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Tariff Authority for Major Ports

G No. 168 **New Delhi, 30 July 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 Kolkata Port Trust for fixation of upfront tariff in respect of its Project at Haldia Dock-II (North) & Haldia Dock-II (South) at Shalukkhali alongwith all required back-up facilities on Design, Build, Finance, Operate & Transfer (DBFOT) basis 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/57/2011-KOPT

Kolkata Port Trust **- - - - -** **Applicant**

O R D E R

(Passed on this 18th day of June 2012)

This case relates to a proposal dated 27 October 2011 received from the Kolkata Port Trust (KOPT) for fixation of upfront tariff in respect of its Project at Haldia Dock-II (North) & Haldia Dock-II (South) at Shalukkhali alongwith all required back-up facilities on Design, Build, Finance, Operate & Transfer (DBFOT) basis.

2.1. The main points made by KOPT in its proposal dated 27 October 2011 are summarised below:

(i). Haldia Dock Complex (HDC) is favourably located with respect to the steel plants, Coal & Ore Mines, Power Plants and other industries. HDC is favorably located with respect to Iron Ore mines of the States of Jharkhand and Orissa. HDC is also well connected with National Highway network and Trunk Railways which are being upgraded.

(ii). HDC, despite being the most preferred port of call for import of coking coal, Non Coking Coal, Lime Stone, Coke, Raw Sugar, export of Iron Ore, coastal shipment of Thermal Coal, the exporters/ importers are unable to bring their required volume of cargo at HDC due to draft restrictions. The exporters/ importers accordingly lighten or up-top substantial volume of these commodities (about 60%) otherwise logical for HDC at neighboring ports of HDC which causes various logistic inconveniences as well as higher transportation cost to the trade.

(iii). In order to obviate the problem of limitation of draft and to cater to the growing demands of the industries in the hinterland region of the Port, there is a need for expansion of HDC at an alternate location. Accordingly, HDC have identified a deep drafted location where ships at a draft of 9 mtrs. can be handled round the year at Mouza Shalukkhali, district Purba Medinipore on the west bank of river Hooghly, which is about 15 kms north east of existing Dock Complex. The site identified is named as Haldia Dock-II and in the proximity of the industrial hub at Haldia, including the proposed mega power plant (Haldia Energy Limited) of CESC.

(iv). Based on the traffic studies for Haldia Dock Complex and the subsequent requests for additional port facilities received by HDC from the prospective users, it is estimated that the total dry bulk traffic is likely to increase from 23.70 million tonnes in 2011-12 to around 39.50 million tonnes in 2019-20. In order to handle the incremental traffic likely to be generated from increase in import of coal (thermal and coking coal), HDC intends to develop Dry Bulk terminals at the proposed location through PPP mode. It is estimated that by the end of 2014-2015, four numbers of Berth would be required to meet the projected capacity. It has been decided that two multipurpose berth and two mechanized berth will be constructed with two BOT operators having two berth each (one mechanical and the other multipurpose) on “DBFOT” basis for a concession period of thirty years.

(v). Physical feature of the facility to be developed are as follows:

Sl. No.	Item	Description & Dimension
1.	Dimension of the proposed 1. Multipurpose Berth – 1 2. Mechanised Berth – 2 3. Mechanised Berth – 3 4. Multipurpose Berth – 4	 275 m x 40 m 275 m x 23 m 275 m x 23 m 275 m x 40 m

2.	Approach 1. Multipurpose Berth – 1 2. Mechanised Berth – 2 3. Mechanised Berth – 3 4. Multipurpose Berth – 4	 2 approach trestles - 10 m wide x 990 m at both end of the berth 1 Approach trestles 10 m wide x 1175 m 1 Approach trestles 10 m wide x 1275 m 2 approach trestles - 10 m wide x 1590 m at both end of the berth
3.	Type of vessels to be handled - Multipurpose Berths Mechanised Berths	Panamax type Bulk Carrier DWT 75000, average GRT 41250
4.	Cargo handling capacity 1. Multipurpose Berth – 1 2. Mechanised Berth – 2 3. Mechanised Berth – 3 4. Multipurpose Berth – 4	 4.10 MTPA 4.79 MTPA 4.79 MTPA 4.10 MTPA
5.	Yard area 1. Multipurpose Berth – 1 2. Mechanised Berth – 2 3. Mechanised Berth – 3 4. Multipurpose Berth – 4	 81000 sq. mtrs* 54000 sq. mtrs * 54000 sq. mtrs* 81000 sq. mtrs * (* including equipment parking area)
6.	Equipping plan a) Multipurpose Berth – 1 Multipurpose Berth – 4	The Multipurpose Berth has been conceived for both loading and unloading of dry bulk cargo. The equipping plan of this Berth comprises two Mobile Harbour Cranes each of 40 Tonnes capacity, 9 Front End loaders and 20 Dumper trucks (tripper trucks) for loading and unloading of cargo at the jetty. For handling cargo at the yard, the equipping plan proposes, Front End loaders Dumpers trucks, etc. A Bucket Wheel Reclaimer of 3000 TPH, boom length 25 M connected to Wagon loader of 3000 TPH and boom length of 10 M has been envisaged for loading of wagons. One In-motion Railway weighbridge and one road weighbridge has been envisaged for weighment of cargo.
	b) Mechanised Berth – 2 Mechanised Berth – 3	Two Grab unloaders of 900 TPH capacity each with in-built discharge chutes for each berth. Conveyor system will comprise of berth conveyor, transport conveyor(both cross & parallel) and stacking conveyor belt width of 1400 mm and belt speed of 2.6 mtrs/sec with a stacker at stackyard having a capacity of 1800 TPH (boom length of 23 m) A Bucket Wheel Reclaimer of 3000 TPH, boom length 25 M connected to Wagon loader of 3000 TPH and boom length of 10 M has been envisaged for loading of wagons. One In-motion Railway weighbridge and one road weighbridge has been envisaged for weighment of cargo.
7.	Cargo likely to be handled	Coal (coking & non Coking) & Iron Ore at Multi-purpose Berth. Only Coal (coking & non Coking) at Mechanised Berth.

(vi). (a). The project is meant for both loading and unloading of coal and iron ore cargo at multipurpose berth and only for unloading of coal at Mechanized Berth. Hence, its equipping plan is based on those equipments which are best suited for loading and unloading of dry bulk cargo not only at the Berth but at the yard also.

(b). Due to draft restrictions and other navigational constraints, every vessel is likely to stay at the terminal for a minimum of 54 hours at Mechanised Berth and 63 hrs at multipurpose Berth. Hence the equipping of the berth has been planned in such a manner that all vessels are turn around within the minimum time inclusive of time required for survey, various clearances etc.

(vii). It is emphasized that Multi-Purpose Berth will be utilized for unloading of coal and loading of iron ore and only unloading of coal at Mechanised Berth. The equipping plan so considered for handling these dry bulk cargoes in this project is different from what has been provided at the upfront tariff guidelines for multipurpose and mechanized terminals. The multipurpose project proposes the use of Mobile Harbour Cranes, Payloaders, Dumpers (tripper trucks), Reclaimer, conveyor and Dozer for loading and unloading of cargo at the jetty. The equipping plan for the mechanised project proposes the use of Grab unloader, Stacker, Reclaimer Wagon loader, Conveyer, Dozer and Electrical equipments etc.

(viii). Optimal Quay Capacity:

(a). Considering the position that one Multipurpose Berth can handle 98 ships in a year at 70% utilization and taking into account the average parcel size of each vessel at 42000 tonnes, the KOPT has calculated the quay capacity of the Multipurpose berths at 4.1 MTPA per berth (98 ships * 42000 tonnes). Thus, for two Multipurpose berths, the quay capacity works out to - 8.2 MTPA.

(b). Considering the position that one Mechanised Berth can handle 114 ships in a year at 70% utilization and taking into account the average parcel size of each vessel at 42000 tonnes, the KOPT has calculated the quay capacity of the Multipurpose berths at 4.79 MTPA per berth (114 ships * 42000 tonnes). Thus, for two Multipurpose berths, the quay capacity works out to – 9.58 MTPA.

At the Multipurpose berths, it is projected that Iron ore would constitute 30% of the capacity and the balance 70% would be coal and other dry bulk cargo. At the Mechanised berth, it would be handling of coal alone.

(ix). Optimal Yard Capacity:

(a). In respect of iron ore to be handled at Multipurpose Berth, by considering the area allocated for iron ore cargo at 18000 sq. mtrs., stacking factor of 15 tonnes per sq. mtr. and plot turnover ratio at 12, the KOPT has determined the optimal yard capacity for iron ore at 70% utilization at 2.27 MTPA. Similarly in respect of coal to be handled at Multipurpose berths, by considering the area allocated for coal at 55700 sq. mtrs., stacking factor of 2.4 tonnes per sq. mtr. and plot turnover ratio at 36, the KOPT has determined the optimal yard capacity for coal at 70% utilization at 3.37 MTPA. Thus, the yard capacity of one berth works out to 5.64 MTPA (2.27 + 3.37). Thus, for two Multipurpose berths, the yard capacity works out to 11.28 MTPA.

(b). Similarly in respect of coal to be handled at Mechanised berths, by considering the area available for stacking of coal at 36000 sq. mtrs,, stacking factor of 5.25 tonnes per sq. mtr and plot turnover ratio at 38, the KOPT has determined the optimal yard capacity for coal at 70% utilization at 5.03 MTPA. Thus, for two Mechanised berths, the yard capacity works out to 10.06 MTPA.

(x). Capital Estimation:

(a). Multipurpose Berth:

Since the cargo profile of the two multipurpose berths is the same, an average of the capital cost is reckoned for computing the tariff:

(**₹ in crores**)

Sl. No.	**Particulars**	**Multipurpose - 1**	**Multipurpose- 4**	**Average**
1.	Civil Work	132.05	187.32	159.69
2.	Mechanical Work	93.32	93.32	93.32
3.	**Total for Cargo handling activity**	**225.38**	**280.64**	**253.01**
4.	Berth Facility	97.22	97.22	97.22
5.	**Total Project Cost**	**322.60**	**377.86**	**350.23**

(b). Mechanised Berth:

Since the cargo profile of the two mechanized berths is the same, an average of the capital cost is reckoned for computing the tariff:

(**₹ in crores**)

Sl. No.	**Particulars**	**Mechanised - 2**	**Mechanised - 3**	**Average**
1.	Civil Work	104.99	107.89	106.45
2.	Mechanical Work	242.78	243.94	243.36
3.	**Total for Cargo handling activity**	**347.78**	**351.82**	**349.81**
4.	Berth Facility	57.17	57.17	57.17
5.	**Total Project Cost**	**404.95**	**408.99**	**406.98**

(xi). Operating cost:

(a). Multipurpose Berth:

For the Cargo handling activity, it is ₹52.92 crores and for the Berthing activity it is ₹5.19 crores.

(b). Mechanised Berth:

For the Cargo handling activity, it is ₹73.16 crores and for the Berthing activity it is ₹3.05 crores.

(xii). Estimation of revenue requirement from cargo handling activity:

(**₹ in crores**)

Description	**Multipurpose**	**Mechanised**
Operating cost	52.92	73.16
Return on Capital Employed @ 16%	40.48	55.97
Revenue requirement	**93.40**	**129.13**

(xiii). Estimation of revenue requirement from berthing activity:

(**₹ in crores**)

Description	**Multipurpose**	**Mechanised**
Operating cost	5.19	3.05
Return on Capital Employed @ 16%	15.56	9.15
Revenue requirement	**20.75**	**12.20**

(xiv). Apportionment of revenue requirement for cargo handling activities:

Tariff Group	Multipurpose		Mechanised	
	% of total revenue requirement	Amount (₹ in crores)	% of total revenue requirement	Amount (₹ in crores)
Cargo Handling Charges	90%	84.06	98%	126.55
Storage Charges	5%	4.67	1%	1.59
Miscellaneous Charges	5%	4.67	1%	1.29
TOTAL	**100%**	**93.40**	**100%**	**129.13**

2.2. The KOPT in its proposal has also furnished the draft Scale of Rates applicable for the Mechanised Berth and Multipurpose Berth, separately.

