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Tariff Authority for Major Ports

GNo. 125

New Delhi,

6 May 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 Kandla Port Trust for fixation of upfront tariff for the Oil jetty to be developed for handling liquid cargo and ship bunkering terminal at old Kandla on Built, Operate and Transfer basis in pursuance of the guidelines for upfront tariff setting at Major Ports which was notified vide Notification No.TAMP/52/2007-Misc. dated 26 February 2008, as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports
Case No. TAMP/5/2013-KPT

Kandla Port Trust

Applicant

QUORUM:

- (i). Smt. Rani Jadhav, Chairperson
- (ii). Shri. T.S. Balasubramanian, Member (Finance)

O R D E R

(Passed on this 22nd day of February 2013)

This case deals with the proposal from the Kandla Port Trust (KPT) for fixation of upfront tariff for the Oil jetty to be developed for handling liquid cargo and ship bunkering terminal at old Kandla on Built, Operate and Transfer (BOT) basis.

2. The KPT initially filed the subject proposal vide its letter dated 27 December 2012. As the proposal dated 27 December 2012 of the KPT was stated to have been the draft proposal and also since the KPT had not forwarded the list of users/ prospective applicants, who are to be taken on consultation on the proposal in reference, we have vide our letter dated 3 January 2013 requested KPT to furnish a list of users / shortlisted bidders or prospective applicants to be consulted with contact details. Further, the KPT in the said proposal had, *inter alia*, requested this Authority to see whether the lease rent needs to be calculated by reverse calculation method as done by this Authority in the proposal of revision of lease rentals for the salt lands. Therefore, in our letter dated 3 January 2013, the KPT was requested to furnish its final proposal by taking into account the lease rent/ licence fee as applicable as per its Rent Schedule as per clause 3.5.4 of the Upfront Tariff Guidelines, based on the category of land proposed to be allotted to the successful bidder.

3.1. In this regard, the KPT vide its letter dated 4 January 2013 furnished the list of prospective applicants and submitted that the proposal is a final proposal and also stated that the proposal has been framed considering the lease rentals as per SOR of KPT as well as the highest accepted tender values received in recent land auction for tank farm development and have considered the License fees in line with the Land Policy for Major Ports, 2010.

3.2. With regard to the licence fee, it was observed that the consideration of lease rentals by the KPT as per the highest accepted tender values reported to have been received in recent land auction for tank farm development, does not appear to be in line with Clause 3.5.4 of the Upfront tariff guidelines. Since we would not be in a position to consider the approach adopted by the KPT to determine the licence fee based on the highest accepted tender values reported to have been received in recent land auction for tank farm development, apart from lease rentals prescribed in the Rent Schedule of KPT, we have vide our letter dated 15 January 2013 requested KPT to formulate its proposal by taking into account the licence fee as applicable as per its Rent Schedule for the lands to be allotted to the Concessionaire.

3.3. In this backdrop, the KPT vide its letter dated 18/19 January 2013 has submitted the proposal. The submissions made by KPT in its forwarding letter are summarized below:

- (i). With reference to TAMP letter dated 15 January 2013, it is clarified that para no.4 of the Land Policy provides that 'the said policy, wherever relevant, would be also applicable to all BOT projects'. Accordingly, the license fee for land to be allotted to the successful BOT operator has been arrived at by considering highest accepted tender value received in recent land auction for tank farm development.
- (ii). Clause no 6.3 (2) of the Land Policy stipulates that the Land Allotment Committee shall, while fixing the reserve price and at the time of allotment, take into account the following factors:
 - (a). Prevailing SOR.
 - (b). Accepted tender value of comparable port land for similar transactions.

- (iii). Clause no. 3.5.4 of the Upfront tariff guidelines stipulates that 'license fee should be taken as per the rate prescribed in the Scale of Rates of the concerned port in fixation of the upfront tariff'. This clause is inconsistent with the para no.4 of Land Policy. Hence there is inconsistency between Upfront Tariff Guidelines, 2008 and Land Policy, 2010.
 - (iv). In this regard TAMP notification no.169 dated 17 August 2011 mentions that 'All the conditions/notes prescribed in the existing scale of rates/schedule of license fees and lease rentals shall apply to the extent they are not inconsistent with the conditions prescribed in the Land Policy Guidelines, 2010 announced by the Government on 13 January 2011. In case of disagreement the conditions prescribed by the Government in the Land Policy for Major Ports, 2010 shall prevail.'
 - (v). Considering above, KPT has rightly fixed the license fees for land of the subject BOT project by taking into account the auction rate as per clause no, 6.3 (2) of Land Policy Guidelines, 2010.
 - (vi). However, as directed by TAMP vide its letter dated 15 January 2013, in line with the Clause 3.5.4 of Upfront Tariff Guidelines 2008, the calculations regarding license fee are revised by considering the license fee for the land as per the KPT SOR-Chapter VI-Category G.
4. The KPT has also furnished Revised Feasibility Report along with the proposal. The highlights of the proposal dated 18/19 January 2013 of the KPT are given below:
- (i). In order to ease pressure on the existing oil terminals and to cater additional liquid cargo, KPT has proposed to develop a liquid cargo handling facility and Ship Bunkering Terminal adjoining to the existing oil jetty no. 1 at Old Kandla. The proposed facility will be able to cater vessels of higher DWT. Land for back up area to be provided is 5.5 Ha (including 1 Ha for bunker tank farm).
 - (ii). The proposed Oil jetty facility shall be used for handling all kinds of liquid cargo i.e. POL, vegetable oils, ammonia, phosphoric acid etc. Commissioning of the proposed facility shall augment the liquid cargo handling capacity of Kandla Port by 3.39 MMTPA and the total capacity of Kandla Port shall be enhanced to 11.39 MMTPA.
 - (iii). The BOT operator shall undertake the following development activities for the proposed project:
 - (a). Construction of wharf of 300 mts. x 15 mts. on pile foundation.
 - (b). Construction of other civil structures on pile foundation such as approach bridge, connecting platform between jetty and approach bridge, crew office, high mast lighting tower, fire house.
 - (c). Storage tank farm with an aggregate storage capacity of 132000 KL having pipeline connectivity for receiving as well as supplying the fuels.
 - (d). Bunker storage tank with an aggregate storage capacity of 32500 KL connected with pipeline.
 - (e). The storage tank farm shall have fire fighting facilities, water sprinkler system, concrete payment, lab testing facility, etc.
 - (f). Providing Temporary Custom fencing wall
 - (g). Asphalt paving behind approach till liquid storage tank farm

- (h). Electrification works
- (i). Gate office and security check
- (j). Development of back up area
 - Development of Tanks for storage of Liquid cargo
 - Construction of permanent boundary wall
 - Supply pipelines from the Oil Jetty to the tank farm
 - Piping network within the tank farm
 - Tank trucks loading racks and pumping
 - Product laboratory
 - Providing fire fighting system
 - Electrification works
 - Construction of office building and security cabin
 - High capacity new weigh bridges
- (k). Capital dredging and Maintenance dredging alongside the jetty

Apart from undertaking the above activities, BOT operator shall provide Marine Loading / Unloading Arm for executing cargo handling operations at the jetty terminal

(iv). **Optimal Capacity:**

The optimal capacity of the proposed facility has been calculated based on the TAMP guidelines that reckons the below referred factors while calculating optimal capacity of the Liquid terminals-

- (a). Type of Cargo to be handled
- (b). Cargo mix ratio (i.e. handling rate of cargos as per TAMP guidelines & percentage share of cargo to be handled arrived at by considering data of last five years liquid cargo handled at Kandla port)
- (c). Size of vessels to be handled

The optimal capacity for the proposed oil jetty is calculated as under:-

	Value	Unit
Handling rate POL	1000	Tons/hour
Handling rate other liquids	300	Tons/hour
Operating hours in a day	24	Hours
Cargo handling ratios (as per last five years liquid cargo handled at Kandla port)		
POL	36.12%	
Other liquids	63.88%	
Cargo handling rates per day		
POL	24000	Tons/day
Other liquids	7200	Tons/day
Optimal Capacity of the terminal (Load factor 70%)	3389827.93	MTPA
Optimal capacity	3.39	MMTPA

The KPT has stated that the TAMP guidelines prescribe that the revenue requirements for operation of the project is to be arrived at as a summation of the total operating cost and the return on capital employed. However, since no miscellaneous activities are envisaged to be undertaken by the BOT operator, no separate charge is allocated for the same and proposed to levy 100% towards Cargo Handling Charges only.

(v). **Capital Cost:**

(₹ in crores)

Sl. No.	Particulars	Capital cost estimation
(A).	<u>Cargo Handling Activity</u>	
i).	Civil Cost excluding berth cost and dredging cost	
	Temporary Fencing Wall (Barbed Wire)	0.16
	Ancillary Civil Infrastructure Facilities	10.00
	DPR preparation and environmental studies	2.00
	Approach Bridge (Size: 450 m x 10 m)	18.61
	Approach Bridge Connecting Platform (Size: 114 m x 10 m)	5.79
	Fire House (Size: 10 m x 15 m)	1.33
	HMT (Size: 7 m x 7 m)	2.25
	Crew Office (Size: 12 m x 10 m)	0.81
	Miscellaneous cost	2.05
	Total of (i)	43.00
ii).	Liquid cargo handling activity: Equipment Cost	
	Marine Loading & Unloading Arm	12.00
	Pipe Line cost from Jetty Terminal to Tank Farm (Length: Approx. 1.25 Km)	26.34
	Other Ancillary items for pipeline works @ 15%	3.95
	Pipe Line cost from Jetty Terminal to Bunker Storage Farm (Length: Approx. 1.00 Km)	7.55
	Other Ancillary items for pipeline works @ 15%	1.13
	Miscellaneous cost	2.55
	Total of (ii)	53.52
	Total Capital cost for Handling Activity [(i) + (ii)]	96.52
(B).	<u>Capital cost for construction of berth</u>	
(i).	5 nos Berthing Dolphins (Size: 24 m x 15 m)	23.15
(ii).	4 nos Connecting Platform (Size: 45 m x 15 m)	13.31
(iii).	Capital Dredging (Input from OOT) - Apportioned for BOT Operator For (Volumetric Dredging)	12.20
(iv).	250 T Bollards	0.50
(v).	3 Cell Fender	2.03
(vi).	Ladder	0.03
(vii).	Miscellaneous cost	2.56
	Total Capital cost for construction of berth	53.77
(C).	<u>Capital cost for Liquid Storage facility</u>	
(i).	Capital cost of POL/Other Liquid Storage activity	
(a)	Civil cost	
	Civil Cost for Development of Tank Farm (includes ₹1.34 Crores as Upfront Value for existing Land Reclamation)	37.87
	Boundary wall	2.49
	Buildings, sewerage, water supply etc	4.74
	Miscellaneous Charges	2.26
(b)	Mechanical cost	
	Mechanical Cost for Development of Tank Farm	8.89
	Fire fighting equipments	7.06
	Miscellaneous Charges	0.80
	Total Capital cost of POL/Other Liquid Storage activity (a) + (b)	64.09

Sl. No.	Particulars	Capital cost estimation
(ii).	Bunker Fuel Storage Tank Farm Storage activity:	
(c)	Civil Cost	
	Civil Cost for Development of Bunker Tank Farm	7.66
	Boundary wall	1.11
	Buildings, sewerage, water supply etc	4.74
	Miscellaneous Charges	0.68
(d)	Mechanical Cost	
	Mechanical Cost for Development of Bunker Tank Farm	2.53
	Fire fighting equipments	1.93
	Miscellaneous Charges	0.22
	Total Capital cost of Bunker Fuel Storage activity (c) + (D)	18.87
	Total Capital cost of Storage facility (i) + (ii)	82.96
	TOTAL CAPITAL COST OF PROJECT	233.25

(vi). **Operating Cost:**

(a). Operating Cost excluding berth and dredging:

Component	Workings	₹ in Crores
Power Consumption	0.99 hectares, 240000 units per hectare/annum @ ₹9.8 per unit	0.23
Repair and Maintenance (Civil Assets)	1% of ₹43.00 Cr.	0.43
Repair and Maintenance (Mechanical Assets)	2% of ₹53.52 Cr.	1.07
Insurance	1% of ₹96.52 Cr.	0.97
Depreciation Civil	3.34% of ₹43.00 Cr.	1.44
Depreciation Mechanical	10.34% of ₹12.60 Cr.	1.30
Depreciation Mechanical (Pipelines)	13.91% of ₹40.92 Cr.	5.69
License Fee (water) (300*15) as per the latest land lease license policy i.e. 50% of the land lease rates	13110 X ₹19.97 X 12	0.31
Other Expenses	1% of ₹55.60 Cr.	0.56
Total		12.00

(b). Operating Cost of berth:

Component	Workings	₹ in crores
Repair and Maintenance of civil assets	1% of ₹41.57 Cr.	0.42
Depreciation	3.34% of ₹53.77 Cr.	1.80
Insurance	1% of ₹53.77 Cr.	0.54
Maintenance Dredging	10% of ₹12.20 Cr.	1.22
Total		3.97

- (c). Operating cost of Storage area - POL Storage area:

Component	Workings	₹ in crores
Power Consumption	(4.5 hectares, 240000 units per hectare/annum @ ₹9.8 per unit	1.06
Repair and Maintenance (Civil Assets)	1.00% of ₹47.36 Cr.	0.47
Repair and Maintenance (Mechanical Assets)	2.00% of ₹16.74 Cr.	0.33
Insurance	1.00% of ₹64.09 Cr.	0.64
Depreciation Civil	3.34% of ₹47.36 Cr.	1.58
Depreciation Mechanical	10.34% of ₹7.41 Cr.	0.77
Depreciation Storage Tanks and Pipelines	13.91% of ₹9.33 Cr.	1.30
License Fee(land)	54900 X ₹39.94 X 12 months	2.63
Other Expenses	1% of ₹56.68 Cr.	0.57
Total		9.35

- (d). Operating cost of Storage area - Bunker Fuel Storage area:

Component	Workings	₹ in crores
Power Consumption	1 hectare, 240000 units per hectare/annum @ ₹9.8 per unit	0.24
Repair and Maintenance (Civil Assets)	1.00% of ₹14.19 Cr.	0.14
Repair and Maintenance (Mechanical Assets)	2.00% of ₹4.68 Cr.	0.09
Insurance	1.00% of ₹18.87 Cr.	0.19
Depreciation Civil	3.34% of ₹14.19 Cr.	0.47
Depreciation Mechanical	10.34% of ₹2.02 Cr.	0.21
Depreciation Storage Tanks and Pipelines	13.91% of ₹2.66 Cr.	0.37
License Fee(land)	10000 X ₹39.94 X 12 months	0.48
Other Expenses	1% of ₹16.84 Cr.	0.17
Total		2.36

- (vii). The return on capital employed is estimated at 16% on the gross block of assets.

- (viii). Accordingly, the revenue requirement is estimated as follows:

(₹ in crores)					
Sl. No.	Particulars	For cargo handling activity	For Berth Hire	For Storage Facility	
				POL and Other Liquid	Bunker Fuel
(i).	ROCE @ 16%	15.44	8.60	10.25	3.02
(ii).	Operating cost	12.00	3.97	9.35	2.36
(iii).	Total Revenue Requirement	27.44	12.57	19.61	5.38

- (ix). The upfront tariff proposed by the KPT to meet the estimated revenue requirement is as follows:

- (a). Berth hire charges:

Foreign Vessels	Coastal Vessels
₹0.53 per GRT per Hour	₹0.32 per GRT per Hour

(b). Cargo handling charges:

	Foreign Vessels	Coastal Vessels
Bunker Fuel and other POL	₹32.51/MT	₹32.51/MT
Other Liquid	₹112.87/MT	₹67.72/MT

(c). Storage charges:

Liquid Tank Farm	₹6.46/Ton/Day
Bunker Fuel Tank Farm	₹7.20/Ton/Day
Considering current market practice of charging monthly rentals for liquid storage, monthly rental rates may also be proposed by multiplying 30 as nos of days in month.	
Liquid Tank Farm	₹193.78 / Tone/ Month
Bunker Fuel Tank Farm	₹215.90 / Tone/ Month

5. In accordance with the consultation process prescribed, the proposal of the KPT was circulated to the concerned users/ user organisations and prospective bidders seeking their comments. Some of the users/ prospective applicants have furnished their comments. These comments have been forwarded to KPT as feedback information. The KPT has responded on the comments of the some of the users/ prospective applicants.

