

Published in Part - III Section 4 of the Gazette of India, Extraordinary)
Tariff Authority for Major Ports

G No. 173

New Delhi, 16 August 2012

NOTIFICATION

In exercise of the powers conferred by Section 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 upfront tariff for upgradation of Barge handling facility at Bunder Basin at Kandla Port in pursuance of the guidelines for upfront tariff setting at Major Port Trusts which was notified vide this Authority's Notification No.TAMP/52/2007-Misc. dated 26 February 2008 as in the Order appended hereto.

(Rani Jadhav)
Chairperson

Tariff Authority for Major Ports
Case No. TAMP/45/2011-KPT

Kandla Port Trust

- - -

Applicant

ORDER

(Passed on this 18th day of June 2012)

This case relates to a proposal dated 25 August 2011 received from the Kandla Port Trust (KPT) for fixation of upfront tariff for upgradation of Barge handling facility at Bunder Basin of KPT on Built, Operate and Transfer (BOT) basis.

2.1. KPT had earlier filed a proposal on the same subject in April 2011 which was registered as a tariff case and taken up on consultation. Since most of the parameters assumed by the port were not in compliance with the tariff guidelines of 2008 for multipurpose cargo terminal, the port was requested to justify the deviations proposed from the norms prescribed in the guidelines with reference to actual parameters for similar operations at KPT or based on technical study conducted by the port apart from seeking clarifications on various other points.

2.2. In the joint hearing held on 5 May 2011, the port was advised to convene a meeting of the users and bidders to explain the proposal in detail and to furnish some additional information/ clarifications.

2.3. The KPT vide its letter dated 16 July 2011 informed that based on the outcome of the meeting held with users and bidders on 1 June 2011, the project parameters need to be revised and hence sought additional time to file its revised proposal.

2.4. Since the revised proposal, when filed by KPT would require fresh consultation with users/ bidders and also require fresh examination, this Authority vide its Order dated 26 July 2011 closed the case initiated based on the proposal filed by KPT and decided to initiate fresh proceedings on receipt of the revised proposal.

3.1. In this backdrop, the KPT submitted a revised proposal under cover of its letter dated 25 August 2011. The KPT has stated that it had convened meeting with bidders on 1 July 2011 on the subject proposal. Based on the outcome of the said meeting and taking into consideration the observations made by TAMP, it has revised its proposal. The highlights of the revised proposal filed by KPT are given below:

- (i). Bunder Basin is a "C" shaped basin of size 85m X 152m in the Bunder area. The south wharf was severely damaged in earthquake and the work for its replacement is in progress. The north wharf and west wharf shall be constructed by the BOT operator. These wharves shall be used for unloading/ loading of cargo from barges and lighten/ load the ships at Outer Tuna Buoy (OTB). The details of the wharves at Bunder Basin are as follows:

<u>Component</u>	<u>Dimension</u>	<u>Status</u>
North wharf	152 m X 9.5 m	Shall be constructed by the BOT operator at its own cost.
West wharf	68 m X 9.5 m	Shall be constructed by the BOT operator at its own cost.
South wharf and its extension	152m X 8 m +50 X 18m	Has been constructed by KPT and hence cost shall be recovered in form of upfront payment from the BOT operator.

- (ii). The following Port facilities have already been developed at Bunder Basin:

- (a). South wharf resting on RCC piles having wharf size of 152m x 8m
- (b). Extension of south wharf resting on RCC piles on east side having wharf size of 50 x 18m

- (c). Stacking area of about 4.5 hectares duly paved with bitumen along with storm water drains & internal roads and duly enclosed with RCC custom fencing wall of 3.60m height
 - (d). Electrification and illumination having 5 no. of high mast towers with required cabling work
 - (e). Approach road, security check post along with gate office
 - (f). Firefighting lines & water supply lines
 - (g). Weigh bridge of 80.00 MT capacity
- (iii). The BOT operator shall undertake the development of following facilities at the Bunder Basin:
- (a). Construction of the North wharf of 152 mts. x 9.50 mts. on pile foundation.
 - (b). Construction of the West wharf of 68 mts. x 9.50 mts. on pile foundation.
 - (c). Providing temporary custom fencing wall.
 - (d). Providing firefighting line.
 - (e). Asphalting paving behind wharf portion.
 - (f). Electrification works.
 - (g). Gate office and security check.
 - (h). Development of back up area.
 - (i). Refurbishments of existing weigh bridge, along with provision of a new weigh bridge.
 - (j). Capital dredging alongside the jetty and maintenance dredging.
- (iv). Apart from developing the above facilities, BOT operator shall provide the following equipment for cargo handling operations:
- (a). Floating crane at OTB to carry out the loading/ un-loading cargo operations. The floating crane shall be positioned alongside the vessels upto the size of Panamax and load/ discharge cargo from/ into barges.
 - (b). Cargo handling equipment viz. excavators, payloaders, forklifts etc. at the jetty.
- (v). The scope of operational activity envisaged at Bunder basin jetty and at OTB is:
- (a). At Bunder Basin barge jetty:

For Import:
Unloading of the cargo from barges and transfer of the same upto the point of storage, and loading onto rakes/ trucks in respect of import cargo.

For Export:
Unloading of the cargo from the rakes/ trucks at the stackyard in respect of export cargo, transfer the cargo to the loading point, loading onto the barges.

(The barge operations (providing/ hiring of barges to user/ vessel owner) shall not be the part of scope of work of the BOT operator.)

- (b). At OTB:
Provide floating crane on hire basis to unload cargo from mother vessel to barge at OTB and vice versa.
- (vi). The proposed project shall be implemented in two phases as given below:
- (a). Phase I:
Concessionaire shall upgrade the existing south wharf jetty of length 202 m in Phase I and complete all the project work within 60 days related to the existing south wharf jetty from the date of award of concession and start the commercial operations of the existing south wharf jetty within 61 days of award of concession.
- (b). Phase II:
The concessionaire shall complete the construction of North Wharf and West Wharf in phase II and start the commercial operations of the proposed facility (phase II and including phase I) within 18 months from the date of award of concession.
- (vii). The port has clarified that its proposal is prepared on the basis of the TAMP guidelines for multipurpose cargo berth. As the project is related to the operations through barges, the operations are different from the operation envisaged at a multipurpose cargo berth. The equipment considered for the project are different from the normative list as this is a barge jetty where floating crane is essential for loading and unloading of cargo from the large size mother vessel on to barges at the Outer Tuna Buoy (OTB).
- (viii). Optimal Capacity:
- (a). Optimal Capacity of Excavators:

As against the optimal capacity of 3.22 Million Metric Tonnes Per Annum (MMTPA) assessed by KPT in the earlier proposal, the port has assessed the optimal capacity of the terminal at 3.29 MMTPA due to change in share of cargo. The detail of the revised assessment of capacity is given below:

	Original proposal of April 2011	Revised proposal of August 2011
Number of excavators (4.5 cum bucket capacity)	3	3
Moves per hour	100	100
Operating load factor (Cargo lifted in a single move as percentage of maximum possible volume)	0.7	0.7
Dry bulk cargo handled in one hour by three excavators	$(4.5 \text{ cum}) \times (1 \text{ Ton/cum}) \times 0.7 \times (100 \text{ moves/hour}) \times 3 = 945 \text{ Tons/hour}$	$(4.5 \text{ cum}) \times (1 \text{ Ton/cum}) \times 0.7 \times (100 \text{ moves/hour}) \times 3 = 945 \text{ Tons/hour}$
Operating hours in a day	16.8 (24×0.7)	16.8 (24×0.7)
Handling Rate of 3 excavators		
- Handling rate/day for bulk cargo	$(945 \text{ Tons/hour}) \times (16.8 \text{ hours}) = 15,876 \text{ Tons/day}$	$(945 \text{ Tons/hour}) \times (16.8 \text{ hours}) = 15,876 \text{ Tons/day}$
- Handling rate/day for steel and bagged cargo	53.33% of 15,876 = 8467 Tons/day	53.33% of 15,876 = 8467 Tons/day
- Handling rate/day for timber logs	33.33% of 15876 = 5,292 Tons/day	33.33% of 15876 = 5,292 Tons/day
Percentage of cargo to be handled		
- All kinds of Bulk Cargo	60%	71.29%
- Steel and Bagged cargo	30%	1.70%
- Timber Logs	10%	27.91%
Optimal Capacity of the terminal	$365 \times 0.7 \times (60\% \times 15,876 + 30\% \times 8,467 + 10\% \times 5,292) = 32,17,972 \text{ Tons}$	$365 \times 0.7 \times (71.29\% \times 15,876 + 1.70\% \times 8,467 + 27.01\% \times 5,292) = 32,93,759 \text{ Tons}$

(b). Optimal Capacity of Floating Crane:

As against the optimal capacity of 3.09 MMTPA reported in the earlier proposal, the port has assessed the optimal capacity of the floating crane at 3.17 MMTPA again due to change in cargo mix. The detail of the revised assessment of floating crane is given below:

		Original proposal of April 2011	Revised proposal of August 2011
(i).	Number of floating cranes	1	1
(ii).	Max per hour volume	1300 ton/ hour	1300 ton/ hour
(iii).	Operating Load factor at 70%		
(a).	Dry bulk (tonnes/ hour)	910	910
(b).	Break bulk (tonnes/ hour)	482.30	485
(c).	Timber logs (tonnes/ hour)	303.33	303
(iv).	Operating hours in a day	16.8	16.8
(v).	Cargo ratio		
(a).	Dry bulk	60%	71.29%
(b).	Break bulk	30%	1.70%
(c).	Timber logs	10%	27.01%
(vi).	Cargo handling rates per day (tonnes/ days)		
(a).	Dry bulk	15288	15288
(b).	Break bulk	8103	8153
(c).	Timber logs	5096	5096
(vii).	Optimal Capacity of the floating cranes	3094920	3171768
	(in Million Tonnes)	3.09 MMTPA	3.17 MMTPA
	Total handling capacity required to handle non geared vessels	0.97 MMTPA	1.00 MMTPA from 3 rd year and 1.64 MMTPA from 5 th year assuming utilization of the 30% and 50% respectively.

Currently at KPT more than 90% to 95% vessels are self-geared vessels and the rest are non-geared vessels. Assuming 30% non-geared vessels in future (i.e. from 3rd year) the handling capacity of the floating crane shall be 30% of the optimal capacity of the terminal i.e. 1.00 MMTPA (30% of the 3.29 MMTPA) and 50% of the optimal capacity of the terminal i.e. 1.64 MMTPA (50% of 3.29 MMTPA). Hence one floating crane is sufficient enough to cater to the demand of the future.

(ix). Capital Cost:

As against the total capital cost of `8574.81 lakhs estimated for the project in the earlier proposal, the capital cost is now estimated at `10959.08 lakhs. In the revised proposal, the port has considered 4 excavators for ship to shore (as against 3 numbers assumed in the original proposal) and 3 excavators are proposed to be deployed for cargo handling at the backup area.

		(` in lakhs)
Sl. No.	Particulars	Capital cost estimation
(A).	<u>Cargo Handling Activity</u>	
(i).	Civil Cost	
	(a). RCC work Dismantling	0.06
	(b). Temporary Fencing Wall	41.72
	(c). Asphalt Paving	19.68
	(d). Development of the backup area (Civil Works)	2564.96
	(e). Ancillary Infrastructure Works	100.00
	(f). DPR Preparation	37.50

	(g). Upfront payment to KPT (for stacking area, SWD, roads, fencing wall replacement and water supply line)	279.87	3043.99
(ii).	Equipment Cost		
	(a). Floating Crane including dump barge, tug and other required components - 1 Nos.	2380.00	
	(b). Excavators (4.5 cum) – 4 Nos.	2108.00	
	(c). Fork Lift Truck (5MT)- 4 Nos.	96.00	
	(d). Fork Lift Truck (10MT)- 2 Nos.	73.00	
	(e). Pay Loader (10MT)- 9 Nos.	328.50	
	(f). Excavators for cargo handling at backup area—3 nos.	100.22	
	(g). Firefighting	28.00	
	(h). Electrification	100.00	
	(i). Weighbridge	70.00	
	(j). Front payment to KPT (for firefighting, electrification and existing weighbridge)	202.88	5486.60
(iii).	Miscellaneous cost (5% of civil and equipment cost)		426.53
	Total Capital cost for Handling Activity [(i) + (ii) + (iii)]		8957.12
(B).	Capital cost for construction of berth		
(i).	Pile Foundation	552.70	
(ii).	Super structure	228.86	
(iii).	Bollards and Fenders	8.51	
(iv).	Upfront payment to KPT (for south wharf and its extension)	531.56	
(v).	DPR preparation	37.50	
(vi).	Capital Dredging	547.50	
(vii).	Miscellaneous Cost @ 5% of above costs	95.33	2001.96
(C).	Total capital cost of the Project (A + B)		10959.08

(x). Operating Cost:

(a). For Excavators:

The operating cost is estimated at `2526.50 lakhs as given below:

Component	Workings	` in lakhs																								
Fuel Consumption and cost	4292 hours for each equipment @ `46.06 per litre and for fuel consumption assumed as follows: <table border="1"> <tr> <th></th><th>Number of equipment</th><th>Fuel consumption Litres/hr</th></tr> <tr> <td>Excavators</td><td>4</td><td>32</td></tr> <tr> <td>Fork Lift Truck (5MT)</td><td>4</td><td>7</td></tr> <tr> <td>Fork Lift Truck (10MT)</td><td>2</td><td>10</td></tr> <tr> <td>Pay Loader (10MT)</td><td>9</td><td>12</td></tr> <tr> <td>Excavators for handling at backup area</td><td>3</td><td>12</td></tr> <tr> <td>15 nos. of Trucks and trailers (`15/ ton * total cargo 3.29 MMTPA) is</td><td></td><td></td></tr> <tr> <td>Sub-total</td><td></td><td></td></tr> </table>		Number of equipment	Fuel consumption Litres/hr	Excavators	4	32	Fork Lift Truck (5MT)	4	7	Fork Lift Truck (10MT)	2	10	Pay Loader (10MT)	9	12	Excavators for handling at backup area	3	12	15 nos. of Trucks and trailers (`15/ ton * total cargo 3.29 MMTPA) is			Sub-total			253.04 55.35 39.54 213.50 71.17 494.06 1126.67
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Sub-total																										
Power Consumption and cost	10 hectares area * 2,40,000 units/annum * `7 per unit	168																								
Repair and Maintenance (Civil Assets)	1% of 3196.19	31.96																								
Repair and Maintenance (Mechanical Assets)	5% of 3261.93	163.10																								
Insurance	1% of 6458.13	64.58																								
Depreciation	3.34% of 3196.19 + 10.34% of 3261.93	444.03																								
(i). License Fee (land)	(a). 4.5 hec @ `21.60/sqm/month	116.64 lakhs 83.16																								
		205.25																								

	(b). 5.5. hec @ `12.60/sqm/month	lakhs	
(ii). License Fee (water) as per the latest land lease license policy	50% of the Land license fee (4.206 hec * `10.80/sqm/month)	5.45	
Other Expenses	5% of 6458.13		322.91
Total Operating Cost			2526.50

(b). For Floating Crane:

The operating cost for floating crane is estimated at `1035.42 lakhs as below:

Component	Workings	` in lakhs												
Fuel Consumption	4292 hours for each equipment @ `46.06 litre for fuel consumption assumed as follows: <table><tr><td></td><td>Number</td><td>Litres/hr</td><td>` in lakhs</td></tr><tr><td>Floating Crane</td><td>1</td><td>154</td><td>304.44</td></tr><tr><td>Tug</td><td>1</td><td>100</td><td>197.69</td></tr></table>		Number	Litres/hr	` in lakhs	Floating Crane	1	154	304.44	Tug	1	100	197.69	502.13
	Number	Litres/hr	` in lakhs											
Floating Crane	1	154	304.44											
Tug	1	100	197.69											
Repair and Maintenance (Mechanical Assets)	5% of `2499 lakhs	124.95												
Insurance	1% of `2499 lakhs	24.99												
Depreciation	10.34% of `2499 lakhs	258.40												
Other Expenses	5% of `2499 lakhs	124.95												
Total Operating Cost		1035.42												

(c). Berth Hire:

The operating cost for berth hire is estimated at `599.65 lakhs.

Depreciation and insurance cost is estimated at 3.34% and 1% on the gross block of berth cost in line with the approach followed in other upfront tariff cases. The maintenance dredging cost is estimated at 90% of the capital dredging cost due to geographical location of the project.

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

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

(` in lakhs)				
Sl. No.	Particulars	For cargo handling activity		For Berth Hire
		For Excavators	For Floating Crane	
(i).	ROCE @ 16%	1033.30	399.84	320.31
(ii).	Operating cost	2526.50	1035.42	599.65
(iii).	Total Revenue Requirement	3559.80	1435.26	919.96

(xiii). Apportionment of Annual Revenue Requirement (Handling activity):

(` in lakhs)					
Sl. No.	Particulars	Apportioned estimated revenue requirement			
		For Excavators		For Floating Crane	
		%	` in lakhs	%	` in lakhs
(i).	Handling Charges	90%	3203.82	100%	1435.26
(ii).	Ground Rent	5%	177.99	-	-
(iii).	Miscellaneous Charges	5%	177.99	-	-
	Total Revenue	100%	3559.80		1435.26

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

- (a). Berth hire charges:

The berth hire proposed by KPT, assuming 4 number of barges each of the size 1500 GRT expected to berth at Bunder basin and share of foreign/ coastal cargo at 90% and 10% respectively, is as follows:

	Rate in ` per GRT per hour
Foreign-going vessel	`2.60
Coastal vessel	`1.56

- (b). Cargo handling charges:

In the subject proposal, (cargo-wise) handling charges for self-geared vessels and non-geared vessels proposed is:

- Upfront tariff for handling cargo at the bunder basin barge jetty for those vessels which are not using floating crane at the OTB.

Upfront tariff for handling cargo at the bunder basin:

Sl. No.	Commodity	Rate per metric tonne in `	
		Foreign	Coastal
1.	All types of dry bulk cargo	65.16	39.09
2.	Steel	122.18	73.31
3.	Timber	195.47	117.28

Proposed Notes:

- (i). Unloading of the cargo from barges and transfer of the same upto the point of storage, storage at the stackyard upto a free period of 5 days and loading on to rakes/ trucks in respect of import cargo and
- (ii). Unloading of the cargo from the rakes/ trucks at the stackyard in respect of export cargo, storage at the stackyard upto a period of 15 days, transfer the cargo to the loading point, loading onto the barges.

- Tariff for hire of floating crane at the OTB

Sl. No.	Commodity	Rate per metric tonne in `	
		Foreign	Coastal
1.	All types of dry bulk cargo	30.31	18.19
2.	Steel	56.84	34.10
3.	Timber	90.93	54.56

- Tariff for handling cargo at the bunder basin barge jetty for those vessels which are using floating crane at the OTB will be the sum of the above two rates.

Proposed Note:

Tariff for hire of floating crane includes unloading of the cargo from the mother vessel to barge at OTB and vice versa. Stevedoring charges shall be separately borne by the user/ vessel owner and the amount of stevedoring charges shall be paid to the service provider.