2.3. The KOPT has furnished documents in support of the civil cost and the cost for the various types of equipments.

3. The proposal of KOPT is as given below:

A. MULTIPURPOSE BERTH

(i). Berth hire charges

Sl. No.	Vessels	Rate per GRT per hour	
		Foreign	Coastal
1.	All vessels	1.07	0.67

(ii). Cargo Handling charges

Commodity	Unit	Rate in ₹	
		Foreign	Coastal
Iron Ore	Per Metric tonne	227.81	Not applicable
Other coal	Per Metric tonne	213.58	128.15

(iii). Storage charges

Commodity	Rate for 1st five days for the balance cargo remaining after the free period	Rate for 6th day to 10th day for balance cargo	Rate for 11th day onwards for balance cargo
Iron Ore and Coal	₹ 10.00	₹ 15.00	₹ 20.00

(iv). Miscellaneous charges

Particulars	Rate per tonne (₹)
Charges for sweeping, weighment of wagons and trucks, receiving / delivery of cargo, etc.	₹ 11.39

B. MECHANISED BERTH

(i). Berth hire charges

Sl. No.	Vessels	Rate per GRT per hour	
		Foreign	Coastal
1.	All vessels	0.64	0.37

(ii). Cargo Handling charges

Commodity	Unit	Rate in ₹	
		Foreign	Coastal
Thermal Coal	Per Metric tonne	275.21	Not applicable
Other coal	Per Metric tonne	275.21	165.12

(iii). Storage charges

Commodity	Rate for 1st five days for the balance cargo remaining after the free period	Rate for 6th day to 10th day for balance cargo	Rate for 11th day onwards for balance cargo
Coal	₹ 5.00	₹ 8.00	₹ 10.00

(iv). Miscellaneous charges

Particulars	Rate per tonne (₹)
Charges for sweeping, weighment of wagons and trucks, receiving / delivery of cargo, etc.	₹ 2.70

4. In accordance with the consultation process prescribed, the proposal of KOPT alongwith the Feasibility Report furnished by KOPT was circulated to the users/user organisations bodies/major Coal importers/Iron ore exporters and prospective bidders (as furnished by the KOPT) for seeking their comments. The comments received from the users/user organisations bodies/major Coal importers/ Iron ore exporters and prospective bidders have been forwarded to the KOPT. The KOPT has furnished its remarks on the comments of the users/user organisations bodies/major Coal importers/Iron ore exporters and prospective bidders.

5. Based on the preliminary scrutiny of the proposal, the KOPT was requested vide our letter dated 12 January 2012 to furnish the information / clarifications on some points. The KOPT has subsequent to the joint hearing, vide its letter dated 10 May 2012, furnished its reply on queries raised. Summary of query raised by us and the response of the KOPT is brought out in the subsequent part of this Order.

6.1. A joint hearing on the case in reference was held on 25 January 2012 at the KOPT premises. The KOPT made a power point presentation explaining the salient features of its proposal. At the joint hearing, the concerned users / user organisations bodies / major Coal importers / Iron ore exporters and prospective bidders have made their submissions.

6.2. As agreed at the joint hearing, the KOPT was requested vide our letter dated 27 January 2012 to furnish its updated proposal. Simultaneously with the submission of the updated proposal to us, the KOPT was requested to circulate a copy of the updated proposal to all the concerned prospective bidders and users advising them to furnish their comments, if any, within one week thereafter.

6.3. After several reminders, the KOPT under cover of its letter dated 10 May 2012 has furnished updated proposal for fixing of upfront tariff for multipurpose berth as well as mechanized berth. The KOPT has furnished the updated Feasibility Report along with its proposal.

6.4. The changes observed in the updated proposal of May 2012 when compared with the proposal of October 2011 are summarized below:

(i). Physical features of the facility to be developed:

Sl. No.	Item	Original Proposal of October 2011	Updated Proposal of May 2012
1.	Type of vessels to be handled - Multipurpose Berths Mechanised Berths	Panamax type Bulk Carrier DWT 75000, average GRT 41250	Panamax type Bulk Carrier of 42000 tonnes & Handymax type bulk carrier with of 30000 tonnes. Average parcel size of vessel considered as 38400 tonnes.

2.	Turnaround time of a vessel	54 hours at Mechanised berth 63 hours at Multipurpose berth	48 hours at Mechanised berth 57 hours at Multipurpose berth
3.	Cargo handling capacity 1. Multipurpose Berth – 1 2. Mechanised Berth – 2 3. Mechanised Berth – 3 4. Multipurpose Berth – 4	 4.10 MTPA 4.79 MTPA 4.79 MTPA 4.10 MTPA	Due to change in the vessel turnaround time, the capacity of the multipurpose berths and the mechanised berths has increased. 4.35 MTPA 5.25 MTPA 5.25 MTPA 4.35 MTPA
4.	Yard area 1. Multipurpose Berth – 1 2. Mechanised Berth – 2 3. Mechanised Berth – 3 4. Multipurpose Berth – 4	 81000 sq. mtrs* 54000 sq. mtrs * 54000 sq. mtrs* 81000 sq. mtrs * (* including equipment parking area)	 79600 sq. mtrs* 50000 sq. mtrs * 50000 sq. mtrs* 79600 sq. mtrs * (* including equipment parking area)

(ii). Optimal Quay Capacity:

	Original Proposal of October 2011	**Updated Proposal of May 2012**
Multipurpose berths	8.2 MTPA (@ 4.1 MTPA per berth) (98 vessels x 42000 tonnes as the parcel size of each vessel)	8.7 MTPA (@ 4.35 MTPA per berth) (17025 tonnes per day x 365 days x 70%)
Mechanised berths	9.58 MTPA (@ 4.79 MTPA per berth) (114 vessels x 42000 tonnes as the parcel size of each vessel)	10.58 MTPA (@ 5.29 MTPA per berth) (20700 tonnes per day x 365 days x 70%)

(iii). Optimal Yard Capacity:

<table>
<tr><th></th><th>Original Proposal of October 2011</th><th>Updated Proposal of May 2012</th></tr>
<tr><td>Multipurpose berths</td><td>11.32 MTPA
(@ 5.66 MTPA per yard)

<table>
<tr><th>Particulars</th><th>Iron Ore (export)</th><th>Coal (Import)</th></tr>
<tr><td>Area allotted for cargo</td><td>20000 sqm</td><td>61000 sqm</td></tr>
<tr><td>Dwell time</td><td>30 days</td><td>10 days</td></tr>
<tr><td>Plot turnover ratio</td><td>12</td><td>36</td></tr>
<tr><td>Stacking quantity</td><td>15 tonne</td><td>2.4 tonne</td></tr>
<tr><td>Yard capacity</td><td>12 x 15 x 20000 x 70% x 91% = 2.30 MTPA</td><td>2.4 x 36 x 61000 x 70% x 91% = 3.36 MTPA</td></tr>
<tr><td>Total Yard capacity</td><td colspan="2">5.56 MTPA</td></tr>
</table></td><td>9.20 MTPA
(@ 4.60 MTPA per yard)

<table>
<tr><th>Particulars</th><th>Iron Ore (export)</th><th>Coal (Import)</th></tr>
<tr><td>Area allotted for cargo</td><td>12000 sqm</td><td>67600 sqm</td></tr>
<tr><td>Dwell time</td><td>30 days</td><td>15 days</td></tr>
<tr><td>Plot turnover ratio</td><td>12</td><td>24</td></tr>
<tr><td>Stacking quantity</td><td>12 tonne</td><td>3 tonne</td></tr>
<tr><td>Yard capacity</td><td>12 x 12 x 12000 x 70% = 1.20 MTPA</td><td>3 x 24 x 67600 x 70% = 3.40 MTPA</td></tr>
<tr><td>Total Yard capacity</td><td colspan="2">4.60 MTPA</td></tr>
</table></td></tr>
<tr><td>Mechanised berths</td><td>10.06 MTPA
(@ 5.03 MTPA per yard)

<table>
<tr><th>Particulars</th><th>Coal</th></tr>
<tr><td>Total area available</td><td>54000 sqm</td></tr>
<tr><td>Actual area available for stacking</td><td>36000 sqm</td></tr>
<tr><td>Dwell time</td><td>9.5 days</td></tr>
<tr><td>Plot turnover ratio</td><td>38</td></tr>
<tr><td>Stacking quantity</td><td>5.25 tonne</td></tr>
<tr><td>Yard capacity</td><td>38 x 5.25 x 0.7 x 36000 = 5.03 MTPA</td></tr>
</table></td><td>10.50 MTPA
(@ 5.25 MTPA per yard)

<table>
<tr><th>Particulars</th><th>Coal</th></tr>
<tr><td>Area available for stacking</td><td>50000 sqm</td></tr>
<tr><td>Dwell time</td><td>12 days</td></tr>
<tr><td>Plot turnover ratio</td><td>30</td></tr>
<tr><td>Stacking quantity</td><td>5 tonne</td></tr>
<tr><td>Yard capacity</td><td>30 x 5 x 0.7 x 50000 = 5.25 MTPA</td></tr>
</table></td></tr>
</table>

(iv). Capital Estimation:

(a). Multipurpose Berth:

Since the cargo profile of the two multipurpose berths is the same, an average of the capital cost is reckoned for computing the tariff:

(**₹ in crores**)

Sl. No.	Particulars	Multipurpose - 1		Multipurpose - 4		Average	
		Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
1.	Civil Work	132.05	135.28	187.32	195.71	159.69	165.49
2.	Mechanical Work	93.32	109.78	93.32	111.58	93.32	110.68
3.	**Total for Cargo handling activity**	**225.38**	**245.06**	**280.64**	**307.29**	**253.01**	**276.17**
4.	Berth Facility	97.22	98.22	97.22	98.22	97.22	98.22
5.	**Total Project Cost**	**322.60**	**343.28**	**377.86**	**405.51**	**350.23**	**374.39**

(b). Mechanised Berth:

Since the cargo profile of the two mechanized berths is the same, an average of the capital cost is reckoned for computing the tariff:

(**₹ in crores**)

Sl. No.	Particulars	Mechanised - 2		Mechanised - 3		Average	
		Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal	Revised Proposal
1.	Civil Work	104.99	115.17	107.89	118.28	106.45	116.72
2.	Mechanical Work	242.78	307.10	243.94	306.47	243.36	306.79
3.	**Total for Cargo handling activity**	**347.78**	**422.27**	**351.82**	**424.75**	**349.81**	**423.51**
4.	Berth Facility	57.17	57.75	57.17	57.75	57.17	57.75
5.	**Total Project Cost**	**404.95**	**480.02**	**408.99**	**482.50**	**406.98**	**481.26**

(v). Operating cost:

(a). Multipurpose Berth:

	Original Proposal of October 2011	Updated Proposal of May 2012
For the Cargo handling activity	₹52.92 crores	₹ 54.87 crores
For the Berthing activity	₹5.19 crores	₹ 5.24 crores

(b). Mechanised Berth:

	Original Proposal of October 2011	Updated Proposal of May 2012
For the Cargo handling activity	₹73.16 crores	₹ 89.33 crores
for the Berthing activity	₹3.05 crores	₹ 3.08 crores

(vi). Estimation of revenue requirement from cargo handling activity:

Amount (₹ in crores)

Description	Multipurpose		Mechanised	
	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
Operating cost	52.92	54.87	73.16	89.33
Return on Capital Employed @ 16%	40.48	44.19	55.97	67.76
Revenue requirement	93.40	99.06	129.13	157.09

(vii). Estimation of revenue requirement from berthing activity:

Amount (₹ in crores)

Description	Multipurpose		Mechanised	
	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
Operating cost	5.19	5.24	3.05	3.08
Return on Capital Employed @ 16%	15.56	15.71	9.15	9.24
Revenue requirement	**20.75**	**20.96**	**12.20**	**12.32**

(viii). Apportionment of revenue requirement for cargo handling activities:

Tariff Group	Multipurpose			Mechanised		
	% of total revenue requirement	Amount (₹ in crores)		% of total revenue requirement	Amount (₹ in crores)	
		Original Proposal of October 2011	Updated Proposal of May 2012		Original Proposal of October 2011	Updated Proposal of May 2012
Cargo Handling Charges	90%	84.06	89.15	98%	126.55	153.95
Storage Charges	5%	4.67	4.95	1%	1.59	1.57
Miscellaneous Charges	5%	4.67	4.95	1%	1.29	1.57
TOTAL	**100%**	**93.40**	**99.06**	**100%**	**129.13**	**157.09**

(ix). The proposed upfront tariff is as follows:

A. MULTIPURPOSE BERTH

(i). Berth hire charges

Sl. No.	Vessels	Rate per GRT per hour			
		Foreign		Coastal	
		Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
1.	All vessels	1.07	1.10	0.67	0.66

(ii). Cargo Handling charges

Commodity	Unit	Rate in ₹			
		Foreign		Coastal	
		Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
Iron Ore	Per Metric tonne	227.81	199.02	Not applicable	Not applicable
Other coal	Per Metric tonne	213.58	215.85	128.15	129.51

(iii). Storage charges

Commodity	Rate for 1st five days for the balance cargo remaining after the free period		Rate for 6th day to 10th day for balance cargo		Rate for 11th day onwards for balance cargo	
	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
Iron Ore and Coal	₹ 10.00	₹ 8.00	₹ 15.00	₹ 12.00	₹ 20.00	₹ 18.00

(iv). Miscellaneous charges

Particulars	Rate per tonne (₹)		
	Original Proposal of October 2011	Updated Proposal of May 2012	
		For Coal & Other dry bulk	For Iron Ore
Charges for sweeping, weighment of wagons and trucks, receiving / delivery of cargo, etc.	₹ 11.39	₹ 11.51	₹ 11.06

B. MECHANISED BERTH

(i). Berth hire charges

Sl. No.	Vessels	Rate per GRT per hour			
		Foreign		Coastal	
		Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
1.	All vessels	0.64	0.64	0.37	0.38

(ii). Cargo Handling charges

Commodity	Unit	Rate in ₹			
		Foreign		Coastal	
		Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
Thermal Coal	Per Metric tonne	275.21	305.45	Not applicable	Not applicable
Other coal	Per Metric tonne	275.21	305.45	165.12	183.27

(iii). Storage charges

Commodity	Rate for 1st five days for the balance cargo remaining after the free period		Rate for 6th day to 10th day for balance cargo		Rate for 11th day onwards for balance cargo	
	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012	Original Proposal of October 2011	Updated Proposal of May 2012
Coal	₹ 5.00	₹ 4.00	₹ 8.00	₹ 6.00	₹ 10.00	₹ 8.00

(iv). Miscellaneous charges

Particulars	Rate per tonne (₹)	
	Original Proposal of October 2011	Updated Proposal of May 2012
Charges for sweeping, weighment of wagons and trucks, receiving / delivery of cargo, etc.	₹ 2.70	₹ 2.99

6.5. As agreed at the joint hearing, the KOPT has forwarded a copy of the updated proposal alongwith the updated Feasibility Report to all the users/user organisations bodies/major Coal importers/Iron ore exporters and prospective bidders. We have requested the users/user organisations bodies/major Coal importers/Iron ore exporters and prospective bidders to furnish their comments within 26 May 2012. One of the users viz., M/s.CESE Limited has furnished its comments with a copy marked to KOPT. The KOPT vide its letter dated 2 June 2012 has furnished its reply on the comments of M/s. CESE Limited.

7. As stated earlier, the KOPT under cover of its letter dated 10 May 2012 has responded to the queries raised by us vide our letter dated 12 January 2012. The queries raised by us and the reply furnished by the KOPT are given below:

Sl. No.	Queries raised by us	Reply furnished by the KOPT
I	**General:**	
(i).	From the proposal filed by KOPT, it is seen that the length of each of the proposed Multipurpose Berths is same as that of each of the Mechanised Berths. Inspite of the same length of the Mechanised Berths and Multipurpose Berths, the estimated capacity of the Multipurpose Berths are seen to be lower at 4.10 MTPA each as compared to the Mechanised Berths at 4.79 MTPA each. When all the berths at the proposed docks will predominantly handle Coal (around 70%), it is not clear as to why a multipurpose berth configuration is selected which has the effecting of lowering the capacity. The KOPT to clarify as to why the handling of iron ore cannot be accommodated at any of the existing berths of KOPT at HDC and all the proposed berths be mechanized to handle coal.	The configuration of Multipurpose Berth has been considered to accommodate handling of both import as well as export cargo. The handling of iron ore has been considered at the Multipurpose Berth of Haldia Dock-II to ensure the availability of wagons for back loading as well as the flexibility of handling cargo other than imported coal. In addition, other dry bulk cargo compatible with the proposed equipment will also be allowed. The same ship can be used for unloading of coal as well as loading of iron ore if the provision of handling iron ore remains which will provide better productivity for the vessels and also ocean freight advantage for the importer/ exporter.
(ii).	KOPT to certify that the operator of a Multipurpose Berth would not be allowed to handle any other dry bulk cargo other than coal and iron ore at the said berths and may not be permitted to convert the said facility for partly or fully mechanised handling of dry bulk cargo.	As per updated feasibility report, dry bulk cargo other than coal and iron ore will also be handled at the Multipurpose berths. This will provide flexibility to the operator in optimally using the project capacity.
II	**Optimal Capacity:**	
A.	**Quay Capacity for the Mechanised Berth:**	
(i).	KOPT has estimated the quay capacity of the mechanized berth based on the assumed handling of number of vessels of the parcel size of 42000 tonnes by considering a turnaround time of 2.25 days. It may be that the ship day output of a vessel influences the turnaround time of a vessel and not vice-a-versa. The upfront tariff guidelines for the mechanized coal terminal stipulate calculation of quay capacity based on the ship day output of the vessel. The KOPT to, therefore, consider revising its quay capacity in line with the formula prescribed for the Mechanised coal terminal in the Upfront tariff guidelines.	In case of Mechanised Berth, 1.75 days will be required for completion of handling of parcel size of 42000 MT. As per updated feasibility report, another 0.25 days has been considered for the activities other than cargo handling. This is mainly because Haldia Dock-II being the only riverine port where various marine related issues like steaming time, tidal windows has to be considered for incoming and outgoing of the vessel.
(ii).	The Mechanised Berth is proposed to handle only import of coal. In this regard, the KOPT has stated that the Mechanised Berth would handle only Panamax Vessels and has considered a ship day output of 24000 tonnes (as against the norm of 35000 tonnes per day prescribed for	While updating the feasibility report, the proposed parcel size has been modified. The ratio of Panamax & Handymax vessel will be 70:30 and corresponding parcel size would be 42000 MT for Panamax & 30000 MT for Handymax size vessel. The norm of 35000

<table>
<tr><td></td><td>Panamax vessels in the Upfront tariff guidelines of 2008). The KOPT has sought to justify the ship day output of 24000 tonnes by stating that the Panamax Vessels having a maximum parcel load of 42000 tonnes corresponds to High Handy Max Vessels whose ship day output as per the Upfront tariff guidelines of 2008 is 15000 tonnes. In this context, the KOPT to:</td><td>MT per day as prescribed in the upfront tariff guideline of 2008 can not be achieved in this case as all the vessels will report only after part discharge at some other ports. Each vessel will carry the bottom cargo which will reduce the handling capacity in each case. In course of discharge of vessel, the ribs and well created during the first port of discharge has to be tackled which consumes lot of additional time.</td></tr>
<tr><td></td><td>(a). Note that the Upfront tariff guidelines of 2008 do not make a mention about any High Handy Max Vessels, as considered by KOPT.</td><td>Noted for future reference. The term High Handimax used earlier has been modified in the updated feasibility report.</td></tr>
<tr><td></td><td>(b). Furnish the basis for considering the average parcel load of Panamax vessel at 42000tonnes.</td><td>Haldia Dock-II project envisages handling of Panamax vessel of 75000 DWT with a maximum parcel load of 42000 MT corresponding to 9 mtr. draft. It may be stated here that the berth hire charge has been calculated on the basis of GRT corresponding to Panamax vessel which is 41250 MT.

In addition 32000 GRT vessel of Handymax size has also been considered with a maximum parcel load of 30000 MT of cargo corresponding to 9 mtrs. draft in the ratio of 70:30 respectively for panamax & handymax size of vessels.</td></tr>
<tr><td></td><td>(c). Furnish the basis for considering a ship day output of 24000 tonnes for the Panamax Vessels.</td><td>TAMP guideline states 15000 TPD for handy max vessel. Since, the instant proposal depicts a situation of handling of maximum parcel load of cargo of a handy max contained in a panamax vessel, therefore, output rate of 24000 TPD has been considered against 35000 TPD fixed for panamax vessel.
Moreover, as the operator has to handle bottom cargo, where cycle time of equipment will be more. Additional time will be required for rib cleaning, hatch accumulation with the help of pay loader, etc.</td></tr>
<tr><td></td><td>(d). Furnish the annual average parcel size of panamax vessels called on Haldia Dock Complex (HDC) including at the berths handled by private terminal operators with coal during the years 2008-09 to 2011-12 (upto December 2011) and the projections for the next three years.</td><td><table><tr><th>Year</th><th>Average Parcel Size</th></tr><tr><td>2008-2009</td><td>25714.33</td></tr><tr><td>2009-2010</td><td>25102.58</td></tr><tr><td>2010-2011</td><td>24448.43</td></tr><tr><td>2011-2012</td><td>24318.91</td></tr></table>
The projection for next 3 years will depend on the draft available during the period.</td></tr>
<tr><td></td><td>(e). (i). Establish with actuals for the years 2008-09 to 2011-12 (upto December 2011) that it has taken 1.75 days to complete coal handling of a Panamax vessel at Haldia Dock Complex, including at the berths handled by private terminal operators.</td><td>Similar mechanised berth are not operating at HDC except the private terminal (bn 4A) where the unloading capacity is much lower than the proposed terminal. However, the data available during the previous year are furnished below:

<table><tr><th>Year</th><th>Average Time Completion</th></tr><tr><td>2008-2009</td><td>2.34</td></tr><tr><td>2009-2010</td><td>2.24</td></tr><tr><td>2010-2011</td><td>1.98</td></tr><tr><td>2011-2012</td><td>1.78</td></tr></table></td></tr>
</table>

<table>
<tr><td></td><td>(ii). Likewise, to establish with actuals for the years 2008-09 to 2011-12 (upto December 2011) that it has taken 0.5 days for handling a Panamax vessel for import of coal at Haldia Dock Complex, including at the berths handled by private terminal operators.</td><td>The situation in the impounded dock system will not be similar to that of reverine terminal. The reply furnished in case of Outer Terminal-I where similar studies were made and 0.3 days detention was found. In this case 0.25 days has been considered for handling in the updated proposal instead of 0.5 days.</td></tr>
<tr><td></td><td>(iii). Furnish the breakup for the service time of 0.5 days.</td><td>In the updated feasibility report, 0.5 days has been revised to 0.25 days. This is because the maximum time a vessel may have to wait for tide is about 12 hrs and a minimum time of waiting will be ‘0’ hour. As such, the average will be 6 hrs i.e. 0.25 days.

Further, the vessel’s waiting time from the actual completion of cargo, 6 hrs. on an average, will be required for removal of pay loaders, closing of hatches, completion of services, signing of documents, departure of personnel, boarding of pilots, lifting of gangway, readiness of engine and singling up, etc.</td></tr>
<tr><td>B.</td><td><u>Yard Capacity for Mechanised Berth</u>:</td><td></td></tr>
<tr><td></td><td>(i). The KOPT has proposed to hand over 92000 square metres of land for the Mechanised Berth. The norms for estimation of yard capacity prescribed for mechanized coal terminals provides for a cushion of around 50%, to meet the requirement of area for ancillary facilities. That being so, the balance 50% is required to be considered for stacking purpose. Against this position, the KOPT has considered only 39% of the total area of land i.e. 36000 square metres for the purpose of stacking of cargo, in the yard capacity calculation. The KOPT to explain the reason for considering only 39% of the total area proposed to be allotted for the facility for stacking.</td><td>The total area proposed to be allotted by the port for mechanized Berth will be 98861 sq. mtrs. as per updated feasibility report. This includes 50000 sq. mtrs. of land earmarked for storage area and the rest 48861 sq. mtrs. has been calculated as ancillary facilities like circumferential roads of hardstand, approach road alongside wagon loading bay, space for conveyor trestle from jetty approach to hardstand and also from hardstand to wagon loading bay and associated drainage and waste water management system etc.