6. Based on the preliminary scrutiny of the proposal, the KPT was requested to furnish additional information/clarifications vide our letter dated 1 February 2013. The KPT has responded vide its e-mail dated 5 February 2013. Summary of the queries raised by us and the corresponding replies furnished by the KPT are tabulated below:

Sl. No.	Queries raised by us	Reply furnished by KPT																																								
(A).	General:																																									
(i).	It is not clear from the proposal as to how much area of waterfront and land area is proposed to be allotted to the allottee. The KPT to furnish separately details of the area (land and waterfront) proposed to be allotted. The distribution of the land in terms of storage and auxiliary facility also to be furnished.	Below is the distribution of the land with minor correction due to including the land area for some of the allied facilities missed out. <table><tr><th>Item</th><th>L (m)</th><th>B (m)</th><th>Sqm</th></tr><tr><td>Jetty</td><td>300</td><td>15</td><td>4500</td></tr><tr><td>Approach</td><td>450</td><td>10</td><td>4500</td></tr><tr><td>Connecting Platform between Jetty and Approach</td><td>114</td><td>10</td><td>1140</td></tr><tr><td>Back Up Area for Tank Farms</td><td></td><td></td><td>55000</td></tr><tr><td>Fire House</td><td>15</td><td>10</td><td>150</td></tr><tr><td>HMT – 2 Nos.</td><td>7</td><td>7</td><td>98</td></tr><tr><td>Crew Office</td><td>12</td><td>10</td><td>120</td></tr><tr><td>Total Land Area</td><td></td><td></td><td>65508</td></tr><tr><td>Water Area (Jetty Length * Vessel Beam * 1.15 as per IS Code)</td><td>300</td><td>43.7</td><td>13110</td></tr></table> The proposal of KPT has been revised as per the marginal correction in the area.	Item	L (m)	B (m)	Sqm	Jetty	300	15	4500	Approach	450	10	4500	Connecting Platform between Jetty and Approach	114	10	1140	Back Up Area for Tank Farms			55000	Fire House	15	10	150	HMT – 2 Nos.	7	7	98	Crew Office	12	10	120	Total Land Area			65508	Water Area (Jetty Length * Vessel Beam * 1.15 as per IS Code)	300	43.7	13110
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(ii).	The KPT to confirm whether the proposed allotment of land is in line with the land use plan of the port.	Yes. It is confirmed.																																								

(B).	Optimal Capacity:																																																												
(i).	The proposal of KPT is to handle “Bunkering Fuel and POL” & “other liquids” at the proposed liquid cargo jetty. The KPT has assessed the optimal berth capacity of the proposed Liquid cargo jetty at 33,89,828 tons per annum at 70% utilization adopting the formula prescribed in the 2008 upfront tariff guidelines for Liquid Terminal berth. While doing so, the KPT has considered a handling rate of 1000 tons/hour for “Bunkering fuel and POL” and 300 tons/hour for “Other liquids”. In this regard, the KPT to clarify/ furnish the following:																																																												
	(a). It appears that Bunker fuel is a type of liquid fuel which is fractionally distilled from crude oil and in comparison with other petroleum products, is extremely crude. In this context, consideration of the handling rate of 1000 tons/hour for Bunker fuel to be justified, when the guidelines prescribe a norm of 5000 tonnes/ hour for Crude oil.	Bunker fuel is considered as a part of POL group of liquid items. Moreover, the 5000 Ton/Hour rate as prescribed in TAMP Guidelines is specifically for Crude Oil only. Hence, the same cannot be considered here for Bunker Fuel. Moreover, the Bunker fuel would be handled for supply to ships at mid sea through barges also. Thus, the rate considered is appropriate. (Note for highlight: - The handling rate is for handling bunkers at project facilities not at vessels at mid stream through barges). POL product are extracted by way distillation from Crude oil, but, for the same, as per TAMP guidelines it handling rate is 1000 T/M3.																																																											
	(b). The actual handling rate achieved by the port for “Bunkering fuel” during the last 3 years.	Bunkers fuels imported are part of POL cargo. Hence, the rate of POL can be considered for the same.																																																											
	(c). The actual handling rate achieved by the port for “POL and other liquids” during the last 3 years separately.	The actual handling rate achieved by port for POL and other Liquids during last three years is attached herewith. STATEMENT SHOWING LIQUIDS TRAFFIC HANDLED AT KANDLA AND AVG. GRT/DWT <table><tr><th>Type</th><th>Year 2009-10</th><th>% of share</th><th>Year 2010-11</th><th>% of share</th><th>Year 2011-12</th><th>% of share</th></tr><tr><td colspan="7">A) LIQUID TRAFFIC</td></tr><tr><td>Foreign Traffic (in Mts)</td><td>9149604</td><td>84.95</td><td>8467495</td><td>82.07</td><td>8088233</td><td>83.72</td></tr><tr><td>Coastal Traffic (in Mts.)</td><td>1621207</td><td>15.05</td><td>1738060</td><td>17.03</td><td>1572522</td><td>16.28</td></tr><tr><td>TOTAL LIQUIDS AT KANDLA</td><td>10770811</td><td>100</td><td>10205555</td><td>100</td><td>9660755</td><td>100</td></tr></table> <table><tr><th colspan="4">B). AVG. HANDLING RATE (In Mts)</th></tr><tr><th></th><th>Year 2009-10</th><th>Year 2010-11</th><th>Year 2011-12</th></tr><tr><td>i).POL</td><td>16463</td><td>11286</td><td>11910</td></tr><tr><td>ii).Other liquids</td><td>6856</td><td>7104</td><td>6642</td></tr><tr><td>iii).Edible Oil</td><td>5819</td><td>5902</td><td>6777</td></tr><tr><td>iv).Phos/ Ammonia</td><td>19964</td><td>23626</td><td>13694</td></tr></table>	Type	Year 2009-10	% of share	Year 2010-11	% of share	Year 2011-12	% of share	A) LIQUID TRAFFIC							Foreign Traffic (in Mts)	9149604	84.95	8467495	82.07	8088233	83.72	Coastal Traffic (in Mts.)	1621207	15.05	1738060	17.03	1572522	16.28	TOTAL LIQUIDS AT KANDLA	10770811	100	10205555	100	9660755	100	B). AVG. HANDLING RATE (In Mts)					Year 2009-10	Year 2010-11	Year 2011-12	i).POL	16463	11286	11910	ii).Other liquids	6856	7104	6642	iii).Edible Oil	5819	5902	6777	iv).Phos/ Ammonia	19964	23626	13694
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(ii).	The KPT has computed the optimal capacity of the Oil jetty assuming a percentage share of 36.12% for “Bunkering fuel and POL” and 63.88% for “Other liquids”. In this regard, the actual percentage share of each of the cargo viz. Bunker fuel, POL and other liquids at KPT during the last three years to be furnished. The basis for the share of 36.12% and 63.88% to be also furnished.	Cargo Share percentages i.e. 36.12% and 63.88% for “POL including Bunker Fuel” and “Other Liquids” respectively have been derived based on liquid cargo imports and exports at Kandla during 2005-06 to 2009-10.																																																											
(iii).	The KPT to furnish details of capacity of pipelines proposed to be installed for transporting different liquid cargoes from / to the Storage Tank Farm to justify the handling rates considered by the port for the respective	Various size of Pipelines with diameters of 10” and 12” have been considered for transportation of various types of POL and other liquids including, vegetable oils, ammonia, phosphoric acid, others etc. capacity of Pipelines envisaged																																																											

	cargoes. The KPT to also establish linkage between pipeline dimensions and handling rates of respective cargo.	commensurate with the handling rates of the commodities to be handled.
(iv).	With reference to pipeline, the port to certify that the dimensions considered by it in the proposal is optimum and that no further improvement, which may have an impact on handling rate, would be possible due to technical reasons. The port to also clarify whether the Concession Agreement would categorically specify the dimensions of pipeline, which cannot be altered by the BOT operator.	Pipeline dimensions considered are appropriate and commensurate with the handling rates and optimal capacity arrived at. The Concession Agreement spell out the minimum requirements of pipelines and same commensurate with the handling rates and optimal capacity of the project.
(v).	Though the computation of storage yard capacity is not required as per the guidelines, it appears that the capacity of the storage area may have an impact on the optimal capacity considered by the port in this case. The KPT to, therefore, compute and furnish the optimal capacity of the storage yard with workings. The basis for 132,000 KL and 32,500 KL considered as capacity for Storage Tank Farm and Bunker Storage Tank respectively to be furnished.	Storage Tank Farm capacities were considered based on the suggestion of the users/industry players through an Expression of Interest. The considered capacities are the appropriate range considered from their suggestions. The turnover ratio for the optimal utilization of these standard capacities works out to approximately 30 times/year. The same is in line with the prevailing market dynamics. Calculation of Turnover Ratio:- Turnover Ratio = (3.39 MMTPA) / (164500 * 0.9 * 70%) = 32.71 times. Hence, the dwell time of 12 days. This is in line with the market dynamics.
(C). Capital cost:		
(i).	Though the KPT in the Rate Analysis has drawn reference to the rates mentioned in the Schedule of Rates, it has not furnished the copy of the Schedule of Rates. The KPT to, therefore, furnish the Schedule of Rates, based on which it has adopted the rates in its capital cost estimation.	The copy of the Schedule of Rates is furnished. (The said document was not found attached. However, at our request, the KPT vide its e-mail dated 14 February 2013 has furnished the Schedule of Rates.)
(ii).	In the Rate Analysis, it is seen that the KPT has stated that the rates considered in estimation of some of the civil costs are based on the prevailing market rate. Documentary evidence in support of such prevailing market rates considered to be furnished.	The documentary evidence for the prevailing market rates has been furnished.
(iii).	The meaning of the term 'RAA' as referred in the Rate Analysis may be explained.	'RAA' stands for "Rate Analysis Attached"
(iv).	<u>Liquid Cargo Handling Activity:</u> The KPT does not appear to have furnished the Rate Analysis in respect of temporary fencing wall (₹0.16 crores), auxiliary civil infrastructure facilities (₹10 crores) and documentary evidence in support of the capital cost of Marine Loading and Unloading arm (₹12 crores). The KPT to furnish the requisite details/ documents.	Rate analysis for temporary fencing wall has been furnished. Moreover, the estimate of ancillary civil infrastructure facilities has been carried out on lumpsum basis. Regarding marine loading unloading arm, quotations were pursued. However, we did not get the response from the parties with firmed up budgeted figures as there is need of detailed design analysis and technical specifications of specific liquid commodities. Thus, at this stage, quotes could not be obtained and hence, we considered the estimates based on the range suggested in discussions with industry users/stakeholders.
(v).	<u>Berth:</u>	
	(a). (i). With regard to capital dredging, the KPT is requested to furnish the quantum of silt proposed to be dredged and the unit rate of dredging. The unit rate of dredging to be substantiated with documentary proof.	(i). The cost estimates for capital dredging is as per the documents furnished. From the document furnished by the port, it is seen that the KPT, the quantum of silt proposed to be dredged is estimated at 0.3958 million cu.m at

		the rate of ₹384/- per cu.m. The rate of ₹384/- per cu.m is reported to be based as per the accepted tender in the year 2010. Capital Cost of Dredging has been revised upwards as follows: Capital Dredging Cost in front of Jetty and its approach to Navigational Channel – ₹15.20 Crores Proportionate Capital Dredging Cost from Navigational Channel from Zero Panel to ₹0.55 Crores Total Capital Dredging ₹15.75 Crores The revised proposal incorporates the above. (ii). The maintenance dredging requirement as percentage of Capital Dredging is as assessed by KPT as per the model studies.																																																																																																																																																																																													
	(ii). It appears that a part of capital dredging cost is proposed to be apportioned to the BOT operator. There is no clarity in this proposition. KPT to clarify. (b). The KPT to furnish documentary proof and workings in support of the cost of 250 T Bollards, 3 Cell Fender and Ladder considered in the capital cost.	The required documentary proofs for the cost estimates have been furnished. <table><tr><th>Cate gory</th><th>No. of vessels Handled</th><th>NRT</th><th>GRT</th><th>DWT</th><th>Avg GRT</th><th>Avg DWT</th></tr><tr><td colspan="7">Year 2009-10</td></tr><tr><td>Product</td><td>147</td><td>1583608</td><td>3440492</td><td>5486386</td><td>23405</td><td>37322</td></tr><tr><td>Chemicals</td><td>667</td><td>3725689</td><td>7469677</td><td>120112345</td><td>11199</td><td>18010</td></tr><tr><td>Vegetable Oil</td><td>79</td><td>545369</td><td>1104079</td><td>1764192</td><td>13976</td><td>22332</td></tr><tr><td>Others</td><td>78</td><td>619858</td><td>1396283</td><td>2160318</td><td>17901</td><td>27696</td></tr><tr><td>Total</td><td>971</td><td>6474524</td><td>13410531</td><td>21423241</td><td>13811</td><td>22063</td></tr><tr><td>Total GRT/DWT</td><td>62.60%</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="7">Year 2010-11</td></tr><tr><td>Product</td><td>168</td><td>1744327</td><td>3976741</td><td>6101920</td><td>23671</td><td>36321</td></tr><tr><td>Chemicals</td><td>609</td><td>3458933</td><td>6967552</td><td>11177618</td><td>11441</td><td>18354</td></tr><tr><td>Vegetable Oil</td><td>69</td><td>553586</td><td>1129636</td><td>1784479</td><td>16372</td><td>25862</td></tr><tr><td>Others</td><td>66</td><td>551447</td><td>1220777</td><td>1886119</td><td>18497</td><td>28578</td></tr><tr><td>Total</td><td>912</td><td>6308293</td><td>13294706</td><td>20950136</td><td>14578</td><td>22972</td></tr><tr><td>Total GRT/DWT</td><td>63.5%</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td colspan="7">Year 2011-12</td></tr><tr><td>Product</td><td>167</td><td>1565056</td><td>3686183</td><td>5486873</td><td>22073</td><td>32856</td></tr><tr><td>Chemicals</td><td>627</td><td>3567906</td><td>7233730</td><td>11564696</td><td>11537</td><td>18444</td></tr><tr><td>Vegetable Oil</td><td>58</td><td>433408</td><td>889707</td><td>1440242</td><td>15340</td><td>24832</td></tr><tr><td>Others</td><td>71</td><td>617416</td><td>1343808</td><td>2039099</td><td>18927</td><td>28720</td></tr><tr><td>Total</td><td>923</td><td>6183786</td><td>13153428</td><td>20530910</td><td>14251</td><td>22244</td></tr><tr><td>Total GRT/DWT</td><td>64.07%</td><td></td><td></td><td></td><td></td><td></td></tr></table> <table><tr><th>Year</th><th>Output per Ship day (in tonnes)</th><th colspan="3">No. of vessels</th><th colspan="2">%</th></tr><tr><th></th><th></th><th>Foreign</th><th>Coastal</th><th>Total</th><th>Foreign</th><th>Coastal</th></tr><tr><td>2009-10</td><td>23971</td><td>2327</td><td>449</td><td>2776</td><td>84</td><td>16</td></tr><tr><td>2010-11</td><td>25858</td><td>2251</td><td>441</td><td>2692</td><td>84</td><td>16</td></tr><tr><td>2011-12</td><td>25309</td><td>2191</td><td>523</td><td>2714</td><td>81</td><td>19</td></tr></table>	Cate gory	No. of vessels Handled	NRT	GRT	DWT	Avg GRT	Avg DWT	Year 2009-10							Product	147	1583608	3440492	5486386	23405	37322	Chemicals	667	3725689	7469677	120112345	11199	18010	Vegetable Oil	79	545369	1104079	1764192	13976	22332	Others	78	619858	1396283	2160318	17901	27696	Total	971	6474524	13410531	21423241	13811	22063	Total GRT/DWT	62.60%						Year 2010-11							Product	168	1744327	3976741	6101920	23671	36321	Chemicals	609	3458933	6967552	11177618	11441	18354	Vegetable Oil	69	553586	1129636	1784479	16372	25862	Others	66	551447	1220777	1886119	18497	28578	Total	912	6308293	13294706	20950136	14578	22972	Total GRT/DWT	63.5%						Year 2011-12							Product	167	1565056	3686183	5486873	22073	32856	Chemicals	627	3567906	7233730	11564696	11537	18444	Vegetable Oil	58	433408	889707	1440242	15340	24832	Others	71	617416	1343808	2039099	18927	28720	Total	923	6183786	13153428	20530910	14251	22244	Total GRT/DWT	64.07%						Year	Output per Ship day (in tonnes)	No. of vessels			%				Foreign	Coastal	Total	Foreign	Coastal	2009-10	23971	2327	449	2776	84	16	2010-11	25858	2251	441	2692	84	16	2011-12	25309	2191	523	2714	81	19
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(vi).	The port has considered cost towards DPR preparation and environmental studies to the tune of ₹2 crores under liquid cargo handling activity. In this regard, it is relevant to mention here that the Miscellaneous cost of 5% as prescribed in the guidelines would also cover the said DPR cost. The KPT to, therefore, review the position.	As requested, the cost of DPR preparation and Environmental studies has been removed in the revised proposal.																																																																																																																																																																																													
(D). Operating cost:																																																																																																																																																																																															
(i).	In the Project Background, the KPT has stated that land for back up area is 5.5 hectares (including 1 hectare for bunker tank farm).	License Fee has been calculated considering the land area for (i) liquid cargo storage i.e. 4.5 Ha, bunker fuel storage i.e. 1 Ha (total of storage																																																																																																																																																																																													

