmental Mitigation cost @ 0.5%	0.43	0.43
	Total	**98.42**	**98.42**
	(iii). Utilities Cost		
	- Water Supply	2.46	2.46
	- Sewarage	0.61	0.61
	- Communication & IT	2.45	2.45
	- Bunkering	2.45	2.45
	- Storm Water Drainage	0.61	0.61
	- Disaster Management Plan	0.31	0.31
	- Environmental Protection Equipments	0.61	0.61
	- Fire fighting facilities	0.61	0.61
	- Miscellaneous Items	1.23	1.23
	- Detailed engineering, Soil Investigation and Project supervision @ 7%	0.79	0.79
	- Contingencies @ 3%	0.34	0.34
	- Works Contract Tax @ 2.8%	0.32	0.32
	- Environmental Mitigation cost @ 0.5%	0.06	0.06
	Total	**12.85**	**12.85**
	(iii). Miscellaneous		
	- 5% on Civil Cost and Equipment Cost except Utilities cost and Electical costs	22.06	25.03
	- Detailed engineering, Soil Investigation and Project supervision @ 7%	1.54	0.00
	- Contingencies @ 3%	0.66	0.00
	- Works Contract Tax @ 2.8%	0.62	0.00
	- Environmental Mitigation cost @ 0.5%	0.11	0.00
	Total	**25.00**	**25.03**
	Total Capital Cost for Handling Activity (i + ii + iii)	**543.82**	**543.86**

B.	**Berth Hire Activity**		
	(i). Berth cost		
	- Construction of berth (550m x 25m)	84.29	84.29
	- Cost of dredging	29.08	29.08
	- Fenders	3.68	3.68
	- Bollards	0.92	0.92
	- Detailed engineering, Soil Investigation and Project supervision @ 7%	8.26	8.26
	- Contingencies @ 3%	3.54	3.54
	- Works Contract Tax @ 2.8%	3.30	3.30
	- Environmental Mitigation cost @ 0.5%	0.59	0.59
	Total	**133.66**	**133.66**
	(ii). Miscellaneous Cost		
	- Miscellaneous (5% of berth cost)	6.68	6.68
	- Detailed engineering, Soil Investigation and Project supervision @ 7%	0.47	0.00
	- Contingencies @ 3%	0.20	0.00
	- Works Contract Tax @ 2.8%	0.19	0.00
	- Environmental Mitigation cost @ 0.5%	0.03	0.00
	Total	**7.57**	**6.68**
	Total capital cost for Berth hire Activity (i + ii)	**141.23**	**140.34**
	Total Capital Cost (A + B)	**685.05**	**684.20**
III	**Operating Cost for Cargo Handling Activity**		
		₹ in crores	
	(a). Power Cost	1.45	1.38
	(MBPT - 100 units/ hour/ crane* Rs. 7.90 per unit * 6132 hours pa for 3 cranes) (TAMP - 100 units/ hour/ crane* Rs. 7.52 per unit * 6132 hours pa for 3 cranes)		
	(b). Fuel Cost		
	- Harbour Mobile Crane	0.52	0.55
	(MBPT - 15 ltrs/ hour/ crane* Rs.56 per litre * 6132 hours pa for 1 HMC) (TAMP - 15 ltrs/ hour/ crane * Rs.59.46 per litre * 6132 hours pa for 1 HMC)		
	- 3 Tonne Forklift	0.24	0.26
	(MBPT - 7 ltrs/ hour/ forklift * Rs.56 per litre * 6132 hours pa for 1 forklift) (TAMP - 7 ltrs/ hour/ forklift * Rs.59.46 per litre * 6132 hours pa for 1 forklift)		
	- 5 Tonne Forklift	0.24	0.26
	(MBPT - 7 ltrs/ hour/ forklift * Rs.56 per litre * 6132 hours pa for 1 forklift) (TAMP - 7 ltrs/ hour/ forklift * Rs.59.46 per litre * 6132 hours pa for 1 forklift)		
	- Rubber Tyred Crane	0.41	0.44
	(MBPT - 12 ltrs/ hour/ crane* Rs.56 per litre * 6132 hours pa for 1 crane) (TAMP - 12 ltrs/ hour/ crane * Rs.59.46 per litre * 6132 hours pa for 1 crane)		
	(c). Repair & Maintenance		
	- Civil Assets	4.08	4.20
	(MBPT - (1% on civil work) (TAMP - 1% on civil work and cost of utilities)		
	- Mechanical & Electrical Equipment including spares	5.56	4.92
	(MBPT - 5% on equipment cost and cost of utilities) (TAMP - 5% on cost of equipment)		
	- Miscellaneous Assets	0.00	0.45
	(MBPT - NIL) (TAMP - (5% of miscellaneous asset cost)		
	(d). Insurance (1% on Gross fixed assets)	5.44	5.44
	(e). Depreciation		
	- Civil Work @ 3.34%	13.61	14.04
	- Mechanical Work @ 10.34%	11.51	10.18
	- Miscellaneous Assets @ 3.34% on civil component and 10.34% on equipment component	0.00	1.19
	(f). License Fee	2.10	2.10
	(g). Other Expenses towards salaries and overheads (5% on gross value of assets)	27.19	27.19
	Total Operating Cost	**72.35**	**71.21**