The stacking area i.e. 50000 sq. mtr. is 50.57% of the area proposed to be made available for development of stacking yard. (i.e. 98861 sq. mtrs.)</td></tr>
<tr><td></td><td>(ii). The KOPT to furnish the Land use plan of the area proposed to be allotted.</td><td>The total land will be a custom bounded area. This will be used for creation of facility for stacking, aggregation and evacuation of cargo by rail/ road. Besides, some land will also be used for creation of embankment, office, fire-fighting and environmental mitigation measures as detailed below:

<table><tr><td>a) Stacking</td><td>64.05 Acre</td></tr><tr><td>b) Railway Tract</td><td>12.4 Acre</td></tr><tr><td>c) Road</td><td>9.8 Acre</td></tr><tr><td>d) Others</td><td>22.65 Acre</td></tr></table></td></tr>
<tr><td></td><td>(iii). Looking into the stack height and turnover ratio as considered by KOPT and by applying the formula prescribed for calculation of yard capacity for the coal terminal, it is seen that the area of 49000 square metres would be sufficient to handle the quay capacity of 4.79 MTPA. Thus, there appears to be a wide mismatch between the estimated quay capacity and yard</td><td>The reply given against 2.B (i) clarifies the mismatch between the estimated quay capacity and yard capacity.</td></tr>
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<tr><td></td><td>capacity given the proposed allotment of 92000 sq. metres. Therefore, the total area of 92000 square metres proposed to be allotted for each berth to be reviewed and the wide gap between the quay and yard capacity to be narrowed down.</td><td></td></tr>
<tr><td></td><td>(iv). The stack height of 5.25 tonnes per sq. mtr considered by KOPT for coal to be supported with actuals achieved at HDC including at the berths handled by private terminal operators, during the years 2008-09 to 2011-12 (upto December 2011).</td><td>The quantity of 5.25 tonnes per sq. mtrs. arrived at considering 7 mtr. of stacking height.</td></tr>
<tr><td></td><td>(v). Likewise, the plot turnover ratio of 38 considered by KOPT for coal to be supported with actuals achieved at HDC including at the berths handled by private terminal operators, during the years 2008-09 to 2011-12 (upto December 2011).</td><td>The turnover ratio of the plot in a year has been revised to 30 in the updated feasibility report considering 14000 MT of evacuation per day. Even after that the yard capacity is 5.25 MTPA.</td></tr>
<tr><td></td><td>(vi). A comparative position of the Stack height, turnover ratio and the free days in respect of Coal and Iron ore as considered by KOPT in the Riverine Outer Terminal – I (Upfront tariff for which was fixed by TAMP vide Order dated TAMP/24/2011-KOPT dated 8 September 2011), proposed Mechanised Berth and the proposed Multipurpose Berth is given below:

<table><tr><th>Parameters</th><th>Riverine Outer Terminal - I</th><th>Multipurpose Berth</th><th>Mechanised Berth</th></tr><tr><td>Stack height</td><td>Coal – 3 t/sqm
Iron Ore – 12 t/sqm</td><td>Coal – 2.40 t/sqm
Iron Ore – 15 t/sqm</td><td>Coal – 5.25 t/sqm</td></tr><tr><td>Turnover Ratio</td><td>Coal – 18
Iron Ore – 12</td><td>Coal – 36
Iron Ore – 12</td><td>Coal – 38</td></tr><tr><td>Free days</td><td>Coal – 5 days
Iron Ore – 25 days</td><td>Coal – 5 days
Iron Ore – 20 days</td><td>Coal – 6 days</td></tr></table>
The reason for considering different Stack height, turnover ratio and the free days in respect of Coal and Iron ore at the above mentioned berths at HDC to be clarified.</td><td>The comparative position of all the parameters of riverine Outer Terminal-1 can be assessed against Multipurpose Berth of Haldia Dock-II project but not against Mechanised Berth.

The turnover ratio of Multipurpose berth of Haldia Dock-II is double than OT-1 as because evacuation of coal has been considered with the help of Reclaimer and Wagon Loader against Pay Loader loading of wagons in case of OT-1.

<table><tr><th>Parameters</th><th>Riverine Outer Terminal - I</th><th>Multipurpose Berth</th><th>Mechanised Berth</th></tr><tr><td>Stack height</td><td>Coal – 3 t/sqm
Iron Ore – 12 t/sqm</td><td>Coal – 3 t/sqm
Iron Ore – 12 t/sqm</td><td>Coal – 5 t/sqm</td></tr><tr><td>Turnover Ratio</td><td>Coal – 18
Iron Ore – 12</td><td>Coal – 24
Iron Ore – 12</td><td>Coal – 30</td></tr><tr><td>Free days</td><td>Coal – 5 days
Iron Ore – 25 days</td><td>Coal – 5 days
Iron Ore – 20 days</td><td>Coal – 6 days</td></tr></table></td></tr>
<tr><td>C.</td><td><u>Quay Capacity for the Multipurpose Berth:</u></td><td></td></tr>
<tr><td>(i).</td><td>The Multipurpose Berth is proposed to handle loading of iron ore and unloading of coal. The KOPT has estimated the quay capacity of the multipurpose berth based on the assumed handling of number of vessels carrying coal and iron ore, with the parcel size of 42000 tonnes by considering a turnaround time of 2.60 days. As stated earlier, it may be that the ship day output of a vessel influences the turnaround time of a vessel and not vice-a-versa. The proposed berth envisages deployment of two Harbour Mobile Cranes (HMCs). Therefore, the productivity (handling rate) of the HMCs should be the factor, rather than the parcel size of the vessels, for estimation of quay capacity of the terminal.</td><td>Both the Multipurpose Berths at Haldia Dock-II are proposed to have 2 MHCs similar to what has been considered for OT-1 for which TAMP has already passed Tariff Order. At OT-1 TAMP has considered ship day output of 20,000 MT per day. The same has been considered for Multipurpose Berth of Haldia Dock-II.</td></tr>
</table>

(ii).	(a). The specific reasons why 40T MHC is preferred and not any higher capacity, to be explained. KOPT to clarify whether the technical design of the multipurpose berths permit deployment of 100T MHCs.	The lifting capacity of these cranes vary with the radius at which they are to work while loading/ unloading cargo. The Harbour Mobile crane considered for the project is capable of lifting minimum of 40T at a radius of 16 mts. which corresponds to 100T HMCs at the lowest possible radius. Same MHC has been considered for OT-I which will also handle similar type of cargo. The technical designs of the multipurpose berths are similar to that of the Outer Terminal-I, as such 100T MHC deployment will not be an issue.
	(b). This Authority has recently fixed ceiling rates following normative approach for use of HMC for common application without reference to individual service providers at the Paradip Port Trust (PPT) and Tuticorin Port Trust (TPT) vide Orders dated 30 December 2009 and at New Mangalore Port Trust (NMPT) and Visakhapatnam Port Trust (VPT) vide Orders dated 16 June 2010. The ceiling rates so fixed for the average daily crane performance is for benchmark level of productivity of 12,500 tonnes for handling of dry bulk cargo with HMC of 100 tonne capacity. The above said tariff Orders are hosted in the website of TAMP. It is noteworthy that the KOPT itself for the proposed multipurpose terminal at Outer Terminal – I had recently considered deployment of 2 numbers of 104 tonne capacity HMCs. The rates fixed for handling of cargo at Berth no. 2 and 8 at HDC also is based on the deployment of 100 tonne capacity HMC. Further, the private operator at KOPT viz., TM International Logistics Limited (TMILL) also deploys HMC of a 104 tonne capacity. In view of the above, the KOPT to review the estimated capacity of the multipurpose berth by considering the benchmark level of productivity of 12,500 tonnes per HMC for handling of dry bulk cargo with HMC of 100 tonne capacity. The berth hire charges may also be revised accordingly.	All the ports mentioned by the Authority is a natural Sea Port where a fully laden vessel can work, but in case of a riverine port like HDC, the benchmark level of productivity cannot be considered as already explained in foregoing para. Incidentally TAMP, in consideration of problems of low parcel size associated with HDC, has considered daily output of 20000 MT by 2 MHCs for OT-I. The same figure has been considered for Multipurpose Berth of Haldia Dock-II.
	(iii). KOPT to confirm that the operator of the proposed Multipurpose Berth would not be allowed to deploy higher capacity HMCs at the proposed berth other than the capacity of the HMC considered for quay capacity calculation.	In general, 100 MT capacity MHC is used in all Multipurpose berths for handling dry bulk cargo.
	(iv). The KOPT to clarify/ furnish the following:	
	(a). The basis for considering the average parcel load of the vessels at 42000 tonnes.	Haldia Dock-II project envisages handling of Panamax vessel of 75000 DWT with a maximum parcel load of 42000 MT corresponding to 9 mtr. draft along with Handymax vessel of 32000 GRT with a maximum parcel load of 30000 MT.

<table>
<tr><td></td><td>(b). The annual average parcel size of vessels called on Haldia Dock Complex (HDC) including at the berths handled by private terminal operators for import of coal and export of iron ore during the years 2008-09 to 2011-12 (upto December 2011) and the projections for the next three years.</td><td><table><tr><th>Year</th><th>Average Parcel Size</th></tr><tr><td>2008-2009</td><td>25714.33</td></tr><tr><td>2009-2010</td><td>25102.58</td></tr><tr><td>2010-2011</td><td>24448.43</td></tr><tr><td>2011-2012</td><td>24318.91</td></tr></table>
We have projected 42000 MT for Panamax and 30000 MT for Handymax vessels for Haldia Dock-II which will be different in case of existing Haldia Dock.</td></tr>
<tr><td></td><td>(c). (i). To establish with actuals for the years 2008-09 to 2011-12 (upto December 2011) that it has taken 2.1 days to complete cargo handling of a vessel at Haldia Dock Complex (HDC) including at the berths handled by private terminal operators.</td><td>Similar multipurpose berths are in operation at Berth No.2 & 8. However, the parcel load at Haldia Dock is much less than what has been projected at Haldia Dock-II. The calculations were made on the basis of projected parcel load of the vessel.</td></tr>
<tr><td></td><td>(ii). Likewise, to establish with actuals for the years 2008-09 to 2011-12 (upto December 2011) that it has taken 0.5 days for handling a vessel at Haldia Dock Complex (HDC) including at the berths handled by private terminal operators.</td><td>The scenario at Haldia Dock Complex will be different from Haldia Dock-II. Any vessel after completion at existing Haldia Dock can be shifted to some other berth to facilitate the handling of another vessel at that berth. However, in case of Haldia Dock-II, the handling of next vessel will be possible only after the sailing of 1st vessel from the berth.</td></tr>
<tr><td></td><td>(iii). Furnish the breakup for the service time of 0.5 days.</td><td>The maximum time of vessel may have to wait for tide is about 12 hrs and a minimum time of waiting will be ‘0’ hour. As such, the average will be 6 hrs.