	However, the operating cost calculation for POL storage area takes into account an area of 54900 sq.m. and the operating cost calculation for Bunker fuel storage area takes into account an area of 10000 sq.m., thus aggregating to 64900 sq.m. i.e. 6.5 hectares. In view of this position, the KPT to explain the reason for considering an area of 6.49 hectare as against 5.5 hectares for determining the licence fee for the storage facility.	area 5.5 Ha) and (ii) the land area for Jetty, Approach Bridge, Connecting Platform, Fire House, High Mast Towers and Crew Office 1.05 Ha (Gross Total 6.55 Ha). The revised proposal considers the License Fee as per the marginally revised total land area i.e., 6.55 Ha as bifurcated in the reply to query with Sr. (A) (i).
(ii).	It appears that the KPT has considered 13110 sq.m. as waterfront area for estimation of licence fee in the estimation of operating cost of cargo handling facility. This area appears to be in addition to the backup area of 6.5 hectares considered for estimation of licence fee in the estimation of operating cost for POL storage area and Bunker fuel storage area, which may be confirmed. The basis for considering 13110 sq.m. to be also brought out.	Water Area basis has already been explained in the query with Sr. (A) (i).
(iii).	While estimating the civil capital costs for POL and other liquid storage tank farm, the KPT has considered an amount of ₹1.34 crores as upfront value to be recovered by KPT from the concessionaire towards existing reclamation of land resulting from demolition of 240 quarters. The KPT has also stated that this land can be used for the project. In this regard, the KPT to clarify/ furnish the following:	The land area of 5.5 Ha on which it is envisaged to develop the Tank farm by the concessionaire is presently partly reclaimed. Earlier, on the said area, there were Port quarters which are now demolished. The cost of ₹1.34 Crores for such reclaimed area is worked out by considering the prevailing Market Rates. This partly developed area by way of reclamation could reduce the cost of the total filling as the same can be used by the Concessionaire. Hence, the cost of same has been incorporated as Upfront value to be recovered from the Concessionaire in the Draft Concession Agreement which is under approval with MoS. As the presently reclaimed land area is not actually another land area and is a part of the 5.5 Ha, hence, the same is not required to be considered for License Fee Calculation.
	(a). The total area arising out of the said reclamation and available for storage.	
	(b). Whether the said area forms part of the 5.49 hectares of land considered for POL and other liquid storage tank farm (Sl. No.8 Table 12 Clause 7.2).	
	(c). From the details furnished by port about the inclusion of upfront value to the tune of ₹1.34 crores in the estimated civil cost for development of Tank Farm, it appears to be the cost relating to the reclamation of the land and not present market value of land as stated by the port. In this connection, the KPT to confirm the said position and also confirm whether this position would form part of the Bid document.	
	(d). If the same has not been considered, then it to be factored while determining licence fee for the POL and other liquid storage tank farm.	
(iv).	The KPT to furnish workings and a copy of the latest Electricity bill in support of the unit cost of power considered at ₹9.80 in this regard.	A calculation has been furnished based electricity tariff schedule for the consumption based on the TAMP Guidelines 2008. The workings show that the per unit rate of power is ₹9.38.
(v).	Under berthing activity, the basis for considering maintenance dredging cost at 10% of the capital dredging cost to be explained. The maintenance dredging cost may be estimated in a scientific manner.	Maintenance Dredging has been estimated by KPT at about 10% of the capital dredging cost as per the model studies.
(E).	<u>Revenue Requirement and proposed tariff:</u>	
(i).	The estimated revenue requirement of ₹27.44 crores is required to be realised from "Bunkering	Distribution of Working Days has been considered based on the optimal capacity which

	fuel and POL” and “other liquids” in the ratio of 14.50% and 85.50% respectively. The ratio so worked out by KPT reflects the reported working days of 51 days and 301 days for the said cargoes respectively. Thus, the total cargo working days aggregates to 352 days in the working furnished by KPT. However, it is to be noted that the estimated revenue requirement of ₹27.44 crores is required to be realised within a period of 256 days at 70% utilisation. Therefore, the revenue requirement to be apportioned between the two categories of cargo in such a way that the operator is able to realise the estimated revenue requirement within 256 days at 70% utilisation.	already considers the factoring of 70%. Hence, the distributed days already considers the 30% window left while calculating the optimal capacity. Cargo working days are the berth days for the commodities and total of the same need not to tally to 256 days i.e. 70% of the 365.																												
(ii).	The KPT has not apportioned any revenue to be generated from the Miscellaneous charges on the ground that it does not envisage to undertake any miscellaneous activities. As a result, the KPT is not seen to have proposed any miscellaneous charges. In this regard, it is relevant to mention here that it may be appropriate to prescribe miscellaneous charges to cover exigencies like spillage, leakage of liquid cargo etc. In view of this position, the KPT to review its proposal so as to allocate some portion of the revenue towards miscellaneous charges and thereby prescribe the per tonne miscellaneous levy. The workings in this regard to be furnished. It is noteworthy that the guidelines also prescribe apportionment of 5% revenue requirement towards Miscellaneous charges. The activities to be covered for levy of Miscellaneous charges to be also listed out.	Miscellaneous Charge is generally per tonne levy; the same may be considered being covered along with cargo handling charges. Even if this exercise of separating out the miscellaneous charges from that charge is carried out, the tariff of the Cargo Handling Charges would reduce to the extent of the revenues from miscellaneous charge. Thus, KPT do not see any point in separate proposal of miscellaneous charges, the Cargo handling charges may be considered to be composite of the miscellaneous charges.																												
(iii).	The basis for considering the ratio of foreign and coastal as 90:10 incase of other liquids to be justified with reference to actuals in this regard during the last three years.	Ratio of foreign and coastal as 90:10 has been considered as historically observed in KPT. In the KPT SOR approved by TAMP in recent past, the same ratio was followed.																												
(F).	Berth hire charges:																													
(i).	The basis of 62.5% considered as a factor to convert DWT of a vessel to GRT of a vessel to be furnished.	The conversion ratio of 62.5% has been considered based on data for liquid cargo carrying 2009-10.																												
(ii).	As stated by the KPT, handling of vessels of 80,000 DWT is proposed for the project. That being so, consideration of average of present position existing at the oil jetties and the position proposed for the project does not appear to be correct. Therefore, the berth hire calculation to be revised considering the vessel size of 80,000 DWT vessels proposed for the project.	Though the KPT has stated to have revised the berth hire charges in the revised proposal, the berth hire calculation has not been revised.																												
(iii).	The KPT to also furnish the average GRT of the vessels carrying the above mentioned liquid cargo during the last three years for each of the said cargo.	The average GRT of the vessels carrying liquid cargo as per proposal for last three years is as follows: <table><tr><th colspan="4">C).AVG.GRT of Tankers (In Mtrs.)</th></tr><tr><th></th><th>2009-10</th><th>2010-11</th><th>2011-12</th></tr><tr><td>i).POL</td><td>23405</td><td>22073</td><td>23387</td></tr><tr><td>ii).Other liquids</td><td>11199</td><td>11537</td><td>12627</td></tr><tr><td>iii).Edible Oil</td><td>13976</td><td>15340</td><td>19092</td></tr><tr><td>iv).Phos/Ammonia</td><td>17901</td><td>18927</td><td>16815</td></tr><tr><td></td><td></td><td></td><td></td></tr></table>	C).AVG.GRT of Tankers (In Mtrs.)					2009-10	2010-11	2011-12	i).POL	23405	22073	23387	ii).Other liquids	11199	11537	12627	iii).Edible Oil	13976	15340	19092	iv).Phos/Ammonia	17901	18927	16815				
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			2009-10	2010-11	2011-12
		i).POL	37322	32856	35417
		ii).Other liquids	18010	18444	20470
		iii).Edible Oil	22332	24832	30963
		iv).Phos/Ammonia	27696	28720	24737
(iv).	Given that the handling rate of each cargo proposed to be handled at the facility is different, it may be appropriate to determine the berth hire by taking into account the handling rate and parameters relevant for each type of cargo. In this regard, the KPT to review its berth hire calculation in the manner it has been done while fixing the upfront tariff for handling liquid cargo at the barge facility of the Chennai Port Trust vide Order No.TAMP/27/2012-CHPT dated 17 August 2012.	TAMP Order No.TAMP/27/2012-CHPT dated 17 th August 2012 is for the barge handling facility. Proposal by KPT is for Bulk Liquid and bunker handling terminal which is prepared in line with the TAMP Guideline 2008. Bunkers are just allowed to be handled for supply of the same to the vessels at mid sea from the rear of the proposed Oil Jetty. However, the import of bunker fuel would also happen in vessels with size upto 80000 DWT. Hence, largely the scope is of main vessel berthing facility for handling liquid cargo. Thus, the proposal is in line with TAMP Guidelines.			
(G).	<u>Storage charges calculation:</u>				
(i).	The KPT has calculated the capacity of the liquid tank farm as 132000 KL and that of Bunker fuel farm as 32500 KL. The KPT to furnish basis for consideration of the said capacity.	Refer the reply of Query Sr. (B) (v).			
(ii).	KPT to furnish an analysis to establish that the said capacity of the liquid tank farm and Bunker fuel tank is in tandem with the capacity of the liquid cargo terminal.	As clarified earlier, the storage capacity was suggested by various users/ industry stakeholders. Calculation clarifies that the 30 time/ year of turnover ratio is in line with prevailing market dynamics and justifies the storage capacity to be in line with the cargo terminal capacity.			
(H).	<u>Scale of Rates:</u> Though the KPT has furnished a summary of the tariff for the various services envisaged to be rendered at the facility, it is seen that the KPT has not furnished a full fledged Scale of Rates proposing the conditionalities governing the levy of the various charges. The KPT to furnish a complete upfront tariff schedule.	The Scale of Rates in line with revised tariff proposal has been furnished.			

7.1. While responding to the queries under cover of its letter dated 5 February 2013, the KPT has also revised its proposal and furnished the same to us. Subsequently, the KPT vide its letter dated 7/8 February 2013 has requested to consider the revised proposal dated 7/8 February 2013 as the revised proposal dated 5 February 2013 had missed out the License fees for Land component in the operating expense calculation for cargo handling activity. A comparative position between the initial proposal dated 18/19 January 2013 and the revised proposal dated 7/8 February 2013 are summarized below:

- (i). The capacity of the liquid terminal is maintained at 3.39 million metric tonnes per annum.
- (ii). Capital cost:

(₹ in crores)					
Sl. No.	Particulars	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
(A).	<u>Cargo Handling Activity</u>				
(i).	<u>Civil Cost excluding berth cost and dredging cost</u>				
	Temporary Fencing Wall (Barbed Wire)	0.16		0.16	
	Ancillary Civil Infrastructure Facilities	10.00		10.00	
	DPR preparation and environmental studies	2.00		0.00	

Sl. No.	Particulars	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Approach Bridge (Size: 450 m x 10 m)	18.61		18.61	
	Approach Bridge Connecting Platform (Size: 114 m x 10 m)	5.79		5.79	
	Fire House (Size: 10 m x 15 m)	1.33		1.33	
	HMT (Size: 7 m x 7 m)	2.25		2.25	
	Crew Office (Size: 12 m x 10 m)	0.81		0.81	
	Miscellaneous cost	2.05		1.95	
	Total of (i)		43.00		40.90
(ii).	Liquid cargo handling activity: Equipment Cost				
	Marine Loading & Unloading Arm	12.00		12.00	
	Pipe Line cost from Jetty Terminal to Tank Farm (Length: Approx. 1.25 Km)	26.34		26.34	
	Other Ancillary items for pipeline works @ 15%	3.95		3.95	
	Pipe Line cost from Jetty Terminal to Bunker Storage Farm (Length: Approx. 1.00 Km)	7.55		7.55	
	Other Ancillary items for pipeline works @ 15%	1.13		1.13	
	Miscellaneous cost	2.55		2.55	
	Total of (ii)		53.52		53.52
	Total Capital cost for Handling Activity [(i) + (ii)]		96.52		94.42
(B).	Capital cost for construction of berth				
(i).	5 nos Berthing Dolphins (Size: 24 m x 15 m)	23.15			23.15
(ii).	4 nos Connecting Platform (Size: 45 m x 15 m)	13.31			13.31
(iii).	Capital Dredging (Input from OOT) - Apportioned for BOT Operator For (Volumetric Dredging)	12.20			15.75
(iv).	250 T Bollards	0.50			0.50
(v).	3 Cell Fender	2.03			2.03
(vi).	Ladder	0.03			0.03
(vii).	Miscellaneous cost	2.56			2.74
	Total Capital cost for construction of berth		53.77		57.50
(C).	Capital cost for Liquid Storage facility				
(i).	Capital cost of POL/Other Liquid Storage activity				
(a)	Civil cost				
	Civil Cost for Development of Tank Farm (includes Rs. 1.34 Crores as Upfront Value for existing Land Reclamation)	37.87		37.87	
	Boundary wall	2.49		2.49	
	Buildings, sewerage, water supply etc	4.74		4.74	
	Miscellaneous Charges	2.26		2.26	
(b)	Mechanical cost				
	Mechanical Cost for Development of Tank Farm	8.89		8.89	
	Fire fighting equipments	7.06		7.06	
	Miscellaneous Charges	0.80		0.80	
	Total Capital cost of POL/Other Liquid Storage activity (a) + (b)		64.09		64.09
(ii).	Bunker Fuel Storage Tank Farm Storage activity:				
(c)	Civil Cost				
	Civil Cost for Development of Bunker Tank Farm	7.66		7.66	
	Boundary wall	1.11		1.11	
	Buildings, sewerage, water supply etc	4.74		4.74	
	Miscellaneous Charges	0.68		0.68	
(d)	Mechanical Cost				
	Mechanical Cost for Development of Bunker Tank Farm	2.53		2.53	
	Fire fighting equipments	1.93		1.93	

Sl. No.	Particulars	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Miscellaneous Charges	0.22		0.22	
	Total Capital cost of Bunker Fuel Storage activity (C) + (D)		18.87		18.87
	Total Capital cost of Storage facility (i) + (ii)		82.96		82.96
	TOTAL CAPITAL COST OF PROJECT		233.25		234.88

(iii). Operating Cost:

(a). Operating Cost excluding berth and dredging:

(₹ in crores)				
Component	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Workings	₹ in Crores	Workings	₹ in Crores
Power Consumption	0.99 hectares, 240000 units per hectare/annum @ ₹ 9.8 per unit	0.23	1.05 hectares, 240000 units per hectare/annum @ ₹ 9.38 per unit	0.24
Repair and Maintenance (Civil Assets)	1% of 43.00	0.43	1% of 40.90	0.41
Repair and Maintenance (Mechanical Assets)	2% of 53.52	1.07	2% of 53.52	1.07
Insurance	1% of 96.52	0.97	1% of 94.42	0.94
Depreciation Civil	3.34% of 43.00	1.44	3.34% of 40.90	1.37
Depreciation Mechanical	10.34% of 12.60	1.30	10.34% of 12.60	1.30
Depreciation Mechanical (Pipelines)	13.91% of 40.92	5.69	13.91% of 40.92	5.69
License fee jetty area, approach, allied items	---	---	10508 sq.m x 39.94 per sq.m x 12 months	0.50
License Fee (water)	(300*15) as per the latest land lease license policy i.e. 50% of the land lease rates	0.57	13110 sq.m x 19.97 per sq.m x 12 months	0.31
Other Expenses	1% of 55.60	0.56	1% of 53.50	0.54
Total		12.26		12.37

(b). Operating Cost of berth:

Component	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Workings	₹ in crores	Workings	₹ in crores
Repair and Maintenance of civil assets	1% of ₹ 41.57	0.42	1% of ₹ 41.57	0.42
Depreciation	3.34% of 53.77	1.80	3.34% of 57.50	1.92
Insurance	1% of 53.77	0.54	1% of 57.50	0.57
Maintenance Dredging	10% of 12.20	1.22	10% of 15.75	1.58
Total		3.97		4.49

(c). Operating cost of Storage area - POL Storage area:

Component	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Workings	₹ in crores	Workings	₹ in crores
Power Consumption	(4.5 hectares, 240000 units per hectare/annum @ ₹ 9.8 per unit)	1.06	(4.5 hectares, 240000 units per hectare/annum @ ₹ 9.38 per unit)	1.01
Repair and Maintenance (Civil Assets)	1.00% of 47.36	0.47	1.00% of 47.36	0.47
Repair and Maintenance (Mechanical Assets)	2.00% of 16.74	0.33	2.00% of 16.74	0.33
Insurance	1.00% of 64.09	0.64	1.00% of 64.09	0.64
Depreciation Civil	3.34% of 47.36	1.58	3.34% of 47.36	1.58

Component	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Workings	₹ in crores	Workings	₹ in crores
Depreciation Mechanical	10.34% of 7.41	0.77	10.34% of 7.41	0.77
Depreciation Storage Tanks and Pipelines	13.91% of 9.33	1.30	13.91% of 9.33	1.30
License Fee(land)		4.78	45000 sq.m x ₹.39.94 per sq.m x 12 months	2.16
Other Expenses	1% of 56.68	0.57	1% of 56.68	0.57
Total		11.50		8.83

(d). Operating cost of Storage area - Bunker Fuel Storage area:

Component	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Workings	₹ in crores	Workings	₹ in crores
Power Consumption	1 hectare, 240000 units per hectare/annum @ ₹ 9.8 per unit	0.24	1 hectare, 240000 units per hectare/annum @ ₹ 9.38 per unit	0.23
Repair and Maintenance (Civil Assets)	1.00% Of 14.19	0.14	1.00% Of 14.19	0.14
Repair and Maintenance (Mechanical Assets)	2.00% of 4.68	0.09	2.00% of 4.68	0.09
Insurance	1.00% of 18.87	0.19	1.00% of 18.87	0.19
Depreciation Civil	3.34% of 14.19	0.47	3.34% of 14.19	0.47
Depreciation Mechanical	10.34% of 2.02	0.21	10.34% of 2.02	0.21
Depreciation Storage Tanks and Pipelines	13.91% of 2.66	0.37	13.91% of 2.66	0.37
License Fee(land)		0.87	10000 sq.m x ₹.39.94 per sq.m x 12 months	0.48
Other Expenses	1% of 16.84	0.17	1% of 16.84	0.17
Total		2.75		2.35

(iv). Annual Revenue Requirement

(₹ in crores)									
Sl. No.	Particulars	Initial proposal dated 18/19 January 2013				Revised proposal dated 7/8 February 2013			
		For cargo handling activity	For Berth Hire	For Storage Facility		For cargo handling activity	For Berth Hire	For Storage Facility	
				POL and Other Liquid	Bunker Fuel			POL and Other Liquid	Bunker Fuel
(i).	ROCE @ 16%	15.44	8.60	10.25	3.02	15.11	9.20	8.83	2.35
(ii).	Operating cost	12.26	3.97	11.50	2.75	12.37	4.49	10.25	3.02
(iii).	Total Revenue Requirement	27.70	12.57	21.75	5.77	27.48	13.69	19.09	5.37

7.2. In view of the above changes, the upfront tariff proposed by the KPT earlier has also undergone a slight change. A comparative position with regard to the upfront tariff proposed by the KPT in its initial proposal of January 2013 and the revised proposal of February 2013 is given below:

(i). Berth hire:

Description	(Rate in ₹ per GRT per hour or part thereof)			
	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Foreign vessel	Coastal vessel	Foreign vessel	Coastal vessel
Berth hire	0.53	0.32	0.57	0.34

(ii). Cargo handling charges:

	Initial proposal dated 18/19 January 2013		Revised proposal dated 7/8 February 2013	
	Foreign Vessels	Coastal Vessels	Foreign Vessels	Coastal Vessels
Bunker Fuel and other POL	₹32.81/MT	₹ 32.81/MT	₹31.95/MT	₹31.95/MT
Other Liquid	₹ 113.92/MT	₹ 68.35/MT	₹ 110.95/MT	₹ 66.57/MT

(iii). Storage charges:

	Initial proposal dated 18/19 January 2013	Revised proposal dated 7/8 February 2013
Liquid Tank Farm	₹7.17/Ton/Day	₹6.29/Ton/Day
Bunker Fuel Tank Farm	₹7.72/Ton/Day	₹7.18/Ton/Day
Considering current market practice of charging monthly rentals for liquid storage, monthly rental rates may also be proposed by multiplying 30 as no. of days in month.		
Liquid Tank Farm	₹215.1 / Tone/ Month	₹ 188.63 / Tone/ Month
Bunker Fuel Tank Farm	₹ 231.6 / Tone/ Month	₹ 215.49 / Tone/ Month

8. In view of the change in the proposed upfront tariff in the revised proposal, the revised proposal was circulated to the users/ user organizations/ prospective applicants, seeking their comments on the revised proposal. The users/ prospective applicants were requested to furnish their comments directly to KPT and with a copy endorsed to us. The KPT was also requested to respond to the comments of the users/ user organizations/ prospective applicants on the revised proposal immediately thereafter. Only one of the prospective bidder viz., Vadinar Oil Terminal Limited (VOTL) vide its letter dated 16 February 2013 has responded. These comments were forwarded to KPT as feedback information. The KPT under cover of its letter dated 20 February 2013 has furnished its comments on the comments of VOTL.