Sr. No.	Particulars	Revised estimates furnished by MBPT	Estimates modified by TAMP
IV	**Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity**		
A.			
(i).	**Estimated Revenue Requirement**		
	(a). Total Operating Cost	72.35	71.21
	(b). Return on capital Employed @ 16%	87.02	87.02
	(c). Total Revenue requirement from cargo handling activity	**159.37**	**158.23**
(ii).	**Apportionment of Revenue Requirement**		
	(a). Cargo Handling Charges (90% of ARR)	143.43	142.40
	(b). Storage Charges (5% of ARR)	7.97	7.91
	(c). Miscelleneous Charge (5% of ARR)	7.97	7.91
	(d).Total Revenue requirement from cargo handling activity	**159.37**	**158.23**
(iii).	**Cargo Handling charge**		
	(a). Cargo Handling Charge		
	- Revenue Requirement (Amount in ₹)	1434316277	1424033729
	- Optimal Capacity of Iron & Steel & Project Cargo	4443145	4443145
	- Optimal Capacity of Automobiles	133371	145108
	- Optimal Capacity of General Cargo	222285	222285
	- Per Tonne rate for handling of Iron & Steel & Project Cargo	**241.18**	**311.02**
	- Per unit rate for handling of Automobiles	**3865.08**	**952.89**
	- Per Tonne rate for handling of General cargo	**69.34**	**311.02**
	(b). Storage Charge		
	- Revenue Requirement (Amount in ₹)	79684238	79112985
	- % of Cargo to attract storage charge		
	- Iron & Steel & Project Cargo and General Cargo	30.70%	30.70%
	- Automobiles	6.60%	6.60%
	- Capacity of cargo to attract storage charge		
	- Iron & Steel & Project Cargo and General Cargo (tonnes)	1432287	1432287
	- Automobiles (units)	8802	9577
	(i) Storage Charge (beyond free period) for Iron & Steel & Project Cargo and General Cargo	**Rate Per tonne per day or part thereof**	**Rate Per tonne per day or part thereof**
	-First 20 days	**5.30**	**4.20**
	-21st day to 40th day	**7.95**	**6.30**
	-41st day onwards	**10.60**	**8.40**
	(ii) Storage Charge (beyond the free period) for Automobiles	**Rate Per vehicle per day or part thereof**	**Rate Per vehicle per day or part thereof**
	-First 20 days	**56.53**	**102.67**
	-21st day to 40th day	**141.32**	**154.00**
	-41st day onwards	**282.65**	**205.34**
	(c). Miscelleneous Charge		
	- Revenue Requirement (₹ in lakhs)	79684238	79112985
	- Capacity (Lakh Tonnes per annum)	4665430	4665430
	- Miscellenous Charge (₹ per tonne)	**17.08**	**16.96**
B.	**BERTH HIRE CHARGES**		
(i).	**Revenue Requirement**	**₹ in crores**	
	(a). Repairs & Maintenance Charge (1% on captial cost for berth)	1.41	1.41
	(b). Depreciation	4.72	4.69
	(c). Insurance (1% on total cost for berth hire service)	1.41	1.40
	(d). Other Expenses (5% on the capital cost for berth)	7.06	0.00
	Subtotal (i)	**14.60**	**7.50**
(ii).	Return on capital Employed @ 16%	**22.60**	**22.45**
	Total Revenue requirement from Berthing services (i + ii)	**37.20**	**29.96**
	Berth hire Charge		
	Foreign going vessel (Rate per GRT per hour) in ₹	**$ 0.015**	**1.374**
	Coastal vessel (Rate per GRT per hour) in ₹	**0.540**	**0.825**