To avoid any confusion if the self geared vessel uses the floating crane at OTB for unloading/ loading of cargo then they have to pay the hiring charges of floating crane for the cargo handled through floating crane. To make it more clear there should be masters certificate which clearly notifies that this much amount of cargo shall be handled through floating crane only at OTB.

(c). Storage charges:

For arriving at storage charge, the port has assumed 60% of cargo capacity will be cleared within free days and 40% of cargo capacity will attract storage charge of which 50% is assumed to be cleared in the first week. Accordingly, the proposed storage charges are:

	Rate per tonne/ day
(i). Free period	5 days - Import 15 days - Export
(ii). Storage charge	1 st to 7 th day – `3.86
	8 th to 14 th day – `5.79
	15 th day onwards – `7.72

(d). Miscellaneous charges for sweeping, weighment of cargo, dust suppression, environment and management, lift on-lift off charges, safety measures, etc. is proposed at `5.40 per tonne.

3.2. The KPT in its letter dated 25 August 2011 has also furnished clarifications of the some points raised by us earlier, which are given below:

- (i). With regard to furnishing the basis of assuming the fuel / power consumption, the port has stated that the fuel consumption is based on the empirical observation and discussion with the manufacturers and actual consumption and that the power consumption is as per the prevalent norms per hectare.
- (ii). With regard to justifying the proposed investment on floating crane and clarifying whether the floating crane would be utilized for other cargo handling operations by the BOT operator given that the utilization of the floating crane was proposed at 0.97 MTPA being 30% of the total handling capacity of 3.09 MTPA, the port has clarified that initially 30% of the optimal capacity of the terminal will utilize the services of floating crane (being projections of non-geared vessels) and it will gradually increase to 50% from the fifth year. Hence, considering that the future projections of non-geared vessels to increase progressively the investment is justifiable. Further, the port has also stated that flexibility is provided to the BOT operator to utilize the crane to handle the cargo which is not coming to bunder basin on fulfillment of requirements of cargo handling at the bunder basin.

3.3. Subsequently, the KPT under cover of its letter dated 7 October 2011 has furnished a copy of the revised Feasibility Report for the revised proposal.

4. While filing its revised proposal dated 25 August 2011, the port has furnished additional information/ clarifications on various points raised by us on their earlier proposal. The summary of the queries raised by us on the earlier proposal and reply of KPT thereon is tabulated below:

Sl. No.	Queries raised by TAMP in earlier proposal of April 2011	Reply of KPT
(i).	The KPT has stated that the guidelines prescribed for multipurpose cargo terminal are followed for arriving at the upfront tariff for upgradation of barge handling facility at Bunder Basin. It is, however, observed that	As advised by TAMP, KPT had number of discussions with ports users and other concerned persons to structure the project. The revised proposal considers the various discussions and meeting with the respective

for the proposed facility, the port envisages deployment of fleet of equipment which are different from the norms prescribed in the guidelines. Further, the proposed floating crane with accompanied equipment like dumb barge, tug, etc., for handling cargo from non-geared vessel are not as per the normative list of equipment prescribed in the guidelines for multipurpose cargo berth. Moreover, the various parameters adopted by the port in arriving at the upfront tariff viz. handling rate, estimation of capital cost, power and fuel consumption etc., also do not comply with the norms prescribed in the guidelines for multipurpose cargo terminal. The KPT to justify each of the deviations proposed from the norms prescribed in the guidelines. The basis of various parameters adopted in the upfront tariff calculation which are different from the norms prescribed in the guidelines also to be justified with reference to the actual parameters for similar operations at KPT or other Major Port Trusts or based on analysis of technical study conducted by the port in this regard.	bidders and concerned persons. KPT has added the equipments as per their suggestions in the project such as increase in the number of excavators from 3 to 4, increased the pay loaders from 3 to 9 and also included the 3 small size excavators to handle the cargo at back up area; hence there is escalation in the equipment cost of the project. KPT has also modified the civil cost based on current scale of rates of Kandla port. Therefore the existing project cost of `85.74 crores has been revised to `109.59 crores due to change in the equipment and civil cost. The tariff proposal is prepared on the basis of available TAMP guidelines for multipurpose cargo berth. This project is related to the operations through barges; hence the operations are different from the multipurpose cargo berth. The list of equipments are different from the normative list of TAMP guidelines because this is a barge jetty where floating crane is essential to unload and load the barges from large size mother vessels at OTB. Guidelines always provide the basic framework but the equipment and other requirements have to be customized for different projects as per the need of the project. The main objective of the project: 1) To offset the draft limitation 2) Decongestion the vessel traffic 3) Cater the large size panamax vessels 4) Encourage shallow water by barge jetty 5) Economies of scale in large size panamax vessels 6) Tap the untapped market of large size panamax vessels 7) Cost savings 8) Cater to the non-geared vessels with the help of floating cranes 9) Utilize KPT assets 10) Private sector participation, infusion of capital in the project and assured returns to KPT 11) Provide alternative mode of cargo handling The floating crane is one of the main equipment to unload/ load the cargo from the mother vessels to barge, but in the case of guidelines provided by TAMP for multipurpose cargo there is no need of floating crane because the mother vessel is directly loaded and unloaded at the berth. Therefore it was decided to have a suitable provision of one floating crane based on the fact that the project is having the concession period of 30 years and the non geared vessels would be expected to increase at OTB in the coming years. Further, it is clarified that there is no set guidelines/ framework from TAMP for the
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		barge jetty facility, hence it will require lot of customization to make it a viable proposition for private investors and also for fulfilling the KPT's objective of handling of cargo at Bunder Basin through barges to attract large size panamax vessels which are currently not coming to Kandla Port due to draft limitations. This is more kind of a demand driven project where handling of cargo through barges will attract large size panamax vessels which are currently not coming to Kandla port due to draft restrictions. However from economic point of view there is cost saving component in the large size panamax vessels to users because of economies of scale and it will reduce the overall transportation cost of the users. Every PPP project is required to be structured in such a way by which the object of both the parties shall be fulfilled and both will leverage each other's strength.
(ii).	The proposal states that the proposed jetty at the Bunder Basin will be used for unloading / loading cargo from barges used to lighten / load the ships at the Outer Tuna Buoy (OTB). In this regard, the following information to be furnished:	
	(a). A flow diagram of the proposed operations at the Bunder Basin. Also, to confirm if the partially developed South Wharf would also be operated and maintained by the successful BOT operator.	The KPT has furnished the flow diagram of operations. Yes, the south wharf would be operated and maintained by the BOT operator. The BOT operator shall start the commercial operations of the existing south wharf in first phase of the project. The captioned project is envisaged to cater to the self-gearred vessels and non-gearred vessels at Outer Tuna Buoy (OTB) through barges only to the proposed Bunder Basin Barge jetty. Scope of Work of the BOT operator: The Scope of work of the BOT Operator at Bunder Basin barge jetty: 1). Unloading/ loading of the cargo from barges to barge jetty/ shore at Bunder Basin 2). Transfer of cargo from Shore to back up area and loading of the cargo to consignee's vehicle and vice versa. The scope of work of the BOT Operator at OTB. 1). Floating crane on hire basis to unload/ load the cargo from the mother vessel to barge at OTB. Two separate tariff/ charges are proposed for handling of cargo for self geared vessels and for handling of cargo for non geared vessels.

		1). Tariff for handling of cargo at Bunder Basin barge jetty (For those vessels which are not using the floating crane at Outer Tuna Buoy (OTB)) (A) 2). Tariff for hiring of floating crane* at OTB (B) 3). Tariff for handling of Cargo at Bunder Basin barge jetty (For those vessels which are using floating cranes at OTB to unload/load the cargo from the mother vessel of the barge) (A) + (B) <i>*Tariff for hiring of floating crane includes the following defined scope of work. Unloading of the cargo from the mother vessel to barge at OTB and vice versa. Stevedoring charges shall be separately borne by the user/vessel owner and the amount of stevedoring charges shall be paid to the service provider.</i> Note: To avoid any confusion if the self geared vessel uses the floating crane at OTB for unloading/loading of cargo then they have to pay the hiring charges of floating crane for the cargo handled through floating crane. To make it more clear there should be masters certificate which clearly notifies that this much amount of cargo shall be handled through floating crane only at OTB.
	(b). The proposal does not state explicitly whether the licence to operate Bunder Basin would cover the lightening/ loading of cargo from ships onto barges at the OTB. Please clarify.	Yes, kindly refer the flow diagram.
	(c). Also, clarify the tariff arrangement relating to vessel related / cargo related charges leviable on mother vessels at OTB and transloading operation thereat.	It shall be the obligation of the BOT operator to unload/ load the cargo from mother vessel to barge at Outer Tuna Buoy (OTB) and the tariff for this operation shall be fixed by TAMP. All vessel related charges including Mooring and Anchorage charges shall not be included in the tariff charges fixed by TAMP for Bunder Basin, and shall be as per the KPT existing Scale of Rates as revised from time to time and shall be collected by KPT directly from vessel owners/ users.
	(d). Since cargo transfer are proposed at two points i.e. one at OTB (vessel to barge or vice versa) and other at the bunder basin (barge to jetty or vice versa), the port to explain why separate set of rates cannot be proposed for these two points with reference to the relevant capex, capacity and operating cost.	Already calculated the separate tariff for handling of cargo at Bunder basin barge jetty for self geared vessels and tariff for hiring of floating crane at OTB considering the relevant capital expenditure, capacity and operating cost. The flow diagram may be referred to. <u>Details of various proposed tariff rates:</u> 1. Tariff for handling of cargo at Bunder Basin barge jetty for self geared vessels=(A) 2. Tariff for hiring of floating crane at OTB = (B) 3. Tariff for handling of Cargo at OTB and Bunder basin barge jetty for non geared vessels = (A)+(B)
(ii).	Optimal Capacity (with reference to three	

	numbers of excavators):																																								
	(a). The optimal capacity calculation by the KPT is only with reference to three excavators proposed to be deployed at the jetty (at bunder basin) for transfer of cargo from/ to barges at the jetty.	Three excavators are required to handle the estimated optimal capacity of the project i.e. 3.29 MMTPA. However, the cargo share has been revised: <table border="1"> <thead> <tr> <th>Cargo</th><th>Earlier share %</th><th>Revised share %</th></tr> </thead> <tbody> <tr> <td>Dry Bulk</td><td>60%</td><td>71%</td></tr> <tr> <td>Steel & Bagged cargo</td><td>30%</td><td>2%</td></tr> <tr> <td>Timber</td><td>10%</td><td>27%</td></tr> </tbody> </table> Revised share percentage is based on the cargo handled at Kandla Port through barges in last three years i.e. 2008-09 to 2010-11. Earlier share percentage is based on the cargo handled at Multipurpose cargo berths at Kandla Port. Hence, the revised capacity of barge jetty based on the revised cargo share is 3.29 MMTPA.	Cargo	Earlier share %	Revised share %	Dry Bulk	60%	71%	Steel & Bagged cargo	30%	2%	Timber	10%	27%																											
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	(b). The reasons for limiting the number of excavators to 3 to be explained with technical analysis.	Capacity of the project is calculated on the basis of handling rate of three excavators i.e. 3.29 MMTPA (Revised Capacity) and evacuation of cargo at Bunder Basin. However to justify the above capacity, KPT has also calculated the optimal capacity on the basis of movement of barges i.e. 3.07 MMTPA. Hence KPT is not limiting the number of barges but proposing three excavators which are sufficient enough to handle the projected capacity of the Bunder basin barge jetty terminal. <table border="1"> <thead> <tr> <th>Capacity Estimation on the basis of movement of barges from OTB to Bunder Basin Barge Jetty</th><th>Data</th><th>Units</th></tr> </thead> <tbody> <tr> <td>Capacity of the Facility</td><td></td><td></td></tr> <tr> <td>Possible Size of Barge at Bunder Basin</td><td>2200</td><td>DWT</td></tr> <tr> <td>Parcel size of 2200 DWT Barge</td><td>1500</td><td>GRT</td></tr> <tr> <td>Possible size of Barge at Bunder Basin</td><td>700</td><td>DWT</td></tr> <tr> <td>Parcel size of 700 DWT Barge</td><td>500</td><td>GRT</td></tr> <tr> <td>Max. Number of Barges to be accommodated at a time</td><td>4 to 6</td><td>Barges</td></tr> <tr> <td>Average Number of trips of Barges in 24 hours</td><td>2</td><td>Trips</td></tr> <tr> <td>Maximum cargo to be handled in one day considering the average density of each cargo</td><td>1200</td><td>MT/day</td></tr> <tr> <td>Number of days in a year</td><td>365</td><td></td></tr> <tr> <td>Maximum capacity in a year</td><td>4.38</td><td>MMTPA</td></tr> <tr> <td>Apportioned factor</td><td>70%</td><td>Percentage</td></tr> <tr> <td>Optimal Capacity of Bunder Basin terminal</td><td>3.07</td><td>MMTPA</td></tr> </tbody> </table> However one more excavator (Total 4 excavators) provision is there in the revised TAMP proposal based on the recommendations of the bidders and	Capacity Estimation on the basis of movement of barges from OTB to Bunder Basin Barge Jetty	Data	Units	Capacity of the Facility			Possible Size of Barge at Bunder Basin	2200	DWT	Parcel size of 2200 DWT Barge	1500	GRT	Possible size of Barge at Bunder Basin	700	DWT	Parcel size of 700 DWT Barge	500	GRT	Max. Number of Barges to be accommodated at a time	4 to 6	Barges	Average Number of trips of Barges in 24 hours	2	Trips	Maximum cargo to be handled in one day considering the average density of each cargo	1200	MT/day	Number of days in a year	365		Maximum capacity in a year	4.38	MMTPA	Apportioned factor	70%	Percentage	Optimal Capacity of Bunder Basin terminal	3.07	MMTPA
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		concerned officials to consider the fact about the repair & maintenance of the working excavator. Hence four excavators are proposed for the proposed project.
	(c). Indicate the number of barges that can be handled at a particular time at the proposed Bunder Basin. Clarify whether all the three excavators proposed at the basin will handle only one barge at a time.	The available draft at Bunder Basin is 4mt during tides; hence considering the marines codes only two sizes of barges are having draft below 4mt. The proposed barge sizes are 2200 DWT and 700 DWT as per marine codes. Hence barges number may vary from 4 to 6 based on the various permutation and combinations and availability. The calculated capacity of the Bunder basin is 3.07 MMTPA based on the movement of barges from OTB at Bunder basin and the three excavators estimated capacity is around 3.29 MMTPA (Revised capacity), hence the three excavators are able to cater the estimated traffic at Bunder Basin. However it is a PPP project where we have to freeze the project cost to structure the project viability. PPP guidelines defines minimum set of parameters required for operations of the project and there is flexibility to BOT operator to add any equipments to fulfill the future demand, but that would not be part of the capital expenditure of the project cost because as per model concession agreement the termination payment clause is there which is directly linked to the project cost. Hence project cost should be freezed, otherwise it will become an open ended liability on the concessioning authority/government.
	(d). Explain the basis of adopting the productivity of one excavator at 100 moves per hour. Justify the productivity parameter with reference to similar equipment deployed at KPT or any other Major Port Trusts of India or technical analysis based on manufacturers' specifications.	Productivity of the excavator is based on the rated capacity and actual performance. Rated capacity is around 400 to 600 tonnes/ hour for one excavator as per the company's quotations. Therefore, three excavators would be able to handle around 3.29 MMTPA (Revised capacity) annually at optimum conditions considering 450 tons per hour for defined sizes of barges.
	(e). Actual performance of excavator, if any, deployed by the port during the past (prior to earth quake) when barge operations were carried out at the bunder basin to be furnished.	There is no existing excavator matching with the proposed one, hence it is not possible for KPT to furnish the details of the same.
	(f). For arriving at the handling rate of three excavators the KPT has applied factor of 70%. Subsequently, for arriving at number of hours, the port has applied 70% factor and arrived at 16.8 hours (i.e. 24 hours * 70% = 16.8 hours) and accordingly the daily output for dry bulk cargo is arrived at 15876 tonnes / day (i.e. 945 tonnes / hour * 16.8 hours). Further, for determining the optimal capacity of the terminal, the port has further applied 70% of the maximum capacity. The norms does not allow separate cushion in each of the parameters relevant for determining the capacity viz. number of hours and handling	This is in line with TAMP guidelines (4000 hours in a year). KPT would like to clarify that even after that the total working hours is coming out 4292 hours in a year, which is justifiable considering 4000 working hours as per defined TAMP guidelines.

	rate. The KPT to review the capacity calculation.									
	(g). The port has arrived at handling rate of excavator for steel / bagged cargo and timber logs applying the factor of 53.33% and 33.33% on the handling rate derived for dry bulk cargo. The basis of adopting these percentages for arriving at the handling rate for these two cargo items may be explained. KPT to note that handling of these two types of commodities may not depend on the bucket capacity of the excavators.	These handling rates are based on the approved TAMP proposal for multipurpose cargo berth at Kandla. The multipurpose cargo handling rate as per TAMP guidelines. <table><tr><td>Dry bulk handling rate</td><td>10,000 Tons/day (parcel size > 30,000 Tons) 7,500 Tons/day (parcel size < 30,000 Tons)</td></tr><tr><td>Steel and bagged cargo</td><td>4000 Tons/day</td></tr><tr><td>Timber logs and break bulk cargo</td><td>2500 Tons/Day</td></tr><tr><td>Ratio of handling rates=Dry Bulk: Steel & Bagged Cargo: Timber logs</td><td>10000: 4000: 2500 =1: 0.4: 0.25 7500:4000:2500 =1: 0.53: 0.33</td></tr></table>	Dry bulk handling rate	10,000 Tons/day (parcel size > 30,000 Tons) 7,500 Tons/day (parcel size < 30,000 Tons)	Steel and bagged cargo	4000 Tons/day	Timber logs and break bulk cargo	2500 Tons/Day	Ratio of handling rates=Dry Bulk: Steel & Bagged Cargo: Timber logs	10000: 4000: 2500 =1: 0.4: 0.25 7500:4000:2500 =1: 0.53: 0.33
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	(h). The basis of assuming share of dry bulk cargo at 60%, steel and bagged cargo at 30% and timber logs at 10% to be explained.	KPT assumed the share of dry bulk, steel and timber logs based on the share of respective commodities handled at Multipurpose cargo berths at Kandla Port during previous years. However KPT has revised the share to dry bulk cargo at 71%, steel and bagged cargo at 2% and timber logs at 27% based on the share of cargo handle at Kandla Port through barges only.								
	(i). The traffic handled by the KPT during the last three years 2008-09 to 2010-11 and projections for the next 3 years in respect of dry bulk cargo, steel and bagged cargo and timber logs to be furnished.	The KPT has furnished the commodity wise traffic details only for the years 2009-10 and 2010-11.								
	(j). Furnish total number of barges that can be handled in a day with reference to the handling rate of excavators, parcel size of barges assumed in the upfront tariff calculation. Please furnish detailed working in this regard along with analysis, if any, done by the port for each of the parameters adopted as even the technical feasibility report is silent on this point.	KPT has justified the estimated capacity based on the handling rate of the excavators as well as movement of barges from OTB to the project facility. The rounds of barges are possible from OTB to Bunder Basin, Kandla in a day based on the required average time of 12 hours to 13 hours to complete the one round of barge. Two sizes of barges (2200 DWT and 700 DWT) can be accommodate the project facility taking into account of draft of 4 mt during high tides. Hence from 4 barges to 6 barges may be accommodated at a time base on various possible permutations and combinations. Kindly refer 3 (ii)b.								
(iii).	(a). Para 1 of the proposal states 4.5 hectares of duly paved stack area already available with the port would be handed over. However, for estimation of license fee land the port has considered 10 hectares of land area. The total area proposed to be allotted which has already been developed by the port/ to be developed by the concessionaire to be provided.	Total area is 10 hectares (4.5 hectares already developed by KPT + 5.5 hectares. KPT has already mentioned in the proposal and the same area shall licensed to BOT operator for development.								
	(b). Explain how port has arrived to allot 10 hectare of land to the BOT operator for the purpose of stacking of cargo, operational purposes, etc. for the proposed terminal.	Considering the estimated capacity of the project, it was decided in the meeting and consultations with bidders during pre-application conference that the area shall be								