Further, the vessel’s waiting time from the actual completion of cargo, 6 hrs. on an average, will be required for removal of pay loaders, closing of hatches, completion of services, signing of documents, departure of personnel, boarding of pilots, lifting of gangway, readiness of engine and singling up, etc.</td></tr>
<tr><td>D.</td><td><u>Yard Capacity for Multipurpose Berth</u></td><td></td></tr>
<tr><td>(i).</td><td>While fixing upfront tariff for coal terminal at VPT a stack height of 6 tonnes per Sq. metre was considered as against the norm of 3 tonnes per Sq. metre prescribed in the guidelines. The KOPT has however considered a lower stack height of 2.4 tonnes per Sq. metre. The KOPT to, therefore, consider revising its yard capacity taking into account the revised stack height of 6 tonnes per Sq. metre.</td><td>In case of VPT, the stack height considered for coal was 9 mts. mainly because of better soil condition which is not possible in case of soil available at Haldia Dock-II.</td></tr>
<tr><td>(ii).</td><td>The KOPT has stated that since there is no need to provide for space for equipment, the entire area can be used for stacking and hence has stated that the utilization would be 100%. However, it is seen that out of the total area proposed to be allotted for Multipurpose Berth at 121000 sq. metres, yard capacity has been calculated considering an area of 73700 Sq. metres only. In other words, the utilisation is seen to be to the extent of around 61% only. Even at the 61% utilization of the area, the yard capacity works out to 5.64 MTPA, which is</td><td>The total area proposed to be allotted by the port for Multipurpose Berth will be 122310 sq. mtrs. This includes 79600 sq. mtrs. of land earmarked for storage area and the rest 42710 sq. mtrs. has been calculated as ancillary facilities like circumferential roads of hardstand, approach road alongside wagon loading bay, space for conveyor trestle from jetty approach to hardstand and also from hardstand to wagon loading bay and associated drainage and waste water management system etc.</td></tr>
</table>

	higher than the quay capacity calculated by KOPT at 4.10 MTPA. The KOPT to, therefore, review the requirement of area to be allotted and the narrow down the gap between the quay and yard capacity.	The stacking area i.e. 79600 sq. mtr. is 65% of the area proposed to be made available for development of stacking yard (i.e. 122310 sq. mtrs.).
(iii).	The actual stack height for coal and iron ore achieved at HDC may be furnished for the years 2008-09 to 2011-12 (upto December 2011) at Haldia Dock Complex (HDC) including at the berths handled by private terminal operators.	The stack height taken into account in the updated feasibility report is that achieved in Haldia Dock Complex. However, no mechanism for recording the stack height is prevalent.
III	**Capital Cost Estimation:**	
(i).	The capital cost estimates for cargo handling activity in the Multipurpose Berth no. 4 is seen to be more by ₹55.26 crores as compared to the capital cost estimates of Multipurpose Berth no. 1. Likewise, the capital cost estimates for cargo handling activity in the Mechanised Berth no.3 is seen to be more by ₹4.04 crores as compared to the capital cost estimates of Mechanised Berth no.2. However, the KOPT has proposed uniform Scale of Rates towards handling, storage and miscellaneous charges for both the Multipurpose berths. Likewise, uniform Scale of Rates has been proposed for both the Mechanised Berths on the ground of uniform cargo profile at the said berths. Thus, given the uniform Scale of Rates and different level of capital investment, it may so happen that the successful bidder who would invest a higher capital may have to levy a lower tariff and the successful bidder who would invest a lower capital may derive undue advantage. The KOPT to examine this point and clarify the position.	The capital cost estimates of Multipurpose Berth No.4 is more than the capital cost estimate of Multipurpose Berth No.1 because of the fact that the length of the trestle of MB-4 is more than 500 mtrs. than that of the trestle of MB-1. Similarly, because of the same reason the cost estimate differs between Mechanised Berth No.2 & Berth No.3 also. Again because of uniform cargo profile proposed to be handled in both Mechanised Berths, uniform Scale of Rates have been proposed. In case the upfront tariff is calculated on the actual capital cost estimates for individual berths, the handling rate will be different in spite of similar type of cargo profile and same handling facility. In such a scenario, the successful bidder with a higher handling rate will find it difficult to mobilise enough cargo for his berth. We have also kept clause 2.2 of the upfront tariff guideline dated 26 February 2008 in mind.
(ii).	The basis for considering contingencies @ 3%, project supervision @ 7%, works contract tax @ 4% and miscellaneous cost @ 5% of the civil cost and mechanical cost in the capital cost estimates of cargo handling activity and berthing activity to be furnished.	In an estimate, it is universal practise for keeping provision of contingency, detailed engineering, project supervision, works contract tax etc. over and above the estimated cost. In the instant case, 7% costs over civil estimates has been considered both for detailed engineering and project supervision (5% for detailed engineering & 2% for project supervision). Cost towards Contingencies @ 3% of the estimates cost has been considered as per civil engineering manual. In addition to the above, based on TAMP guideline 5% cost over civil and mechanical estimates have been kept for mitigating miscellaneous activities like pollution control, fire fighting, waste water management, fresh water facilities etc.
(iii).	Civil cost for the Mechanised and Multipurpose Berth: The Feasibility Report mentions that the civil cost estimates are based on prevailing market rates. Though the KOPT has furnished workings to arrive at the unit rate for some of the cost elements, it could not be correlated to the	The rates pertaining to estimated civil cost under ship berthing facility and cargo handling activity such as hardstand etc. have been derived from the prevalent rate of civil construction considered in case of estimates

<table>
<tr><td></td><td>amount of civil cost under Ship Berthing facility and Cargo handling activity. The KOPT to, therefore, furnish supporting documents to justify the unit rates considered for estimation of civil cost and furnish workings to correlate it to the amount considered in the civil cost estimation.</td><td>of Multipurpose Outer Terminal-1 which has already been accepted by TAMP.</td></tr>
<tr><td>(iv).</td><td><u>Equipment Cost for the Mechanised Berth:</u>
(a). The documentary evidence stated to have been attached in support of the cost of various types of Equipment have not been found attached to the proposal. Even from the documents furnished by KOPT in respect of cost of some of the equipments, the document could not be correlated to the estimated Mechanical cost of the Cargo handling activity except for Stacker, BW Reclaimer and Wagon Loader. The KOPT to, therefore, furnish documentary evidence in support of the cost for Grab Unloaders, Conveyor, Dozer and Railway Weigh Bridge.</td><td>The documentary evidence in support of the cost for Grab Unloaders, Conveyor, Dozer and Railway Weigh Bridge is furnished.</td></tr>
<tr><td></td><td>(b). It is seen that there are deviations with respect to the no. of handling equipment considered in the proposal as compared to the norms prescribed in the Upfront tariff guidelines for the coal terminal as given below:
<table><tr><th>Sl. No.</th><th>As per Norms for coal unloading terminal</th><th>As considered by KOPT</th></tr><tr><td>1</td><td>Reclaimer – 2 nos.</td><td>Reclaimer – 1 no.</td></tr><tr><td>2.</td><td>Wagon loader, truck loader – 1 no. each</td><td>No. of Wagon loader considered by KOPT is not indicated.
The KOPT does not appear to have considered truck loaders.</td></tr><tr><td>3.</td><td>Stackers – 2 nos.</td><td>Stacker – 1 no.</td></tr><tr><td>4.</td><td>Cranes – 2 nos.</td><td>The KOPT does not appear to have considered Cranes.</td></tr><tr><td>5.</td><td>Pay loaders and Dozers – 4 nos.</td><td>Dozer – 1 no.</td></tr><tr><td>6.</td><td>Workshop Equipment</td><td>The KOPT does not appear to have considered Workshop Equipment.</td></tr><tr><td>7.</td><td>Electrical power & Control switch gears</td><td>The KOPT has considered capital cost for Electrical Works. It may be confirmed whether capital cost relates to Electrical power & Control switch gears.</td></tr><tr><td>8.</td><td>Railway Weigh Bridge - NIL</td><td>Railway Weigh Bridge</td></tr></table>
The KOPT to justify each deviation.</td><td>1. The capacity of Reclaimer considered is higher than Stacker as such 1 Reclaimer per berth will suffice.

2. Wagon loader has been considered but no Truck loader has been considered as coal being the bulk cargo is expected to be evacuated by Rail.

3. The mechanised berth is expected to handle mainly coal traffic so no crane has been considered here.

4. 4 nos. of Pay loader has to be added for hatch cleaning.

5. The Workshop cost has been included in the miscellaneous cost considered as 5%.

6. The Railway Weigh Bridge is essential for evacuation of cargo by Rail as per recent guidelines of Railways.</td></tr>
<tr><td></td><td>(c). The basis for the lumpsum considered for Electrical works to be furnished justifying the cost considered in the estimates.</td><td>The cost estimates are furnished.</td></tr>
<tr><td></td><td>(d). The exchange rate per Euro or Dollar considered in the estimation of the Capital Cost of some of the Equipment may be furnished.</td><td>The exchange considered in the estimate for the equipment in case of OT-1 has been taken in this case also which has already</td></tr>
</table>

		been approved by TAMP. The estimated capital cost of all the equipments considered for the mechanised terminal are furnished in Indian Rupees.
	(e). The KOPT to furnish the workings to arrive at the cost of each equipment considered in the capital cost estimates. While doing so, the benefit available under the Scheme of Export Promotion for Capital Goods (EPCG) may be borne in mind.	The EPCG benefit is not applicable in the instant case.
(v).	Equipment Cost for the Multipurpose Berth:	
	(a). The equipping plan considered by the KOPT for the proposed multipurpose berth is different from the equipping plan prescribed in the upfront tariff guidelines for the multipurpose terminal. In this regard, the KOPT to justify the need of each equipment as proposed to be deployed by it vis-à-vis the equipment prescribed in the Upfront guidelines of 2008.	One Reclaimer and conveyor has been considered additionally for faster evacuation of cargo and higher turnover ratio.
	(b). The number of each type of equipment considered in the proposal to be justified in the light of the productivity level of the individual equipment and capacity of the multipurpose terminal.	The justification has been considered in each case in the updated version of the upfront tariff proposal.
	(c). The documentary evidence stated to have been attached in support of the cost of various types of Equipment have not been found attached to the proposal. Even from the documents furnished by KOPT in respect of cost of some of the equipments, the document could not be correlated to the estimated Mechanical cost of the Cargo handling activity except for reclaimer. The KOPT to, therefore, furnish documentary evidence in support of the cost for HMCs, Dumper trucks, front end loaders, conveyor, dozer and Road Weigh Bridge.	The documentary evidence is furnished.
	(d). The basis for the lumpsum considered for Transformers, Electrical cable, high mast towers to be furnished justifying the cost considered in the estimates.	The cost estimates are furnished.
	(e). The exchange rate per Euro or Dollar considered in the estimation of the Capital Cost of some of the Equipment may be furnished.	The exchange rate considered in the estimate for the equipment in case of OR-1 has been taken in this case also which has already been approved by TAMP.
	(f). The KOPT to furnish the workings to arrive at the cost of each equipment considered in the capital cost estimates. While doing so, the benefit available under the Scheme of Export Promotion for Capital Goods (EPCG) may be borne in mind.	The working of cost estimate given in the upfront tariff proposal (as approved by TAMP in case of OT-I). The EPCG benefit is not applicable in the instant case.
IV	**Operating Cost:**	
(i).	For the Mechanised Berth and Multipurpose Berth: In the calculation of licence fee, the KOPT is seen to have considered a rate of ₹78/- per sq. mtr per annum incase of water front area and ₹156/- per sq. mtr per annum incase of land areas. However, from the proposal filed by KOPT for prescription of rates in respect of	In the updated tariff proposal a rate of ₹1229 per 100 sq. mtr. has been considered as license fee as approved by TAMP recently.

	lands at Haldia Dock – II, the KOPT has proposed a rate of ₹73.14 per sq. mtr per annum incase of water front area and ₹146.28 per sq. mtr per annum incase of land areas. The position may be clarified.	
(ii).	<u>For the Multipurpose Berth:</u>	
	(a). The basis for considering power consumption @ 2.4 lakh units per annum per hectare to be justified with workings. The actual power consumption in this regard may also be furnished for the years 2008-09 to 2011-12 (upto December 2011).	Details are furnished.
	(b). It appears from the proposal that the estimated power cost considered by KOPT is towards power and lighting as prescribe din the Upfront tariff guidelines. It further appears that the estimated power cost is towards power required for illumination of area for storage of coal and iron ore. If that is so, the basis for considering 2 hectares of land for iron ore storage and 6.1 hectares of land for coal storage considered in the power consumption to be justified.	As above.
	(c). The unit rate of electricity considered at ₹5.38 per unit to be justified with latest documentary evidence.	The rate downloaded from WBSEDCL site is furnished.
	(d). The KOPT has considered fuel consumption of 70 litres per hour incase of HMCs for estimation of fuel cost. In this regard, it may be recalled that the fuel consumption of 70 litres per hour is for a HMC of 100 tonne capacity whereas the KOPT has proposed deployment of lower capacity HMC of 40 tonne. Therefore, the fuel consumption considered at 70 litres per hour to be justified.	The 70 litres per hour fuel consumption has been considered for 100T MHC as considered in case of OT-I.
	(e). The basis for considering 1200 hours of operation of one HMC incase of Iron ore and 2900 hours of operation of one HMC incase of Coal, considered in the estimation of fuel cost may be furnished.	In the updated feasibility report and upfront tariff proposal, the hour of operation considered as 1200 hrs. for iron ore & 3160 hrs for coal and other dry bulk.
	(f). The KOPT has considered fuel consumption of 13.5 litres per dumper trip based on the consumption of 2.5 litres per km and considering a distance of 5.4 kms. In this context, to justify the fuel consumption factor considered for the said equipment supported by documentary evidence.	The consumption pattern has been considered same as in case of Outer Terminal-I.
	(g). The basis for considering 48000 dumper trips incase of iron ore and 116000 dumper trips incase of coal to be furnished with workings.	This has been revised in the updated upfront tariff proposal.
	(h). The KOPT has considered fuel consumption of 12 litres per hour for pay loaders. The fuel consumption factor considered for the said equipment to be justified supported by documentary evidence.	The consumption pattern has been considered same as in case of Outer Terminal-I.
(i).	The basis for considering 8000 hours incase of iron ore and 19333 hours incase of coal to be furnished with workings.	This has been revised in the updated upfront tariff proposal.