Berth Hire Calculation as furnished by MBPT

Sr. No.	Particulars	Unit	Iron & Steel	Automobiles	General Cargo
i	Parcel Size	Tonnes or PCU	45000	3000	35000
ii.	Vessel Size	DWT	60000	60000	45000
iii.	Unberthing hours	Hours	4.80	1.80	4.80
iv.	Average GRT	GRT	36585	36585	27439
v.	Expected traffic	Million tonnes	2.22	0.07	0.11
vi.	Daily throughput of Berth	TPD or PCU	10000	3000	10000
vii	No. of Berth days	Berth Days	222	22	11
viii.	No. of Berth hours	Hours	5332	533	267
ix.	No. of Vessels	Nos.	49	22	3
x.	Unberthing hours	Hours	237	40	15
xi.	Total berth hours including unberthing (viii + x)	Hours	5569	573	282
xii.	Total GRT hours (iv * ix)	GRT	1806157	813238	87133
xiii.	Revenue Requirement	372004692			
	Berth hire - foreign going vessel (in US$)	0.015			
	Berth hire - coastal vessel (in Rupees)	0.54			

Berth Hire Calculation as per TAMP Estimates

Sr. No.	Particulars	Unit	Iron & Steel	Automobiles	General Cargo	Total
i	Ship day output	Tonnes/day	20000	6528	20000	
ii.	Average GRT	Tonnes	36585	36585	27439	
iii.	Average parcel size	Tonnes	45000	3000	35000	
iv.	Tonnage expected to be handled	Tonnes	4443145	145108	222285	4810538
v.	Average no. of berth days (iv / i)	Days	222	22	11	256
vi.	No. of berth hours {24 x (v)}	Hours	5332	533	267	6132
vii	Expected number of vessels (iv / iii)	Nos.	99	48	6	
viii.	Unberthing time per vessel	Hours	4.8	1.8	4.8	
ix.	Unberthing hours (vii x viii)	Hours	474	87	30	591
x.	Total hours (vi + ix)	Hours	5806	621	297	6723
xi.	Total GRT hours (ii x x)	GRT hours	212404005	22702997	8155613	243262615
xii.	Revenue Requirement	Rupees				299580868
	Working for foreign vessel 74% and coastal vessel 26%)					
	243262615 * 74% * x + 243262615 * 24% * 0.6x =					299580868
	180014335 x + 37948968 x =					299580868
	x = Foreign going vessel rate					**1.3745**
	Coastal vessel Rate = 0.6 x foreign going vessel rate					**0.8247**

Annex – II

REFERENCE TARIFF SCHEDULE FOR THE OFFSHORE MULTIPURPOSE CARGO BERTH AT MUMBAI PORT TRUST.

DEFINITIONS

In this Scale of Rates unless the context otherwise requires, the following definitions shall apply.

(i). "Coastal Vessel" means any vessel exclusively employed in trading between any port or place in India to any other port or place in India having a valid coastal license issued by the competent authority.

(ii). "Foreign Vessel" means any vessel other than a coastal vessel.

(iii). "Per day" means per calendar day unless otherwise stated.

GENERAL TERMS & CONDITIONS

(i). The status of the vessel, as borne out by its certification by the Customs or the Director General of Shipping, or Mercantile Marine Department or Registrar of Indian Ships or Maharashtra Maritime Board or issued under Coastal vessels Act, Inland vessels Act shall be the deciding factor for its classification as 'coastal' or 'foreign-going' for the purpose of levying vessel related charges; and, the nature of cargo or its origin will not be of any relevance for this purpose.

(ii) (a). A foreign going vessel of Indian Flag having a General Trading Licence can convert to Coastal run on the basis of a Customs Conversion Order or on filing of Coastal International General Manifest in Coastal Establishment Section of Customs Department.

(b). A foreign going vessel of Foreign Flag can convert to coastal run on the basis of a Coastal Voyage Licence issued by the Director General of Shipping.

(c). In cases of such conversion, coastal rates shall be chargeable by the load port from the time the vessel starts loading coastal goods.

(d). In cases of such conversion, coastal rates shall be chargeable only till the vessel completes coastal cargo discharging operations; immediately thereafter, foreign-going rates shall be chargeable by the discharge ports.

(e). For dedicated Indian coastal vessels having a Coastal Licence from the Director General of Shipping, no other document will be required to be entitled to Coastal rates.

(f). For vessels visiting the port other than for cargo operations the conditions referred in (c) and (d) above shall not apply.