	Out of the total area proposed to be provided, the area to be utilised for stacking cargo and the utilisation plan envisaged for the balance land area to be indicated.	increased from 4.5 hectares to 10 hectares. However as per the industry practice 40:60 norm is there, presuming 60% cargo will be cleared and 40% will require storage of more than 5 days, hence considering the dwell time of all three cargos and following 60:40 norm, KPT has arrived to this figure. Also roughly for 1 MMTPA capacity around 2.5 hectare is required.
	(c). With reference to the land area proposed to be allotted, the port to make attempt to assess the optimal yard capacity considering different parameters for stacking different cargo group, the average dwell time and turnover, etc. to ensure that the land proposed to be allotted would be adequate. Furnish working in this regard.	In the proposal, it is clearly stated 5 free days shall be provided and the cargo which is considered as storage cargo will come into the picture after 5 days. Here 60% of total cargo will require 5 days and rest 40 per cent shall be considered as storage cargo, which is further bifurcated as 50% for next 7 days, 30% for next 7 days and 20% for next 7 days.
(iv).	Optimal Capacity (with reference to floating crane):	
	(a). The basis of assessing the hourly volume of cargo handled by floating crane at 1300 cubic metre to be explained. Technical analysis, if any, done in this regard to be submitted.	1300 tonnes per hour is as per the rated capacity of the equipment. Brochure is furnished for information & justification. However the estimated annual capacity is 3.17 MMTPA (Revised capacity based on 71%, 2% and 27%) from which it comes to around 8800 tons per day, which is as per the prevalent norms.
	(b). As per the port's own calculation the optimal capacity of floating crane is assessed at 3.09 MTPA. However, the port has stated that the handling capacity required is only 0.97 MTPA (i.e. 30% of the optimal capacity of the terminal determined at 3.22 MTPA for excavators) assuming floating crane will provide service to 30% of non geared vessels. This means the utilisation of the floating crane and the associated equipment would be less than even 50%. Justify the proposed investment of `23.80 crores proposed for floating crane including dump barge, tug and other assets which finally gets built into the upfront tariff when the KPT envisages utilisation of floating crane to be less than 50%. Clarify, whether these floating crane will be utilised for any other cargo handling operations relating to the BOT operator.	The concession period of the BOT project is 30 years wherein the private party has to operate and maintain the project facility for defined concession period. At KPT, from 3rd year onwards 30% vessels are expected to be non geared vessels and it will gradually go up in the future. The project is mainly envisaged to attract the large size vessels which are not coming to Kandla Port due to draft limitations. However the proposed floating crane can also be used to handle the cargo which is not coming to Bunder basin, hence considering the future projections for next 30 years the investment of `23.80 crores is justifiable. The non geared vessels at Kandla Port will be expected to increase progressively. Estimated capacity of the Bunder basin terminal: 3.29 MMTPA (Revised Capacity) Estimated capacity of the floating crane at OTB: 3.17 MMTPA (Revised capacity) Assumed non geared vessels at Kandla Port: 30% from 3 year and will be expected to up gradually in the later years. Required capacity of floating crane to handle non geared vessels $30\% \times 3.29 = 1.00$ MMTPA, but as per assumptions gradually the non geared vessels will increase in later years such as 40% in 4 year, 50% in 5 years, hence the proposed floating crane is justifiable and also flexibility is provided to BOT operator to utilize the floating crane to handle the cargo which is not coming to Bunder Basin but subject to the fulfillment of the requirements of cargo handling coming to Bunder basin

		facility. With regard to justification regarding life of crane i.e. 15 years, KPT would like to highlight that in model concession agreement of PPP framework the termination payment clause was there which safeguards the interest of the government from financial liability point of view. It is essential to freeze the capex part of the project, otherwise it is an open ended liability for the government and in future it will become the part of litigation that how much amount shall be paid to the private party in case the event of default is from concessioning authority side. From other point of view, if the private party is periodically investing capex in the project to augment their revenues, whereas PPP framework set bare minimum facilities required to implement the project. For example suppose initial cost of the project is 100 crores and private party in next 10 years shall invest another 200 crores for their profits. Therefore in that case if KPT doesn't freeze the capex, it will become a liability for government to pay the private party of `300 crores in case of event of default from concessioning authority side.
(v).	In para 3.6. of the Annex-I, the KPT has assessed the revenue requirement and upfront tariff for floating crane separately to distinguish the rate between geared vessel and non-geared vessel. However in 3.2. of Annex-I, the upfront tariff calculation includes the capital cost and operating cost of floating crane and related equipment. Thus, all costs relating to floating crane are considered twice in the proposal. Further, as per the KPT's calculation, the geared vessel would be burdened with the cost of the floating crane and associated equipment even though these services would not be utilised by the geared vessel. The KPT to modify its proposal to fix differential tariff for cargo availing floating crane services and those brought by geared vessels.	KPT has already clarified this point in the earlier section regarding the consideration of the floating crane tariff twice, but KPT has calculated the tariff separately to cover all the marine activities. For non geared vessels the floating crane tariff shall be added to the cargo handling tariff for self geared vessels.
(vi).	Capital Cost:	
	(a). The KPT has considered `1014.31 lakhs towards upfront payment in the capital cost estimation. KPT to confirm that this payment represents the cost of assets created by KPT but to be handed over to the PPP operator. In the event, furnish the details of the asset valuation carried.	It is to inform that KPT has completed the construction of the proposed South Wharf in May 2011. Hence the valuation is not required considering the fact that the construction cost of the south wharf covers major part of the total investment as mentioned in the block estimate.
	(b). The written down value as on 31 March 2011 as per the provisional Annual Accounts in respect of each of the above assets of the KPT to be indicated.	WDV is not applicable to the fixed assets which are under creation. The cost of `10.65 crores (`10.14 crores + 5% miscellaneous cost) towards south wharf is justifiable as per the current market rates which are much higher than the old rates. Also KPT would like to highlight the fact that the construction of the south wharf recently got completed in May 2011, hence the provision of the depreciation is not applicable.

	(c). Civil Cost (cargo handling):	
	(i). The KPT has stated that norms prescribed in the guidelines for multipurpose cargo berth are adopted. The list of items included in the estimation of civil cost for cargo handling activity do not match with the normative list of civil works prescribed in the guidelines for multipurpose cargo berth. The reasons for deviation from each of the items from the normative list need to be justified.	Already concluded that it is the barge jetty, hence it is not possible to match all the normative list of components with multipurpose cargo jetty.
	(ii). The breakup of estimation of ancillary infrastructure works estimated at `100 lakhs may be furnished alongwith the details of such works. This item is not found to be as per the normative list of civil works prescribed in the guidelines.	It includes signage, water supply, drainages, etc.
	(d). Equipment Cost:	
	(i). The equipments proposed by the KPT are not found to be as per the norms prescribed in the guidelines. The KPT to justify deviation proposed from the norms prescribed in the guidelines.	Already concluded that it is not the multipurpose cargo berth, hence it is not possible to have all components as per normative list.
	(ii). The capital cost includes cost of fire fighting and one weigh bridge to be added by the operator apart from one weigh bridge and the existing fire fighting facilities at bunder basin to be provided by the port to the BOT operator. The need for having two weighbridges to be explained in the light of the cargo capacity of proposed facility. Further, the service of weighbridge is to be taken under the miscellaneous services and mentioned so in the SOR.	This is as per the project requirement. The existing weighbridge is not sufficient enough to cater the proposed traffic at the project facility, hence suitable provision of one new weighbridge is proposed for smooth running of operations.
	(iii). The unit rate of Floating crane and associated equipment appear to be based on quotations obtained December 2010. The port may confirm the unit rate reflect the prevailing rate else, update the unit rate to reflect the prevailing rate. Likewise, the conversion rate adopted i.e. 1 Euro = `62.45 may also be updated with reference to the prevailing exchange rate. Furnish detailed calculation of the base rate, and customs, duties, etc. added thereon to derive the gross unit rate of floating crane and associated equipment.	This is as per the prevailing market rates and it is not possible to incorporate the changing values of euro. It is better to take average of fluctuating rate to convert the currency otherwise it is not possible to freeze the cost due to the daily fluctuation in the currency. Hence the same is also applicable for the cost of the equipment. Already provided.
	(iv). Quotation for barge jetty, tugs forwarded by the KPT are not signed by the signatories. Please send authenticated quotations.	The KPT has not furnished any specific comments on the said point.
	(v). Capital cost of berth	
	(a). Details of quantum of dredging and unit rate adopted for dredging may be furnished to justify capital dredging cost estimated at `547.50 lakhs.	The KPT has not furnished any specific comments on the said point.
	(b). The port has considered DPR cost at `37.50 lakhs under the civil cost estimated for cargo handling and `37.50 lakhs in the capital cost of berth. The nature and the basis of this expense may be explained and substantiated with documentary evidence. This is not found as per the normative list of capital cost prescribed in the guidelines and	The KPT has not furnished any specific comments on the said point.

	such expenses, if incurred, are to be taken as part of the 5% miscellaneous cost allowed in the capital estimates.	
	(c). As already mentioned in the guidelines, the capital cost of equipment should be updated to capture the prevailing market rate while fixing the upfront tariff cap. The KPT may, therefore, confirm that the estimates of both civil and equipment cost reflect the prevailing market rate. The estimates may be substantiated with documentary support in form of budgetary quotations, rate analysis, etc. for those items which are not substantiated with documentary support.	The KPT has not furnished any specific comments on the said point.
	(d). If any of the tax benefits are available for any of the capex items proposed, the port to confirm that the same may be considered while determining the capital cost.	The KPT has not furnished any specific comments on the said point.
(vii).	Operating Cost (cargo handling):	
	(a). As stated earlier, the equipment proposed by the KPT (i.e. excavator, dumper barge, tug, floating crane) are not found in the normative list of equipment. Hence the basis of fuel consumption considered by the KPT for estimating the fuel cost in respect of each of these equipment to be explained and substantiated with actual fuel consumption of these equipment at its port or any other private terminal operators in Major Port Trusts or manufacturers' specifications.	Basis of fuel consumption has been considered by empirical observation, discussions with the manufacturers and actual consumptions.
	(b). The basis of estimating fuel cost for 4000 hrs/ equipment is not clear. The operating time of each equipment to be assessed based on its capacity and performance standards.	4000 hrs in a year is as per TAMP guidelines for multipurpose cargo berth. Kindly refer approved TAMP proposal for multipurpose cargo berths at Kandla and our answer no.2.
	(c). Power Cost:	
	(i). The power cost is computed assuming consumption of power at 2,40,000 units per hectare which is not as per the guidelines for multipurpose cargo berth.	Consumption of power: As per the prevalent norms per hectare.
	(ii). The unit rate of power adopted by the KPT to be substantiated with a copy of the recent electricity bill.	The copy of electricity bill is furnished.
	(d). License fee:	
	(i). As per the upfront tariff guidelines, license fee has to be estimated as per the rates prescribed in the Scale of Rates of the concerned Major Port Trusts. The KPT is requested to confirm that the unit rate of license fee adopted at `21/ sq. mtrs./ month is as per the rates prescribed in the Scale of Rates of KPT giving the reference thereof in the SOR.	KPT has revised the same as per the latest SOR of the KPT. Now the current rate is `21.60/sqmts/month for Pucca Plots (4.5 hectares) and `12.60/sqmts/month for Kutchha Plots (5.5 hectares)
	(ii). The Land Policy Guidelines of 2011 announced by the Ministry of Shipping stipulated license fee for water area will be 50% of the license fee for abutting land. The Port has estimated license fee for water area at `126 lakhs applying 50% of total lease rental estimated for land area of 10 hectares. In this context, the following points may be clarified:	Modified as per the latest SOR and as per the land policy guidelines of 2011. Total water area: 4206 m ² ((152x9.5)+(68x9.5)+(152x8)+(50x18)) As per latest land policy 50% of the land rates (i.e. 50% of 25.20)

	➤ Indicate what the exact water area is proposed to be made available by the KPT to the BOT operator for the proposed barge handling terminal. ➤ Confirm the license fee of `21/ sq. mtrs./ month proposed to be adopted for water area is with reference to the land area abutting the water area where the proposed barge jetty is to be developed.	
(viii).	Upfront tariff calculation of Floating Crane (furnished by KPT at 3.6. of Annex-I):	
	(a). As already stated earlier, the capital cost, operating cost, ROCE and the rate furnished in para 3.6 (a) to (e) are double counted as all these components are already captured in the upfront tariff calculation at para 3.2. to 3.5 of Annex - I. As stated earlier, the port to review and modify its proposal.	It is separately calculated to cover all marine activities, for self geared vessels the floating crane charges shall be deducted from the cargo handling tariff for non geared vessels.
	(b). With reference to the upfront tariff calculation for floating crane computed in table 3.6.(e) of Annex - I, to confirm that the said tariff will cover the revenue requirement estimated for the floating crane.	Yes, it will cover the revenue requirement estimated for the floating crane separately.
(ix).	Berth hire computation:	
	(a). The norms prescribed in the guidelines stipulate estimation of maintenance cost of berth at 1% of the total cost. Accordingly, the maintenance dredging cost will be around `5.47 lakhs based on the current estimates furnished by the KPT. As against that the KPT estimated this cost at `273.75 lakhs in addition to `5.47 lakhs estimated as part of repairs and maintenance cost. The estimation of maintenance dredging cost is not found to be as per the norms prescribed in the guidelines. The reasons for deviation from the norms prescribed in the guidelines for estimating this expense to be justified.	Maintenance dredging shall be carried out by the BOT operator as proposed in the project and the cost of the same is also borne by the BOT operator. Heavy siltation is expected at the side of the Bunder Basin because of the location of the barge jetty as well as horse shoe type civil structure of the jetty which leads to heavy accumulation of the material which needs to be dredged continuously to avoid drafty restriction. Therefore, the cost of the maintenance dredging is assumed at 90% of the cost of the capital dredging.
	(b). The computation of berth hire by the KPT does not consider the total number of barges to handle the optimal capacity, average stay of barge at the jetty, total GRT hours for stay of barge at the vessel. The KPT to modify the computation of berth hire following the approach done in the other upfront tariff cases approved by the Authority.	Computation of Berth Hire: Already considered the number of barges as per the optimal capacity and followed the same method earlier used to calculate the berth hire charges.
(x).	Storage charge Computation:	
	(a). The basis of assuming cargo equal to 40% of the cargo capacity will attract storage charge may be explained with reference to the proposed free period of 5 days for import cargo and 15 days for export cargo, average dwell time of each of these cargo group, and the cargo turn over ratio.	As per the prevalent trend of storage cargo and subsequent discussions with the bidders. However as per the industry practice 40:60 norm is there, presuming 60% cargo will be cleared and 40% will require storage of more than 5 days, hence considering the dwell time of all three cargos and following 60:40 norm,

		KPT has arrived to this figure. Also roughly for 1 MMTPA capacity around 2.5 hectare to 3 hectare is required.
	(b). The share of import cargo/export cargo and the average dwell time (cargo-wise) for both import cargo and export cargo assumed in the calculation may be indicated and justified with reference to the past actuals.	Share of import and export cargo is in the ratio of 94:06 and average dwell time of dry bulk cargo is 40 days, for break bulk cargo it is 8 days and for timber logs it is 20 days.
	(c). While determining the upfront storage charge, the port has considered 50% of the cargo likely to attract storage charge will be cleared in one week. The position with reference to the balance 50% of the cargo is not explained nor captured in the upfront tariff calculation. The KPT may review the storage charges in the light of the above observation. The KPT to consider proposing slab wise increasing rate for increase in the stay of cargo.	Total assumed storage cargo is 40% of the total cargo. Out of which 50% cargo of the 40% of total cargo cleared in first week and 30% cargo of 40% of total cargo in next 7 days and rest 20% cargo of 40% of total cargo in next 7 days.
(xi).	Scale of Rates	
	(a). <u>Schedule 2- Berth Hire</u> The berth hire charge is proposed to be levied on barge and other floating craft approaching or lying alongside the berth. In this regard the following points to be clarified: (i). What are the other floating craft on which the berth hire is proposed to be collected. The relevance of collecting berth hire on floating craft is not clear. The upfront berth hire calculation does not capture stay of any floating craft at the berth to derive the proposed berth hire.	(i). Tariff for hiring of floating crane at OTB has calculated separately and that shall not be part of the berth hire charges.
	(b). The basis of considering the barges of 2200 DWT capacity to be explained. Port to confirm that it does not expect higher DWT capacity barge at the proposed jetty considering the project covers 30 years period.	As per the marine codes 2200 DWT size barges required 3.5 mt drafts. 2200 DWT barge is proposed considering the availability of draft of 4 mt only during tides at Bunder basin.
	(c). The proposed note (i) states that 2200 DWT barges are proposed to be deployed. The said note is not a tariff related issue and hence need not be prescribed in the Scale of Rates. If necessary, the port to include this point in the Bid document and in the Concession Agreement.	Already incorporated in the DCA, it is only for the estimation of optimal capacity and calculation of berth hire charges.
	(d). Justify reasons for the proposed note numbers (vi) and (vii) relating to levy of additional berth hire. It is not clear whether barges will require pilotage services from KPT. Even if it is so, the reasons why the BOT operator should collect penal charges for a service to be provided by KPT.	Deleted.
	(e). <u>Schedule-3 Cargo Handling Charge</u> The proposed rate for foreign cargo at `65.67 / tonne for dry bulk, `123.90 per tonne for steel and `197.01 for timber include the capex, operating cost and ROCE relating the floating crane. Though, the port has derived separate rate for non-geared vessels	The project include various separate marine activities loading of mother vessel at OTB, unloading of cargo at barge jetty, use of floating crane for other operations, hence it is advisable to have separate tariff proposals for each activity. This will bring transparency and justified charges for each activity.

	availing floating crane facility, the proposed Scale of Rates do not propose separate tariff arrangement for geared vessel and non-geared vessel.	Shall be incorporated in the Scale of Rates.
	(f). <u>Schedule – 4 Storage Charge</u> (i). As per clause 5.8.2. of the tariff guidelines of 2005, free period for import (container) shall commence from the day after the day of landing of the container and for export the free period shall commence from the time (container) enters the terminal. Whilst the proposed condition no (vii) regarding commencement of free period of export is in line with the guidelines, the proposed note number (iii) stating the free period for import shall commence from the day of complete discharge of cargo is not found to be in line with the provision stipulated in the guidelines. Specific reasons, if any, for deviation from the said guidelines provision to be explained.	(i). This is as per the SOR of the KPT [Refer schedule 2(i) of SOR of KPT]. Free period of imports shall be reckoned with the date of complete discharge of vessel's cargo, otherwise it will affect the financial viability and vessel owner will not be interested in lighterage operation.
	(ii). The conditions proposed at (iv) to (vii) relating to free period for cargo partly discharged on wharf and partly in stream, conversion of import cargo on transit terms into re-export cargo etc., are incorporated by the KPT as per the provisions prescribed in the Scale of Rates of the port. The relevance of each of the proposed provision in the SOR of the BOT operator to be examined as such conditions are not prescribed in the upfront tariff schedule prescribed for dry bulk terminal at Tuna Tekra.	Conditions proposed at (iv) to (vii) are given below: (iv). When a vessel's cargo is partly discharged in stream and partly on wharf, the free period of storage in transit sheds and yards shall be reckoned with separately. This shall be removed considering the operations through barges only. (v). Free period in respect of cargo discharged in lighters in stream shall commence from the date of complete landing of the cargo on the wharf from the lighters. (vi). When import cargo is stored in transit terms and then covered into re-export, free period will be considered from the date of filing of export documents like shipping bill. (vii). Free period for exports shall commence from the date on which the cargo is brought in the transit/ port area. The demurrage will cease from the day following the date of berthing of vessel. In case of stream loading, the demurrage will cease from the day of loading of first barge. Demurrage will cease for the total cargo actually loaded through barges to the vessel in the same voyage. The highlighted portion shall be deleted based on the fact that the cargo handling operations is through barges only.
	(iii). The proposed condition number (ix) stating that Sundays and Holidays shall be included for calculation of free period for hazardous cargo in not in line with provision prescribed in clause 4.5. of the tariff guidelines of 2005.	This is in line with SOR of the KPT and second point is that individual port has a freedom to proposed number of free days as per TAMP guidelines schedule 4.5.
	(xii). In view of our suggestion to update the estimation of capital cost and unit rate of operating cost to the year 2011, the general note 6 may be modified to prescribe the base WPI for automatic adjustment to be considered every year as 1 January 2011	Incorporated the same.

	instead of 1 January 2010 proposed by the port.	
(xiii).	A copy each of the Agenda, minutes and Board resolution approving the subject proposal to be forwarded as agreed by the port in the proposal.	The same is furnished.