9. Since some gaps were noticed in the reply to queries furnished by the KPT vide its letter dated 5 February 2013, the KPT was requested to furnish additional information/ clarifications vide our letter dated 8 February 2013. The KPT has responded vide its e-mail dated 14 February 2013. A summary of the queries raised by us and the corresponding replies furnished by the KPT are tabulated below:

Sl. No.	Queries raised by us	Reply furnished by KPT
(i).	As requested at Sl no. (B)(iv)- General, the KPT has not certified that the dimensions of the pipelines considered by it in the proposal is optimum and that no further improvement would be possible due to technical reasons, which may have an impact on handling rate. While responding to the said query, the KPT has stated that the Concession Agreement would spell out the minimum requirement of pipelines. However, the provision proposed to be incorporated in the Concession Agreement would not cover the scenario where the operator would put into use a higher dimension of the pipelines.	As clarified in our earlier replies, it is again clarified that the various types of pipelines considered with dimensions i.e. dia of 10" and 12" which commensurate with the handling rates and optimal capacity proposed for the project. Moreover, only minimum requirement in line with the optimal capacity in this regard can be spelled out in the Concession Agreement. Higher side cannot be assumed. To ensure the user interest, Concession Agreement can be incorporated with the provision for Tariff revision in the scenario if the higher traffic than the optimal capacity is handled by the Concessionaire.
(ii).	While replying to the query at Sl no. (C)(i)- Capital costs, the KPT is stated to have furnished the Schedule of Rate considered in the	Schedule of Rate is attached

	estimation of civil costs. However, the same is not found attached along with the KPT letter dated 5 February 2013.	
(iii).	As requested at SI no. (C)(v)(a)(ii)- Capital cost, there is still no clarity with regard to the part of the capital dredging being apportioned to the BOT operator.	Capital Dredging Cost in front of Jetty and its approach to Navigational Channel – ₹15.20 Crores as estimated by KPT. (0.3958 Mcum x ₹384/cum) Proportionate Capital Dredging Cost for Navigational Channel from Zero Panel to Oil Jetty Complex. Total Cost estimated for this stretch is ₹3.86 Crores (0.121 Mcum x ₹319/cum). Presently, Port has got six oil jetties in Oil Jetty complex. As including expected BOT operator, total nos. of party comes to 7. The proportionate cost of dredging to be borne by BOT operator = ₹3.86 Crores / 7 Nos. = ₹0.55 Crores. ₹0.55 Crores Total cost towards Capital Dredging= ₹15.20 + ₹0.55 = ₹15.75 Crores.
(iv)	As requested at SI no. (E)(ii)- Revenue requirement and proposed tariff, the KPT has not apportioned the Revenue requirement towards Miscellaneous charges on the ground that cargo related charges would be composite of miscellaneous charges. In this regard, the miscellaneous charges are leviable to cover exigencies like spillage, leakage of liquid cargo etc. by including the levy of miscellaneous charges as part of handling charges, it would amount to recovering charges even when there are no exigencies. The KPT is, therefore, requested to review this position.	It is not possible to estimate / frame the separate miscellaneous charges to be recovered for covering the exigencies like spillage, leakage of liquid cargo etc. specifically when they occur. It has to be covered as an overhead to be spread to each tonne handled at the terminal. This is justified with the view that the every tonne handled carries the risk of such exigency. Hence, each tonne handled should bear the cost to cover this risk also. Moreover, a specific note has been put in the proposed SOR for the project also that the handling rate covers the cost of miscellaneous services in case of exigencies like spillage, leakage, etc.
(v).	As requested at SI no. (G)(ii)- Storage charges calculation, the KPT has not furnished the analysis to establish that the said capacity of the liquid tank farm and Bunker fuel tank is in tandem with the capacity of the liquid cargo terminal.	Storage charge calculation as explained in earlier replies. We explain below through an analysis of the turnover ratio by comparing the optimal capacity of the terminal and the storage tank farm capacity. Turnover Ratio = (3.39 MMTPA) / (164500 * 0.9 * 70%) = 32.71 times. Turnover ratio is division of Terminal Capacity and Storage Capacity which has been found to be 32.71 times. Total days i.e. 365 in year is divided by Turnover ratio, will give the dwell time which is in this case is 12 days and is in line with the market scenario.

10. A joint hearing in this case was held on 19 February 2013 at the KPT premises. The KPT made a power point presentation of its proposal. At the joint hearing, KPT and the RFQ applicants have made their submissions.

11.1. As agreed at the joint hearing, the KPT has furnished its reply under cover of its letter dated 19 February 2013 as under:

Sr. No.	Query	Clarification
1	Rate for Back Handling of Bunker Fuel	Presently, bunker supply activity in Kandla is at a very nascent stage. Very small quantities are being supplied through barges to the vessels at mid sea. To promote the bunkering activity at Kandla Port, the handling of the bunker fuels has been included in the proposed project of Development of Oil Jetty to Handle Liquid Cargo and Ship Bunkering Terminal at Old Kandla on BOT Basis. As discussed with some of the bunker suppliers in Kandla and as per Traffic Data of KPT, it has been known that the estimated quantity of bunker supplied through barges is around 200000 MT per year. As far as the total volume for supply of bunkers through barges and revenue earning from the same is concerned, they are very insignificant quantity considering the overall capacity of the Proposed Terminal as well as its revenue requirement proposed. Proposed Total Revenue Requirement for Project is Rs. 6562 Lakhs which includes the revenue requirement for cargo handling activity that has been arrived at considering the proposed tariff of ₹32.55/MT. Even if all of the above mentioned quantity of bunker fuels supplied through barges i.e. 200000 MT is handled at proposed Oil Jetty, the revenue would amount to only ₹32.55 Lakhs (200000 MT x 32.55 x 50%) only which if compared to the revenue requirement as aforesaid, it will be just 0.5% of the total proposed revenue requirement. Moreover, if the volume is compared to optimal capacity of the terminal, it may contribute just 5.9%. It is also pertinent to note that the above mentioned full volume of 200000 MT may not happen at proposed oil jetty. So then the proportion described earlier as percentage of revenue requirement and optimal capacity may further go down. Thus, considering the non-availability of separate record of bunker fuels at Kandla Port (Bunker Fuels are treated as cargo of POL category) and overall insignificant volume of bunker fuels supplied through barges, the separate tariff formulation for bunker fuels has not been carried out. Thus, KPT proposed tariff for back side handling of Bunker Fuel for supply through barges at 50% of the already worked out rate for POL and Bunker Fuel for Cargo handling at Jetty Front i.e. $50\% \times ₹ 32.55/MT = ₹16.28/MT$. This is being proposed in line with prevailing analogy adopted in the current approved Scale of Rate of KPT for handling of Ship Bunkers for which Chapter III, Schedule of Wharfage Charges – Sr. No. 5 under Miscellaneous may be referred.
2	Inclusion of the Project in Five Years Plan of the Port	KPT confirms that the proposed project is as per Five Year Plan of KPT. The copy of the same is enclosed.

11.2. Subsequently, the KPT vide its letter dated 20 February 2013 has submitted a comprehensive note for consideration of handling of Bunker Fuel at back side of the jetty and its charges. The submissions made by the KPT are summarized below:

- (i). Presently, bunker supply activity in Kandla is at a very nascent stage. Very small quantities are being supplied through barges to the vessels at mid sea. To promote the bunkering activity at Kandla Port, the handling of the bunker fuels has been included in the proposed project of Development of Oil Jetty to Handle Liquid Cargo and Ship Bunkering Terminal at Old Kandla on BOT Basis.

- (ii). As discussed with some of the bunker suppliers in Kandla and as per Traffic Data of KPT, it has been known that the estimated quantity of bunker supplied through barges is around 200000 MT per year. As far as the total volume for supply of bunkers through barges and revenue earning from the same is concerned, they are very insignificant quantity considering the overall capacity of the Proposed Terminal as well as its revenue requirement proposed.
- (iii). Proposed Total Revenue Requirement for Project is ₹6562 Lakhs which includes the revenue requirement for cargo handling activity that has been arrived at considering the proposed tariff of ₹ 32.55/MT. Even if all of the above mentioned quantity of bunker fuels supplied through barges i.e. 200000 MT is handled at proposed Oil Jetty, the revenue would amount to only ₹32.55 Lakhs (200000 MT x 32.55 x 50%) only which if compared to the revenue requirement as aforesaid, it will be just 0.5% of the total proposed revenue requirement. Moreover, if the volume is compared to optimal capacity of the terminal, it may contribute just 5.9%. It is also pertinent to note that the above mentioned full volume of 200000 MT may not happen at proposed oil jetty. So then the proportion described earlier as percentage of revenue requirement and optimal capacity may further go down.
- (iv). Thus, considering the non-availability of separate record of bunker fuels at Kandla Port (Bunker Fuels are treated as cargo of POL category) and overall insignificant volume of bunker fuels supplied through barges, the separate tariff formulation for bunker fuels has not been carried out. Thus, KPT proposed tariff for back side handling of Bunker Fuel for supply through barges at 50% of the already worked out rate for POL and Bunker Fuel for Cargo handling at Jetty Front i.e. 50% x ₹32.55/MT = ₹16.28/MT. This is being proposed in line with prevailing analogy adopted in the current approved Scale of Rate of KPT for handling of Ship Bunkers for which Chapter III, Schedule of Wharfage Charges – Sr. No. 5 under Miscellaneous may be referred.
- (v). Revenue Requirement from the bunker fuel handling at the back side of the proposed Oil Jetty is required to be estimated. Presently at Kandla Port, around 200000 MT is being handled per annum. Of which 25% can be expected to be handled at the proposed oil jetty (i.e. back side of the jetty). Hence, considering the proposed rate for this back side handling of the bunker fuel through barges at 50% of the already proposed rate of Cargo Handling Charges for “Bunkering Fuel and POL” (that is applicable for handling at front of the Jetty). This is being proposed in line with prevailing analogy adopted in the current approved Scale of Rate of KPT for handling of Ship Bunkers for which Chapter III, Schedule of Wharfage Charges – Sr. No. 5 under Miscellaneous may be referred. The revenue requirement considering the aforesaid rate and the expected volume has been worked out as shown below:

Revenue Expected from Back Side Bunker Handling	Value	Unit
Present Barge Bunker Supply at Kandla	200000	MT
Estimated Quantity of Bunkers to be supplied through barges	25%	of Total
Volume Expected at Proposed Oil Jetty	50000	
Rate = 50% of Cargo Handling Charge for POL & Bunker Fuel	16.28	
Revenue Expected to Earned from Bunker Handling	8.14	₹ Lakhs

- (vi). Further, to maintain the revenue requirement of the Project from cargo handling activities unchanged, it is proposed to adjust the above expected revenue from bunker handling at the back side of the jetty. Thus, the Revenue Requirement of Cargo Handling Charges are proposed to be reduced which in turn would reduce the tariff for cargo handling charges as shown below:

Details	₹ Lakhs
Operating cost	1237.41
capital cost	5083.73
ROCE 16% of capex	1510.76
Total	2748.18
Less: Revenue Expected from Bunker handling at back side of Jetty	8.14
Net Revenue Requirement to be considered for setting tariff for Cargo Handling Charges	2740.04

- (vii). Hence, based on reduced Revenue Requirement of Cargo Handling Charges work out as shown below:

Cargo Group	Cargo Share	Handling Rate Per Day	Cargo to be handled (tonnes)	Cargo Working Days	Percentage of Cargo Working days	Revenue Requirement	Cargo to be handled	Cargo to be handled	Rate in Rs.	Rate in Rs.
				(iv / iii)		(Rs. in Lakhs)	(Foreign) in tonnes	Coastal (in tonnes)	For foreign cargo	For coastal cargo
Bunkering Fuel and POL	36.12%	24000	1.22	51	14.50%	397	1224258	0.00	32.45	32.45
Other Liquids	63.88%	7200	2.17	301	85.50%	2343	1949013	216557	112.69	67.61
Total	100%		3.39	351.8		2740				

Revenue requirement and tariffs proposed for all other activities including storage and berth hire remains unchanged.

- (viii). We would also like to propose a following note to be included under the proposed Scale of Rates for Cargo Handling Charges for the proposed project (as Para 3.1 Note (iii)).

“Tariff for Bunker Fuels to be handled at back side of the Jetty through barges would be charged at 50% of the above rate applicable for “Bunkering Fuel and POL” category.”

12. The proceedings relating to consultation in this case are available on records at the office of this Authority. An excerpt of the comments received and 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>.

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

- (i). In view of Kandla Port Trust (KPT) witnessing a considerable increase in the Liquid cargo traffic and in order to ease the pressure on the existing oil terminals and to cater to the traffic of additional liquid cargo, the KPT has proposed to develop a liquid cargo handling facility and Ship Bunkering Terminal under Public Private Partnership (PPP) mode to handle Bunker Fuel, Petroleum Oil Lubricants (POL), and Other Liquids like Vegetable oils, Ammonia, Phosphoric acid etc. The guidelines of February 2008 issued by the Government as policy direction under Section 111 of the Major Port Trusts Act, 1963, stipulate, *inter alia*, that tariff caps have to be set upfront for all PPP projects for which bids will be invited after announcement of said guidelines. Accordingly, the proposal from KPT is to fix upfront tariff for the liquid cargo to be handled at the said facility based on the Guidelines for upfront tariff fixation issued by the Government in February 2008. It is noteworthy that the KPT has confirmed that this project is as per the Five Year Plan of the KPT.

It is clarified to the KPT that the upfront tariff fixed now is for the liquid cargo handling facility and Ship Bunkering Terminal to handle Bunker Fuel & POL, and Other Liquids etc. If the liquid cargo profile envisaged to be handled at the proposed facility undergoes a change, tariff will have to be reviewed to capture the change in the cargo, if any.

- (ii). The KPT has filed its proposal in January 2013. Subsequently, based on the information/ clarifications sought by us during the processing of the case, the KPT under cover of its letter dated 6 February 2013 has forwarded a revised proposal. The revision in the proposal is mainly with reference to estimated increase in the cost of capital dredging as well as increase in the licence fees forming part of the operating costs. Subsequently, KPT vide its letter dated 20 February 2013 has

proposed tariff for back handling of bunker fuel by barges for supply to the vessels. The revised proposal of the KPT furnished in February 2013 along with the information/ clarifications furnished by KPT during the proceedings of the case are considered in this analysis.

- (iii). The issue raised by the KPT initially with regard to determination of license fee for the land proposed to be allotted to the BOT operator for determination of upfront tariff is settled in the joint hearing held in this case on 19 February 2013. The port has agreed that the policy prescribed by the Government in the upfront tariff Guidelines regarding consideration of license fee as prescribed in its Rent Schedule for estimation of license fee in the operating cost for fixation of upfront tariff is binding on the port. It is noteworthy that the KPT has estimated license fee based on the rates prescribed in its Schedule of Rate.
- (iv). The proposal filed by KPT envisages handling of liquid cargo by transporting the liquid cargo through pipelines to the Tank Farm. With regard to a specific query, the KPT has confirmed that the dimensions of the Pipelines are appropriate and that it is commensurate with the handling rates considered for calculation of the optimal capacity. The KPT has also stated that the Concession Agreement would spell out the minimum requirement of pipelines so as to commensurate with the handling rates and optimal capacity of the project. However, incorporation of the said provision in the Concession Agreement would not cover the scenario where the operator would put into use a higher dimension of the pipelines with a higher pumping rate resulting in a higher productivity of the liquid cargo berth, than that considered for determining the optimal capacity of the facility. In this regard, the KPT has specifically stated that the Concession Agreement would spell out only the minimum requirement and that higher side cannot be assumed. However, to ensure the user interest, the KPT has agreed for incorporation of a provision for tariff revision in the scenario of the higher traffic than the optimal capacity is handled by the Concessionaire.

Nevertheless, based on the position as brought out by the KPT above, the current analysis proceeds further with fixation of upfront tariff for the liquid cargo facility at KPT based on the handling rates for various liquids as discussed hereinafter.

- (v). The KPT has proposed allotment of 65508 sq. m. of land area and 13110 sq. m. of water area for the proposed facility. Out of the 65508 sq.m of land area, 55000 sq.m of land is proposed to be utilised as backup area for tank farms. The balance area is proposed to be utilised for ancillary facilities like Jetty, Approaches, Connecting Platform between Jetty and Approach, Fire House, HMTs, Crew Office etc. The KPT has also confirmed that the proposed allotment of land is in line with the land use plan of the port. The judgment of the port for the total area requirement for handling liquid cargo is relied upon in the analysis.
- (vi). With regard to fixation of upfront tariff for handling liquid cargo at the barge handling facility, the KPT is seen to have followed the norms prescribed in the Upfront tariff guidelines for the liquid bulk terminal. In this regard, it is relevant here to mention that the Upfront tariff guidelines for the liquid bulk terminal prescribe allocation of the total Annual Revenue Requirement (ARR) into two groups i.e. Handling charges and Miscellaneous charges. The Guidelines state that the handling charges, interalia, are inclusive of the charges for storing in tanks. In the case under reference, the KPT has segregated the capital costs, operating costs etc. relevant for handling charges and storage charges separately. As a result, it has arrived at different per tonne rate for handling and storage of various liquid cargo. Since the approach adopted by the KPT is more detailed and elaborate, it is considered in the analysis.