(iii). Users will not be required to pay charges for delays beyond a reasonable level attributable to the Terminal operator.

(iv). Interest on delayed payments / refunds:

(a). The user shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the Terminal Operator shall pay penal interest on delayed refunds.

(b). The rate of penal interest will be 2 % above the prime lending rate of the State Bank of India. The penal interest rate will apply to both the Terminal Operator and the user equally.

(c). The delay in refunds will be counted only 20 days from the date of completion of services or on production of all the documents required from the users, whichever is later.

(d). The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. This provision will not apply to the case where payment is to be made before availing of the services / use of port properties as stipulated in the MPT Act, 1963 and / or prescribed as a condition in the tariff.

(e). Interest will be calculated for the actual no. of days from the date of raising the bills till the date of payment.

(v). The minimum charges recovered in any bill shall be Rupees Hundred (₹100/-) only.

(vi). All charges worked out shall be rounded off to the next higher rupee on the grand total of each bill.

(vii). In calculating the gross weight or measurement by volume or capacity of any individual item, fractions upto 0.5 shall be taken as 0.5 unit and fractions of 0.5 and above shall be treated as one unit, except where otherwise specified.

(viii). No claims for refund shall be entertained unless the amount refundable is ₹100/- or more likewise Terminal shall not raise any upplementary / under charge bills & interest bills if the amount due to port is less than ₹100/-.

(ix). (a). The rates prescribed in this Scale of Rates are ceiling levels; likewise, rebates and discounts are floor levels. The Terminal Operator may, if it so desires, charge lower rates and/ or allow higher rebates and discounts.

(b). The Terminal Operator may also, if he so desires, rationalize the prescribed conditionality governing the application of rates prescribed in the Scale of Rates, if such rationalization gives relief to the user in rate per unit and the unit rates prescribed in the Scale of Rates do not exceed the ceiling levels.

(c). Provided that the Terminal Operator should notify the public such lower rates and / or rationalization of the conditionality governing the application of such rates and continue to notify the public any further changes in such lower rates and / or in the conditionality governing the application of such rates, provided the new rates fixed shall not exceed the rates notified by the TAMP.

WHARFAGE CHARGES:

Amount in ₹

Type of Vessel	Iron & Steel	Automobiles	General Cargo	Unit of levy
Foreign	311.02	952.89	311.02	Per MT or PCU
Coastal	186.61	571.73	186.61	Per MT or PCU

Note:
The Wharfage charges cover services such as Labour, management and supervision of labour, control and supervision of cargo, operation and maintenance of cargo handling equipment etc.

BERTH HIRE CHARGES

	₹ Per GRT per hour or Part thereof	
Type of Vessel	**Foreign**	**Coastal**
All Vessels	1.3745	0.8247

Notes:

(i). Incase of occupation of only one berth by a vessel, 50% of the respective berth hire charges as mentioned above are leviable for the foreign going vessels and coastal vessels.

(ii). The period of berth hire shall be calculated from the time vessel occupies the berth.

(iii). Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch etc.

(iv). No berth hire shall be levied for the period when the vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator.

(v). (a). Berth hire shall stop 4 hours after the time of vessel signaling its readiness to sail.

(b). The time limit of 4 hours prescribed for the cessation of berth hire shall exclude the ship's waiting time for want of favorable tide conditions, inclement weather, and due to lack of night navigation.

(c). The master/ agent of the vessel shall signal readiness to sail only in accordance with favorable tidal and weather conditions.

(vi). The Penal Berth hire shall be equal to one-day's (24 hours) berth hire charge for a false signal.

"False signal" would be when the vessel signals readiness and asks for a pilot in anticipation even when she is not ready for un-berthing due to engine not being ready or cargo operation not completed or such other reasons attributable to the vessels. This excludes the signaling readiness when a vessel is not able to sail due to unfavorable tide, lack of night navigation or adverse weather conditions.

MISCELLANEOUS CHARGES

Type of Cargo	₹ Per Metric Tonne
All Cargo (except automobiles)	16.96

Note:
Miscellaneous charges prescribed above is a composite charge for provision of all miscellaneous services such as sweeping of cargo on the wharf, weighment of cargo, dust suppression etc.

STORAGE CHARGES Amount in ₹

Commodities	Unit	For 1st to 20th day	For 21st to 40th day	From 41st day onwards
Iron & Steel, General Cargo	Per tonne per day	4.20	6.30	8.40
Automobiles	Per Vehicle per day	102.67	154.00	205.34

Notes:

(i). No storage charge shall accrue for the period during which the terminal operator is not in a position to deliver cargo when requested by the user for reasons attributable to the terminal operator.