5. In accordance with the consultation process prescribed, the revised proposal of the KPT dated 25 August 2011 and the revised Feasibility Report furnished by KPT under cover of its letter dated 7 October 2011 was circulated to the concerned users/ user organisations and prospective bidders seeking their comments. The comments received from the users/ user organisations/ prospective bidders were forwarded to the KPT as feedback information. The KPT has responded.

6. Based on the preliminary scrutiny of the revised proposal filed by the KPT and further scrutiny of the additional information/ clarification furnished by the KPT along with its proposal addressing the queries raised in its earlier proposal, the KPT was vide our letter dated 29 December 2011 requested to furnish the information / clarifications on the few points. The KPT has submitted its response during the joint hearing held on 5 January 2012. A summary of the queries raised by us and corresponding reply of KPT thereon is tabulated below:

Sl. No.	Queries raised by us	Reply received from KPT
(i).	Item 3(i)(a): The flow diagram of the proposed operations at the Bunder Basin furnished by the KPT shows that there will be movement of cargo from barge at OTB to Barge Port by Stevedores. In the proposed SOR, that the proposed tariff for handling cargo does not cover the stevedoring charges which shall be paid separately by user/ vessel to the service provider. In this regard the following points to be clarified:	The whole phrase refers basically to barge operation. Barge port has been mentioned as the jetty where the barge is handled. It means nothing but the barge movement operations carried out to take the cargo discharged from the mother vessel to a jetty.
	(a). The operation of movement of cargo from Barge at OTB to Barge Port onto barges, to be clarified. The meaning of 'Barge Port' to be explained.	
	(b). As per the guidelines the upfront handling tariff is to be fixed for composite service to include cargo loading or unloading charges as the case may be, transportation, wharfage and storage charge, etc. Thus as per the guidelines, the stevedoring component also forms part of the composite rate. Special circumstance for deviating from the guidelines provision by proposing the said note that the proposed tariff does not include stevedoring charge (which is payable separately to the service provider) to be explained.	Proposed tariff includes the stevedoring charges at Bunder Basin. However, it does not include the stevedoring charges at OTB. The proposed arrangement of including stevedoring charges in Tariff at Bunder Basin is also comparable with arrangement for berths no.13 to 16 as there also, the stevedoring charges for support services to take the cargo from vessel at berth to back yard is included in tariff for cargo handling. Moreover, the proposed tariff does not include the charges to be paid for the barge operation. The same would be arranged by the users. The charges for the same would be determined by the market forces.
	(c). KPT to clarify as to who will offer the stevedoring service and the tariff arrangement proposed for such service.	Barge Operation (stevedoring) would be provided by private players who are currently operating in and around KPT.
	(d). KPT to confirm whether the BOT operator of the Bunder Basin Terminal will be finally responsible for the stevedoring service. If so, and recognising that the stevedoring forms integral part of the handling activity the KPT to review this point	No, BOT operator would not be responsible for barge operation and stevedoring at OTB. However, BOT operator would be responsible for stevedoring operation at Bunder Basin.

	and modify its proposal to state that it shall be inclusive of the stevedoring service as well.	
(ii).	Optimal Capacity:	
	(a). Item (ii)(b): The port has considered one additional excavator (i.e. 4 nos.) instead of 3 nos. proposed earlier for transfer of cargo at shore in the estimation of capital cost. Consequently, the estimation of operating cost and the estimated revenue requirement also considers cost of 4 excavators. However, in the calculation of optimal capacity of the barge handling facility at 3.29 MTPA, the KPT has reckoned only 3 barges. This inconsistency in the proposal to be corrected.	Additional excavator has been assumed considering its requirement as back up equipment in case there is break down of any of the three working excavators. This additional excavator has been considered for computing operating cost considering its requirement in stack yard/ back up area. Normally, the 3 excavators would be working on jetty. Hence the capacity calculations are based on the same.
	(b). At the joint hearing held on 5 May 2011 during the last proceedings, the port was advised to explain why higher capacity equipment cannot be deployed keeping in view of further growth potential. This can improve the capacity of the proposed bunder basin. The port has not addressed this point. KPT to examine and furnish a detailed note in this regard.	Currently proposed equipments have capacity which is appropriate considering the reasonably available working hours with favorable tidal conditions. Though the higher capacity equipments may be installed at Bunder Basin, it would remain idle if the required volumes to utilise the same could not be transferred by the barges in available working hours.
	(c). The port has stated that 4 to 6 barges can be handled at the same time at the bunder basin. That being the case, the reasons for restricting the number of excavators to 3 nos. in the capacity calculation to be explained. Also, explain the number of excavators that can be technically deployed considering the length of the proposed terminal.	There is no point in increasing the handling capacity at jetty if a similar increase cannot be made in the cargo volumes made available by the barges used for Lighterage of mother vessels during the working hours with favorable tidal conditions. Hence, Length of Terminal required by an excavator cannot be considered for calculation of number of excavators to be installation on jetty.
	(d). Item (ii) (f): The reply furnished by the KPT is not satisfactory. As per the formula prescribed in the guidelines, the factor of 70% is prescribed only once for determining the optimal quay capacity. Whereas, the KPT has provided this cushion factor of 70% at three stages. First for arriving at the handling rate of three excavators the KPT has applied factor of 70%. Subsequently, for arriving at number of hours, the port has applied 70% factor and arrived at 16.8 hours (i.e. 24 hours * 70% = 16.8 hours) and accordingly the daily output for dry bulk cargo is arrived at 15876 tonnes / day (i.e. 945 tonnes / hour * 16.8 hours). Then, for determining the optimal capacity of the terminal, the port has further applied 70% of the maximum capacity (this is the only one which is as per the guidelines). The norms does not allow separate cushion in each of the parameters relevant for determining the capacity viz. number of hours and handling rate. The KPT to review the capacity calculation.	70% factor has been applied thrice for calculation of Optimal capacity. The factor has been applied twice to reduce 24 hours to practically available working hours. Apart from this 2 time, once has been applied as per the guidelines.
(iii).	Capital Cost:	
	(a). Item (vi)(a):	

	The reply of the KPT does not fully address the point made by us. The KPT has considered `1014.31 lakhs towards upfront payment in the capital cost estimation i.e. `279.87 lakhs in the civil cost (excluding berth), `202.88 lakhs for fire fighting, electrification and existing weighbridge and `531.56 lakhs for south wharf extension by KPT. If the south wharf construction is completed in May 2011 as stated by the port, then KPT to confirm whether the upfront payment claimed for this asset created is equivalent to the value of such asset booked in the Accounts of the KPT. As regards the other assets of the port to be handed over to the operator, KPT to confirm that the upfront payment represents the cost of assets created by KPT. The details of the asset valuation carried out by the port to determine the upfront fee to be provided.	Value of the South Wharf is as per the approved tender value for the works undertaken; The value considered for the other assets is as per the value at which the assets were created.
	(b). Item (vi)(d)(iii): The average exchange rate of one Euro for the period 1 December 2010 to 1 December 2011 is found to be `64.03 as against 1Euro = `62.45 adopted by the KPT. The working of capital cost for excavator shows that the KPT has adopted the exchange rate of 1Euro = `60. Since there is a vast variation in the exchange rate adopted by the KPT, the port to update the estimates based on the average exchange rate.	Exchange rates have been considered whenever the estimate were made based on quotation received. There could be daily fluctuations in these rates which cannot be taken into considerations on a daily basis. Considering the fact that the estimates have been accepted by the bidders and bids for qualification have been received, it is not appropriate to keep on updating the estimates based on daily fluctuating parameter like exchange rate.
	(c). The working of equipment cost provided by the KPT show that for many of the equipment proposed to be imported by the port has not considered any Customs duty. Customs duty after the EPCG benefit available to be considered in the estimation of equipment cost.	Custom duty after EPCG benefit has been considered in case of imported equipments like excavators, etc.
(iv).	Operating Cost:	
	(a). Item (vii)(b): The reply of the port is not found satisfactory. With reference to 4000 hours assumed for estimating the fuel cost of each of the equipment it is reiterated that the operating time of each equipment may be assessed based on its capacity and performance standards. It is further pointed out that for estimating the berth hire 6132 hours are assumed, whereas, for estimating fuel cost 4292 hours is assumed for each of the equipment.	Operating hours for equipments working 4292 (=365*24*70%*70%) is being considered based on possibly available working hours with favorable tidal conditions. However, berth hire charges would have to be estimated based on higher number of hours (365*24*70%=6132) due to high possibility that barges may not be able to leave the berth in low tide. Hence, there is fair possibility that barges would have to utilise the berth more than actual operating hours of equipments for cargo handling. Moreover, there are support activities which have to be carried out during the time before the cargo handling and after the cargo handling also.
	(b). Item (vii)(c): As per the guidelines, the power consumption norm of 2.4 lakh unit per hectare is prescribed towards the general	In the absence of guidelines for power requirements for back area illumination in case of multipurpose cargo berths, the

	lighting and illumination for liquid terminal and not for multipurpose cargo handling terminal. KPT to clarify the relevance of applying those norms for the proposed multipurpose cargo handling terminal at Bunder Basin. If there is any specific need to provide for lighting facility in the water/ land area for the operational purpose, the port to assess the power consumption based on its experience in the port operations with necessary justification. While doing so, KPT to examine whether lighting facility is envisaged for the entire land area of 10 hectares.	guidelines for liquid terminal have been referred as the purpose is the same here, i.e. illumination of back up area. Hence, the area based norm (2.4 Lakh units/ ha) has been considered. Moreover, the illumination requirement would have to be considered for the entire area.
(v).	Item (viii) (a): KPT to furnish a working to support the statement of the port that at the proposed tariff, the operator can recover the entire revenue requirement estimated for the floating crane.	Working presented for calculation of tariff for floating crane can be referred in this regard. Tariff has been set considering the operating cost plus the prescribed return on capital cost and apportionment of the same over the optimal capacity as per TAMP Guidelines.
(vi).	Berth hire computation:	
	(a). Item (ix) (a): With reference to the submissions made by the port about deviation in the estimation of maintenance dredging cost, KPT to explain the basis of estimating 90% of the capital dredging cost required to maintain the bunder basin. Further, the KPT to justify the estimation with reference to the actual maintenance dredging cost incurred by the port for the said bunder basin in the past giving details of quantity of the silt dredged and updating the unit cost with the prevailing dredging cost. The unit cost of dredging to be substantiated with documentary support.	COM Vadinar has suggested the same.
	(b). Number of trips by each barge assumed as two numbers per day is not captured in the berth hire calculation.	Numbers of trips are not required to be considered for berth hire calculation as it is calculated based on the hours being utilised and average GRT available at Bunder Basin.
	(c). The port has stated that 4 to 6 barges will be handled per day. Then the reasons for restricting it to 4 barges instead of average 6 may be explained.	Combination of barges ranging from 700 DWT to 2200 DWT has been mentioned, i.e. 500 GRT to 1500 GRT. Berth hire charges consider the Average 1500 GRT. Considering the number of barges at 4 (which is minimum of range) Average GRT was considered to be on higher side. So, it is better to refer total GRT which equals to Barge Nos. * Average GRT which is in this case is 6000 (1500*4). It could be the result of different combination also like 1200*5=6000. So, the combination is difficult to freeze currently, so, we have considered higher of GRT and lower of barge nos. The combination of 1200*5 could be the result of following barges.
	(d). The port while replying our query at (ii) (b) has indicated barges of 2200 DWT and 700 DWT will be handled at the basin based on some combination. But for estimating the berth hire calculation, the port has considered only 2200 DWT (1500 GRT) vessel. The port may indicate and confirm the correct position considered in the berth hire calculation.	- 1500 * 3 = 4500 - 1000 * 1 = 1000 - 500 * 1 = 500

		Total = 6000, Average = 1200. This combination would also give similar berth hire charges as the same is based on total 6000 GRT.
(vii).	Storage charge computation:	
	Item (x)(c): The KPT has stated that out of 40% of the cargo capacity availing storage facility, 50% will be cleared in first week, 30% of cargo in next 7 days and rest 20% cargo in next seven days. The port has stated that the average dwell time of cargo is 40 days for dry bulk and 20 days for timber. Whilst the port has captured the effect of the cargo likely to avail storage facility for the first two slabs, the effect of the cargo availing storage for the second and the third slab is not considered while arriving at the proposed storage charge. The KPT to examine this point and modify the proposed storage charge in the light of the above observation.	The storage charge has been computed considering that the 40% of cargo would attract the storage charge, i.e. 60% of cargo would be cleared immediately or within the free period. Of 40% of total cargo, three slabs have been assumed which are chargeable. First 7 days after free period. Second slab of 7 days and third slab of 7 days. The cargo chargeable for the storage has been assumed for at 50%, 30% and 20% for respective phases. The charges for second and third phase have been set progressively with multiplying factor of 1.5 times and 2 times respectively to discourage the users to store for longer duration.
(viii).	Item (xi)(f)(ii): The KPT has not fully addressed our query raised. The conditions proposed at (iv) to (vii) relating to free period for cargo partly discharged on wharf and partly in stream, conversion of import cargo on transit terms into re-export cargo etc., are incorporated by the KPT as per the provisions prescribed in the Scale of Rates of the port. KPT to examine the relevance of each of the proposed provision in the SOR of the BOT operator as such conditions are not prescribed in the upfront tariff schedule prescribed for dry bulk terminal at Tuna Tekra.	Provisions referred in query are prescribed in Scale of Rates as they are relevant due to the nature of the project, i.e. the barge handling facilities. The project is of different nature compared to Dry Bulk Terminal at Tuna Tekra as it is full-fledged direct vessel berthing and handling facility where the provisions referred for Bunder Basin Handling Facility would not be applicable.
(ix).	Clause 5.7.3 of 2005 tariff guidelines of 2005 prescribe 25% premium on the handling and storage charges of hazardous cargo. As against that the port has proposed 100% premium which is not as per the guidelines. Moreover, KPT to confirm whether any hazardous cargo is likely to be handled at the proposed terminal for proposing this condition.	Guidelines of 2005 mentions about hazardous conditioners for which it prescribes 25% premium. However, in the absence of clear instruction about hazardous cargo at multipurpose berths in Guidelines, 100% premium has been considered in line with prevailing Scale of Rates of KPT.
(x).	Note under Schedule 3.2. in the proposed SOR states that there should be a masters certificate which clearly notifies that this much amount of cargo shall be handled through floating crane at OTB. The relevance and the intention of proposing the said condition is not clear and hence may be explained.	If the vessel is to be lightened by the usage of floating crane (partly/ fully), the volume of the cargo to be handled should be officially established. This is in line with the current practice of KPT in which a Master's Certificate is produced when the cargo is to be handled by excavator installed at berth/ jetty.
(xi).	The note proposed for Miscellaneous charges may be amplified to state that it shall cover charges for all other miscellaneous services not specifically prescribed in the SOR.	The mentioned types of charges that are covered in the note are comprehensively covered. However, the requested change for amplifying that the services not prescribed in Scale of Rates specifically would be covered in Miscellaneous.
(xii).	The share of geared and non-geared vessel likely to be handled to be indicated. Further, the quantum of cargo capacity that is	It can be derived based on workings submitted. However, there is no explicit need of mentioning shares of gearless and

	anticipated to be handled by geared vessel (cargo-wise) at the proposed terminal to be indicated.	geared vessels as it does not have any application in setting up of tariff.
(xiii).	During the joint hearing held on 5 May 2011 during the last proceedings, the KPT was advised to furnish a detailed note about the future traffic projections and as to why higher capacity of floating crane/ equipment cannot be deployed keeping in mind further growth potential clearly bringing out the operational arrangement of the proposed floating crane. The port has not furnished a detailed note in this regard while furnishing the revised proposal which may please be furnished.	Proposed project has optimal capacity is 3.29 MMTPA, single floating crane proposed is with capacity of 3.17 MMTPA. Hence, there is not a requirement of higher capacity floating crane. Unnecessarily higher capacity floating crane can lead to higher tariffs.

7.1. A joint hearing in this case was held on 5 January 2012 at the Kandla Port Trust (KPT) premises. The KPT made a power point presentation of its proposal. At the joint hearing, the KPT and the concerned users/ organisation bodies have made the submissions.

7.2. At the joint hearing, the KPT has submitted a supplement to its proposal revising the proposed rate on account of upward revision of the backup area. The main modifications made by the KPT are given below:

- (i). Developed Back up area considered at 4.5 Ha has been revised at 7 Ha (approx). Total back up area as per TAMP Guidelines at 12 Ha instead of earlier assumed 10 Ha. Hence, remaining back up area required is to be developed by BOT operator, i.e. 5 Ha. instead of 5.5 Ha. Hence, there is reduction in non-berth civil cost.
- (ii). Revision of length of west wharf from 68m (as considered in base map provided by KPT) to 107.5m. The change has increased the cost of pile foundation, super structure, bollards and fenders. However, there is no net change in Total Project Cost i.e. `10959 lakhs.