(vii). Optimal Capacity of the facility:

- (a). By considering the percentage share of the liquid cargoes viz., POL and Bunker Fuel at 36.12% and Other Liquids at 63.88% and the handling rate of Liquid cargo at 1000 tonnes/ hour and 300 tonnes/ hour respectively and at 70% utilisation, the KPT has arrived at the optimal capacity of the facility at 3.39 Million Metric Tonnes Per Annum.
- (b). The percentage share of POL and Bunker Fuel at 36.12% and Other Liquids at 63.88% is reported to be based on the actuals for the same cargo during the last five years at KPT.
- (c). The upfront tariff guidelines of 2008 prescribe handling norm for Crude, POL products, LPG/ LNG and other liquids at 5000 tonnes/ hour, 1000 tonnes/ hour, 250 tonnes/ hour and 300 tonnes/ hour respectively.

The handling rate for POL and Other Liquids at 1000 tonnes per hour and 300 tonnes per hour respectively is seen to be in line with the handling rates prescribed for the said cargo in the Upfront Guidelines.

With regard to Bunker Fuel, the KPT has adopted the handling norm of 1000 tonnes per hour as prescribed for the POL in the Guidelines. When sought to justify consideration of the said handling rate for Bunker Fuel also, the KPT has sought to explain that Bunker fuel is to be considered as part of POL group of liquid items. Further, the Bunker fuel would be handled for supply to ships at mid sea through barges also and therefore, it has sought to justify the handling rate of 1000 tonnes per hour for Bunker Fuel.

- (d). Thus, the optimal capacity of the proposed Liquid cargo handling facility at 3.39 Million Metric Tonnes Per Annum at 70% utilization, as assessed by the port is relied upon.

(viii). Though the computation of storage capacity is not required as per the guidelines for the liquid terminal, it appears that the capacity of the tank farms used for storage of the liquid cargo may have an impact on the optimal capacity considered by the port in this case. The KPT has considered the capacity for Storage Tank Farm and Bunker Storage Tank Farm at 132,000 KL and 32,500 KL respectively, reportedly based on the suggestion of the users/ industry players. This translates into around 1.48 lakh tonnes of storage capacity at 90% density of the liquid cargo at a time. With reference to the observation made by the United Liner Agencies India (Private) Ltd. (ULAIPL) that the capacity of the storage tanks is not adequate for the optimal handling capacity of 3.39 Million Tonnes, the capacity for Storage Tank Farm and Bunker Storage Tank Farm is expected to enable a turnover ratio of approximately 30, which results in a dwell time of approximately 12 days, which is in line with the prevailing market dynamics, according to KPT. Further, since there are private storage tanks in the vicinity of the port, the liquid cargo can be shifted to such private storage tanks, since the port has stated that it will not insist on storing of liquid cargo handled at the oil jetty to be necessarily stored in the tanks. Therefore, inadequacy in the storage capacity, if any, does not appear to have impact on the project model considered by the KPT.

(ix). Capital cost:

- (a). Handling activity:
The capital cost for the handling activity as estimated by the KPT is ₹94.42 crores of which ₹40.90 crores is estimated towards civil capital costs and the balance ₹53.52 crores is estimated for equipment capital costs.

- (i). Civil works:
- (a). The upfront tariff guidelines broadly indicate the civil works involved for the liquid cargo terminal and require the port to estimate the civil cost. The nature of the civil works proposed to be undertaken at the facility generally adheres to normative list of civil works stipulated in the guidelines for the liquid cargo terminal. The estimated civil costs relating to handling of liquid cargo to the tune of ₹40.90 crores pertains to Temporary Fencing Wall (Barbed Wire), Ancillary Civil Infrastructure Facilities, Approach Bridge (Size: 450 m x 10 m), Approach Bridge Connecting Platform (Size: 114 m x 10 m), Fire House, HMT, Crew Office and Miscellaneous cost @ 5%.
- (b). The KPT has furnished the Rate Analysis with reference to almost all the civil works. As seen from the Rate Analysis, the KPT is seen to have estimated the civil works based on its Schedule of Rates for the year 2011 and prevailing market rates. The cost for the ancillary civil infrastructure facilities to the tune of ₹10 crores has been reported to be carried out on lumpsum basis. The civil cost for the Cargo handling activity as estimated by the Port is relied upon.
- (c). Under the civil capital cost, the KPT has considered miscellaneous capital cost @ 5% of the estimated civil cost. Similarly, the KPT has considered miscellaneous capital cost @ 5% of the estimated equipment cost. It may be relevant to mention here that the Upfront tariff guidelines of 2008 stipulate estimating Miscellaneous capital cost @ 5% of the total of the estimated civil and equipment. The KPT instead, has separately considered the Miscellaneous cost under the respective category of Capital cost.
- (ii). Equipment costs:
- (a). To handle the liquid cargo, the KPT has envisaged deployment of two Marine Loading & Unloading Arms, and their cost, Cost of Pipe Line measuring 1.25 Km length from Jetty Terminal to Tank Farm including ancillary items, Cost of Pipe Line measuring 1.00 Km length from Jetty Terminal to Bunker Storage Farm including ancillary items. The list of equipment proposed to be deployed at the facility is generally seen to adhere to the normative list of equipment prescribed in the guidelines for the liquid cargo terminal. The Vadinar Oil Terminal Limited (VOTL) has stated that at least three unloading arms are required. In this connection, the existing position at the oil jetty, as brought out by KPT during the proceedings, shows that two loading/unloading arms for one oil jetty will be sufficient. This position has emerged out of the experience gained by the KPT. Therefore, investment in the third equipment may be infructuous and idle and thus, may burden the users.
- (b). The KPT has furnished the Rate Analysis with reference to cost of Pipelines. As seen from the Rate Analysis, the KPT is seen to have estimated the cost of Pipelines based on the prevailing market rates for cost of pipes, pipe laying, welding, sand blasting, painting, PU coating,

pedestal construction cost, structure cost on approach bridge etc. the cost of Pipelines also include the cost of ancillary items for pipeline works estimated at 15% of the total piping cost. The cost of Pipelines as estimated by the Port is relied upon.

- (c). With regard to the estimated cost of Marine Loading & Unloading Arms, the KPT has stated that in the absence of non-availability of Quotations, the cost for Marine Loading & Unloading Arm has been estimated based on the suggestions with industry users/ stakeholders. It is noteworthy that the VOTL has endorsed the estimate of ₹12 crores. Since the cost of Marine Loading & Unloading Arm is as per the Feasibility Report, this Authority is inclined to consider the cost of Marine Loading & Unloading Arm as estimated by the KPT.

(b). Berthing activity:

- (i). The KPT has estimated the capital costs relating to berthing activity to the tune of ₹57.51 crores. This estimated cost pertains to 5 nos. of Berthing Dolphins, 4 nos. of Connecting Platform, Cost of apportioned Capital Dredging, 250 T Bollards, 3 nos. of Cell Fenders, Ladder and Miscellaneous cost @ 5%.
- (ii). The KPT has furnished the Rate Analysis with reference to cost of Berthing Dolphins and Connecting Platform. As seen from the Rate Analysis, the KPT is seen to have estimated the cost of Berthing Dolphins and Connecting Platform based on its Schedule of Rates for the year 2011 and prevailing market rates.
- (iii). With regard to Capital dredging, the KPT has stated that the cost is towards carrying out dredging to achieve a draft of 13 metres in front of the proposed oil jetty and its approach area to Navigational Channel to the tune of ₹15.20 crores. The quantum of silt proposed to be dredged is estimated at 0.3958 million cu.m at the rate of ₹384/- per cu.m. The rate of ₹384/- per cu.m is reported to be based as the accepted tender in the year 2010. Further, the KPT has considered proportionate cost of Capital Dredging from Navigational Channel to Zero Panel to the tune of ₹0.55 Crores. The cost of capital dredging at ₹15.75 crores as estimated by the port is relied upon.
- (iv). The KPT has furnished documentary evidence in support of the unit rate for 250 T Bollards and Ladders and has furnished workings in support of the cost of Cell Fenders. The cost of the above mentioned equipment which is seen to be as per the Feasibility Report is considered in the analysis, as estimated by the Port.
- (v). The KPT has considered miscellaneous capital cost @ 5% of the estimated capital cost relating to berthing activity. Though the Upfront tariff guidelines of 2008 stipulate estimation of Miscellaneous capital cost @ 5% of the total of the estimated civil cost incase of handling activity, the guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in case of the upfront tariff determined for various projects of Visakhapatnam Port Trust (VPT), Coal terminal at V.O Chidambaranar Port Trust (VOCPT), Mormugao Port Trust (MOPT), multipurpose and mechanised berths at Kolkata Port Trust (KOPT), Barge handling facility to

handle liquid cargo at Chennai Port Trust, 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, the miscellaneous capital cost under the berthing activity at 5% of the capital cost of berth is taken into account, as proposed by the port.

(c). Storage activity:

(i). POL & Other Liquid Storage Tank Farm:

The capital cost for the storage of POL & Other Liquid cargo as estimated by the KPT is ₹64.11 crores of which ₹47.36 crores is estimated towards civil capital costs and the balance ₹16.75 crores is estimated for equipment capital costs.

(a). Civil costs:

- (i). The KPT has estimated the civil costs relating to storage of POL & Other Liquid cargo to the tune of ₹47.36 crores. This estimated cost pertains to Development of Tank Farm, Boundary wall, Buildings, sewerage, water supply etc. and Miscellaneous cost @ 5%.
- (ii). The KPT has furnished the Rate Analysis with reference to almost all the civil works. As seen from the Rate Analysis, the KPT is seen to have estimated the civil works based on its Schedule of Rates for the year 2011 and prevailing market rates.
- (iii). The civil capital costs for POL and other liquid storage tank farm is inclusive of an amount of ₹1.34 crores considered by the KPT towards recovery by KPT from the concessionaire upfront towards existing reclamation of land resulting from demolition of 240 port quarters. The KPT has also stated that the land area of 5.5 hectares on which the Tank farm is envisaged to be developed by the concessionaire is presently partly reclaimed. Since the said partly developed area could reduce the cost of the total filling to be borne by the Concessionaire, the KPT has reported to have considered an amount of ₹1.34 crores as Upfront value. It is understood from KPT that the value of ₹1.34 crore considered by KPT represents the current market value for the cost of filling up of the reclaimed land already incurred at the time of construction of the said 240 quarters on the reclaimed land. The cost of ₹1.34 Crores for the reclaimed area is reported to have been worked out by considering the prevailing Market Rates. This position is relied upon.
- (iv). For the reasons stated earlier, Miscellaneous cost @ 5% of the civil costs is considered, as assessed by the Port.

- (b). Mechanical costs:
- (i). The KPT has estimated the mechanical costs relating to storage of POL & Other Liquid cargo to the tune of ₹16.75 crores. This estimated cost pertains to mechanical cost for development of Tank Farm, Fire Fighting and Miscellaneous cost @ 5%.
 - (ii). Though the KPT has furnished the Rate Analysis with reference to mechanical costs, it is seen that the costs have been estimated on lumpsum basis. The VOTL and IMC Ltd. have felt that the storage tank cost is on the lower side. However, it is not supported by any analysis. We also do not have the benefit of the views of the KPT in this regard since the comments of KPT on the comments of IMC Ltd. were not received till finalization of this case. Since mechanical cost is as per the Feasibility Report, this Authority is inclined to consider the mechanical cost as estimated by the KPT.
 - (iii). For the reasons stated earlier, Miscellaneous cost @ 5% of the mechanical cost is considered, as assessed by the Port.

- (ii). Bunker Fuel Storage Tank Farm:
The capital cost for the storage of Bunker Fuel as estimated by the KPT is ₹18.87 crores of which ₹14.19 crores are estimated towards civil capital costs and the balance ₹4.68 crores are estimated for equipment capital costs.

- (a). Civil costs:
- (i). The KPT has estimated the civil costs relating to storage of Bunker Fuel to the tune of ₹14.19 crores. This estimated cost pertains to Development of Tank Farm, Boundary wall, Buildings, sewerage, water supply etc. and Miscellaneous cost @ 5%.
 - (ii). The KPT has furnished the Rate Analysis with reference to almost all the civil works. As seen from the Rate Analysis, the KPT is seen to have estimated the civil works based on its Schedule of Rates for the year 2011 and prevailing market rates.
 - (iii). For the reasons stated earlier, Miscellaneous cost @ 5% of the civil costs is considered, as assessed by the Port.
- (b). Mechanical costs:
- (i). The KPT has estimated the mechanical costs relating to storage of Bunker Fuel to the tune of ₹4.68 crores. This estimated cost pertains to mechanical cost for development of Tank Farm, Fire Fighting and Miscellaneous cost @ 5%.

- (ii). Though the KPT has furnished the Rate Analysis with reference to mechanical costs, it is seen that the costs have been estimated on lumpsum basis. Since the cost of mechanical costs is as per the Feasibility Report, this Authority is inclined to consider the mechanical cost as estimated by the KPT.
 - (iii). For the reasons stated earlier, Miscellaneous cost @ 5% of the mechanical is considered, as assessed by the Port.
- (x). Return on capital employed is calculated at 16% of the estimated capital cost as per the norms prescribed in the guidelines.
- (xi). Operating cost:
 - (a). Cargo Handling activity:
 - (i). Power cost:
Power cost has been estimated by the port for illumination of 1.05 hectares of area (jetty area, approach, allied items) at 240000 units per hectare per annum at the rate of ₹9.38 per unit.

The consumption of 240000 units per hectare per annum for illumination is as per the norms prescribed in the upfront guidelines.

The KPT has furnished the workings in support of the rate of ₹9.38 per unit. Hence, the power cost of ₹9.38 per unit as estimated by the port is considered in this analysis.
 - (ii). Repairs and maintenance cost is estimated at 1% of the civil assets and 2% of the equipment costs, which is in line with the norms prescribed in the guidelines.
 - (iii). Insurance cost is estimated at 1% of the gross fixed assets by KPT, which is in line with the norms prescribed in the guidelines.
 - (iv). Depreciation is computed @ 3.34% on civil cost, 10.34% on equipment cost and 13.91% on the cost of pipelines 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.
 - (v). The upfront guidelines stipulate estimation of 'other expenses' at 1% of the gross fixed assets. However, the KPT has estimated 'other expenses' at 1% of the cost of equipment alone. The other expenses' is calculated at 1% of the gross fixed assets, as stipulated in the guidelines.
 - (vi). Licence Fee:
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.

It may be recalled that this Authority vide its Order no.TAMP/21/2010-COPT dated 25 March 2011 has fixed lease rentals for the lands belonging to KPT.

Licence fee has been estimated by the port for 10508 sq.m of jetty area, approach etc at the rate of ₹39.94 per sq. mtr per month based on the rates as per the existing Scale of Rates of KPT relevant for the Category – G 'Land of Liquid Storage Tanks situated at Old Kandla; between railway siding and leading to M/s.IFFCO and M/s. IOCL (LPG)', after taking into account the applicable escalation factor. Similarly, licence fee has been estimated by the port for 13110 sq.m of water area at the rate of ₹19.97 per sq. mtr per month, being 50% of the rate considered applicable for the land area, as stipulated in the Land Policy Guidelines of 2010. The licence fee as estimated by the port is considered in the analysis. Incidentally, maintenance dredging cost is considered in the operating cost of berths in other cases of fixation of upfront tariff for liquid cargo berth.

(b). Berthing activity:

- (i). The guidelines require the operating cost for berthing service to be estimated at 1% of the berth cost. In addition to maintenance cost, the KPT has considered insurance and depreciation while estimating the operating cost of berthing service.

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 @ 1% and depreciation cost @ 3.34% are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service.

- (ii). Further, in the operating cost estimation for the berthing activity, there is an element of maintenance dredging cost estimated at 10% of the capital dredging cost. Since the maintenance dredging requirement as a percentage of Capital Dredging is reported to be assessed by KPT as per the model studies, the same is relied upon in the analysis.

(c). Storage activity:

- (i). POL and Other Liquid Tank Farm:

- (a). Power cost:

Power cost has been estimated by the port for illumination of 4.50 hectares of backup area at 240000 units per hectare per annum at the rate of ₹9.38 per unit.

The consumption of 240000 units per hectare per annum for illumination is as per the norms prescribed in the upfront guidelines.

For the reasons stated earlier, the power cost of ₹9.38 per unit as estimated by the port is considered in this analysis.

- (ii). Repairs and maintenance cost is estimated at 1% of the civil assets and 2% of the equipment costs, which is in line with the norms prescribed in the guidelines.

- (iii). Insurance cost is estimated at 1% of the gross fixed assets by KPT, which is in line with the norms prescribed in the guidelines.
- (iv). Depreciation is computed @ 3.34% on civil cost, 10.34% on equipment cost and 13.91% on the cost of storage tanks 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.
- (v). The upfront guidelines stipulate estimation of 'other expenses' at 1% of the gross fixed assets. The manner in which estimation of other expenses has been made remains unexplained. The other expenses' is, therefore, re-calculated at 1% of the gross fixed assets, as stipulated in the guidelines.
- (vi). Licence Fee:
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.

It may be recalled that this Authority vide its Order no.TAMP/21/2010-COPT dated 25 March 2011 has fixed lease rentals for the lands belonging to KPT.

Licence fee has been estimated by the port for 45000 sq.m of backup area at the rate of ₹39.94 per sq. mtr per month based on the rates as per the existing Scale of Rates of KPT relevant for the Category – G 'Land of Liquid Storage Tanks situated at Old Kandla; between railway siding and leading to M/s.IFFCO and M/s. IOCL (LPG)', after taking into account the applicable escalation factor. The licence fee as estimated by the port is considered in the analysis.

- (vii). Bunker Fuel Tank Farm:
 - (a). Power cost:
Power cost has been estimated by the port for illumination of 1 hectare of backup area at 240000 units per hectare per annum at the rate of ₹9.38 per unit.

The consumption of 240000 units per hectare per annum for illumination is as per the norms prescribed in the upfront guidelines.

For the reasons stated earlier, the power cost of ₹9.38 per unit as estimated by the port is considered in this analysis.
 - (b). Repairs and maintenance cost is estimated at 1% of the civil assets and 2% of the equipment costs, which is in line with the norms prescribed in the guidelines.
 - (c). Insurance cost is estimated at 1% of the gross fixed assets by KPT, which is in line with the norms prescribed in the guidelines.
 - (d). Depreciation is computed @ 3.34% on civil cost, 10.34% on equipment cost and 13.91% on the cost of storage tanks 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.