(ii). All import goods will be allowed storage in the docks free of demurrage for five days from the date following the day of complete discharge of vessel's cargo. All export goods will be allowed storage in the docks free of demurrage for fifteen days commencing from the date of admission of cargo into the port.

(iii). The purpose of calculation of free days Sunday's, Customs notified holidays and port non-operating days will be excluded.

(iv). Demurrage charges will be assessed on the gross weight of the goods. Gross weight if not in exact multiples of 100 Kgs. will be rounded off to the next higher multiple of 100 Kgs. for levy of charges.

(v). No charge will be charged on shut out cargo. Demurrage shall be levied on Shut out cargo from the date of admission of cargo into Terminal till and including the date of removal. Shut out cargo must be removed by shippers on receipt of three days' notice from the Terminal Operator. In case of non-compliance, the Terminal Operator may remove such goods to a place at expenses of shippers.

GENERAL NOTE:

The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January, 2013 and 1st January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1st April of the relevant year to 31st March of the following year.

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ANNEX - III

PERFORMANCE STANDARDS

The indicative norms for Gross Berth Output for different categories of cargo as follows

Cargo category	Indicative Norms
Iron and steel and project cargo	4000 T/Day
Automobiles	3000 Units/Day
General Cargo	2500 T/Day

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SUMMARY OF THE COMMENTS RECEIVED FROM THE PORT USERS / DIFFERENT USER ORGANISATIONS / BIDDERS AND ARGUMENTS MADE IN THIS CASE DURING THE JOINT HEARING BEFORE THE AUTHORITY.

F. No.TAMP/47/2013 -MBPT	**-**	**proposal from the Mumbai Port Trust (MBPT) for fixation of upfront tariff for proposed Multipurpose Offshore Cargo Berth at MBPT**

A summary of comments received from users / user organisations and shortlisted bidders and the comments of MBPT thereon are tabulated below:

Sl. No.	Comments of concerned users/ user organisations and Shortlisted Bidders	Comments of MBPT
1.	**Volkswagen India Private Limited**	
(i).	With regard to Storage area of 9 Sqmtr per Passenger Car Unit (PCU) as mentioned in Multipurpose berth – storages 1.1.1 – Storage Area requirement Storage area required for export automobiles, it is suggested that it may be cosidered at 18 sqmtr PCU as per Volkswagen Group standards. But in case this is not possible we propose it should at least be 14 sqmtr per PCU.	While preparing the DPR, an area of 7 sq. mtrs was considered for small automobile units and 11 sq. mtrs for bigger automobile units. Thus an average area of 9 sq. mtrs per unit has been worked out in the DPR. Considering the total area available in the Indira Dock and area available at berth, same is in order.
(ii).	The storage space at berth is considered at 43200 sqmtr at 4000 PCUs at per day at 9 sqmtr per PCU. This may be considered at 216000 sqmtr / 168000 sqmtr at 10000 PCU at storage space of 18 sqmtr / 14 sqmtr per PCU.	
2.	**Tata Motors Limited**	
(i)	With regard to "demurrage free days", it is stated that MBPT has proposed storage in docks free of demurrage for seven days. This timeframe is too low & should be made to 30 days matching to existing arrangement of MBPT. This requirement is particularly important because of two reasons, one that frequency of a car carrier in Mumbai port to a particular trade route is generally once in a month & secondly it's impossible to cart all of our planned vehicles for a particular vessel within seven days because of infrastructural hurdles in and around MBPT.	MBPT has proposed five days free of demurrage in case of import goods and fifteen days free of demurrage for export goods for storage in docks instead of three days and seven days proposed earlier. Same is as per TAMP's guideline.
3.	**Indian National Shipowners Association**	
	The proposal is silent on the services that are to be provided by a port/terminal for waste removal under MARPOL regulations. It is expected that this authority and the port will ensure that care would be taken to ensure compliance of Port obligations under MARPOL with proper tariff.	All the dues as per TAMP's guideline has been included in the proposal. TAMP's guideline is silent about the specific tariff to be charged by the port in compliance of ports obligation under MARPOL. The BOT operator & MBPT will be bound by the mandatory law to be followed as per the law of the land.
4.	**Indian Merchants' Chamber**	
(i).	As a Trade Body and Port User, we would like to know, as to when the said Multipurpose	As per the project schedule, the proposed Offshore Multipurpose Cargo Berth is