- (iii). Changes in operating cost of the facility as a result of change in the project parameters is as below:

Particulars	` in lakhs
Operating Cost for Cargo Handling Activity	2605.20
Operating Cost for Floating Cranes	1035.42
Operating Cost of Berth	612.75

- (iv). The changes in the project parameters have marginal implications on the proposed tariff which is given below:

- (a). Berth hire charges:

	Rate in ` per GRT per hour
Foreign-going vessel	`2.75
Coastal vessel	`1.65

- (b). Cargo handling charges:

- Upfront tariff for handling cargo at the bunder basin:

Sl. No.	Commodity	Rate per metric tonne in `	
		Foreign	Coastal
1.	All types of dry bulk cargo	65.88	39.53
2.	Break bulk cargo (Steel and Bagged cargo)	123.53	74.12
3.	Timber Logs *	197.64	118.58

- Tariff for hire of floating crane at the OTB

Sl. No.	Commodity	Rate per metric tonne in `	
		Foreign	Coastal
1.	All types of dry bulk cargo	30.31	18.19
2.	Break bulk cargo (Steel and Bagged cargo)	56.84	34.10
3.	Timber Logs *	90.93	54.56

* Rates applicable for handling other break bulk cargo at OTB and at Bunder basin will be same as that of handling timber.

(c). Storage charges:

	Rate per tonne/ day
(i). Free period	5 days - Import 15 days - Export
(ii). Storage charge	1 st to 7 th day – `3.90
	8 th to 14 th day – `5.79
	15 th day onwards – `7.72

(d). Miscellaneous charges for sweeping, weighment of cargo, dust suppression, environment and management, lift on-lift off charges, safety measures, etc. is proposed at `5.46 per tonne.

(v). Cargo handling tariffs has increased marginally as a net effect of reduction in capital cost and increase in operating cost (power and license fee cost).

(vi). Berth hire charges have been increased due to increased capital cost because of increased length of west wharf.

8. As agreed at the joint hearing, the KPT was advised to furnish its response to some points. After reminders, the KPT under cover of its letter dated 20 April 2012 has furnished its response. Further, the KPT in its letter dated 20 April 2012 has stated that it has modified its proposal, SOR and its Feasibility Report after incorporating the changes in the project parameters and other changes as suggested during the joint hearing and has thus submitted its revised tariff proposal alongwith SOR and Feasibility Report. The points raised by us during the joint hearing and the response of KPT thereon are tabulated below:

Sr. No.	Queries raised by TAMP	Reply of KPT
(i).	Review the assessment of capacity with reference to the physical facilities available and remove the mismatch, if any, between the assessed capacity and the handling equipment proposed to be provided.	(The KPT has stated to have addressed the said query in its revised proposal.) In the revised proposal, the KPT has stated that: “Developed Back up area considered at 4.5 Ha has been revised at about 7 Ha. Total back up area as per TAMP guidelines at 12 Ha has been considered instead of earlier assumed 10 Ha. Hence remaining back up area required to be developed by BOT operator, i.e. 5 Ha, instead of 5.5 Ha. Hence, there is reduction in non-berth civil cost. Another change has taken place in the civil cost of the berth which has increased due to the revision of length of west wharf from 68m (as considered in base map provided by KPT) to 107.5m. The change has increased the cost of pile foundation, super structure, bollards and fenders.”
(ii).	Justify the area of backup land proposed to be allotted with reference to the different types of cargo to be handled and their dwell	(The KPT has stated to have addressed the said query in its revised proposal.) In the revised proposal, the KPT has stated that:

	time.	“As there is no guideline provided by TAMP for calculating the requirement of stack yard for multipurpose cargo, storage area requirement of multipurpose cargo has been calculated based on the requirement as per the current operations in KPT for multipurpose cargo. Calculation of Back up area requirement for Optimal capacity of 3.29 MMTPA has been calculated by the Port at 12 Ha.”
(iii).	Confirm that only three excavators can be deployed due to any technical or physical constraints at the quay. If no such constraints are noticed, the reasons why the port has proposed to restrict such deployment only to three.	Total 3 nos. of excavators have been assumed for capacity calculation. However, the operating cost calculation has been done based on 4 nos. of excavator because 1 no. of excavator has been assumed to be working in back up area. This excavator can be used at jetty in case of breakdown of any of 3 nos. of excavators working at jetty. Moreover, considering the views of existing port users also, it is confirmed that the maximum of 3 nos. of excavators that can be deployed at Bunder basin considering the technical parameters like wharf length, layout, cargo mix, positioning of barges with respect to the shape of wharf, etc. Moreover, port users have opined that the tidal restrictions may limit the cargo volumes to those which can cater maximum 3 nos. of excavators. We have calculated the optimal capacity of the Bunder basin barge jetty on movement of barges from OTB to Bunder basin. Kindly refer article no. 5.5 of the draft feasibility report. Based on norms for fixation of upfront tariff for services rendered at multipurpose berth the optimal capacity of the terminal (Barge jetty) is worked out as 3.29 MMTPA.
(iv)	Re-look at the valuation of the developed facilities which are proposed to be handed over to the BOT operators and certify that the method of valuation adopted conforms to the instructions issued by the Government for such valuation.	As per the opinion of the transaction adviser, there are no prescribed guidelines from Govt. and that KPT has considered the upfront premium based on the actual cost incurred for the facilities to be handed over to BOT operator. The valuation by Registered Govt. Valuer is being obtained. the value whichever is higher will be incorporated by KPT.

9.1. As discussed in the preceding paragraph, the KPT has revised its proposal of August 2011. This has led to changes in the Capital cost, operating cost and Revenue requirement when compared with the KPT's earlier proposal of August 2011.

- (i). The Optimal Capacity of Excavators has been maintained at 3.29 Million Metric Tonnes Per Annum (MMTPA), based on 3 nos. of Excavators and the Optimal Capacity of Floating Crane has been maintained at 3.09 MMTPA, based on 1 no. of Floating crane.
- (ii). Capital Cost:
 - (a). As against the estimated total civil capital cost (excluding berth) of `3196.19 lakhs in the August 2011 proposal, the civil capital cost (excluding berth) estimated in the proposal of April 2012 is `2951.35 lakhs, as detailed below:

(` in lakhs)

Particulars	Capital cost estimation in the August 2011 proposal	Capital cost estimation in the April 2012 proposal
Cargo Handling Activity		
Civil Cost		
(a). RCC work Dismantling	0.06	0.06
(b). Temporary Fencing Wall	41.72	41.72
(c). Asphalt Paving	19.88	19.88
(d). Development of the backup area (Civil Works)	2564.96	2331.78
(e). Ancillary Infrastructure Works	100.00	100.00
(f). DPR Preparation	37.50	37.50
(g). Upfront payment to KPT (for stacking area, SWD, roads, fencing wall replacement and water supply line)	279.87	279.87
(h). Miscellaneous Cost @ 5%	152.20	140.54
	3196.19	2951.35

- (b). As against the estimated total berth cost of `2001.96 lakhs in the August 2011 proposal, the berth cost estimated in the proposal of April 2012 is `2247.15 lakhs, as detailed below:

(` in lakhs)

	Capital cost estimation in the August 2011 proposal	Capital cost estimation in the April 2012 proposal
Capital cost for construction of berth		
Pile Foundation	552.70	686.92
Super structure	228.86	325.20
Bollards and Fenders	8.51	11.46
Upfront payment to KPT (for south wharf and its extension)	531.56	531.56
DPR preparation	37.50	37.50
Capital Dredging	547.50	547.50
Miscellaneous Cost @ 5% of above costs	95.33	107.01
	2001.96	2247.15

- (c). Thus, the details of the total project cost as estimated in the August 2011 proposal vis-à-vis the project cost as estimated in the proposal of April 2012 is given below:

Sl. No.	Particulars	Estimates in the August 2011 proposal	Estimates in the April 2012 proposal
A.	Cargo handling of multipurpose cargo at Bunder basin (for vessels not using floating crane at Outer Tuna Bay (OTB))		
	Civil Cost excl. Berth cost	3196.19	2951.35
	Equipment cost at Barge jetty	3261.93	3261.93
		6458.12	6213.28
B.	Capital cost of Floating crane at OTB	2499.00	2499.00
C.	Capital cost of Berth	2001.96	2247.15
D.	Project cost	10959.08	10959.43

As seen above, though there are changes in the civil cost and the berth cost, the total project cost is almost the same.

- (iii). There is a change in the estimates of operating cost, as given below:

(` in lakhs)

Sl. No.	Particulars	Estimates in the August 2011 proposal	Estimates in the April 2012 proposal
(a).	For Excavators	2526.50	2563.06
(b).	For Berth Hire	599.65	612.75

- (iv). The change in the estimates of Revenue Requirement is as follows:

(` in lakhs)

Sl. No.	Particulars	Estimates in the August 2011 proposal			Estimates in the April 2012 proposal		
		Excavators	Floating Cranes	Berth hire	Excavators	Floating Cranes	Berth hire
(i).	Operating Cost	2526.50	1035.42	599.65	2553.06	1035.42	612.75
(ii).	ROCE @ 16%	1033.30	399.84	320.31	994.13	399.84	359.54
(iii).	Total Revenue Requirement	3559.80	1435.26	919.96	3547.19	1435.26	972.29

- (v). The above mentioned change in the Revenue Requirement has lead to a meager variation in the upfront tariff proposed by the port in April 2012 when compared to the upfront tariff proposed in the August 2011 proposal of KPT.

9.2. The proposal of April 2012 has been circulated to the users/ prospective bidders seeking their comments by 10 May 2012. No response from the users/ prospective bidders has been received.

10. 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>.

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

- (i). The proposal is to fix upfront tariff for all types of dry bulk cargo, break bulk cargo like steel and bagged cargo and timber and other break bulk cargo envisaged to be handled at the Barge handling facility at Bunder Basin of Kandla Port Trust (KPT) to be developed under Public Private Partnership (PPP) mode. The proposal is based on the Guidelines for upfront tariff fixation issued by the (then) Ministry of Shipping, Road Transport and Highways in February 2008.

It has already been clarified to KPT that as per clause 2.2. of the guidelines for upfront tariff setting for PPP projects of February 2008, the tariff caps to be prescribed now for various cargo/ services would not only be applicable to the proposed project at Bunder Basin but would also be applicable to all projects to be bid out subsequently for identical cargo/ services at the KPT during the next five years.

It is also clarified to the KPT that the upfront tariff fixed now is for the cargo operation at the Bunder basin with barges carrying the dry bulk cargo, break bulk cargo like steel and bagged cargo and timber and other break bulk cargo by using the Excavators and supporting facilities like Floating cranes at Outer Tuna Buoy (OTB). If this method of handling the said cargo at the Bunder basin formulated by KPT undergoes a change, tariff will have to be reviewed to capture the change in the method, if any.

- (ii). The KPT has filed its proposal in August 2011. Subsequently, based on the information/ clarifications sought by us during the processing of the case and based on the discussions held during the joint hearing on 5 January 2012, the KPT under cover of its letter dated 20 April 2012 has forwarded a revised proposal, as explained earlier. The revised proposal of the KPT dated 20 April 2012 along with the information/ clarifications furnished by KPT during the proceedings of the case are considered in this analysis.
- (iii). The proposal of the port is for handling different types of cargo brought by barges with the help of excavators and accompanied equipment at Bunder Basin and also to provide floating crane at OTB. The KPT has stated to have adopted the norms prescribed in the Upfront Guidelines for the multipurpose berth. Though the upfront tariff guidelines of 2008 prescribe norms for handling the multipurpose cargo, the norms are with reference to the deployment of Electric Level Luffing

(ELL) cranes and different set of equipment. Further, no explicit norms for floating cranes are available in the Guidelines. Clause 3.2 of the Guidelines permit this Authority to make necessary adjustments in the norms based on the justification to be furnished by the concerned port trust keeping in view the port specific conditions.

The KPT has envisaged this project to attract new business of barge handling due to draft limitations at Bunder basin. As such, the higher capacity vessels like Panamax and Capesize would be anchored at Outer Tuna Buoy (OTB) and Floating crane is stated to be essential to unload and load the cargo into the barges from large size mother vessels at OTB to bring the cargo to the barge jetty. Based on the position explained by KPT, the equipment proposed to be deployed at the barge jetty and the OTB, though they are different from the ones prescribed to be deployed in the upfront guidelines for multipurpose berth, is taken in to account in this analysis. Based on the justifications and analysis furnished by KPT, the relevant norms are considered.

In this context, it is relevant to mention here that though the upfront guidelines prescribe deployment of ELL cranes at the multipurpose berth, deployment of Harbour Mobile Cranes (HMC) in lieu of ELL Cranes have been adopted in fixation of upfront tariff at some other major port trusts like Visakhapatnam Port Trust (VPT), Paradip Port Trust (PPT), VO Chidambaranar Port Trust (VOCPT), New Mangalore Port Trust (NMPT) and Kolkata Port Trust (KOPT) for cargo operations.

(iv). Optimal capacity:

(a). Barge handling Facility:

- (i). KPT has asserted the optimal capacity of the Bunder Basin facility at 3.29 million tonnes per annum based on the handling rate of cargo by 3 nos. of excavators. No explicit norm is prescribed in the Guidelines for the Excavators. By considering 100 moves per Excavator per hour with a load factor of 70% and by equating 4.5 cum bucket capacity of one excavator to 1 tonne per cum and based on operating hours of 16.8 hours per excavator per day, the KPT has arrived at the handling rate of dry bulk cargo at 15876 tonnes per day by 3 excavators. The parameters considered are reportedly based on the rated capacity of the equipment and actual performance. By considering the ratio of handling rate of dry bulk cargo, Steel and other cargo as prescribed in the Upfront Guidelines for multipurpose berth, the KPT has arrived at the handling rate of steel and bagged cargo at 8467 tonnes per day and the handling rate of timber logs at 5292 tonnes per day.
- (ii). The KPT has confirmed that a maximum of 3 nos. of Excavators can be deployed at Bunder basin, considering the technical parameters like wharf length, layout, cargo mix, positioning of barges with respect to the shape of the wharf. Further, the KPT has stated that even the port users have opined that the tidal restrictions may limit the cargo volumes to those which can cater maximum 3 nos. of Excavators.

Though the KPT has determined the optimal capacity of the barge handling facility at Bunder Basin based on 3 nos. of excavators for the purpose of estimating the capital cost and operating cost of the excavators, the KPT has considered 4 nos. of excavators. The KPT has stated to have considered an additional excavator in the capital cost and operating cost estimation, based on the recommendations of the bidders and concerned officials as back up equipment in case there is break down of any of the three excavators working in the jetty. The KPT has further stated that

when the additional excavator would not be working on the jetty, it would be used in stack yard/ back up area.

In this context, it is relevant to mention here that no additional ship-shore equipment has been considered over and above the ones required to handle the capacity of the terminal on the ground of providing cushion for any contingency like break down and repairs and maintenance etc. in any other cases relating to fixation of upfront tariff cases of various projects of the various major port trusts. Tariff fixing proceeds on a normative basis irrespective of the actuals.

The KPT has further stated that incase of non-working of the additional excavator on the jetty, it would be used in stack yard/ back up area. In this regard, it is relevant to mention here that over and above the 3 excavators proposed to be deployed at the jetty, the KPT has proposed to deploy 3 other excavators in the stack yard also.

It may be recalled that while fixing upfront tariff for the project of construction of Outer terminal - I riverine jetty of Kolkata Port Trust (KOPT), the proposal of the port to have a cushion in the requirement of additional trucks to move the cargo was agreed to, as it was ancillary equipment and not directly contributing to terminal capacity. The KPT has, however, not furnished any other technical analysis justifying the requirement of 4 excavators at the barge handling facility.

In view of the above, the capital cost and operational cost of the additional excavator is not considered, particularly when the additional excavator would not contribute towards the capacity of the barge handling facility.

- (iii).
 - (a). As per the formula prescribed in the guidelines, the factor of 70% is to be applied only once for determining the optimal capacity. For arriving at the optimal capacity of the barge handling facility, the KPT has applied the factor of 70% at three stages. First, as the load factor on number of moves per hour per excavator (i.e. 100 moves * 70%), second in the operating hours (i.e. 24 hours * 70% = 16.8 hours) and third in the overall capacity calculation as prescribed in the norms.
 - (b). When asked to justify the position, the KPT has not furnished a categoric reply. The norms do not allow separate cushion in each of the parameters relevant for determining the capacity. However, considering that the Feasibility Report mentions that 70% is the maximum possible volume that can be lifted by an excavator in a single move, the position is relied upon. In this regard, it is noteworthy that incase of fixation of upfront tariff for the mechanized iron ore handling at WQ-1 berth of VPT vide Order no.TAMP/32/2010-VPT dated 29 November 2010, equipment efficiency factor was reckoned to factor the time taken for operational requirements (over and above the norm of 70% prescribed in the guidelines). As confirmed by KPT, 100 moves per hour is the rated capacity provided by suppliers and 70% of such rated capacity is taken as the working capacity in the calculation to derive optimal capacity of the terminal. This is done in the absence of any productive norm prescribed in the guidelines for Excavators.

(c). The upfront tariff guideline is very categorical about considering operating hours at 24 hours per day. The KPT has not furnished any technical justification towards considering 16.8 operating hours per day and has merely stated that it is based on working hours possible with favorable tidal conditions. At the same time, it is noteworthy that the KPT has estimated huge costs towards continuous maintenance dredging (discussed in the later part of the analysis) to maintain draft. Further, it is to be noted that the proposed facility will handle only barges which may not require greater depths. Notably, even in the case of fixation of upfront tariff for the Dry Bulk Terminal off Tekra near Tuna at Port of Kandla vide Order no.TAMP/42/2009-KPT dated 17 August 2010, as well as in the case of fixation of upfront tariff for the multipurpose cargo berths no.13 to 16 at KPT, the KPT had not sought any concession in its operating hours citing tidal restrictions. In view of the above position, no separate allowance in the operating hours is allowed while determining the capacity.

(iv). By considering 100 moves per Excavator per hour with a load factor of 70% and based on operating hours of 24 hours per excavator per day, the handling rate of dry bulk cargo works out to 22680 tonnes per day by 3 excavators. By considering the ratio of handling rate of dry bulk cargo, Steel and other cargo as considered by KPT, the handling rate of steel and bagged cargo works out to 12095 tonnes per day and the handling rate of timber logs works out to 7559 tonnes per day.

It is noteworthy that the deployment of 3 excavators in lieu of 3 ELL cranes at the barge jetty has resulted in considering a higher handling rate of dry bulk cargo, steel and bagged cargo and timber logs when compared with the handling rate of dry bulk cargo, steel and bagged cargo and other cargo as prescribed in the Upfront guidelines for the multipurpose berth.

(v). The cargo mix of 71.29%, 1.70% and 27.01% of dry bulk cargo, steel and bagged cargo and timber logs respectively considered in the calculation of optimal capacity is reportedly based on the actual cargo handled at the KPT through barges during the last three years i.e. 2008-09 to 2010-11.