V	**Cargo handling charges calculation:** The basis for considering 90% of the cargo to be foreign and 10% of the cargo to be coastal for both the Mechanised Berth and Multipurpose berth may be furnished. The ratio of similar category of foreign and coastal cargo at HDC including at the berths handled by private terminal operators during the years 2008-09 to 2011-12 (upto December 2011) to be furnished yearwise separately.	The present pattern of cargo/ vessel arrival has been taken into consideration.
VI	**Storage charge calculation:**	
(i).	The actual average dwell time of coal and iron ore at HDC including at the berths handled by private terminal operators during the years 2008-09 to 2011-12 (upto December 2011) to be furnished yearwise separately.	As already indicated in our reply in case of OT-I, no such data is being maintained at this end. However, TAMP can rely on the data already placed in case of OT-I.
(ii).	The basis for considering 25% each of coal and iron ore cargo to attract storage charges in the multipurpose berth to be furnished.	It depends on various operational parameters and based on experience 25% of cargo to attract storage charge.
VII	**Berth hire**:	
(i).	Capital cost: The Capital cost proposed to be incurred towards cost of berth structure and cost of dredging at the Mechanised Berth and Multipurpose Berth to be supported by documentary evidence.	The documentary evidence for the capital cost in respect of the berth structure for both mechanised and multipurpose berth is furnished. A very minimum dredging is required in front of the berths and only a lumpsum amount has been considered for the same.
(ii).	Calculation of berth hire: The KOPT to consider working out the berth hire charges in line with the approach adopted in the Upfront case of KOPT in case no. TAMP/24/2011-KOPT dated 8 September 2011.	Same approach has been adopted.

8. 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.

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

(i). The proposal from Kolkata Port Trust (KOPT) is to fix upfront tariff for the cargo envisaged to be handled at the two nos. each of Multipurpose Berths and 2 nos. each of Mechanised Berths to be developed under Public Private Partnership (PPP) mode at Haldia Dock-II of KOPT. 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.

(ii). The cargo envisaged to be handled at the Multipurpose Berths are Iron Ore, Coal and other dry bulk cargo and handling of coal alone is envisaged at the Mechanised Berths. The KOPT has not listed down the types of cargo that would be covered under 'Other dry bulk cargo'. It has, however, clarified that dry bulk cargo which would be compatible with the equipment proposed to be deployed at the multipurpose berth would be handled. Since the KOPT has grouped coal and

other dry bulk cargo together, the parameters applied incase of coal are considered in respect of other dry bulk cargo also. It is noteworthy that inclusion of other dry bulk cargo at the multipurpose berth is proposed in the revised proposal based on a suggestion to this effect that emerged at the joint hearing.

(iii). It is noteworthy that even in the multipurpose berths, the KOPT has estimated to handle around 70% of Coal. Given that the length of the Multipurpose Berths and the Mechanised Berths are same and when all the berths are estimated to predominantly handle coal, the proposal of KOPT to handle multipurpose cargo at the multipurpose berths has the effect of lowering the capacity of the Multipurpose Berths. The KOPT was, therefore, requested to clarify as to why the handling of iron ore cannot be accommodated at any of the existing berths of KOPT at HDC and all the proposed berths be mechanized to handle coal, so as to ensure optimum utilisation of the resources.

In this regard, the KOPT has clarified that the configuration of Multipurpose Berth has been considered to accommodate handling of both import as well as export cargo. The ships bringing coal for unloading can be used for loading of iron ore, which will provide better productivity for the vessels and also ocean freight advantage for the importer/ exporter. The handling of iron ore at the Multipurpose Berth would ensure the availability of wagons for back loading as well as the flexibility of handling of other dry bulk cargo compatible with the proposed equipment other than imported coal.

(iv). As stated earlier, the proposal from KOPT is to fix upfront tariff for handling of cargo for two nos. each of Multipurpose Berths and 2 nos. each of Mechanised Berths. Since the same profile of cargo is proposed to be handled in both multipurpose berths and both mechanical berths respectively, the KOPT has proposed to apply same set of tariff for both the Multipurpose berths and another set of tariff for both the Mechanised berths. To arrive at the proposed uniform Scale of Rates to be applicable for Multipurpose berths, the KOPT has taken into account the average of the capital cost and operating cost pertaining to two Multipurpose berths. Similarly, to arrive at the proposed uniform Scale of Rates to be applicable for Mechanised berths, the KOPT has taken into account the average of the capital cost and operating cost pertaining to two Mechanised berths.

As per clause 2.2. of the guidelines for upfront tariff setting for PPP projects of February 2008, the tariff caps set for handling different commodities or providing different services would apply to all terminals bid out in the port during the next five years to handle identical commodity and to provide similar services. Since, both multipurpose berths and mechanical berths are envisaged to handle similar cargo respectively by deploying similar equipment, this Authority agrees to the proposal of the port to prescribe upfront tariff each for the multipurpose berth and mechanised berth, by considering the average cost of each of the multipurpose berths and each of the mechanised berths respectively.

The upfront tariff fixed now is for handling cargo like iron ore, coal and other dry bulk cargo at the Multipurpose berth by using the Mobile Harbour Cranes (MHCs) and supporting equipment like front end loaders, reclaimers etc. Similarly, the upfront tariff fixed now is also for handling coal at the Mechanised berth by using the Grab unloaders and supporting equipment like conveyors, reclaimer etc. In this regard, it is to be noted by the KOPT that if the method of handling the said cargo either at the Multipurpose berth or the Mechanised berth formulated by KOPT undergoes a change, tariff will have to be reviewed to capture the change in the method, if any.

(v). The KOPT has filed its proposal in October 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 25 January 2012, the KOPT under cover of its letter dated 10 May 2012 has updated its proposal. The

updated proposal of the KOPT dated 10 May 2012 along with the information/ clarifications furnished by KOPT during the processing of the case are considered in this analysis.

A. <u>Multipurpose Terminal</u>:

(vi). With regard to fixation of upfront tariff for the Multipurpose berth, the updated proposal of KOPT generally follows the Upfront tariff guidelines prescribed for the multipurpose berth. Notably, the KOPT has also relied upon many of the parameters which have been considered at the time of fixation of upfront tariff for the Riverine Outer Terminal – I vide Order No.TAMP/24/2011-KOPT dated 8 September 2011.

(vii). <u>Optimal Terminal Capacity of Multipurpose berth:</u>

(a). The equipping plan considered by the KOPT for the proposed multipurpose terminal, *inter alia*, considers use of 2 numbers of 100 tonne capacity MHCs, instead of 3 numbers of 20 tonne capacity Electric Level Luffing (ELL) Cranes mentioned in the guidelines. At some of the existing facilities at the West Quay and other berths of Visakhapatnam Port Trust (VPT), MHC of 100 tonnes capacity are already put into operation by the port. Other Major Port Trusts such as Paradip Port Trust (PPT), V.O. Chidambaranar Port Trust (VOCPT), Kandla Port Trust (KPT) and New Mangalore Port Trust (NMPT) have also proposed deployment of MHC of around 100 Tonne capacity for the cargo handling operation. Even at the Outer Terminal-I riverine jetty at HDC of KOPT, deployment of MHCs has been envisaged. That being so, the proposed deployment of MHC by KOPT in lieu of ELL Cranes is in line with the approach adopted at some other major port trusts as well as in the same port for some other project.

(b). In view of the tidal and other navigational constraints at HDC, the KOPT has reportedly considered deployment of 2 nos. of MHCs at each berth so as to enable handling of vessels within the minimum berth time of 57 hours. It may be recalled that at the riverine Jetty at Outer terminal – I, also, the proposed berth length was 270 m x 40 m and two nos. of 104 tonne MHCs were envisaged to be deployed for handling multipurpose cargo like coal and iron ore.

(c). On the ground that Haldia Dock Complex (HDC) is a tidal port and the vessels have to invariably wait for suitable tide for sailing after completion of work, the KOPT has considered ship day output of 10000 tonnes per day per MHC. Effectively, the ship day output considered is around 8512 tonnes per day per MHC only because an additional time of 6 hours is factored in the calculation towards service time and waiting time for the favorable tide by a vessel.

In this regard, it may be recalled that while fixation of upfront tariff for the riverine jetty at the Outer Terminal – I at KOPT, in view of the peculiarity of the situation anticipated at the proposed riverine facility such as the continuous adjustment of working of the MHC to cope up with the up and down movement of the vessel with the change in water level of the river and handling of mainly bottom cargo vessels, handling rate of 10000 tonnes per day per MHC was considered which is about 20% lower than the handling rate of 12500 tonnes per day per 100 tonne MHC applied in the cases pertaining to New Mangalore Port Trust (NMPT), Visakhapatnam Port Trust (VPT) and upfront tariff determination for mechanization of berth involving deployment of MHC at the V.O. Chidambaranar Port Trust (VOCPT) and Kandla Port Trust (KPT).

Taking into account the position that this Authority has already recognised the peculiarity of the situation at KOPT and considered a reduced ship day output of 10000 tonnes per day per MHC at riverine jetty at Outer Terminal – I, the same productivity level is adopted incase of Multipurpose berth also. Accordingly, the ship day output at 20000 tonnes per day for 2 MHCs is considered in the analysis.

(d). Considering the ship day output at 20000 tonnes per day for 365 days at 70% utilisation, the optimal quay capacity of the Multipurpose berth works out to 5.11 million tonnes per annum as against the optimal quay capacity of 4.35 million tonnes per annum as estimated by the port.

(e). While assessing the capacity of 4.35 million tonnes, KOPT has reported that 1.2 million tonnes would be Iron Ore and the remaining 3.15 tonnes would be Coal and other dry bulk together. This works out to a share of iron ore at 27.59% and share of coal and other dry bulk cargo at 72.41%, instead of 30% of iron ore and 70% of coal and other dry bulk cargo as reported by the KOPT.

(f). The Upfront Guidelines for the multipurpose berth do not require assessment of the yard capacity separately. The KOPT has stated that the stacking area of 79600 sq. mtrs. is 65% of the area proposed to be made available for development of stacking yard (i.e. 122310 sq. mtrs.) and the balance 35% for ancillary facilities. The judgment of KOPT for area requirement of 122310 sq. mtrs. of land is relied upon in the analysis.

(viii). Capital Cost:

The capital cost as estimated by the KOPT in its revised proposal is ₹343.28 crores and ₹405.51 crores respectively for the two multipurpose berths. Accordingly, the average capital cost of ₹374.40 crores is considered, of which ₹276.19 crores is estimated for cargo handling services and ₹98.22 crores for berthing activity. Out of the capital cost for the handling activity, ₹165.50 crores is estimated towards civil capital costs and the balance ₹110.68 crores towards equipment cost.

(a). Civil Cost:

(i). Cargo handling activity:

The upfront tariff guidelines broadly indicate the civil works involved for the multipurpose berth and require considering the civil cost as per the estimates given by the Port Trust. The items of civil works estimated by KOPT broadly adhere to normative list of items stipulated in the guidelines. The KOPT has also furnished the rate analysis for some of the items of civil cost. Provisions are also made in the estimates towards Soil investigation, Project supervision, Contingencies, detailed engineering, works contract tax etc. The civil cost for the Cargo handling activity as estimated by the Port is relied upon.

Under the civil capital cost, the KOPT has considered miscellaneous capital cost @ 5% of the estimated civil cost. Similarly, the KOPT has considered miscellaneous capital cost @ 5% of the estimated equipment cost. It is relevant to mention here that the Upfront tariff guidelines of 2008 stipulate estimating Miscellaneous capital cost @ 5% of the total of the estimated civil and equipment. The KOPT, instead, has separately considered the Miscellaneous cost under the respective category.

(ii). Berthing activity:

As per the upfront tariff guidelines, the capital cost for berthing services includes cost of construction of berth and cost of dredging, if any, carried out alongside the berth. The guidelines require considering the civil cost as per the estimates given by the Port Trust.

The capital cost for construction of berth is estimated at ₹79.20 crores. The KOPT has furnished the rate analysis for majority of the items of civil cost, which is relied upon.