(e). The upfront guidelines stipulate estimation of 'other expenses' at 1% of the gross fixed assets. The manner in which estimation of other expenses has been made remains unexplained. The other expenses' is, therefore, re-calculated at 1% of the gross fixed assets, as stipulated in the guidelines.

(f). Licence Fee:
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.

It may be recalled that this Authority vide its Order no.TAMP/21/2010-COPT dated 25 March 2011 has fixed lease rentals for the lands belonging to KPT.

Licence fee has been estimated by the port for 10000 sq.m of backup area at the rate of ₹39.94 per sq. mtr per month based on the rates as per the existing Scale of Rates of KPT relevant for the Category – G 'Land of Liquid Storage Tanks situated at Old Kandla; between railway siding and leading to M/s.IFFCO and M/s.IOCL (LPG)', after taking into account the applicable escalation factor. The licence fee as estimated by the port is considered in the analysis.

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

(a). Cargo handling activity:

(i). The annual revenue requirement for the liquid cargo handling activity which is the sum of the operating cost and return on capital employed is estimated at ₹27.89 crores as against ₹27.48 crores estimated by the port.

(ii). As discussed in the factual position of this note, the KPT has proposed to levy some charges for back handling of bunker fuel by barges for supply to the vessels. Considering a traffic of 50000 MT expected to be handled at the back side of the proposed oil jetty and considering 50% of its proposed rate for POL, Bunker fuel at ₹32.55 per MT i.e. ₹16.28 per MT, the KPT has arrived at the revenue to be realized from the back handling of bunker fuel at ₹8.14 lakhs. Since the estimated traffic of 50000 MT forms part of the overall optimal capacity of 3.39 MMTPA, it is logical that the revenue requirement realizable from handling 3.39 MMTPA should exclude the income of ₹8.14 lakhs to be realizable separately from back handling. Accordingly, the KPT has excluded the amount of ₹8.14 lakhs from its estimated revenue requirement from handling of ₹27.48 crores, to determine the per tonne handling rate for the various types of cargoes.

(iii). The guidelines for liquid bulk terminal stipulate apportionment of 95% of the total revenue requirement towards handling charge and 5% towards miscellaneous charge. However, the KPT has not apportioned any revenue to be generated from the Miscellaneous charges on the ground that it does not envisage to

undertake any miscellaneous activities. As a result, the KPT is not seen to have proposed any miscellaneous charges. Even with reference to a request to allocate some portion of the revenue requirement towards miscellaneous charges and thereby prescribe the per tonne miscellaneous levy, KPT has stated that cost for covering exigencies like spillage, leakage of liquid cargo etc. is to be covered as an overhead and is to be spread to each tonne handled at the terminal, as every tonne handled carries the risk of such exigency.

Prescription of a consolidated per tonne rate inclusive of the levy for exigencies as proposed by the port, would result in situation where the user would be required to pay even when there is no spillage or leakage of his liquid cargo. In other words, all the users would continue to pay the same rate irrespective of whether there is spillage or not. That means, the user whose cargo is not spilled, leaked and would not avail the said services from the BOT operator in this regard, if any, would cross subsidise the user whose cargo is leaked, spilled.

Prescription of a separate rate for handling as well miscellaneous levy to cover exigencies, would result in the user paying the miscellaneous charge only if there is spillage or leakage of his liquid cargo. Also, even if the argument of the KPT that every tonne handled carries the risk of exigency, then the operator would not be put into any disadvantageous position, as he would continue to earn the required revenue albeit from two different heads of levy i.e. handling as well as miscellaneous charges. Therefore, 5% of the revenue requirement is apportioned towards Miscellaneous charges, as prescribed in the Guidelines, so as to enable prescribe a per tonne rate for miscellaneous services.

- (iv). The upfront tariff caps for the liquid cargo to be handled at the facility is arrived at by KPT by taking into account the handling rate of different types of cargo and the cargo working days of each type of cargo.
- (v). 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) not exceeding 60% of the normal cargo/ vessel related charges. Accordingly, the KPT has not proposed for any coastal rates for POL and Bunker Fuel and proposed concessional rates for coastal cargo of Other Liquids in line with the Government policy, assuming the share of foreign and coastal cargo as 90% and 10% respectively for 'Other Liquid' cargo. The port has clarified that the share of coastal/ foreign cargo assumed by it is based on the ratio historically observed in KPT. The share of foreign/ coastal cargo assumed by the port incase of 'Other Liquid' cargo is relied upon in this analysis. The KPT has arrived at the handling rate for each liquid cargo with reference to their individual composition of foreign/ coastal cargo to meet the estimated revenue requirement.
- (vi). For the reasons stated above, a miscellaneous levy of ₹4.11 per tonne is prescribed to cover exigencies like spillage, leakage etc.

- (b). Berthing activity:
Based on the analysis explained earlier, the revenue requirement from berthing service works out to ₹13.69 crores, as estimated by the port.

Considering the average GRT of the vessels at 40625 GRT and the operating hours at 6132, the KPT has arrived at the total GRT hours. Considering the ratio of foreign and coastal vessels at 90:10, based on the prevailing trend at KPT, the port has arrived at the berth hire charge of ₹0.57 per GRT per hour for foreign going vessels.

The average GRT of vessels at 40625 GRT is based on the assumption of the port that vessels in the range of 50000 DWT to 80000 DWT would be calling the port. The conversion factor to convert DWT to GRT considered by the KPT at 62.5% is relied upon. Hence, berth hire charge of ₹0.57 per GRT per hour for foreign going vessels and ₹0.34 per GRT per hour for coastal vessels as assessed by the port is prescribed.

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. The proposal of the KPT for rupee denominated berth hire is in line with the decision taken by this Authority in the other upfront tariff cases.

- (c). Storage activity:

- (i). POL and Other Liquid Storage Tank Farm:

- (a). Based on the analysis explained earlier, the revenue requirement from POL and Other Liquid Storage Tank Farm works out to ₹19.17 crores instead of ₹19.09 crores estimated by the port.

- (b). Considering the capacity of the Tank Farm at 132000 KL, as discussed earlier, with a density factor of 0.9, for 365 operating days at 70% utilisation, the KPT has arrived at the storage charge of ₹6.29 per tonne per day. In view of change in the Revenue Requirement, the storage charge of ₹6.31 per tonne per day has been worked out. Prescription of storage charges in terms of tonnage meets the request made by one of the users.

- (ii). Bunker Fuel Storage Tank Farm:

- (a). Based on the analysis explained earlier, the revenue requirement from Bunker Fuel Storage Tank Farm works out to ₹5.39 crores instead of ₹5.37 crores as estimated by the port.

- (b). Considering the capacity of the Tank Farm at 32500 KL, as discussed earlier, with a density factor of 0.9, for 365 operating days at 70% utilisation, the KPT has arrived at the storage charge of ₹7.19 per tonne per day. In view of change in the Revenue Requirement, the storage charge of ₹7.21 per tonne per day has been worked out.

- (xiii). In the proposed upfront tariff schedule, the KPT has proposed definitions for common terms like coastal vessel, foreign vessel, free period, port, per day, TAMP, tonne. These definitions are found to be in line with the definitions prescribed for the respective terms in the other upfront tariff cases and Scale of Rates of other major ports and private terminals.

- (xiv). The KPT has proposed some general conditionalities like conditionalities governing levy of interest on delayed payments/ refunds, rounding off bills, non-levy of charges for delay beyond a reasonable level attributable to the terminal operator, granting of rebate equivalent to berth hire charges incase of idling of Oil Vessels due to breakdown or non-availability of the shore based facilities of Oil Terminal or any other reasons attributable to Terminal, which are found to be in line with the general conditionalities prescribed in the Scale of Rates of the KPT.
- (xv). Some general conditionalities like conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates, conditionalities prescribing criteria for categorization of a vessel as a coastal vessel is also prescribed in the Upfront Schedule as has been prescribed in other Upfront tariff Schedules.
- (xvi). In the Berth hire Schedule, the common conditionalities like the period of berth hire to be calculated 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, and no berth hire to 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, are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.
- (xvii). The KPT has proposed a provision to state that the handling charges prescribed shall include the cargo loading or unloading charges (as the case may be), transportation through pipelines, wharfage, etc. The note also states that it would include unloading of the cargo from vessels and transfer of the same up to the point of storage and loading on to trucks/tankers in respect of import cargo and unloading of the cargo from the trucks/tankers at the storage tank farm in respect of export cargo, transfer of the cargo to the loading point, loading onto the vessels and barges, which is approved.
- (xviii). The KPT has not proposed for any free days for handling the liquid cargo. As per Clause 4.5 of the tariff guidelines of 2005, the number of free days may be proposed by individual ports. Given that no users have objected to non-prescription of free days, the same is approved.
- (xix). Under the storage schedule, the common conditionalities like Storage charges to be payable for all days including Terminal's non-working days and Customs notified holidays for stay of cargo beyond the prescribed free days, Storage charge to not accrue for the period when the terminal operator is not in a position to deliver/ ship the cargo when requested by the user due to reasons attributable to the terminal operator are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.
- (xx). The KPT has proposed a note under Storage Schedule that the demurrage charges on hazardous liquids shall be levied at double the normal rates specified in above schedule. Clause 5.7.3 stipulates prescription of Premium to the extent of 25% on handling and storage charges in case of hazardous containers/ cargo. Accordingly, the said note is modified to reflect the guideline position.
- (xxi). Under the Miscellaneous charge schedule, a note has been prescribed stating that miscellaneous charge is towards Cleaning of the area in the event of spillage, leakage.

14.1. As per clause 2.8 of the Guidelines, 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 2008 and 1 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 April of the relevant year to 31 March of the following year. In the instant case, since the estimation of capital cost and unit rate of operating cost considered in the upfront tariff calculation are as of the year 2012, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as on 1 January 2012.

14.2. As specified in clauses 2.9.1. and 2.9.2. of the guidelines, before commencement of commercial operations, the private operator shall approach this Authority for notification of Scale of Rates containing the approved ceiling rates and the statement of conditions, as required under Section 48 of the Major Port Trusts Act, 1963.

14.3. As per clause 3.8.5 of the guidelines, if any question arises requiring clarifications or interpretation of the Scale of Rates and the statement of conditionalities, the matter shall be referred to this Authority and its decision in this regard will be binding on the operator.

14.4. The performance norms for the project should be clearly brought out in the bid documents. The private operator is expected to perform at least at the performance norms brought out in the bid document/ concession agreement.

14.5. The upfront tariff approved by this Authority is with reference to the handling of certain liquid cargo at the facility. If there is any change in the cargo profile, the upfront tariff will have to be reviewed.

14.6. The actual performance of the private operator will be monitored by this Authority. If any complaint regarding quality of service is received, this Authority will enquire into such allegation and forward its findings to the Kandla Port Trust. If any action is to be taken against the private operator, the Kandla Port Trust shall initiate appropriate action in accordance with the provisions of the relevant Concession Agreement.

14.7. During the commercial operation at the terminal, within 15 days from the end of every quarter, the private operator shall submit to this Authority through the Kandla Port Trust a report containing the terminal's physical and financial performance during the preceding three months.

15. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves the upfront tariff caps for handling POL, Bunker Fuel, Other Liquid cargo at the Oil Terminal and ship bunkering terminal at the Kandla Port Trust, which is attached as **Annex - II**.

(T.S. Balasubramanian)
Member (Finance)

UPFRONT TARIFF CALCULATION FOR THE OIL JETTY TO BE DEVELOPED AT KANDLA PORT TRUST.

₹ in lakhs			
Sr. No.	Particulars	Revised proposal of February 2013	Estimates modified by TAMP
I	Optimal capacity		
(a)	Percentage Share of Liquid cargo:		
	- Bunker Fuel, POL (S1)	36.12%	36.12%
	- Other Liquids (S2)	63.88%	63.88%
(b)	Handling rate of Liquid cargo per day:		
	- Bunker Fuel, POL (P1)	24000	24000
	- Other Liquids (P2)	7200	7200
(c)	Optimal Quay Capacity = $0.7*((S1*P1)+(S2*P2))*365$	3390015	3390015
	Optimal Capacity in million tonnes / annum	3.39	3.39
II	Capital Cost		
		₹ in crores	
A.	Cargo Handling Activity:		
(a)	Civil costs		
	Temporary Fencing Wall (Barbed Wire)	0.16	0.16
	Ancillary Civil Infrastructure Facilities	10.00	10.00
	Approach Bridge (Size: 450 m x 10 m)	18.61	18.61
	Approach Bridge Connecting Platform (Size: 114 m x 10 m)	5.79	5.79
	Fire House (Size: 10 m x 15 m)	1.33	1.33
	HMT (Size: 7 m x 7 m)	2.25	2.25
	Crew Office (Size: 12 m x 10 m)	0.81	0.81
	Miscellaneous cost @ 5%	1.95	1.95
	(a)	40.90	40.90
(b)	Equipment costs		
	Marine Loading & Unloading Arm	12.00	12.00
	Pipe Line cost from Jetty Terminal to Tank Farm (Approx. 1.25 Km length) including ancillary items	30.29	30.29
	Pipe Line cost from Jetty Terminal to Bunker Storage Farm (Approx. 1.00 Km length) including ancillary items	8.68	8.68
	Miscellaneous cost @ 5%	2.55	2.55
	(b)	53.52	53.52
	Total capital costs for the cargo handling activity	94.42	94.42
B.	Berthing activity:		
	5 nos Berthing Dolphins (Size: 24 m x 15 m)	23.15	23.15
	4 nos Connecting Platform (Size: 45 m x 15 m)	13.31	13.31
	Capital Dredging (Apportioned for BOT Operator)	15.75	15.75
	250 T Bollards	0.50	0.50
	3 Cell Fender	2.03	2.03
	Ladder	0.03	0.03
	Miscellaneous cost @ 5%	2.74	2.74
	Total capital costs for the berthing activity	57.51	57.51
C.	Storage activity:		
(i)	POL & Other Liquid Storage Tank Farm		
(a)	Civil costs		
	Development of Tank Farm (including Rs.1.34 Crores as Upfront Value for existing Land Reclamation)	37.87	37.87
	Boundary wall	2.49	2.49
	Buildings, sewerage, water supply etc	4.74	4.74
	Miscellaneous Charges @ 5%	2.26	2.26
	(a)	47.36	47.36
(b)	Mechanical Costs		
	Mechanical Cost for Development of Tank Farm	8.89	8.89
	Fire fighting equipments	7.06	7.06
	Miscellaneous Charges	0.80	0.80
	(b)	16.75	16.75
	Total capital costs for the POL & Other Liquid Storage Tank Farm	64.11	64.11
(ii)	Bunker Fuel Storage Tank Farm		
(a)	Civil costs		
	Development of Tank Farm	7.66	7.66
	Boundary wall	1.11	1.11
	Buildings, sewerage, water supply etc	4.74	4.74
	Miscellaneous Charges @ 5%	0.68	0.68
	(a)	14.19	14.19

(b) Mechanical Costs		
Mechanical Cost for Development of Tank Farm	2.53	2.53
Fire fighting equipments	1.93	1.93
Miscellaneous Charges	0.22	0.22
(b)	4.68	4.68
Total capital costs for the Bunker Fuel Storage Tank Farm	18.87	18.87
D Total capital cost of the project (A + B + C)	234.91	234.91
III Operating Cost	₹ in crores	
A Cargo handling activity:		
(a). Power cost	0.24	0.24
(KPT - 1.05 hectares of land * 240000 units per hectare @ Rs.9.38 per unit) (TAMP - 1.05 hectares of land * 240000 units per hectare @ Rs.9.38 per unit)		
(b). Repair & Maintenance		
- Civil works (1% on civil costs)	0.41	0.41
- Equipment cost (2% on Equipment costs)	1.07	1.07
(c). Insurance (1% on Gross fixed assets)	0.94	0.94
(d). Depreciation		
- Civil works (3.34% on civil costs)	1.37	1.37
- Equipment cost (10.34% on Equipment costs)	1.30	1.30
- Pipelines cost (13.91% on Pipeline costs)	5.69	5.69
(e). License Fee		
(KPT - For jetty - 10508 sq. mtrs of land * Rs.39.94 per sq.m * 12 months + for Water front - 13110 sq.mtrs. * Rs.19.97 per sq.m * 12 months) (TAMP - For jetty - 10508 sq. mtrs of land * Rs.39.94 per sq.m * 12 months + for Water front - 13110 sq.mtrs. * Rs.19.97 per sq.m * 12 months)	0.82	0.82
(f). Other Expenses (1% of Gross fixed assets)	0.54	0.94
Operating Cost for cargo handling activity	12.37	12.78
B. Berthing activity:		
(a). Repairs & Maintenance Charge (1% on capital cost for berth excl. dredging)	0.42	0.42
(b). Depreciation (3.34% of total capital cost of berthing activity)	1.92	1.92
(c). Insurance (1% of total capital cost of berthing activity)	0.58	0.58
(d). Maintenance Dredging (10% of the capital dredging cost)	1.58	1.58
Operating cost for the berthing activity	4.49	4.49
C. Storage activity:		
(i) POL & Other Liquid Storage Tank Farm		
(a). Power cost	1.01	1.01
(KPT - 4.5 hectares of land * 240000 units per hectare @ Rs.9.38 per unit) (TAMP - 4.5 hectares of land * 240000 units per hectare @ Rs.9.38 per unit)		
(b). Repair & Maintenance		
- Civil works (1% on civil costs)	0.47	0.47
- Equipment cost (2% on Equipment costs)	0.34	0.33
(c). Insurance (1% on Gross fixed assets)	0.64	0.64
(d). Depreciation		
- Civil works (3.34% on civil costs)	1.58	1.58
- Equipment cost (10.34% on Equipment costs)	0.77	0.77
- Storage tank cost (13.91% on Pipeline costs)	1.30	1.30
(e). License Fee	2.16	2.16
(KPT - 45000 sq. mtrs of land * Rs.39.94 per sq.m * 12 months) (TAMP - 45000 sq. mtrs of land * Rs.39.94 per sq.m * 12 months)		
(f). Other Expenses (1% of Gross fixed assets)	0.57	0.64
Operating cost for the POL & Other Liquid Storage Tank Farm	8.84	8.91
(ii) Bunker Fuel Storage Tank Farm		
(a). Power cost	0.23	0.23
(KPT - 1 hectare of land * 240000 units per hectare @ Rs.9.38 per unit) (TAMP - 1 hectare of land * 240000 units per hectare @ Rs.9.38 per unit)		
(b). Repair & Maintenance		
- Civil works (1% on civil costs)	0.14	0.14
- Equipment cost (2% on Equipment costs)	0.09	0.09
(c). Insurance (1% on Gross fixed assets)	0.19	0.19
(d). Depreciation		
- Civil works (3.34% on civil costs)	0.47	0.47
- Equipment cost (10.34% on Equipment costs)	0.21	0.21
- Storage tank cost (13.91% on Pipeline costs)	0.37	0.37
(e). License Fee	0.48	0.48
(KPT - 10000 sq. mtrs of land * Rs.39.94 per sq.m * 12 months) (TAMP - 10000 sq. mtrs of land * Rs.39.94 per sq.m * 12 months)		
(f). Other Expenses (1% of Gross fixed assets)	0.17	0.19
Operating cost for the Bunker Fuel Storage Tank Farm	2.35	2.37