(vi). Thus, based on the percentage of cargo mix and the individual handling rate of dry bulk cargo, steel and bagged cargo and timber logs, the optimal capacity of the barge handling facility at Bunder Basin works out to 4.71 million tonnes per annum at 70% utilization, as against 3.29 million tonnes per annum assessed by KPT.

(b). Floating Crane at Outer Tuna Buoy (OTB):

(i). Deployment of Floating crane is envisaged to carry out cargo handling operations at OTB through barges. The Feasibility Report justifies deployment of one Floating crane to cater to the demand of non-geared vessels in future. No separate norms are available in the Guidelines for working of Floating cranes.

(ii). KPT has assessed the optimal capacity of the floating crane at 3.17 million tonnes per annum. By considering the handling rate of dry bulk cargo at 1300 tonnes per day with a load factor of 70% and based on operating hours of 16.8 hours per crane per day, the KPT has arrived at the handling rate of dry bulk cargo at

15288 tonnes per day. Applying the ratio of handling rate of dry bulk cargo, Steel and other cargo as prescribed in the Upfront Guidelines for multipurpose berth, the KPT has arrived at the handling rate of steel and bagged cargo at 8153 tonnes per day and the handling rate of timber logs at 5096 tonnes per day.

- (iii). For arriving at the optimal capacity of the floating crane, the KPT has provided for the cushion factor of 70% at three stages.

Since the handling rate of 1300 tonnes per hour for dry bulk is as claimed by the suppliers, a load factor of 70% is considered in the capacity calculation, for the reasons given earlier in the case of excavators. However, no separate allowance in the operating hours is considered in the capacity calculation, for the reasons given earlier.

- (iv). By considering 1300 moves per hour with a load factor of 70% and based on operating hours of 24 hours per day, the handling rate of dry bulk cargo by floating cranes works out to 21840 tonnes per day. By considering the same ratio of handling rate of dry bulk cargo, Steel and other cargo as considered by KPT, the handling rate of steel and bagged cargo works out to 11640 tonnes per day and the handling rate of timber logs works out to 7272 tonnes per day.
- (v). Thus, based on the percentage of cargo mix and the individual handling rate of dry bulk cargo, steel and bagged cargo and timber logs, the optimal capacity of the floating crane works out to 4.53 million tonnes per annum at 70% utilization.
- (c). The Upfront Guidelines for the multipurpose berth do not require assessment of the yard capacity separately. Nevertheless, the KPT was requested to justify the area of backup land proposed to be allotted with reference to the different types of cargo to be handled and their dwell time. In this regard, the KPT has stated that it has calculated storage area requirement at 12 hectares as per the current operations in KPT for multipurpose cargo. The KPT has also stated that around 2.5 to 3 hectares of land is required for a capacity of about 1 MMTPA, though no analysis to establish this assumption is furnished. The area requirement of 12 hectares of land is relied upon in the analysis.

(v). Capital Cost:

(a). Barge handling facility:

(i). Civil cost:

- (a). The upfront tariff guidelines require to consider the civil cost as per the estimates given by the Port Trust. The KPT has furnished the rate analysis for major of the items of civil cost like temporary fencing wall, asphalt paving and development of backup area, which is relied upon. An arithmetical mistake noticed in the calculation is rectified in the estimation of cost for developing backup area. Items of civil cost like RCC work dismantling and ancillary infrastructure works are considered at lumpsum by KPT.
- (b). The port has included DPR cost at `37.50 lakhs under the civil cost estimated for cargo handling. In spite of a specific request to explain the nature and the basis of the said expenditure, the KPT has not responded. The upfront guidelines provide for recognising 5% of the

capital cost towards miscellaneous cost to accommodate various other expenses not specifically accommodated in the civil and equipment cost estimates. Therefore, the cost of DPR is to be taken as part of the miscellaneous cost and hence, not considered separately in the civil cost estimates.

- (c). The KPT has considered upfront payment as an item of capital civil cost. The said upfront payment represents the recovery of the cost of civil works like stacking area, SWD, roads, fencing wall replacement and water supply line, already incurred by KPT and which is to be handed over to the BOT operator. The KPT has confirmed that the cost of the assets to be handed over to the BOT operator is as per the current market rates.

When the KPT was requested to relook at the valuation of the facilities proposed to be handed over to the BOT operator and to certify that method of valuation adopted by it conforms to the Government instructions, the KPT has categorically replied that there are no guidelines prescribed by the Government and that it has considered the upfront premium based on the actual cost incurred for the facilities. The KPT has further stated that the valuation by Registered Government Valuer is being obtained and the higher value will be incorporated by KPT.

The KPT has not furnished the Valuation Report till the finalization of the case. It is not clear as to how a different value of assets could be factored at a later stage by KPT. In this case, the values reported by KPT are relied upon.

- (d). The KPT has considered miscellaneous capital cost @ 5% of the estimated civil cost and 5% of the estimated equipment cost separately, instead of estimating Miscellaneous capital cost @ 5% of the total of the estimated civil and equipment as prescribed in the Upfront tariff guidelines of 2008. This position is relied upon in the analysis.

(ii). Equipment cost:

- (a). As stated earlier, the configuration of equipment proposed to be deployed by the KPT at the barge handling facility is relied upon. The KPT has proposed the use of 4 numbers of 4.5 cum excavators, 4 numbers of 5MT Fork lifts, 2 nos. of 10MT forklifts, 9 nos. of 10MT Pay loaders and 3 nos. of excavators for cargo handling at the backup area.

It is noteworthy that Clause 3.2. of the guidelines for upfront tariff setting gives flexibility to this Authority to make necessary adjustment in the norms based on the justification furnished by the port in view of the port's specific conditions having impact on the norms prescribed in the guidelines. In view of clarification furnished by the KPT and also recognizing that none of the users/ bidders has raised any objection on the complement of the equipment proposed by KPT, this Authority is inclined to consider the equipping plan and accept the estimates of numbers of the above said equipment, subject to the discussion below.

- (b). It may be recalled that though the KPT has determined the optimal capacity of the barge handling facility based on 3 nos. of excavators, for the purpose of estimating the capital cost and operating cost of the excavators, the KPT has considered 4 nos. of excavators. For the reasons brought out earlier, deployment and the cost of 3 excavators at the jetty at Bunder Basin only are considered in this analysis.
- (c). The KPT has furnished budgetary quotation with reference to the cost of the one Excavator at 810000 Euros. Custom duty after EPCG benefit has been considered in case of excavators. The transportation cost considered is also supported by the quotation.

Generally, while deciding the upfront cases, the exchange rate prevailing at the time of finalization of the case is considered to update the cost of imported equipment. In spite of a specific request to update the cost of the Excavators based on the prevailing exchange rate, the KPT has not updated the cost of the Excavators on the ground that it is better to take average of the fluctuating currency rate for conversion. The cost of Excavator estimated by the KPT is, therefore, updated and considered at around `6.07 Crores per machine on account of considering the exchange rate of `69.131 per Euro prevailing at the time of analysis of this case. Thus, the estimated cost of three excavators work out to about `18.21 Crores.

- (d). The cost of 5MT Forklift trucks, 10MT Forklift trucks and 10MT Payloaders are not supported by any documentary evidence. However, the unit cost of each type of equipment considered by the KPT is found comparable to the cost of the similar equipment considered in the cases relating to some other major ports like Visakhapatnam Port Trust (VPT) (Case no.TAMP/39/2008-VPT dated 12 February 2009 fixing upfront tariff for multipurpose handling) and Paradip Port Trust (PPT) (Case no.TAMP/43/2009-PPT dated 19 January 2010 fixing upfront tariff for multipurpose cargo handling). In view of the above, the capital cost of each of the above mentioned equipment as furnished by the KPT is considered in the analysis.
- (e). The KPT has furnished quotation with reference to the cost of the Excavator to be used for handling cargo at the stack yard at `29 lakhs. Excise duty and sales tax component have been added by KPT to the unit cost of excavator, as reflected in the Quotation. Thus, the cost of 3 excavators works out to around `1 crore.
- (f). Though the cost of other equipment like Firefighting, Electrification and Weigh bridge are not supported by any documentary proof, the estimates are as per the Feasibility Report furnished by the KPT.
- (g). The KPT has considered upfront payment as an item of capital equipment cost. The said upfront payment represents the recovery of the cost of Firefighting, Electrification and Weigh bridge from the BOT operator. For the reasons stated earlier, the amount of upfront

payment receivable by the port considered as part of the Equipment cost by KPT is relied upon in the analysis.

- (h). For the reasons explained earlier, Miscellaneous cost @ 5% of the equipment cost considered by KPT is relied upon.

(b). Floating crane at OTB:

- (i). The KPT has furnished quotation with reference to the cost of the one Floating crane at 1800000 Euros. The cost of pedestal, genset, grabs and transportation cost considered is also supported by the quotation. Custom duty after EPCG benefit has been considered in case of Floating crane. Generally, while deciding the upfront cases, the exchange rate prevailing at the time of finalization of the case is considered to update the cost of imported equipment. In spite of a specific request to update the cost of the Floating crane based on the prevailing exchange rate, the KPT has not updated the cost of the Crane on the ground that it is better to take average of the fluctuating currency rate for conversion. The cost of Floating crane estimated by the KPT is updated and considered at around `17.68 Crores on account of considering the exchange rate of `69.131 per Euro prevailing at the time of analysis of this case.
- (ii). The capital cost of Floating crane includes the cost of dumb barge and tugs. The KPT has furnished quotation with reference to the cost of the dumb barge at `4.77 crores and of that of tug at `2.61 crores. The service tax component and the vessel registration charges is also supported by the quotation.
- (iii). Based on the updation of cost of the Floating crane on account of the exchange rate, as explained above, the total cost of the Floating crane is considered at `26.03 crores.
- (iv). For the reasons explained earlier, Miscellaneous cost @ 5% of the equipment cost considered by KPT is relied upon.

(c). Berthing activity:

- (i). The upfront tariff guidelines requires the port to estimate the civil cost. The KPT has not furnished any rate analysis for any of the civil work proposed to be carried out for the berthing activity. As such, the items of civil cost are considered at lumpsum as given by KPT.
- (ii). The KPT has estimated cost of Capital dredging alongside the jetty at `5.48 crores. In spite of a specific request, the KPT has not furnished documentary evidence to support the unit rate of `535/- per cum. Since the rate is supported by the Feasibility Report and also since the users/ prospective bidders have not raised any objection with regard to the rate adopted for capital dredging, this Authority relies upon the capital dredging estimate of `5.48 crores furnished by the port.
- (iii). The amount of upfront payment receivable by the port from the BOT operator towards the cost incurred by KPT for construction of south wharf and its extension is not based on the Valuation Report and is reported to be the actual cost incurred by KPT. For

the reasons stated earlier, the amount of Upfront payment as estimated by the port is relied upon in the analysis.

- (iv). For the reasons stated earlier, the cost of DPR preparation is to be taken as part of the 5% miscellaneous cost allowed in the capital estimates and hence, not considered separately in the analysis.
- (v). As stated earlier, Miscellaneous cost @ 5% of the equipment cost considered by KPT is relied upon.
- (vi). Return on capital employed is calculated at 16% of the estimated revised capital cost, as per the norms prescribed in the guidelines.
- (vii). Operating Cost:

(a). Barge handling facility:

(i). Fuel cost:

- (a). The KPT has considered 4292 operating hours to determine the fuel cost for each type of equipment. KPT has stated that working of 4292 hours ($=365 \times 24 \times 70\% \times 70\%$) is being considered based on available working hours with favorable tidal conditions and has further stated that 4292 hours is justifiable considering 4000 working hours as per Upfront guidelines.

For the reasons explained in assessment of optimal capacity, the working hours is considered at 6132 hours (i.e. $365 \text{ days} \times 24 \text{ hours} \times 70\%$) for estimating the fuel cost for each type of equipment.

- (b). The fuel consumption of 32 litres per hour per excavator, 7 litres per hour per 5MT forklift truck, 10 litres per hour per 10MT forklift truck, 12 litres per hour per 10MT payloader and 12 litres per hour per excavator at backup area and fuel cost of ₹15 per tonne for trucks and trailers is not justified by any analysis. The KPT has stated that the fuel consumption is based on the empirical observation and discussion with the manufacturers and based on actual consumption.

Fuel consumption of 5MT forklift truck, 10MT forklift truck and 10MT payloader considered by KPT is as per the norms prescribed in the upfront guidelines of 2008 and hence considered in the analysis.

With regard to other equipment, in the absence of requisite details and taking into account the position that KPT has confirmed that the fuel consumption is based on the discussion with the manufacturers and also that there is no objection from the users with regard to the fuel consumption considered by KPT, this Authority is constrained to rely upon the fuel consumption considered by KPT for the other equipment.

The unit rate of diesel considered by KPT is updated with reference to the rate of diesel prevailing at the time of finalization of the case at ₹46.25 per litre.

(ii). Power cost:

Power cost has been estimated by the port with regard to the illumination of the 12 hectares of land reportedly based on the power consumption as per the prevalent norms per hectare of 240000 units per hectare per annum at the rate of `7 per unit.

It is relevant to mention here that the norm for power consumption of 2.4 lakhs units per annum per hectare adopted by the KPT is the power consumption norm prescribed in the guidelines for fixation of upfront tariff for liquid bulk terminal. In this regard, the KPT has stated that since the illumination requirement would have to be considered, the guidelines for liquid terminal have been referred as the purpose is the same here.

The Upfront tariff guidelines for the multipurpose berth do not prescribe norms towards consumption of power for illumination of the yard. Nevertheless, illumination of the yard is essential. The power consumption of 240000 units per hectare per annum as considered by KPT by borrowing the norms prescribed in the upfront tariff guidelines for the liquid bulk terminal is, therefore, relied upon in the analysis.

The documentary evidence furnished by KPT to support the unit cost of power at `7 per unit is only an interdepartmental memo. However, it is relevant to mention here that the unit cost of power at `7 per unit was considered while fixation of upfront tariff for the Dry Bulk Terminal off Tekra near Tuna at Port of Kandla vide Order no.TAMP/42/2009-KPT dated 17 August 2010 and hence considered in the analysis.

- (iii). Repairs and maintenance cost on civil work is estimated by KPT at 1% on the civil cost and 5% on mechanical equipment and electrical equipment cost, which is in line with the norms prescribed in the guidelines.
- (iv). Insurance cost is estimated at 1% of the gross fixed assets and other expenses are estimated at 5% of the gross value of fixed assets by KPT, which is in line with the norms prescribed in the guidelines.
- (v). Depreciation is computed @ 3.34% on civil cost and 10.34% on equipment cost as per the rates prescribed in the Companies Act, 1956 under the Straight Line Method for the relevant group of assets and is in line with the guidelines for upfront tariff fixation.
- (vi). The guidelines of 2008 require estimation of license fee based on the rates prescribed in the Scale of Rates of the respective Major Ports. The unit rate adopted by the port for estimating the license fee pertains to storage of cargo at open space (pucca plots and kutchha plots) for stay beyond 180 days and is in nature of demurrage charge.

It is relevant to mention here that while fixation of upfront tariff for the Dry Bulk Terminal off Tekra near Tuna at Port of Kandla vide Order no.TAMP/42/2009-KPT dated 17 August 2010, License fee for the land area was based on the rate of storage fees on general cargo for occupation beyond 180 days as prescribed in the existing SOR of Kandla Port, as no separate lease rental was approved for KPT estate at that point of time.

Thereafter, this Authority vide its Order dated 25 March 2011 for the first time fixed lease rentals for the lands of KPT, for three cycles commencing from July 1999, January 2004 and January 2009 respectively.

Subsequently, in the fixation of upfront tariff for mechanization of Dry Cargo Berth Nos.7 and 8 at the KPT vide Order no.TAMP/8/2011-KPT dated 29 June 2011, the lease rental prescribed for the lands of KPT vide Order dated 25 March 2011 was applied.

It is ascertained from KPT that the lease rental prescribed for the category 'land having water front and upto half mile from shore i.e. the west bank of Kandla creek' is relevant for determining the licence fee for the project at Bunder basin. The lease rental prescribed for the said area in the said Order is `110.40 per sq. m. per annum with effect from 1 January 2009 subject to annual escalation of 2%. The license fee in the instant case is estimated adopting the rate of `117.16 per sq. m. per annum by applying annual escalation of 2% to arrive at the 2012 rate. Accordingly, lease rentals are estimated for the 12000 hectares of land.

Licence fee for the water area of 1.437 hectares is considered at 50% of the above mentioned licence fee, as stipulated Clause 6.2.2.3 (k) of the Land Policy Guidelines of 2010.

- (b). Floating crane at OTB:
 - (i). Fuel cost:
 - (a). The KPT has considered a fuel consumption of 154 litres per TEU. The fuel consumption is not supported by any documentary evidence. In this context, it is relevant to mention here that while recently disposing the proposal received from Mormugao Port Trust (MOPT) for fixation of Cargo Handling Charges for transhippers/ floating cranes vide Order no.TAMP/30/2011-MOPT dated 2 May 2012, the fuel consumption of Floating Crane was considered at 96 litres per hour during working hours and 12 litres per hour during idle hours respectively. According to MOPT, even during idle hours, the generators installed on the crane has to work round the clock for providing lighting for crew accommodation, safety light, and air conditioning, etc. In the absence of the requisite information, this Authority relies upon the fuel consumption for the floating crane as considered in the case of MOPT.
 - (b). In the absence of requisite details, this Authority is constrained to rely upon the fuel consumption of 100 litres per hour per tug considered by KPT in its calculations.
 - (ii). Repairs and maintenance cost is estimated by KPT at 5% on the cost of Floating cranes, which is in line with the norm of considering repairs and maintenance cost at 5% of the cost of equipment.
 - (iii). Insurance cost is estimated at 1% of the cost of Floating cranes, which is in line with the norm of considering insurance cost at 1% of the cost of equipment.

- (iv). Depreciation is computed @ 10.34% on the cost of Floating cranes as per the rates prescribed in the Companies Act, 1956 under the Straight Line Method and is in line with the norm of calculating depreciation as per the Companies Act of the cost of equipment.

(c). Berthing activity:

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

The operating cost estimated by KPT in the Berthing activity comprises of Insurance cost at 1% of the berth cost and depreciation @ 3.34% of the berth cost apart from the prescribed norm of 1% towards maintenance.

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

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

- (ii). Further, in the operating cost estimation for the berthing activity, there is an element of maintenance dredging cost estimated at 90% of the capital dredging cost. The justification furnished by the port is that heavy siltation is expected at the side of the Bunder Basin due to the location and structure of the barge of the jetty, which would lead to heavy accumulation of the material. As such, this accumulation needs to be dredged continuously to avoid draft restriction.

As stated earlier, the cost for capital dredging has been considered at the rate of `535/- per cubic metre. The cost of maintenance dredging at 90% of the capital dredging cost thus works out to around `482/- per cubic metre. In view of the justification furnished by the port and also since the Feasibility Report concurs with the said position, this Authority considers the cost of maintenance dredging as furnished by the port. It is noteworthy that while fixation of upfront tariff for the Dry Bulk Terminal off Tekra near Tuna at Port of Kandla vide Order no.TAMP/42/2009-KPT dated 17 August 2010, maintenance dredging expenditure alongside the jetty and approach channel has been estimated at `265/- per cubic metre.