With regard to cost of capital dredging, the KOPT has stated that the capital dredging alongside the berth would be the responsibility of the successful bidder. KOPT has considered a lump sum amount on this account and despite a request, no documentary evidence or analysis to support the quantity to be dredged and the unit rate is furnished. The dredging cost estimate of ₹2.50 crores, as furnished by the Port is considered.

The port has also estimated miscellaneous capital cost at 5% of the cost of the berthing activity. The upfront tariff guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in case of the upfront tariff proposals determined for various projects of VPT, Coal terminal at VOCPT and Mormugao Port Trust (MOPT), this Authority has considered the miscellaneous capital cost at 5% to meet contingencies under the Berthing Service. Even in respect of the fixation of tariff for the riverine jetty at Outer Terminal – I, miscellaneous capital cost at 5% has been considered under the Berthing Service to meet contingencies. Keeping in view the decision taken by this Authority in the above mentioned cases, it may not be unreasonable to allow miscellaneous capital cost of under the berthing activity, in this case also.

(b). Equipment Cost:

(i). The KOPT has explained that since the multipurpose berth will be utilized for unloading of coal and other dry bulk cargo and loading of iron ore, the equipping plan for handling the said dry bulk cargoes is different from what has been provided in the upfront tariff guidelines for multipurpose berth. The multipurpose berth envisages the deployment of Mobile Harbour Cranes, Payloaders, Dumpers (tripper trucks), Reclaimer, conveyor and Dozer for loading and unloading of cargo at the jetty. Further, the KOPT has also stated that due to draft restrictions and other navigational constraints, the equipping of the berth has been planned in such a manner that all vessels turnaround within the minimum time.

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 KOPT and also since none of the prospective bidders nor the users have raised any pointed objection to the proposed equipping plan, this Authority is inclined to consider the equipping plan as proposed by the port, which is based on the Feasibility Report.

It is relevant to mention here that even incase of the riverine jetty at the Outer Terminal – I at KOPT, a similar equipping plan was relied upon by this Authority.

(ii). The position regarding deployment of 2 MHCs at each of the berths is already discussed earlier.

The KOPT has envisaged deployment of 25 numbers of Dumper trucks for transfer of cargo between the jetty and yard. Considering the load carried by one truck per trip and taking into account the discharge rate of the MHCs per hour, it is seen that the proposed facility would theoretically require a minimum of 21 number of dumper trucks to transfer the ship day output of 20000 tonnes to the yard. Additional trucks may have to be maintained for any contingency like break down of the trucks and repairs and maintenance etc. In view of the above, the number of 25 numbers of dumper trucks as proposed by KOPT is found adequate and, therefore, maintained, even for a higher optimal capacity of 5.11 million tonnes. It is noteworthy that even incase of fixation of upfront tariff for the riverine jetty at Outer Terminal – I of KOPT, additional tripper trucks were considered.

The KOPT has envisaged the use of 12 nos. of Front end loaders for handling cargo, 1 no. of Reclaimer for evacuation of cargo by rail, Conveyor, 2 nos. of Dozers for dozing coal for reclaiming for wagon loading, 3 nos. of Poclain (Excavators) for accumulation and heaping of cargo. The KOPT has not furnished any specific justification with regard to the deployment of the above mentioned number of equipment with reference to its capacity. Given that none of the prospective bidders nor the users have raised any pointed objection to the deployment of the proposed no. of equipment, this Authority is inclined to consider the number of equipment as proposed by the port, which is based on the Feasibility Report.

(iii). The KOPT has furnished budgetary quotation in support of the cost of MHC at 3158000 Euros. KOPT has further added the cost of 145000 Euros towards grabs. The KOPT has clarified that there would not be any component of Customs duty in the cost of the imported equipment. The KOPT has applied the exchange rate adopted in the case of upfront tariff fixation of the riverine jetty at Outer Terminal – I in the current case also. 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. Considering the exchange rate of ₹69.131 per Euro prevailing at the time of analysis of this case, the estimated cost of two MHCs works out to about ₹45.67 crores.

The KOPT has also furnished budgetary quotation with reference to the cost of the dumper trucks, which includes cost of insurance and registration. The cost of 25 nos. of dumper trucks works out to around ₹5.95 crores.

The base rate considered by KOPT for estimation of cost of front end loaders is the same as considered at the time of fixation of upfront tariff of the riverine jetty at Outer Terminal – I of KOPT. By considering the exchange rate of ₹69.131 per Euro prevailing at the time of analysis of this case and taking into account NIL customs duty, the cost of front end loaders work out to ₹1.15 crores.

Based on the budgetary quotation for Bucket Wheel reclaimer, and after considering excise duty, sales tax and service tax components, as reflected in the Quotation, the capital cost works out to around ₹16.21 crores.

The KOPT has furnished quotation with reference to the cost of the Conveyor measuring length of 7420 metres. Excise duty, sales tax and service tax components have been added by KOPT to the unit cost, as reflected in the Quotation. Since the conveyor at the Multipurpose berth is envisaged to be around 550 metres long, the KOPT has proportionately considered the cost at ₹7.76 crores in the calculation.

The KOPT has furnished budgetary quotation with reference to the cost of the Dozer. Excise duty, and sales tax component have not been added by KOPT to the unit cost, as reflected in the Quotation. Therefore, the cost of Dozer as furnished by KOPT is updated to reflect this position. The cost works out to around ₹4.13 crores.

The base rate considered by KOPT for estimation of cost of excavators is the same as considered at the time of fixation of upfront tariff of the riverine jetty at Outer Terminal – I of KOPT. By considering the exchange rate of ₹69.131 per Euro prevailing at the time of analysis of this case and taking into account NIL customs duty, the cost of 3 nos. of excavators work out to ₹5.51 crores.

The amount of ₹21 lakhs towards cost of Road Weigh Bridge is not supported by documentary evidence. Nevertheless, since the cost is reflected in the Feasibility Report furnished by the port, it is relied upon in the analysis.

The KOPT has furnished costing with reference to cost of transformers, electrical cables etc. amounting to ₹3.78 crores, which is considered in the analysis.

The percentage for determining the cost towards Project supervision, Contingencies, detailed engineering, works contract tax etc. is relied upon as furnished by the port.

For the reasons explained earlier, Miscellaneous cost @ 5% of the equipment cost considered by KOPT is taken into account.

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

(x). Operating Cost:

(a). Power cost:

(i). For illumination:

Power cost has been estimated by the port with regard to the illumination of the 7.96 hectares of land based on the power consumption of 240000 units per hectare per annum at the rate of ₹5.38 per unit.

It is relevant to mention here that the power consumption of 2.4 lakhs units per annum per hectare adopted by the KOPT is the norm prescribed in the guidelines for fixation of upfront tariff for liquid bulk terminal to quantify the expenses on illumination of yard.

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 KOPT is, therefore, relied upon in the analysis.

(ii). Reclaimer:

Power cost has been estimated by the port for operating the Reclaimer by considering a power consumption of 300 units per hour for 3272 hours per annum at the rate of ₹5.38 per unit.

The KOPT has stated that the Reclaimer is governed by 500 KVA Transformer. By considering a load factor of 75% and power factor of 80%, the KOPT has stated to have arrived at the power consumption of 300 units per hour for the reclaimer.

Based on the position that 3.15 million tonnes of coal has to be handled through reclaimers for loading onto rakes and based on the prevailing practice that each rake carries 3650 tonnes of coal and that each rake requires about 3.8 hours, the KOPT has arrived at the operating hours of reclaimer at around 3272 hours. By considering the revised capacity of coal and other dry bulk cargo at 3.70 million tonnes, the operating hours of reclaimer works out to around 3853 hours.

(iii). The KOPT has furnished documents to support the unit cost of power at ₹5.38 per unit.

(b). Fuel cost:

<u>MHC:</u>

The consumption norm of fuel prescribed in the guidelines for multipurpose cargo terminal is with reference to operation of 3 numbers of ELL cranes. Since the KOPT proposes deployment of 2 numbers of MHCs for handling cargo, it has estimated fuel cost for the MHCs assuming 70 litres of consumption of fuel per hour by a MHC. Fuel consumption of 70 litres per hour has been allowed with reference to MHC of 100 tonne capacity in the riverine jetty project.

The fuel cost is estimated by KOPT by taking into account 4350 hours per MHC. The exact number of hours applying the norms prescribed (i.e. 365 days * 24 hours * 70% utilization) works out to 6132 hours per MHC. As

stated earlier, the average cargo operation of a vessel would require 52 hours (including the waiting period of 6 hours). This means that cargo operation will take place for around 88.50% of the total time and the equipment will remain idle for the balance 11.50% of time waiting for tide, etc. This is because, unless the vessel which has completed the cargo operation vacates the berth, another vessel cannot be accommodated in the berth. Thus, the effective time of operation of MHC will be 88.50% of the total time i.e. (88.50% of 6132 hours), which works out to 5426.82 hours per MHC (rounded off to 5427 hours per MHC). That being so, the fuel consumption should be related to the actual operation of the MHC of 5427 hours. Therefore, we have considered 5427 hours per MHC instead of 4350 hours per MHC considered by KOPT.

Dumper Trucks:

To estimate the cost of fuel for operation of 25 numbers of dumper trucks, the KOPT has considered fuel consumption of 4 litres per hour per truck for 6450 hours per annum per truck.

The consumption of 4 litres per hour per truck is seen to be in line with the fuel consumption for the tripper trucks considered at the time of fixation of upfront tariff of the riverine jetty at Outer Terminal – I of KOPT.

The KOPT has considered the annual working hours for each truck at 6450 hours. Out of 6450 hours, 5250 hours is estimated for carrying coal and other dry bulk cargo. It is understood that the KOPT has arrived at 5250 hours as 365 days x 70% x 20.50 hours per day. The working hours of one truck for around 20.50 hours per day is based on the judgment of the port.

The remaining 1200 hours is estimated for carrying iron ore. Based on the position that 1.2 million tonnes of iron ore has to be unloaded from rakes and carried to the yard through dumper trucks and based on the prevailing practice that each rake carries 3800 tonnes of iron ore and that each rake requires about 4 hours, the KOPT has arrived at 1200 operational hours. By considering the revised capacity of iron ore at 1.40 million tonnes, the operating hours of dumper trucks works out to around 1484 hours.

Pay loaders:

The consumption of 12 litres per hour per front end loader is seen to be in line with the fuel consumption for the pay loaders considered at the time of fixation of upfront tariff of the riverine jetty at Outer Terminal – I of KOPT.

The KOPT has considered the annual usage of each front end loader at 5305 hours. KOPT has estimated 5305 hours based on 365 days x 70% x 21 hours per day. The operation of one pay loader for around 21 hours per day is based on the judgment of the port.

Dozer and Poclain (Excavators):

The KOPT has considered fuel consumption of 12 litres per hour per dozer, and has not furnished any justification for the said fuel consumption. The upfront guidelines do not prescribe fuel consumption norms for dozers. In the absence of norms, this Authority is constrained to rely upon the fuel consumption as estimated by the port.

The consumption of 12 litres per hour per poclain is seen to be in line with the fuel consumption for the poclain considered at the time of fixation of upfront tariff of the riverine jetty at Outer Terminal – I of KOPT.

To estimate the fuel consumption of both dozers and poclain, the KOPT has considered the operating hours at 6300 hours. Out of 6300 hours, 4562 hours is estimated for handling coal and other dry bulk cargo. It is understood that the KOPT has arrived at 4562 hours as 365 days x 70% x 18 hours per day. The operation of the equipment for around 18 hours per day is based on the judgment of the port.

The remaining 1738 hours is estimated to be spent for handling iron ore. Based on the position that 1.2 million tonnes of iron ore has to be unloaded from rakes and based on the prevailing practice that each rake carries 3800 tonnes of iron ore and that each rake requires an average of 5.5 hours, the KOPT has arrived at 1738 operational hours. By considering the revised capacity of iron ore at 1.40 million tonnes, the operating hours works out to around 2040 hours.

The unit rate of fuel at ₹43.74 per litre considered by KOPT is seen to the prevailing rate of diesel, which is considered in the estimation of fuel cost of MHC, Dumper Trucks, Front end loaders, Dozers and Excavators in the analysis.

(c). Repairs and maintenance cost on civil work is estimated by KOPT 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.