Sr. No.	Particulars	Revised proposal of February 2013	Estimates modified by TAMP
IV	Estimated Revenue Requirement & upfront tariff		
A.	Cargo handling activity:		
(i).	Estimated Revenue Requirement		
	(a). Total Operating Cost	12.37	12.78
	(b). Return on capital Employed @ 16%	15.11	15.11
	(c). Total Revenue requirement from liquid handling activity	27.48	27.89
(ii).	Apportionment of Revenue Requirement		
	(a). Liquid Handling Charges (KPT - 100% of ARR, TAMP - 95% of ARR)	27.48	26.49
	(b). Miscellaneous Charge (KPT - 0% of ARR, TAMP - 5% of ARR)	0.00	1.39
	(c). Total Revenue requirement from liquid handling activity	27.48	27.89
(iii).	Liquid Handling charge		
	(a). Liquid Handling Charge		
	- Revenue Requirement (₹ in crores) (excluding back handling operations)	27.40	26.42
	- Capacity (Million Metric Tonnes per annum)	3.39	3.39
	- Per tonne handling rate (in Rs.)		
	- Bunker Fuel, POL	32.45	31.29
	- Other liquid	112.68	108.64
	(b). Miscellaneous Charge		
	- Revenue Requirement (₹ in crores)	0.00	1.39
	- Capacity (Million Metric Tonnes per annum)	0.00	3.39
	- Miscellaneous Charge (₹ per tonne)	0.00	4.11
	(c). Rate for back handling operations	16.23	15.65
B.	Storage activity:		
(i).	POL & Other Liquid Storage Tank Farm		
	Estimated Revenue Requirement		
	(a). Total Operating Cost	8.84	8.91
	(b). Return on capital Employed @ 16%	10.26	10.26
	(c). Total Revenue requirement from storage activity	19.09	19.17
	Capacity of Tank Farm in KL	132000	132000
	No. of operating days	365	365
	Optimal utilisation	70%	70%
	Storage charge per tonne per day (in Rupees)	6.29	6.31
	Storage charge per tonne per month (in Rupees)	188.72	189.42
(ii).	Bunker Fuel Storage Tank Farm		
	Estimated Revenue Requirement		
	(a). Total Operating Cost	2.35	2.37
	(b). Return on capital Employed @ 16%	3.02	3.02
	(c). Total Revenue requirement from storage activity	5.37	5.39
	Capacity of Tank Farm in KL	32500	32500
	No. of operating days	365	365
	Optimal utilisation	70%	70%
	Storage charge per tonne per day (in Rupees)	7.19	7.21
	Storage charge per tonne per month (in Rupees)	215.60	216.33
C.	BERTH HIRE CHARGES		
	(a) Operating cost	4.49	4.49
	(b) Return on capital Employed @ 16%	9.20	9.20
	(c) Total Revenue requirement from Berthing services	13.69	13.69
	Berth hire Charge (Rate per GRT per hour) in ₹ for foreign going vessels	0.57	0.57
	Berth hire Charge (Rate per GRT per hour) in ₹ for coastal vessels	0.34	0.34

Berth Hire Calculation:

Sr. No.	Particulars	Unit	As given by KPT	As modified by us
i.	No. of Vessel	No.	1	1
ii.	Average GRT of the Vessel	Tonnes	40625	40625
iii.	No. of hours at the jetty	Tonnes	6132	6132
iv.	Total GRT hours (ii * iii)	GRT hours	249112500	249112500
	- Foreign (90%)	GRT hours	224201250	224201250
	- Coastal (10%)	GRT hours	24911250	24911250
v.	Revenue Requirement	Rs. in crores	13.69	13.69
vi.	Berth hire charge for foreign going vessels	Rs. per GRT per hour	0.57	0.57
vii.	Berth hire charge for coastal vessels	Rs. Per GRT per hour	0.34	0.34

KANDLA PORT TRUST

**UPFRONT TARIFF SCHEDULE FOR THE OIL JETTY TO HANDLE LIQUID CARGO AND SHIP
BUNKERING TERMINAL AT OLD KANDLA****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. **"Free period"** shall mean the period during which cargo shall be allowed storage free of demurrage charges/ground rent and this period shall exclude Customs notified holidays and Terminal's non-operating days
- iv. **"Port"** shall mean Kandla Port Trust
- v. **"Per day"** means per calendar day unless otherwise stated
- vi. **"TAMP"** shall mean the Tariff Authority for Major Ports constituted under Section 47A of the Major Ports Act, 1963.
- vii. **"Tonne"** shall mean one metric tonne or 1,000 kilograms or one cubic metre.

1.1. General Terms and Conditions

- i. 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.
 - 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 shall, however, not apply to the cases where payment is to be made before availing the services where payment of charges in advance is prescribed as a condition in this Scale of Rates.
- ii. All charges worked out shall be rounded off to the next higher rupee on the grand total of the bill.
- iii. Users will not be required to pay charges for delays beyond reasonable level attributable to the terminal operator.
- iv. In case a Oil Vessel idles due to breakdown or non-availability of the shore based facilities of Oil Terminal or any other reasons attributable to Terminal, rebate equivalent to berth hire charges payable to the concessionaire accrued during the period of idling of vessels shall be allowed by Concessionaire.

- v. The status of the Vessel as borne out by its certification by the Customs or Director General of Shipping is the relevant factor to decide whether vessel is "Coastal" or foreign-going" for the purpose of levy of Berth hire, and the nature of cargo or its origin will not be of any relevance for this propose.
- vi. (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.
- (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.
- vii. (a). The berth hire for all coastal vessel should not exceed 60% of the corresponding charges for other vessels.
- (b). The cargo related charges for all coastal cargo other than crude including POL, Iron ore and Iron pellets and thermal coal should not exceed 60% of the normal cargo related charges.
- (c). In case of cargo related charges, the concessional rates should be levied on all the relevant handling charges for ship shore transfer and transfer from/to quay to/from storage yard including wharfage.
- (d). Cargo from a foreign port which reaches an Indian Port "A" for subsequent transshipment to Indian Port "B" will be levied the concession charges relevant for its coastal voyage. In other words, cargo from/to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.
- (e). The charges for coastal cargo / vessels shall be denominated and collected in Indian rupee.
- viii. The rates prescribed in the 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.

The terminal operator may also, if it so desires rationalise the prescribed conditionalities governing the application of rates prescribed in the Scale of Rates if such rationalisation 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.

The terminal operator should, however, notify the public such lower rates and / or rationalisation of the conditionalities governing the application of such rates and continue to notify the public any further changes in such lower rates and / or in the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rates notified by the TAMP

2. Berth Hire Charges:

The berth hire charge payable by masters / owners / agents of the barge and other floating craft approaching or lying alongside the berth shall be as per the rates given below:

Foreign going Vessels	₹0.57 per GRT per hour
Coastal Vessels	₹0.34 per GRT per hour

Notes:

- i. The period of berth hire shall be calculated from the time vessel occupies the berth.
- ii. Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc,
- iii. No berth hire shall be levied for the period when the barge 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.

3. Cargo Handling Charges:

3.1 Calculation of Tariff for the handling of Liquid cargo at Oil Jetty at Old Kandla Port

The liquid cargo handling charges at Oil Jetty shall be payable on the manifested cargo directly by the importer of cargo at the rates specified below:

Description / Cargo	Tariff in ₹ per MT
Bunker Fuel and POL (Both foreign and coastal)	31.29
Other Liquid (Foreign traffic)	108.64
Other Liquid (Coastal traffic)	65.18

Note:

The cargo handling charges shall include the cargo loading or unloading charges (as the case may be), transportation through pipelines, wharfage, etc.

- i. unloading of the cargo from vessels and transfer of the same up to the point of storage and loading on to trucks/tankers in respect of import cargo and
- ii. unloading of the cargo from the trucks/tankers at the storage tank farm in respect of export cargo, transfer of the cargo to the loading point, loading onto the vessels and barges.
- iii. Tariff for Bunker Fuels to be handled at back side of the Jetty through barges would be charged at 50% of the above rate applicable for "Bunkering Fuel and POL" category.

4. Storage Charges:

The storage charges for the cargo stored in the tank farm shall be as below:

(A) For Import & Export

	(Rate in ₹ per MT per day)
Liquid Tank Farm	6.31
Bunker Fuel Tank Farm	7.21

(B) For Import & Export

Description / Cargo	(Rate in ₹ per MT per Month)Tariff
Liquid Tank Farm	189.42
Bunker Fuel Tank Farm	216.33

Note:

- i. No free days shall be allowed for any type of cargo.
- ii. The demurrage charges on hazardous liquids shall be levied at 1.25 times the normal rates specified in above schedule.
- iii. Storage charges shall be payable for all days including Terminal's nonworking days and Customs notified holidays for stay of cargo.
- iv. Storage charge on cargo shall not accrue for the period when the terminal operator is not in a position to deliver/ship the cargo when requested by the user due to reasons attributable to the terminal operator.

5. Miscellaneous Charges

A rate of ₹4.11 per MT is to be levied towards Cleaning of the area in the event of spillage, leakage.

6. General Note to Section 2 to 5 Above

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 2012 and 1 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 April of the relevant year to 31 March of the following year.

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**SUMMARY OF THE COMMENTS RECEIVED FROM THE PORT USERS /
PROSPECTIVE APPLICANTS AND ARGUMENTS MADE IN THIS CASE DURING THE JOINT
HEARING BEFORE THE AUTHORITY**

F. No.TAMP/5/2013 -KPT	-	Proposal received from the Kandla Port Trust for fixation of upfront tariff for development of Oil jetty to handle liquid cargo and ship bunkering terminal at old Kandla on Built, Operate and Transfer basis
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A summary of the comments received from users / prospective applicants and reply furnished by KPT thereon are tabulated below:

Sl. No.	Comments of the users/ prospective applicants	Reply of KPT
1.	United Liner Agencies of India (Private) Ltd.	
(i).	It is requested that the correspondence exchanged between KPT and TAMP as referred in KPT's letter be also circulated since it appears that it relates to the License fee for the land to be allotted to the successful Operator. The tariff proposal is presently based on TAMP's guidelines and KPT SOR Chapter VI Category G. It stands to reason that if the highest expected Tender Value received in recent land auction for Tank Farm development is to be taken into consideration in the operating costs as per Land Policy 2010, the component of operating cost will significantly go up leading to higher revenue requirement which will necessitate increase in tariff for storage of cargoes.	License Fee is as per prevailing SOR of KPT as per the categorical instruction of TAMP
(ii).	<u>Project Cost:</u>	
	(a). The breakup of capital expenditure of Project Cost does not seem to include upfront license fee, upfront premium on land for establishing storage tank farm and bunker tank farm and the same will be a significant addition to the project cost again requiring review of revenue requirement/ tariffs.	License Fee is proposed to be charged not as upfront but be charged every year in advance. Hence, it is part of the operating cost and not the capital cost as per TAMP Guidelines.
	(b). The breakup of estimated Civil Construction Cost reveals that this cost is based on KPT's SOR for general construction project related items. However, construction of Jetties and Marine Dolphins and such offshore structures are of complex nature requiring specialised Plant & Machinery and technical expertise. The prevailing market rates for construction of marine structures on Piles and prefabricated Decks will be quite high as compared to KPT's SOR for general	Estimation of the Construction cost following the KPT Schedule of Rate is the general practice for preparation of various TAMP Proposal. Moreover, the KPT SOR framing also considers the prevailing market scenario. Hence, the considered Construction Cost is appropriately based on SOR.

construction items. To cite an example:				
Sl. No.	Item	Unit	KPT's estimated rate assumed in tariff fixation proposal (₹)	Approximate prevailing Market Rate (₹)
	5 Nos. Berthing Dolphins Rate Analysis			
1.	Pile @ 1200 mm			
i.	Pile concrete	Cbm	6258.00	6500.00
ii.	R/f (main 32 mm, stirrup 12 mm)	Kg.	58.00	65.00
iii.	MS Liners	Kg.	67.50	85.00
iv.	Pile Boring	RM	5000.00	6000.00
2.	Main Beam			
i.	Beam Concrete	Cbm	4512.00	9000.00
3.	Precast Slab			
i.	Slab concrete	Cbm	4512.00	9000.00
Since the above rates are also taken for assumption in 4 nos. Connecting Platforms, Approach Bridge, Crew Office, Fire House, Approach Bridge Connecting Platform and such various other structures, the same does not require repetition. Thus, it can be easily observed that the BOT operator will be carrying out World Class standard construction in the marine environment requiring capex provision in line with the current market rates for such constructions. Subject to a further detailed cost analysis of the civil structures as also cost estimation of construction of Tank Farms, it would be fair to assume that the capex budget for civil construction will be atleast 15% to 20% higher than that estimated in tariff fixation proposal by KPT. The higher project cost will naturally have a bearing on the profitability of the project.				
	(c). Kindly advise whether Marine Loading/ Unloading Arm cost has been based on a proper backup quotation from the Manufacturers.		Regarding marine loading unloading arm, quotations were pursued. However, we did not get the response from the parties with firmed up budgeted figures as there is need of detailed design analysis and technical specifications of specific liquid commodities. Thus, at this stage, quotes could not be obtained and hence, we considered the estimates based on the range suggested in discussions with industry users/stakeholders.	
(iii).	Regarding cargo storage, the market rate for storage of cargo in the Tank Farms is not covered by TAMP jurisdiction and thus rates proposed by KPT for the present Oil Jetty project are extremely low and does not reflect the ground market realities for storage rates of Liquid Cargoes.		Liquid Cargo Storage Activity's Capital and Operating Expenses have been considered to arrive at storage charges. We are of the opinion that the rates arrived at are in line with prevailing market scenario.	

(iv).	To utilise the full potential of the cargo handling capacity at the Jetty of 3.39 MMTPA, the backup 5.5 hectares storage land available and the capacity of tanks that can be created on such small backup land seems to be highly inadequate.	5.5 Ha back up area was considered in line with the range suggested by various industry players. Hence, it is sufficient in our view. Turnover Ratio = $(3.39 \text{ MMTPA}) / (164500 * 0.9 * 70\%) = 32.71$ times. Hence, the dwell time of 12 days. This is in line with the market dynamics.																					
(v).	Taking the numbers from KPT's proposal, we observe the following: <table border="1"> <tr> <td>a.</td><td>Optimal capacity of the Jetty</td><td>3.39 MMTPA</td></tr> <tr> <td>b.</td><td>Percentage of POL and Bunker Cargo at 36%</td><td>1.22 MMTPA</td></tr> <tr> <td>c.</td><td>Percentage of other Liquid Cargo at 64%</td><td>2.17 MMTPA</td></tr> <tr> <td>d.</td><td>Capacity of Bunker Tank Farm 32500 KL 0.9 density</td><td>29250 MT</td></tr> <tr> <td>e.</td><td>Capacity of other Liquid Tanks 132000 KL at 90% density</td><td>118800 MT</td></tr> <tr> <td>f.</td><td>The cargo turnaround time for Bunker and POL Cargo to support 1.22 MMTPA handling at the Jetty works out to</td><td>42 turnarounds or 9 days per month</td></tr> <tr> <td>g.</td><td>Similarly to support 2.17 MMTPA handling capacity at the Jetty the Liquid Tank Farm has to turnaround the cargo</td><td>18 times a year or over 20 days in month</td></tr> </table> The above cargo turnaround times are highly ambitious considering ground realities for this storage activity in Kandla. Thus, the mismatch between cargo storage capacity and the Jetty handling capacity coupled with very low storage tariff allowed at the Bunker Farm and under utilisation of the Jetty capacity may lead to severe erosion in the profitability of the project.	a.	Optimal capacity of the Jetty	3.39 MMTPA	b.	Percentage of POL and Bunker Cargo at 36%	1.22 MMTPA	c.	Percentage of other Liquid Cargo at 64%	2.17 MMTPA	d.	Capacity of Bunker Tank Farm 32500 KL 0.9 density	29250 MT	e.	Capacity of other Liquid Tanks 132000 KL at 90% density	118800 MT	f.	The cargo turnaround time for Bunker and POL Cargo to support 1.22 MMTPA handling at the Jetty works out to	42 turnarounds or 9 days per month	g.	Similarly to support 2.17 MMTPA handling capacity at the Jetty the Liquid Tank Farm has to turnaround the cargo	18 times a year or over 20 days in month	
a.	Optimal capacity of the Jetty	3.39 MMTPA																					
b.	Percentage of POL and Bunker Cargo at 36%	1.22 MMTPA																					
c.	Percentage of other Liquid Cargo at 64%	2.17 MMTPA																					
d.	Capacity of Bunker Tank Farm 32500 KL 0.9 density	29250 MT																					
e.	Capacity of other Liquid Tanks 132000 KL at 90% density	118800 MT																					
f.	The cargo turnaround time for Bunker and POL Cargo to support 1.22 MMTPA handling at the Jetty works out to	42 turnarounds or 9 days per month																					
g.	Similarly to support 2.17 MMTPA handling capacity at the Jetty the Liquid Tank Farm has to turnaround the cargo	18 times a year or over 20 days in month																					
2.	Indian National Shipowners Association																						
	We have no comments to offer.																						
3.	CRL Terminals Private Ltd.																						
(i).	The objective of KPT for initiating this 'Development Proposal' seems to be threefold i.e. promoting the development of bunkering terminal in Kandla Port, increasing the available liquid cargo handling capacity by adding a jetty and maximizing revenue from the available plot of vacant land. All potential bidders while considering their business case will evaluate how much they can pay for the required license whilst ensuring sufficient profitability. The upfront tariff fixation method used by KPT will in no way impact the internal considerations of the bidders. (It is, therefore, relevant only for the determination of the floor price for the license, below which KPT would not proceed with the award of the contract).	The KPT has not responded to the comments.																					
(ii).	If lease/ license fees for new projects can be fixed upfront following guidelines like 'Land Policy Guidelines 2010' or 'upfront Tariff Guidelines 2008', it would be commendable if	The KPT has not responded to the comments.																					