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

- (a). The annual revenue requirement for the Barge handling facility at Bunder Basin is estimated at `3752.79 lakhs which is the sum of the operating cost and return on capital employed as against `3547.17 lakhs estimated by the port.

Similarly, the annual revenue requirement for the floating crane at OTB is estimated at `1590.96 lakhs which is the sum of the operating cost and return on capital employed as against `1435.26 lakhs estimated by the port.

- (b). In line with the guidelines for multipurpose cargo terminal, 90% of the total revenue requirement has been apportioned towards handling charge, 5% each towards storage charge and miscellaneous charge, by KPT incase of barge handling facility as well as the floating crane at OTB.
- (c). The upfront tariff caps for the barge handling facility and floating crane are determined so as to meet the estimated revenue requirement to operate the terminal at the optimal capacity at barge handling facility and with the help of floating cranes at OTB. It is relevant to mention here that the cost for the barge handling facility includes the cost of Weigh Bridge also. However, the KPT has not categorically specified as to which upfront tariff component would bear the cost of Weigh Bridge. Since the upfront tariff for each service is calculated to meet the apportioned revenue requirement from the said service, it may not be inappropriate to include the provision for rendering of the service of the Weigh Bridge in either cargo handling or miscellaneous charges. For convenience, charges for the use of Weigh Bridge is considered as part of the Miscellaneous charge.
- (d). As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) not exceeding 60% of the normal cargo/ vessel related charges. Accordingly, the KPT has proposed concessional rates for coastal cargo in line with the Government policy, assuming the share of foreign and coastal cargo in the total optimal capacity as 90% and 10% respectively for each of the three cargo groups. The port has clarified that the share of coastal/ foreign cargo assumed by it is based on the cargo profile of the Kandla Port Trust. The share of foreign/ coastal cargo assumed by the port is relied upon in this analysis. The KPT has arrived at the handling rate for each cargo category with reference to their individual composition of foreign/ coastal cargo to meet the estimated revenue requirement. The approach followed by the KPT is in line with the approach followed for the fixation of upfront tariff for mechanization of Dry Cargo Berth Nos.7 and 8 at the KPT vide Order no.TAMP/8/2011-KPT dated 29 June 2011.
- (e). In the proposed Scale of Rates, the KPT has envisaged 5 free days in respect of import cargo and 15 free days in respect of export cargo which is in line with the Guidelines. KPT has estimated that 60% of the total cargo would be cleared within the free days and the balance 40% of the total cargo handled at the barge jetty would attract storage charges. Further, out of this cargo, 50% of the cargo is estimated to be cleared within the first week and the balance 50% is expected to remain in the second week. This leads to a position that out of the total cargo estimated to attract storage charges, 100% of the said cargo would attract storage charges in the first week and only 50% would remain in the port during the second week. The calculation furnished by KPT contains some inconsistencies in this regard and, therefore, revised to reflect the above said position. The rate so arrived at works out to `0.88 per tonne per day during the first week and `1.32 per tonne per day during the second week.
- (f). Based on the modified revenue requirement, the upfront tariff cap for miscellaneous charge is prescribed at `3.99 per tonne as against `5.38 per tonne proposed by the Port. The miscellaneous charge is a composite charge for providing all miscellaneous services related to handling of cargo.

- (g). The revenue requirement from berthing service is estimated at `963.89 lakhs instead of `972.29 lakhs estimated by the port. Accordingly, the KPT has worked out the berth hire charges for foreign going vessels and coastal vessels.

As per policy direction of the Government, concessional tariff is to be prescribed for coastal vessels not exceeding 60% of the corresponding charges for other vessels. For the said purpose, the status of a vessel as borne out by its certification is the relevant factor to decide whether a vessel is 'foreign-going' or 'coastal'. In the instant case, the foreign going vessel or coastal vessels would be handled at the OTB. At the Bunder Basin, for which the upfront berth hire charge is to be fixed, only the barges shuttling between the OTB and the Bunder Basin would be handled. Therefore, the question of prescribing berth hire charges for foreign going vessels and coastal vessels at the Bunder Basin does not arise. The working furnished by KPT to arrive at the berth hire charges is suitably modified to reflect this position. Accordingly, berth hire charge to be levied on the barges works out to `2.62 per GRT per hour or part thereof.

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.

- (ix). Definitions of some of the common terms like foreign going vessel, coastal vessel, per day, free period, tonne are included in upfront schedule in line with the definitions prescribed in the other upfront tariff cases.
- (x). Some of the common conditions stipulated in the guidelines of 2005 and uniformly prescribed in the Scale of Rates of other major ports/ private terminals and other upfront tariff cases such as users should not be required to pay charges for delays beyond reasonable level attributable to the private terminal operator, non-accrual of storage charge for the period when the operator is not in a position to effect deliver/ship the cargo when requested by user for the reasons attributable to the operator, etc. proposed by the KPT are incorporated in the upfront tariff schedule.
- (xi). The KPT has clarified that the BOT operator would be responsible for stevedoring operation at Bunder Basin and as such the proposed tariff includes the stevedoring charges at Bunder Basin similar to the arrangement prevailing at berths no.13 to 16. However, since the BOT operator would not be responsible for barge operation and stevedoring at OTB, the upfront tariff does not include the stevedoring charges at OTB.

Under the schedule of cargo handling charges for hire of floating cranes at OTB, the KPT has inserted a note to the effect that stevedoring charges shall be separately borne by the user/ vessel owner and the amount of stevedoring charges shall be paid to the service provider. Stevedores are licensed by the Port Trust to render the stevedoring services at the port. The note proposed by the port is modified to reflect the position that stevedoring charges shall be paid to the licensed stevedores who will provide the relevant service at OTB floating crane.

12.1. 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 May 2012, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2012. The note proposed by KPT in this regard is suitably modified.

12.2. 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.

12.3. 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.

12.4. 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.

12.5. The upfront tariff approved by this Authority is with reference to the use of excavators and floating cranes to be deployed by the BOT operator. If any change in the equipping plan considered in this analysis, the upfront tariff will have to be reviewed.

12.6. 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.

12.7. 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.

13. 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 dry bulk cargo, steel and bagged cargo and timber at the Bunder Basin of the Kandla Port Trust which is attached as **Annex - II.**

(Rani Jadhav)
Chairperson

UPFRONT TARIFF CALCULATION FOR UPGRADATION OF BARGE HANDLING FACILITY AT BUNDER BASIN AT KANDLA PORT TRUST

in lakhs				
Sr. No.	Particulars	Estimates furnished by KPT in its proposal of August 2011	Revised Estimates furnished by KPT in its proposal of April 2012	Estimates modified by TAMP
I	Optimal capacity of the Barge handling facility			
	Number of excavators (4.5 cum bucket capacity)	3	3	3
	Moves per hour per Excavator	100	100	100
	Operating load factor (Cargo lifted in a single move as percentage of maximum possible volume)	0.7	0.7	0.7
	Dry bulk cargo handled in one hour by three excavators	$(4.5 \text{ cum}) \times (1 \text{ Ton/cum}) \times 0.7 \times (100 \text{ moves/hour}) \times 3 = 945 \text{ Tonnes/hour}$	$(4.5 \text{ cum}) \times (1 \text{ Ton/cum}) \times 0.7 \times (100 \text{ moves/hour}) \times 3 = 945 \text{ Tonnes/hour}$	$(4.5 \text{ cum}) \times (1 \text{ Ton/cum}) \times 0.7 \times (100 \text{ moves/hour}) \times 3 = 945 \text{ Tonnes/hour}$
	Operating hours in a day	16.8 hours i.e. 24 hours $\times 0.7$	16.8 hours i.e. 24 hours $\times 0.7$	24 hours
	Handling Rate of 3 excavators			
	- Handling rate/day for bulk cargo	$(945 \text{ Tonnes/hour}) \times (16.8 \text{ hours}) = 15,876 \text{ Tonnes/day}$	$(945 \text{ Tonnes/hour}) \times (16.8 \text{ hours}) = 15,876 \text{ Tonnes/day}$	$(945 \text{ Tonnes/hour}) \times (24 \text{ hours}) = 22680 \text{ Tonnes/day}$
	- Handling rate/day for steel and bagged cargo	53.33% of 15,876 = 8467 Tonnes/day	53.33% of 15,876 = 8467 Tonnes/day	53.33% of 22680 = 12095 Tonnes/day
	- Handling rate/day for timber logs	33.33% of 15876 = 5,292 Tonnes/day	33.33% of 15876 = 5,292 Tonnes/day	33.33% of 22680 = 7559 Tonnes/day
	Percentage of cargo to be handled			
	- All kinds of Bulk Cargo	71.29%	71.29%	71.29%
	- Steel and Bagged cargo	1.70%	1.70%	1.70%
	- Timber Logs	27.01%	27.01%	27.01%
	Optimal Capacity of the Barge Jetty	$365 \times 0.7 \times (71.29\% \times 15,876 + 1.70\% \times 8,467 + 27.01\% \times 5,292) = 32,93,759 \text{ Tonnes}$	$365 \times 0.7 \times (71.29\% \times 15,876 + 1.70\% \times 8,467 + 27.01\% \times 5,292) = 32,93,759 \text{ Tonnes}$	$365 \times 0.7 \times (71.29\% \times 22680 + 1.70\% \times 12095 + 27.01\% \times 7559) = 47,05,256 \text{ Tonnes}$
	Thus, Optimal capacity of the Barge Jetty (in Million tonnes per annum)	3.29	3.29	4.71
II	Optimal Capacity of the Floating crane at Outer Tuna Buoy			
	Number of floating cranes	1	1	1
	Max per hour volume	1300 tonnes/ hour	1300 tonnes/ hour	1300 tonnes/ hour
	Operating Load factor	70%	70%	70%
	Dry bulk (tonnes/ hour)	910 tonnes per hour	910 tonnes per hour	910 tonnes per hour
	Break bulk (tonnes/ hour)	485 tonnes per hour	485 tonnes per hour	485 tonnes per hour
	Timber logs (tonnes/ hour)	303 tonnes per hour	303 tonnes per hour	303 tonnes per hour
	Operating hours in a day	16.8 hours	16.8 hours	24 hours
	Cargo handling ratio			
	Dry bulk	71.29%	71.29%	71.29%
	Break bulk	1.70%	1.70%	1.70%
	Timber logs	27.01%	27.01%	27.01%
	Cargo handling rates per day (tonnes/ days)			
	Dry bulk	15288 tonnes per day	15288 tonnes per day	21840 tonnes per day
	Break bulk	8153 tonnes per day	8153 tonnes per day	11640 tonnes per day
	Timber logs	5096 tonnes per day	5096 tonnes per day	7272 tonnes per day
	Optimal Capacity of the floating cranes	$365 \times 0.7 \times (71.29\% \times 15,288 + 1.70\% \times 8,153 + 27.01\% \times 5,096) = 31,71,768 \text{ tonnes}$	$365 \times 0.7 \times (71.29\% \times 15,288 + 1.70\% \times 8,153 + 27.01\% \times 5,096) = 31,71,768 \text{ tonnes}$	$365 \times 0.7 \times (71.29\% \times 21840 + 1.70\% \times 11640 + 27.01\% \times 7272) = 45,30,471 \text{ tonnes}$
	Optimal Capacity of the floating cranes (in Million tonnes per annum)	3.17	3.17	4.53
III	Capital Cost			
A.	Cargo Handling Activity at Barge Jetty			
	(i). Civil Cost			
	- RCC work Dismantling	0.06	0.06	0.06
	- Temporary Fencing Wall	41.72	41.72	41.72
	- Asphalt Paving	19.88	19.88	19.88
	- Development of the backup area (Civil Works)	2564.96	2331.78	2356.49
	- Ancillary Infrastructure Works	100.00	100.00	100.00
	- DPR Preparation	37.50	37.50	0.00
	- Upfront payment to KPT (for stacking area, SWD, roads, fencing wall replacement and water supply line)	279.87	279.87	279.87
	- Miscellaneous Cost @ 5%	152.20	140.54	139.90
	Total	3196.19	2951.35	2937.92

(ii). Equipment Cost			
- Excavators (4.5 cum) – 4 Nos by KPT, 3 Nos by TAMP.	2108.00	2108.00	1821.64
- Fork Lift Truck (5MT)- 4 Nos.	96.00	96.00	96.00
- Fork Lift Truck (10MT)- 2 Nos.	73.00	73.00	73.00
- Pay Loader (10MT)- 9 Nos.	328.50	328.50	328.50
- Excavators for cargo handling at backup area—3 nos.	100.22	100.22	100.31
- Firefighting	28.00	28.00	28.00
- Electrification	100.00	100.00	100.00
- Weighbridge	70.00	70.00	70.00
- Upfront payment to KPT (for firefighting, electrification and existing weighbridge)	202.88	202.88	202.88
- Miscellaneous Cost @ 5%	155.33	155.33	141.02
Total	3261.93	3261.93	2961.34
Total Capital Cost for Barge Jetty (i + ii)	6458.12	6213.28	5899.26
B. Floating crane at Outer Tuna Buoy			
- Floating Crane including dumped barge, tug and other required components - 1 No.	2380.00	2380.00	2602.88
- Miscellaneous Cost @ 5%	119.00	119.00	130.14
Total	2499.00	2499.00	2733.02
C. Berth Hire Activity			
- Pile Foundation	552.70	686.92	686.92
- Super structure	228.86	325.20	325.20
- Bollards and Fenders	8.51	11.46	11.46
- Upfront payment to KPT (for south wharf and its extension)	531.56	531.56	531.56
- DPR preparation	37.50	37.50	0.00
- Capital Dredging	547.50	547.50	547.50
- Miscellaneous Cost @ 5%	95.33	107.01	105.13
Total capital cost for Berth hire Activity	2001.96	2247.15	2207.78
Total Capital Cost (A + B + C)	10959.08	10959.43	10840.06
IV Operating Cost			
A. Cargo Handling Activity at Barge Jetty			
(a). Fuel Cost			
- Excavators	253.04	253.04	272.26
(KPT - 32 ltrs/ hour/ excavator* Rs.46.06 per litre * 4292 hours pa for 4 Excavators) (TAMP - 32 ltrs/ hour/ Excavator * Rs.46.25 per litre * 6132 hours pa for 3 Excavators)			
- Fork Lift trucks (5 MT)	55.35	55.35	79.41
(KPT - 7 ltrs/ hour/ truck * Rs.46.06 per litre * 4292 hours pa for 4 trucks) (TAMP - 7 ltrs/ hour /truck * Rs.46.25 per litre * 6132 hours * 4 Trucks)			
- Fork Lift trucks (10 MT)	39.54	39.54	56.72
(KPT - 10 ltrs/ hour/ truck * Rs.46.06 per litre * 4292 hours pa for 2 trucks) (TAMP - 10 ltrs /hour /truck * Rs.46.25 per litre * 6132 hours * 2 Trucks)			
- Pay Loaders (10 MT)	213.50	213.50	306.29
(KPT - 12 ltrs /hour/ loader * Rs.46.06 per litre * 4292 hours pa for 9 pay loaders) (TAMP - 12 ltrs /hour /loader * Rs.46.25 per litre * 6132 hours * 9 pay loaders)			
- Excavators (for handling backup cargo)	71.17	71.17	102.10
(KPT - 12 ltrs/ hour/ excavator * Rs.46.06 per litre * 4292 hours pa for 3 excavators) (TAMP - 12 ltrs/ hour/ excavator * Rs.46.25 per litre * 6132 hours * 3 excavators)			
- Trucks & Trailers	494.06	494.06	705.79
(KPT - Rs.15 per tonne) (TAMP - Rs.15 per tonne)			
(b). Power consumption	168.00	201.60	201.60
(KPT - 12 hectares * 240000 units per hectare/ annum @ Rs.7/-per unit)			
(c). Repair & Maintenance			
- Civil Assets (1% on civil work)	31.96	29.51	29.38
- Mechanical & Electrical Equipment including spares (5% on equipment cost)	163.10	163.10	148.07
(d). Insurance (1% on Gross fixed assets)	64.58	62.13	58.99
(e). Depreciation			
- Civil Work @ 3.34%	106.75	98.58	98.13
- Mechanical Work @ 10.34%	337.28	337.28	306.20
(f). License Fee			
As per KPT			
- On 7 hectares @ Rs.1.597 per hectare per month for 12 months)	116.64	134.15	-
- On 5 hectares @ Rs.1.260 per hectare per month for 12 months)	83.16	75.60	-
- On Water 1.437 hectares @ Rs.0.7985 per hectare per month for 12 months)	5.45	13.77	-
As per TAMP			
- On 120000 sq. mtrs @ Rs.117.16 per sq. mtr per annum	-	-	140.59
- On Water 14370 Sq. mtrs @ Rs.58.58 per sq. mtr per annum)	-	-	8.42
(g). Other Expenses (5% on gross value of assets)	322.91	310.66	294.96
Total Operating Cost for Barge Jetty	2526.49	2553.05	2808.91

B.	Floating crane at Outer Tuna Buoy			
(a).	Fuel Cost			
	- Floating crane	304.44	304.44	286.85
	(KPT - 154 ltrs/ hour/ crane * Rs.46.06 per litre * 4292 hours pa for 1 crane)			
	(TAMP - (For Working hours - 96 ltrs/ hour/ crane * Rs.46.25 per litre * 6132 hours pa for 1 Crane) + (For Idle hours - 12 ltrs/ hour/ crane * Rs.46.25 per litre * 2628 hours pa for 1 Crane))			
	- Tugs	197.69	197.69	283.61
	(KPT - 100 ltrs/ hour/ tug * Rs.46.06 per litre * 4292 hours pa for 1 tug)			
	(TAMP - 100 ltrs/ hour/ tug * Rs.46.25 per litre * 6132 hours * 1 Tug)			
	(b). Repair & Maintenance on Mechanical assets (5% on equipment cost)	124.95	124.95	136.65
	(c). Insurance (1% on Gross fixed assets)	24.99	24.99	27.33
	(d). Depreciation (10.34% on equipment cost)	258.4	258.40	282.59
	(e). Other Expenses (5% on equipment cost)	124.95	124.95	136.65
	Total Operating Cost for Floating crane	1035.42	1035.42	1153.68
C.	Berth hire activity			
(a).	Repairs & Maintenance Charge (1% on capital cost for berth)	20.02	22.47	22.08
(b).	Depreciation (3.34% of berth cost)	66.87	75.05	73.74
(c).	Insurance (1% on total cost for berth hire service)	20.02	22.47	22.08
(d).	Maintenance dredging (90% of the cost of capital dredging)	492.75	492.75	492.75
		599.66	612.75	610.65
V	Estimated Revenue Requirement & Apportionment			
A.	Cargo Handling Activity at Barge Jetty			
(i).	Revenue Requirement			
	(a). Total Operating Cost	2526.49	2553.05	2808.91
	(b). Return on capital Employed @ 16%	1033.30	994.12	943.88
	(c). Total Revenue requirement from cargo handling activity	3559.79	3547.17	3752.79
(ii).	Apportionment of Revenue Requirement			
	(a). Cargo Handling Charges (90% of ARR)	3203.81	3192.46	3377.52
	(b). Storage Charges (5% of ARR)	177.99	177.36	187.64
	(c). Miscellaneous Charge (5% of ARR)	177.99	177.36	187.64
	(d). Total Revenue requirement from cargo handling activity	3559.79	3547.17	3752.79
(iii).	Upfront tariff at Barge Jetty			
(a).	Cargo Handling Charge (Note 1)			
	- Revenue Requirement (` in lakhs)	3203.81	3192.46	3377.52
	- % share of Revenue requirement by each type of cargo based on cargo working days			
	- Bulk cargo (45.84%)	1468.74	1463.53	1548.37
	- Steel and bagged cargo (2.05%)	65.67	65.44	69.23
	- Timber logs (52.11%)	1669.40	1663.49	1759.91
	- Per tonne handling rate of foreign cargo (in Rs.)			
	- Bulk cargo	65.16	64.93	48.08
	- Steel and bagged cargo	122.18	121.74	90.16
	- Timber logs	195.47	194.78	144.26
	- Per tonne handling rate of coastal cargo (in Rs.)			
	- Bulk cargo	39.09	38.96	28.85
	- Steel and bagged cargo	73.31	73.04	54.09
	- Timber logs	117.28	116.87	86.55
	(b). Storage Charge (Note 3)			
	- Revenue Requirement (` in lakhs)	177.99	177.36	187.64
	- % of Cargo to attract storage charge	40%	40%	40%
	- Cargo attracting storage charges	1317492	1317492	1882102
	- Approximate % Cargo to be cleared in first week	50%	50%	50%
	- Storage charges for seven days	27.02	26.92	-
	- Storage charges for one day in first week (in Rs. Per tonne)	3.86	3.85	0.88
	(c). Miscellaneous Charge			
	- Revenue Requirement (` in lakhs)	177.99	177.36	187.64
	- Capacity (Lakh Tonnes per annum)	3293729	3293729	4705256
	- Miscellaneous Charge (` per tonne)	5.40	5.38	3.99