	Offshore Cargo berth facilities would be made operational.	scheduled to be awarded in November, 2013. Same is to be completed in the period of 30 months, hence will be operational by mid-year of 2016.
(ii).	The said Multipurpose Offshore Cargo Berth facilities should have been made operational as far back as in the year 2010. Today we are almost completing the year 2013, and as of date, there has been no intimation to the Trade Bodies, as to when the said facility would be made operational.	
(iii).	The fixation of tariffs for service provided, can only be discussed or commented upon, once the Trade Bodies and the Port Users are briefed, as to what are the facilities and the Services, that would be extended and what would be the advantage of bringing cargo to Mumbai Port from the existing Container Terminal across the Harbour at J.N.P.T.	The cargo proposed to be handled at the proposed Offshore Multipurpose Cargo Berth are iron & steel and project cargo, automobiles and general cargo. Containers are not proposed to be handled at the proposed project.
(iv).	The J.N. Port Administrator has also augmented its container handling facility capacity and also further augmenting its capacity by creation of a Fourth Container Terminal at J.N.P.T. We would also like to be made aware of the handling capacity and clearance procedures of cargo that would be handled at the Multipurpose Offshore Cargo Berth at MBPT. For e.g (a) Would the container be cleared directly from the Offshore Container Yard ? (b) Would the container be destuffed and clearance effected from the Offshore Container Yard ? (c) Would all the containers be shifted from the Container Yard to the respective CFS? (d) Whose responsibility would be, to ensure that the containers are cleared at the Container Yard or Container Freight Station (CFS) and (e) How would the Service Providers be accountable for undertaking their required task ? (f) The Port Users and the Trade should not be exploited as it is prevalent across the Harbour.	
(v).	In view of the above, the IMC finds it difficult to convey the comments at present and request that a presentation be made by the MBPT to enlighten the users of the facility.	

2. A joint hearing in this case was held on 18 October 2013 at the Office of this authority. At the joint hearing, the MBPT and the concerned users and user organisation bodies have made the following submissions:

Mumbai Port Trust:

(i). In Mumbai there is no major facility for general cargo handling. Therefore, there is a potential for multipurpose cargo berth. Our assessment is that the project is doable. If we get a good tariff, there would be takers for the project.

State Trading Corporation

(i). We import Edible Oil, which comes in through huge vessels. We had some berthing issues in the past.

(MBPT: We do not envisage handling of any edible oil in the said berth.)

ICC Shipping Association

(i). There should be some reservation in the form of Priority berthing for Coastal vessels.

(ii). Some concession in tariff is also required for Coastal vessels.

(MBPT: At present there is no Government policy for reservation of space on priority basis for coastal vessels. But we provide concession in tariff as per the Government policy. The users can have MOU with the successful bidder for priority berthing of coastal vessels.)

Mumbai & Nhava Sheva Ship Agent's Association/ Parekh Marine Agencies Private Limited

(i). When cargo like steel, pulses etc. would be handled at the facility, would it have an open or a closed storage area?

(MBPT: We are giving 35000 sq.m of backup area. It is upto the operator to decide whether the storage area would be open or closed, depending on the type of cargo that he would be handling.)

(ii). Are both the projects viz., Multipurpose Offshore Cargo Berth as well as the Harbour Wall Berth required?

(MBPT: Under the existing scenario, bigger vessels cannot enter the port. We need bigger vessels. Our existing berths at Indira Dock are more than 100 years old. Higher capacity cranes cannot be installed at the Indira Dock and larger size vessels cannot be handled thereat. Therefore, the need of the hour is to shift operations to the Outer Harbour, so that bigger vessels can be brought in. Multipurpose Offshore Cargo Berth is envisaged to handle premium cargo except coal and containers. Both projects are required to retain the present cargo volume.)

Association of Multimodal Operators of India

(i). We have no comments to offer.

Bombay Custom House Agent's Association

(i). Will containers be handled at the facility?

(MBPT: No containers would be handled at the facility.)

Bombay Custom House Agent's Association

(i). What is the arrangement for evacuation of cargo?

(MBPT: As against the perceived notion that majority of the cargo moves by road, only 10% of the cargo of MBPT moves by road. Thus, there is scope for movement of cargo by roads. We are in talks with the various authorities and are in the process of improving arrangement for movement by road as well as by rail.)