	KPT took up the matter of 'renewal of existing leases' or 'issuing of new leases' of KPT land with an equal zeal on the same/ similar basis. CRL Terminals Private Ltd., therefore, recommends that whichever methodology is now considered for the upfront license fee fixation, be also used as the base for renewal of leases that are currently pending for plots occupied by bonafide businesses on KPT land.							
4.	Alpha Vinimay Pvt. Ltd.							
(i).	The cost of the project of ₹233.25 should be indexed from the date of feasibility report to the year 2016, which is the likely date of completion of the project.	TAMP Guideline 2008 also provides for the WPI based escalation in approved tariff after Tariff Notification. Hence, there is no need to index the project cost till the year 2016.						
(ii).	The proposed tariff rates viz. the berth hire charges, handling charges, storage charges, etc. need to be at par with the existing equivalent rates at the existing oil terminals. The higher tariff will dissuade the customer's to come on the proposed oil jetty.	Proposed Tariff cannot be expected to be at par with KPT rates for existing oil jetties because of the proposed project involves fresh investment while existing oil jetties have been already developed with different set of capacities and investment cost. Thus, considering TAMP Guidelines and underlying methodology for framing tariffs for PPP projects, the referred tariffs to be fixed cannot be at par with existing facilities.						
(iii).	The calculation of the license fees for water is at variance with that calculated for berth nos. 13 to 16.	Calculation of License Fee for water area has been carried out in line with Land Policy for Major Ports 2010 and relevant IS code to arrive at water area. The same is explained as shown below: <table><tr><td>Water Area (Jetty Length * Vessel Beam * 1.15 as per IS Code)</td><td>300</td><td>43.7</td><td>13110</td></tr></table> License Fee = Water Area * KPT SOR Rate of Land *50% = 13110 sqm x ₹ 479.30/Sqm/Year as of Jan 2013 *50% = ₹ 0.31 Crores In case of 13 to 16, the Land Policy for Major Ports 2010 was not available for direction.	Water Area (Jetty Length * Vessel Beam * 1.15 as per IS Code)	300	43.7	13110		
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5.	IMC Ltd.							
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		as below: (a). Bunker fuel loading rate at 300 tons per hour (b). POL handling rate at 750 tons per hour	viscous in nature. Such products are to be handled at lower rates. (3) Rate of loading marine tankers would also be limited by the nature and properties of the cargoes. (4) Rate of bunkering to barges would be at 100 to 300 MT per hour which would bring down the average handling rates for POL cargoes. In view of the above reasons, it is suggested to assume the appropriate average handling rate for POL cargoes.						
(ii).	Chapter / Section - 4 Table 2:			The KPT has not responded to the comments.					
	<table><tr><th>Existing provision/assumption</th><th>Comments/suggestion</th><th>Rationale</th></tr><tr><td>Cargo Handling Ratios assumed at 36.12 percent for POL and 63.88 percent for other liquids based on last five years cargo handled at KPT.</td><td>Suggested Cargo Handling ratio at 20 percent for POL and 80 percent for other liquids.</td><td>The POL traffic at Kandla is mainly captive in nature, i.e. handled by the PSU oil companies and much of this cargo may continue to be handled at the existing terminals. The proposed Liquid Terminal is a Common User Facility and expected to handle more of "other liquids" and this should be reflected in the assumptions.</td></tr></table>	Existing provision/assumption	Comments/suggestion		Rationale	Cargo Handling Ratios assumed at 36.12 percent for POL and 63.88 percent for other liquids based on last five years cargo handled at KPT.	Suggested Cargo Handling ratio at 20 percent for POL and 80 percent for other liquids.	The POL traffic at Kandla is mainly captive in nature, i.e. handled by the PSU oil companies and much of this cargo may continue to be handled at the existing terminals. The proposed Liquid Terminal is a Common User Facility and expected to handle more of "other liquids" and this should be reflected in the assumptions.	
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(iii).	Chapter / Section - 5:			The KPT has not responded to the comments.					
	<table><tr><th>Existing provision/assumption</th><th>Comments/suggestion</th><th>Rationale</th></tr><tr><td>Formulation of upfront tariff for cargo handling operations: No miscellaneous activities are envisaged to be undertaken by BOT operators.</td><td>BOT Operator will be required to provide various miscellaneous services for which the capital and operating costs must be considered and appropriate tariff rates must be prescribed.</td><td>Some of the miscellaneous services envisaged: (1) Cleaning of tanks while switching of products, spills and leakages. (2) As a bunkering terminal, the BOT operator may be required to provide related services such as supply of fresh water, lubes, etc. (3) Slop receipt and treatment (4) Provision of special facilities such as heating, refrigeration, etc.</td></tr></table>	Existing provision/assumption	Comments/suggestion		Rationale	Formulation of upfront tariff for cargo handling operations: No miscellaneous activities are envisaged to be undertaken by BOT operators.	BOT Operator will be required to provide various miscellaneous services for which the capital and operating costs must be considered and appropriate tariff rates must be prescribed.	Some of the miscellaneous services envisaged: (1) Cleaning of tanks while switching of products, spills and leakages. (2) As a bunkering terminal, the BOT operator may be required to provide related services such as supply of fresh water, lubes, etc. (3) Slop receipt and treatment (4) Provision of special facilities such as heating, refrigeration, etc.	
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(v).	Chapter / Section - 6.1: <table><tr><th>Existing provision/ assumption</th><th>Comments/ suggestion</th><th>Rationale</th></tr><tr><td>Capital Cost of the Berth</td><td>We request clarification as to whether the Capital Cost of the Berth includes the cost of Fire Protection System and allied facilities for the Jetty.</td><td>Separate fire protection systems would be required at the tank farm and also on the jetty. We request clarity as to whether adequate provision is made for fire protection system on both sides.</td></tr></table>	Existing provision/ assumption	Comments/ suggestion	Rationale	Capital Cost of the Berth	We request clarification as to whether the Capital Cost of the Berth includes the cost of Fire Protection System and allied facilities for the Jetty.	Separate fire protection systems would be required at the tank farm and also on the jetty. We request clarity as to whether adequate provision is made for fire protection system on both sides.	The KPT has not responded to the comments.
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(vii).	Chapter / Section - 7.1: <table><tr><th>Existing provision/ assumption</th><th>Comments/ suggestion</th><th>Rationale</th></tr><tr><td>Estimation of Capital Cost of the Liquid Tank Farms and Bunker Fuel Tank Farms Table 11</td><td> The capital cost for the tank farm appears to be on the lower side. We request clarification whether the following items have been included in the Capital Cost: (1) Product pump for each tank (2) Export pumps (3) Heating system for high viscous grade bunkers and other products (4) Automation cost for the terminal (5) Nitrogen Blanketing (6) Blending and Drumming facility </td><td> For bunkering activity export pumps would be required. For export cargo, the terminal should have dedicated pumps for loading marine tankers. Heating system including boilers, coils and insulation is required to handling certain grades of cargo and bunker fuels. Miscellaneous cost indicated does not appear to be adequate to cover the capital cost for the items listed herein. </td></tr></table>	Existing provision/ assumption	Comments/ suggestion	Rationale	Estimation of Capital Cost of the Liquid Tank Farms and Bunker Fuel Tank Farms Table 11	The capital cost for the tank farm appears to be on the lower side. We request clarification whether the following items have been included in the Capital Cost: (1) Product pump for each tank (2) Export pumps (3) Heating system for high viscous grade bunkers and other products (4) Automation cost for the terminal (5) Nitrogen Blanketing (6) Blending and Drumming facility	For bunkering activity export pumps would be required. For export cargo, the terminal should have dedicated pumps for loading marine tankers. Heating system including boilers, coils and insulation is required to handling certain grades of cargo and bunker fuels. Miscellaneous cost indicated does not appear to be adequate to cover the capital cost for the items listed herein.	The KPT has not responded to the comments.
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(ix).	Chapter / Section – Annexure-Rate Analysis for Liquid Cargo Storage: <table><tr><th>Existing provision/ assumption</th><th>Comments/ suggestion</th><th>Rationale</th></tr><tr><td>The tank design proposed is with heights of 23</td><td>The height of all tanks must be restricted to a</td><td>The height of tanks must be restricted to 20 meters to comply with applicable</td></tr></table>	Existing provision/ assumption	Comments/ suggestion	Rationale	The tank design proposed is with heights of 23	The height of all tanks must be restricted to a	The height of tanks must be restricted to 20 meters to comply with applicable	The KPT has not responded to the comments.
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	meters and 21 meters	maximum of 20 meters as per Oil Industry Safety Directorate 118 standards.	regulations.	
(x).	Chapter / Section 7.4 Storage Charges:			The KPT has not responded to the comments.
	Existing provision/assumption	Comments/suggestion	Rationale	
	Cost of Storage is proposed on ₹ / ton / day basis or considering the current market practice, it is proposed on ₹ / ton / month basis.	We suggest that storage cost is charged on ₹ per ton per month basis.	Unlike dry cargo, a liquid storage tank can be used for only one type of cargo even if the tank is partially full, the remaining space in the tank cannot be utilized for other cargoes. Further, liquid storage tanks are often required to be customized for different types of cargoes. Therefore, it is requested that the storage charges are fixed on ₹ per ton per month basis instead of the generally followed principle of charging storage rates on ₹ per ton per day.	

2. In view of the change in the proposed upfront tariff in the revised proposal, the revised proposal was circulated to the users / prospective applicants, seeking their comments on the revised proposal. Only one of the prospective bidder viz., Vadinar Oil Terminal Limited (VOTL) vide its letter dated 16 February 2013 has responded. These comments were forwarded to KPT as feedback information. The KPT undercover of its letter dated 20 February 2013 has furnished its comments on the comments of VOTL. The comments of VOTL and the reply of KPT thereon are summarized below:

Sl. No.	Comments of the users/ prospective applicants	Reply of KPT
1.	Vadinar Oil Terminal Limited (Private) Ltd.	
(i).	<u>Optimal Capacity of the Terminal</u> Capacity of the terminal should be 2.47 million ton as against KPT's estimate of 3.39 million ton: As per KPT proposal (Table 6), handling rate of Bunkering Fuel and POL is 24,000 ton per day while that of other liquids is 7,200 ton per day. This leads to Cargo working days of 351.8 days for handling of 1.22 million tonnes of POL and other bunkering fuel and 2.17 million tons of other liquids. This will lead to berth utilization of around 96% as against optimum level of 70%. With the proposed handling rate and cargo composition, capacity of the terminal should be 2.47 million ton (3.39 X 70%/96%). This Capacity calculation can be arrived	Optimal Capacity of the Terminal has been arrived at in line with the TAMP Guidelines 2008 considering the cargo types, their share in traffic, handling rates/hour and optimization factor of 70%. Working out the capacity by applying the 351.8 cargo working days (which itself has been arrived at after consideration of the capacity of 3.39 MMTPA, that too for tariff calculations) as 96% utilization and then applying the 70% optimization factor is not the correct way of calculating the optimal capacity. We would also like to add here that the query raised with equation method wherein two constant "C" and "D" are assumed does not clarify amply the working of the solution of the two equations. Moreover, even if the capacity of 2.46 MMTPA is arrived at through the referred equations, the method would still remains questionable because it assumes the 351.8 days which has

	indirectly as well. For 2.47 million ton of total traffic, traffic of POL & Bunkering Fuel and other Liquids will be as follows: POL & Bunkering Fuel – $2.47 \times 36.12\% = 0.89$ million ton Other Liquids - $2.47 \times 63.88\% = 1.58$ million ton Capacity utilization – $0.89 \times 10^6 / (24000 \times 365) + 1.58 \times 10^6 / (7200 \times 365) = 70\%$ Correct way of calculating the capacity will be as follows: With 70% berth occupancy available no. of days will be 255.5 days. Let us assume that capacity of the terminal is 'C' and number of days of handling POL and bunker fuel is 'D'. Hence no. of days of handling Other Liquids will be 255.5-D days. Then we will get following two liner equations: $36.12\% \times C = 24,000 \times D$.....Eqn (1) $63.88\% \times C = 7,200 \times (255.5 - D)$....Eqn(2) Multiplying Eqn (1) by 0.3 and adding to Eqn (2) we get, $74,716\% \times C = 1839600 = > C = 2462123$ that is capacity of the terminal is 2.46 million ton which is same as above.	been arrived at based on the capacity bifurcation of the figure of 3.39 which itself is based on 70% optimization. We would like to present the capacity calculation based on average handling rate per day arrived at based on the weighted average handling rate and 255.5 cargo working days which is 70% of 365 days. <table><tr><th>Cargo Type</th><th>Handling Rate/Day</th><th>Cargo Share %</th><th>Handling Rate x Cargo Share</th><th>365 days x 70%</th><th>Total Handling or Capacity</th></tr><tr><td>POL and Bunker Fuel</td><td>24000</td><td>36.12%</td><td>8667.75</td><td></td><td></td></tr><tr><td>Other Liquids</td><td>7200</td><td>63.88%</td><td>4599.67</td><td></td><td></td></tr><tr><td colspan="3">Capacity/Handling based on Weighted Average Rate and Average Cargo Working Days</td><td>13267.4</td><td>255.5</td><td>3389828</td></tr></table> Thus, if the cargo working days are to be assessed in terms of capacity calculations. The same may be understood from the above methodology.	Cargo Type	Handling Rate/Day	Cargo Share %	Handling Rate x Cargo Share	365 days x 70%	Total Handling or Capacity	POL and Bunker Fuel	24000	36.12%	8667.75			Other Liquids	7200	63.88%	4599.67			Capacity/Handling based on Weighted Average Rate and Average Cargo Working Days			13267.4	255.5	3389828
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(ii).	<u>Size of tanks:</u> KPT needs to provide the configuration of the tanks (size of the tanks and number of tanks) for better capex and Opex estimation. Capex estimate provided by KPT cannot be validated as they have not provided the details of configuration of the tanks to be built. Capex would be higher in case of smaller capacity tanks and vice-versa. Similarly operation and maintenance cost of the tanks will also be dependent	Size of Tanks, Capacity of the Tank Farm, both Liquid Cargo and Bunker Fuel, considered may be referred from the feasibility report.																								

	on the number of tanks need to be operated and maintained. Higher the number of tanks, higher will be operation and maintenance cost of the terminal.	
(iii).	<u>Vessel GRT:</u> Higher GRT of the vessels have been assumed for berth hire charge calculation. Average GRT of the vessels assumed for berth hire charge calculation is based on 65000 DWT vessels while observed DWT for the vessels at existing oil berths is only 50,000 DWT. Hence, berth hire charge should be calculated assuming 50000 DWT vessels only.	We would like to state that the proposed project is to accommodate the vessels upto 80000 DWT. Hence, considering the existing Oil Jetties where upto 50000 DWT vessels can be accommodated and proposed DWT of 80000, we considered average figure of 65000 DWT for consideration of GRT of vessels to be applied while calculating berth hire charges.
(iv).	<u>Storage charges of tanks:</u> Storage charge of tanks should be specified in ₹/KL/Day as against ₹/ton/Day proposed. : Volume of the tanks is fixed while weight of the liquid is dependent on its density. Hence for same storage capacity, weight would vary depending upon the density of the liquid cargo. For calculation of storage charge density of the liquid is assumed as 0.9 (table 14) which is just an estimation and it may be far off from the actual density of the liquid. Hence, it will be better for the developer as well as customers if storage charges are specified as ₹/KL/Day instead of ₹/ton/Day as proposed.	The storage charges proposed are based on consideration of 0.9 KL/MT density. We considered the storage charge per tonne in line with the other charges. However, TAMP may guide appropriately in this case.

3. A joint hearing in this case was held on 19 February 2013 at the KPT premises. At the joint hearing, KPT and users / prospective applicants have made the following submissions:

Kandla Port Trust

- (i). Tariff for back handling of bunker fuel is proposed at 50% of tariff for POL and Bunker fuels. [KPT says it is a new proposal.]
- (ii). We could not obtain budgetary offers for the estimated cost ₹ 12 crores for the two unloading arms. Our estimate is based on our interaction with manufacturers.
- (iii). There is no imbalance between pipeline dimensions, optimal capacity estimated for jetty and the estimated capacity of storage tanks.

- (iv). We agree that we have to consider the rate of license fee prescribed by TAMP in our notified Scale of Rates for estimation of license fee in the operating cost for upfront tariff fixation. It is the policy of the Government and binding on us.
- (v). We will examine and confirm that our proposal is as per KPT's Business Plan.
- (vi). We do not insist that all the liquid cargo handled at the jetty should be stored in the storage facility envisaged in the proposal. There are other private storage tanks where cargo can be shifted.
- (vii). We have followed TAMP formula for capacity calculation.
- (viii). Our estimates on storage tank cost are realistic.
- (ix). In our port, we work with two unloading arms in one jetty. From our experience, two are sufficient per jetty. Therefore, we have considered two in our proposal. Provision of additional unloading arm will be idle investment.

Vadinar Oil Terminal Limited

- (i). ₹ 12 crores is ok for two unloading arms.
- (ii). In our view, capacity of the terminal should be 2.47 Million Tonnes. We have given calculations. Going by the handling rates considered by port, cargo working days will be 351.8 days to achieve the capacity of 3.39 Million Tonnes. This will lead to berth utilisation of 96% as against 70%.
- (iii). Storage Tank cost estimate is on the lower side.
- (iv). Two loading / unloading arms are not sufficient. Atleast three are required.

United Liner Agencies of India (Private) Ltd.

Capacity of storage tanks is not adequate considering 3.39 Million Tonnes of handling capacity.