B.	Floating crane at Outer Tuna Buoy			
(i).	Revenue Requirement			
	(a). Total Operating Cost	1035.42	1035.42	1153.68
	(b). Return on capital Employed @ 16%	399.84	399.84	437.28
	(c). Total Revenue requirement from cargo handling activity	1435.26	1435.26	1590.96
(ii).	Apportionment of Revenue Requirement			
	Floating crane charges (100% of ARR)	1435.26	1435.26	1590.96
(iii).	Upfront tariff for Floating crane (Note 2)			
	- Revenue Requirement (in lakhs)	1435.26	1435.26	1590.96
	- % share of Revenue requirement by each type of cargo based on cargo working days			
	- Bulk cargo (45.8%)	657.97	657.97	729.35
	- Steel and bagged cargo (2.05%)	29.42	29.42	32.61
	- Timber logs (52.1%)	747.87	747.87	829.00
	- Per tonne handling rate of foreign cargo (in Rs.)			
	- Bulk cargo	30.33	30.33	23.51
	- Steel and bagged cargo	56.87	56.87	44.11
	- Timber logs	90.98	90.98	70.61
	- Per tonne handling rate of coastal cargo (in Rs.)			
	- Bulk cargo	18.20	18.20	14.11
	- Steel and bagged cargo	34.12	34.12	26.47
	- Timber logs	54.59	54.59	42.36
C.	Berthing activity			
(i).	Revenue Requirement			
	(a). Total Operating Cost	599.66	612.75	610.65
	(b). Return on capital Employed @ 16%	320.31	359.54	353.24
	(c). Total Revenue requirement from Berthing activity	919.97	972.29	963.89
(ii).	Apportionment of Revenue Requirement			
	Berth hire charges (100% of ARR)	919.97	972.29	963.89
(iii).	Upfront berth hire			
	- No. of Barges handled by excavators	4	4	4
	- Average GRT of Barge	1500	1500	1500
	- No. of available hours at the jetty (365 days * 24 hours * 0.7)	6132	6132	6132
	- Total GRT hours (4 barges * 1500 GRT * 6132 hours)	36792000	36792000	36792000
	- Berth hire charge (Rs. Per GRT hour)	2.50	2.64	2.62
	- GRT Hours Foreign (90%)	33112800	33112800	-NA-
	- GRT Hours Coastal (10%)	3679200	3679200	-NA-
	- Berth hire per GRT per hour for foreign vessel	2.60	2.75	-NA-
	- Berth hire per GRT per hour for coastal vessel	1.56	1.65	-NA-

KANDLA PORT TRUST

**UPFRONT TARIFF SCHEDULE FOR UPGRADATION OF BARGE HANDLING FACILITIES AT
BUNDER BASIN, KANDLA**

1.1. 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.

1.2. 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 barge idles due to breakdown or non-availability of the shore based facilities of 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 barge shall be allowed by Terminal.

2. Berth Hire Charges:

The berth hire charge shall be payable by masters/ owners/ agents of the barge and other floating craft approaching or lying alongside the berth at the rate of `2.62 per GRT per hour.

Notes:

- (i). The period of berth hire shall be calculated from the time barge 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 Tariff for the handling cargo at Bunder Basin Barge Jetty

(Those vessels which are not using floating crane provided by the concessionaire at OTB)

The cargo handling charges for the handling of multipurpose cargo at Bunder Basin Barge Jetty at the rates specified below:

Sl. No.	Commodity	Rate in ` per tonne	
		Foreign	Coastal
1	All types of dry bulk cargo	48.08	28.85
2	Steel	90.16	54.09
3	Timber	144.26	86.55

Note:

The cargo handling charges shall include the charge for:

- (i). unloading of the cargo from barges and transfer of the same upto the point of storage, storage at the stackyard upto a free period of 5 days and loading on to rakes/trucks in respect of import cargo and
- (ii). unloading of the cargo from the rakes/trucks at the stackyard in respect of export cargo, storage at the stackyard upto a free period of 15 days, transfer the cargo to the loading point, loading onto the barges.

3.2 Tariff for handling cargo by floating crane at Outer Tuna Buoy

Sl. No.	Commodity	Rate in ` per tonne	
		Foreign	Coastal
1	All types of dry bulk cargo	23.51	14.11
2	Steel	44.11	26.47
3	Timber	70.61	42.36

*Tariff for cargo handling by floating crane includes the following defined scope of work: Unloading of the cargo from the mother vessel to barge at OTB and vice versa. Stevedoring charges shall be separately borne by the user/vessel owner and the amount of stevedoring charges shall be paid to the licensed stevedores.

Note:

If a self-geared vessel uses the floating crane at OTB for unloading/ loading of cargo, then it has to pay the charges of floating crane for the cargo handled through floating crane. To make it more clear there should be masters certificate which clearly notifies that this much amount of cargo shall be handled through floating crane only at OTB.

4. Storage Charges:

The storage charges for the cargo stored in the stackyard beyond the free period allowed shall be as below:

Particulars	Rate per tonne/ day
Storage charge	1 st to 7 th day – `0.88
	8 th to 14 th day – `1.32
	15 th day onwards – `1.76

Note:

- (i). Five free days for import cargo and fifteen free days for export cargo shall be allowed.
- (ii). For the purpose of calculation of free period, Sundays, Customs notified holidays and the port's non- working days shall be excluded.
- (iii). Free period for imports shall be reckoned with from the date of complete discharge of vessel's cargo.
- (iv). Free period in respect of cargo discharged in lighters in stream shall commence from the date of complete landing of the cargo on the wharf from the lighters.
- (v). When import cargo is stored in transit terms and then converted into re-export, free period will be considered from the date of filing of export documents like shipping bill.
- (vi). Free period for exports shall commence from the date on which the cargo is brought in the transit / port area. In case of stream loading, the demurrage will cease from the day of loading of first barge. Demurrage will cease for the total cargo actually loaded through barges to the vessel in the same voyage.
- (vii). Free period for export cargo taken back for any reason shall commence from the time the export cargo is brought into the port area.
- (viii). Sundays and Holidays shall be included for the purpose of calculation of free period for hazardous cargo both for imports and exports The demurrage charges on hazardous goods shall be levied at double the normal rates specified in above schedule.
- (ix). Storage charges shall be payable for all days including Terminal's nonworking days and Customs notified holidays for stay of cargo beyond the prescribed free days.
- (x). 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

The miscellaneous charge at the rate of `3.99 per tonne is a composite charge for provision of all miscellaneous services such as sweeping of cargo on the wharf, weighment of cargo, dust suppression, environment and management, lift on-lift off charges, safety measures, weigh bridge, etc.

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.

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

F. No.TAMP/45/2011 - KPT - Proposal from the Kandla Port Trust (KPT) for fixation of upfront tariff for upgradation of Barge handling facility at Bunder Basin at Kandla Port on Built, Operate and Transfer (BOT) basis.

A summary of comments received from the users / user organisations/ prospective bidders and reply furnished by Kandla Port Trust (KPT) thereon are tabulated below:

Sl. No.	Comments of users / user organisations/ prospective bidders	Reply furnished by KPT
1.	ABG-LDA Bulk Handling Pvt. Ltd.	
(i).	The average excavator productivity of 100 moves/ hour is unrealistic. Normal utilization cannot be above 45 moves/ hour. The capacity may be modified accordingly.	We have determined optimal capacity of the facility considering 70% efficiency as per the TAMP guidelines. As per our calculation the effective utilization would be: 100 moves/hour * 70% * 70% = 49 moves/ hour Productivity of the excavator is based on the rated capacity and actual performance.
(ii).	The terminal can be considered as a multipurpose terminal. A barge carries a parcel lower than 30,000 tonnes. Therefore based on the 'Guidelines for upfront tariff setting PPP projects at Major Port Trusts, 2008' annex V page 19 table 1, the norm for unloading dry bulk is 7,500 tonnes/day, unloading Steel and bulk cargo is 4,000 tonnes/day and unloading other bulk cargo (timber logs) is of 2,500 tonnes/day. Please adjust capacity accordingly.	Handling rate determined based on the rated capacity of the excavators and further considering different types of cargo to be handled through excavators.
(iii).	The reference for stating that non-gearred vessel proportion will be 30% after 3 years of operations and 50% after 5 years of operations, may be provided. Unless KPT provides basis for this assumption coming from a worldwide known source (Drewry Shipping Consultant Limited, Clarksons Private Limited Company), please consider this proportion as staying steady from the current situation (5 to 10% non-gearred vessel). The volume handled by the floating crane may be modified accordingly.	We have considered increase of non-gearred vessels by 30% of the existing number of non-gearred vessels entering Kandla Port at the end of 3 rd year of introducing floating crane i.e. 30% of the vessels entering Kandla Port is expected to be non-gearred and 50% of the vessels is expected to be non-gearred at the end of 5 th year of operation. The utilization of floating crane is calculated accordingly. The BOT operator has the provision of using the floating crane for loading / unloading of barges which are not coming to Bunder Basin subject to fulfillment of requirement of the Bunder Basin barge jetty on priority basis which means that the barges which are coming to Bunder Basin barge jetty shall use the floating crane on priority basis for unloading / loading of the cargo from the mother vessel at OTB for ensuring optimal utilization of floating crane.
(iv).	The quotation for a 4.5 cbm excavator is from 2010. Is the total Capital expenditure mentioned taking in consideration the variation of the Wholesale Price Index?	As per TAMP Guidelines (refer Section 2.8 of Guidelines for upfront tariff setting for PPP Projects at Major Port Trusts, 2008)

(v).	A realistic figure for the volume to be handled by the floating crane may be provided. The project figure that more than 95% of the cargo handled at Bunder basin will also be handled by the floating crane does not fit with reality and not even with the assumption that a share of 50% of the vessels calling in KPT will be non-gear vessel.	Tariff for usage of floating crane is calculated at the optimal capacity of the same as per the TAMP guidelines (refer Section 3.3.2 of Guidelines for upfront tariff setting for PPP Projects at Major Port Trusts, 2008)
(vi).	Based on 'Guidelines for upfront tariff setting PPP projects at Major Port Trusts, 2008' and TAMP order notified in Gazette of India vide Extraordinary Gazette of India No. 35 part III section 4 dated 22 March 2005, there should be no tariff distinction in between coastal and foreign cargo for Iron ore handling and thermal coal. A line illustrating this may be added.	The subject guidelines notified in Gazette of India vide Extraordinary Gazette of India No. 35 part III Section 4 dated 22 March 2005 is applicable.
2.	IMC Limited	Comments of KPT dated 10 January 2012
(i).	The KPT has proposed that the floating crane positioned at OTB shall cater up to Panamax vessels. As new cargo terminals with capability to handle Panamax vessels are under development, it is suggested that the floating crane must be capable of handling vessels which are larger than Panamax, so that the Barge Handling facility provides maximum value to importers and exporters. It is requested that higher capacity of floating crane may be considered at the OTB.	Considering the optimal capacity of proposed terminal at 3.29 MMTPA, the floating crane proposed with capacity of 3.17 MMTPA is appropriate. Moreover, the traffic is largely dominated by Panamax and lower size vessels. Further, the considered floating crane can handle the post-Panamax vessels also.
(ii).	The project envisages implementation in two phases. In phase 1, upgrading the existing south wharf will be completed and would start commercial operations from the 61 st day of award of concession. For phase II, time of 18 months from the date of award of concession is available to the concessionaire. It may be clarified as to what tariff will the concessionaire levy on the users during the period of operation of phase I facilities?	The tariff described in TAMP proposal would be applicable for operations during the period of both the phases of the proposed project.
(iii).	(a). The optimal capacity of the barge jetty is estimated at 3.29 MMTPA. Considering the size of the wharves, capacity of the barges and the draft limitations, this capacity is very much on the higher side. Taking into account the technical and operational constraints and the present dry cargo traffic levels, the estimated cargo volumes of 3.29 MMTPA is optimistic and may not be achieved during the first 5-6 years of commercial operations. It is suggested that the cargo volumes be reviewed and the optional terminal capacity be re-assessed at lower levels to improve the project viability. (b). The calculations presume that cargo would be available for all the three bucket elevators throughout the year and the terminal would achieve the maximum	(a). The optimal capacity of 3.29 MMTPA is calculated based on the TAMP guidelines, based on the number of trips of barges possible from OTB, the length of wharves, the operational load factor and is appropriate. (b). The calculation does not presume that the all the bucket elevators would be available throughout the year but 70% of the year. Tariff proposal submitted does

	operational capacity right from the first year of operations. (c). The assumption of 100 moves per hour for all the 3 bucket elevators is not achievable considering the practical limitations in handling cargoes. (d). Taking into account the technical and operational constraints and the present dry cargo traffic levels, the estimated cargo volumes of 3.29 MMTPA is optimistic and may not be achieved during first 5-6 years of commercial operations. It is suggested that the cargo volumes be reviewed and the optimal terminal capacity be re-assessed at lower levels to improve the project viability. (e). The barge handling facility is planned for both import and export cargoes. Generally, the loading rates of barges for export would be lower as compared to the unloading rate for import cargo. However, the calculations assume the same rate of handling for both import as well as export. It is requested that the optimal terminal capacity may be re-worked based on the assumption of suitable mix of import and export cargoes and the tariff levels re-set based on the revised optimal terminal capacity.	not describe the year in which the maximum operational capacity is achieved. It presents the tariff setting based on optimal capacity as per TAMP Guidelines. (c). 100 moves is the rated capacity provided by suppliers and the same has been factored in with 70% as guided by TAMP to calculate optimal capacity. (d). Optimal capacity calculations have been done as per TAMP guidelines and considering the traffic projections in consensus with Maritime Agenda 2020. (e). Loading/ unloading rates for import and export have been considered the same as TAMP Guidelines does not provide for separate rates for imports and exports.
(iv).	(a). The maximum rate of 1300 MT per hour and operating load factor of 70 percent appear to be based on continuous alongside vessel operation. However, with barges of 500 to 2000 DWT, the unloading/ loading would take place in multiple operations (for e.g. 50000 MT parcel size would be done in a minimum of 25 barge operations assuming 2000 MT per barge). In view of this operational requirement, the rate of 1300 MT per hour is high and it is suggested that a lower rate of 700-800 MT per hour is considered for the calculations. (b). The flotilla for the floating crane is not considered in the calculations. It is suggested that the costs be taken into account for calculation of the tariff. (c). The optimal capacity of the floating crane is assumed at 3.17 MMTPA. However, KPT has projected that the minimum floating crane handling capacity in the 3rd year would be 1 MMTPA and that in the 5th year 1.64 MMTPA. The tariff for the floating crane is based on optimal capacity of 3.17 MMTPA. In view of the lower projected traffic levels, the investment on	(a). 1300 ton per hour is as per the rated capacity of the equipment. However, the optimal capacity of floating crane has been worked out considering the 70% factor on the rated capacity. (b). The flotilla cost component is already considered in the floating crane cost. (c). Tariff for floating crane is worked out based on optimal capacity as per TAMP Guidelines. However, as far as volumes to be handled by floating crane is concerned, it can be used for loading of the barges going from OTB to jetties other than Bunder Basin also.

	the floating crane would not be able to fetch the targeted ROCE of 16%. Hence, IMC is of the view that the revenue requirement for the floating crane should be based on 1.64 MMTPA instead of 3.17 MMTPA.	
(v).	The average GRT of the barges has been assumed to be 1500. This appears to be on the higher side, considering the barge range of 500 DWT to 2200 DWT. Further, the GRT of 1500 is assumed for all the four berths and the berth hours are calculated on full utilization basis of 70 percent throughout the year. Consequently, the total GRT hours are on the higher side, leading to lower unit rates. It is suggested to base the working on lower GRT of 1000.	Berth hours have been calculated based on the TAMP Guidelines. The average 1500 GRT for barges is considered based on a combination of barges ranging from 700 DWT to 2200 DWT and is appropriate.

2. A joint hearing in this case was held on 5 January 2012 at the Kandla Port Trust (KPT) premises. The KPT made a power point presentation of its proposal. At the joint hearing, the KPT and the concerned users/ organisation bodies have made the following submissions:

Kandla Port Trust

- (i). Our calculations have been slightly revised due to increase in backup area. Project cost and capacity will not, however, undergo any revision.
- (ii). Bunder Basin can handle only barges. Technically, we can put more number of excavators. But this will push the capacity to unrealistic levels, which cannot be achieved due to evacuation issues.

Kandla Stevedores Association

- (i). OTB to Bunder Basis movement will not be affected by tidal variations. A larger barge of 2200 DWT can be handled by two excavators.
- (ii). The capacity of Bunder Basin appears to be underestimated.

Gandhidham Chamber of Commerce and Industry

- (i). Valuation of KPT assets to be handed over to PPP operator should be made on historical cost only. Otherwise, it will push up tariff to users.
- (ii). Direct transfer of cargo to barges as well as through floating crane should be allowed. Likewise, small vessels should be allowed direct berthing at Bunder Basis without lightering at OTB.
- (iii). The rate should be competitive when compared to those fixed for Tuna facilities, as the same type of cargo is envisaged to be handled at both the places.
- (iv). The proportion of coastal cargo at 10% appears to be lower (KPT clarifies, coastal volume achieved in KPT for barge handling is less than 10%. But 10% is assumed in this exercise to accommodate increase in share in future).

IMC Limited and other bidders

No comments.