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

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

(f). The guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts. Licence fee has been estimated by the port for around 12 hectares of land area and for around 5 hectares of water front area.

Out of the total area proposed to be allotted of around 12 hectares, around 8 hectares of land is considered by KOPT as yard area for storage of cargo and the balance of around 4 hectares is earmarked towards reclaimer track, land for service roads and Land for siding, wagon loading track. The KOPT has considered 66.67% utilization of total land for storage of cargo, as against the norm of 70% prescribed for calculation of yard capacity for mechanized iron ore and coal terminal. The KOPT has sought to justify consideration of 66.67% utilization of area for storage purpose instead of 70% on the ground that about 33.33% of the stacking area will be required for creation of railway tracks, maneuvering of the equipment etc.

This Authority vide Order no.TAMP/40/2011-KOPT dated 14 February 2012 has fixed the Rent Schedule for the land of KOPT at Haldia Dock – II. The lease rental for allotment of bare land in the Dock Interior Zone has been fixed at ₹1229/- per 100 sq.m per month. Similarly, 50% of the scheduled rent/ licence fee of the land i.e. ₹614/- per 100 sq.m per month has been prescribed for the waterfront abutting Haldia dock –II. There appears to be a minor error in the rate of licence fee in the calculation made by KOPT, which is rectified. Accordingly, licence fee is arrived for the allotted land and water front area at ₹2.12 crores.

(g). On the ground that if the statutory payment of licence fee for the allotted land is taken into consideration, one of the bidders viz., IVRCL Assets and Holding Limited (IAHL) has urged to consider threshold revenue share as part of the calculations. The bidder states that by doing this, any bidder quoting less than the threshold revenue share can be rejected. Even if the present guidelines do not specify threshold share to be included in the upfront tariff calculations, it should be considered at least now, according to IAHL.

Considering revenue share payable to the landlord port in the fixation of upfront tariff is not in line with Clause 3.5.5. of the upfront tariff guidelines. The exercise before this Authority is to determine reasonable upfront tariff for the cargo proposed to be handled at the multipurpose berth. Review of the upfront guidelines to accommodate pass through of revenue share is beyond the scope of the current exercise.

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

The KOPT has considered insurance @ 1% and depreciation @ 3.34% on the aggregate capital cost relating to construction of berth and dredging while estimating the operating cost of berthing service apart from the prescribed norm of 1% towards maintenance.

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

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

With reference to both multipurpose and mechanised berths, IVRCL Assets and Holding Limited (IAHL) has stated that since the operating cost relating to the Berthing service do not indicate any cost towards maintenance dredging, it is being understood that no maintenance dredging would be required in the docks and approaches. In this regard, the KOPT has stated that the norm of 1% towards maintenance cost has been considered. It is noteworthy that the prescribed norm of 1% is calculated as a percentage of berth cost and capital dredging cost. Hence from the response of KOPT, it is inferred that the cost of maintenance dredging has been included in the cap of 1% maintenance cost.

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

(a). The annual revenue requirement for the Cargo handling activity which is the sum of the operating cost and return on capital employed is estimated at ₹99.65 crores as against ₹99.06 crores estimated by the port.

(b). In line with the guidelines for multipurpose berth, 90% of the total revenue requirement has been apportioned towards handling charge, 5% each towards storage charge and miscellaneous charge, by KOPT.

(c). Taking into consideration the share of coastal and foreign cargo incase of coal and the share of only foreign iron ore cargo, the KOPT has arrived at differential rates for handling foreign iron ore and coal. It may be relevant to mention here that the upfront tariff caps are determined so as to meet the estimated revenue requirement to operate the berth at the optimal capacity, which comprise of iron ore, coal and other dry bulk cargo. The implication of the concessional rate to coastal coal cargo need not be borne by the foreign coal cargo alone. Therefore, a uniform rate is prescribed for handling foreign iron ore, coal and other dry bulk cargo instead of differential rates as proposed by the Port. It is noteworthy that even incase of fixation of upfront tariff for the riverine jetty at the Outer Terminal – I, uniform rates were prescribed for handling foreign iron ore and coal. Further, the productivity levels assumed for both coal and iron ore are same and no separate deployment of assets between these two types of cargo is reported by KOPT.

(d). It is relevant to mention here that the cost for the cargo handling facility includes the cost of Weigh Bridge also. 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. The KOPT has considered the charges for the use of Weigh Bridge as part of the Miscellaneous charge.

(e). 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 KOPT has proposed concessional rates for handling coal and other dry bulk cargo in line with the Government policy. Since the KOPT has considered the entire traffic of coal and other dry bulk cargo to avail of the concessional rates applicable for coastal vessels, it is presumed that thermal coal (which does not enjoy concessional tariff) is not envisaged to be handled at the multipurpose berth.

The KOPT has proposed concessional rates for handling coal and other dry bulk cargo by assuming the share of foreign and coastal cargo in the total optimal capacity as 90% and 10% respectively for coal and other dry bulk cargo. The port has clarified that the share of coastal/ foreign cargo/ vessel assumed by it is based on the present pattern. Though IVRCL Assets and Holding Limited (IAHL) have stated that the share of foreign to coastal cargo should be changed to 60% and 40%, it has not furnished any analysis in support of its statement. However, the KOPT has also stated that if in future the actual earning of the successful bidder gets affected due to change in the composition of coastal/ foreign cargo/ vessel, the bidder may have to take up the matter with the concerned Authority as per the rules and guidelines prevailing at the relevant point of time. It is not clear as to how a different share of coastal/ foreign cargo/ vessel could be considered at a later stage after the bidding for the project is concluded based on the upfront tariff caps to be set now. In this case, the percentage share of coastal/ foreign cargo/ vessel values as reported by KOPT are relied upon.

Accordingly, the handling rate for iron ore, coal and other dry bulk cargo has been arrived with reference to their individual composition of foreign/ coastal cargo to meet the estimated revenue requirement.

(f). The KOPT has proposed 5 free days in respect of import coal and other dry bulk cargo and 15 free days in respect of export iron ore cargo which is in line with the Guidelines. KOPT has estimated that 75% of the total cargo would be cleared with the free days and the balance 25% of the

total cargo would attract storage charges. Further, out of this cargo, 50% is of the cargo is estimated to be cleared within the first five days, 40% cargo in the next five days and the balance 10% of the cargo in the third slab. 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 five days, 50% of the cargo would remain in the port during the next five days and the balance 10% cargo to be cleared in the next five days. The calculation furnished by KOPT contains some inconsistencies in this regard and, therefore, revised to reflect the above said position. The rate so arrived at works out to ₹3.95 per tonne per day during the first five days after free period for all cargo proposed to be handled at the multipurpose berth. The rate for the subsequent slabs is prescribed at 1.5 times and 2.25 times the rate of the first slab, as proposed by KOPT.

(g). Based on the modified revenue requirement, a common upfront tariff cap for miscellaneous charge is prescribed at ₹9.75 per tonne as against ₹11.51 per tonne proposed by the Port for coal and ₹11.06 per tonne proposed for iron ore. The miscellaneous charge covers miscellaneous services such as sweeping, weighment, receiving and delivery charges etc.

(h). The revenue requirement from berthing service is estimated at ₹20.96 crores by the port. The KOPT has proposed berth hire in rupee terms for foreign going vessel at ₹1.10 per GRT per hour or part thereof.

Out of the total cargo proposed to be handled at the terminal, the KOPT has considered that 70% of the cargo would be handled by Panamax vessels and the balance 30% of the cargo would be handled by Handymax vessels. Further, the KOPT has considered that 90% of the cargo would be handled by Foreign going vessels and the balance 10% of the cargo would be handled by Coastal Vessels.

With the average parcel size of 38400 tonnes and the cargo handling rate of 20000 tonnes in 24 hours, a vessel will require 46 hours to complete its cargo operations. However, the vessel will continue to stay on an average for 6 more hours for favorable tidal conditions to sail out. As seen from the calculations, the berth hire is leviable on a vessel for the entire stay of 52 hours. Hence, the additional time of 6 hours also needs to be captured in the berth hire calculation, to arrive at the total GRT hours. Such an approach has been adopted at the time fixation of upfront berth hire charges for the riverine jetty at the Outer Terminal – I of KOPT.

Based on the revenue requirement from berthing service at ₹20.96 crores and considering the enhanced capacity of the berth and considering the ratio of the GRT hours of the coastal vessels and GRT hours of foreign going vessels, the upfront berth hire rate works out to ₹0.95 per GRT per hour or part thereof for foreign going vessels and ₹0.57 per GRT per hour or part thereof for the coastal vessels, as against the berth hire proposed by the KOPT at ₹1.10 per GRT per hour or part thereof for foreign going vessel and ₹0.66 per GRT per hour or part thereof for the coastal vessels.

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

(xiii). In the proposed upfront schedule for the multipurpose berth, the KOPT has proposed definitions for common terms like coastal vessel, foreign going vessel, free period, per day, port, week. The definitions are found to be in line with the definitions prescribed for the respective terms in the other upfront tariff cases.

(xiv). In the proposed upfront schedule, the KOPT has proposed some conditionalities prescribing criteria for categorizing of a vessel as a foreign going vessel or coastal vessel, conditionalities governing levy of interest on delayed payments/ refunds, non levy of charges for delay beyond a reasonable level attributable to the terminal, conditionalities governing levy of concessional rates for coastal vessels/ cargo, conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates are found to be in line with the general conditionalities prescribed in the Scale of Rates of the port.

(xv). In the Berth hire Schedule, the common conditionalities like berth hire is to be levied from the time the vessel occupies the berth till she vacates the berth, no berth hire charges to be levied for the period when the vessel idles at the berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, berth hire charges include charges for occupation of berth and for rendering services like cleaning, fire watch, prescription of penal berth hire charges for false signal, ousting priority/ priority berth hire are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.

(xvi). The KOPT has prescribed a conditionality stating that Berth hire shall stop 6 hours after the time of the vessel signaling its readiness to sail subject to availability of favourable tide. This conditionality is modified to reflect 4 hours, as stipulated at Clause 6.6.1 of the tariff guidelines of 2005.

(xvii). The KOPT has proposed a provision to state that the composite handling charges for coal and other dry bulk cargo is for unloading of the cargo from the vessel, transportation of the cargo upto the stackyard, storage at stack yard upto a free period of 5 days and loading on to trucks/ wagons. Similarly, in respect of export cargo of iron ore, the composite handling charge is for unloading of the cargo from trucks/ wagons at the stack yard, storage at stack yard upto a free period of 15 days, transportation of the cargo upto the loading point at jetty and loading on to the ship.

The composite charge for coal, other dry bulk and iron ore includes wharfage and supply of labour and/ or equipment, wherever necessary and all other miscellaneous charges not specifically prescribed in the Scale of Rates.

B. <u>Mechanised Bulk Terminal</u>:

(xviii). With regard to fixation of upfront tariff for the Mechanised berth, the updated proposal of KOPT generally follows the Upfront tariff guidelines prescribed for the mechanised berth for handling import coal.

(xix). <u>Optimal Terminal Capacity of Mechanised berth:</u>

(a). Optimal Quay capacity:

(i). The equipping plan considered by the KOPT for the proposed mechanised berth for handling import coal, *inter alia*, considers use of 2 numbers of 900 TPH capacity Grab Unloaders.

(ii). The KOPT proposal envisages handling of Panamax vessels and Handymax vessels at the mechanised berth. On the ground that Haldia Dock Complex (HDC) is a tidal port and the vessels have to invariably wait for suitable tide for sailing after completion of work, KOPT has considered a ship day output of 24000 tonnes per day with 2 grab unloaders for both panamax and handymax vessels as against the ship day output norm of 35000 tonnes per day and 15000 tonnes per day for panamax and handymax vessels respectively prescribed in the Upfront guidelines for the mechanised coal terminals.

Effectively, the KOPT has considered a ship day output of around 20700 tonnes per day for both the Panamax vessels and Handymax vessels and has factored an additional time of 6 hours required towards service time and waiting time for the favorable tide by the vessel, in the ship day output.

In this regard, it may be recalled that while fixation of upfront tariff for the riverine jetty at the Outer Terminal – I at KOPT, in view of the peculiarity of the situation anticipated at the proposed riverine facility such as the continuous adjustment of working of the Mobile Harbour Cranes (MHCs) to cope up with the up and down movement of the vessel with the change in water level of the river and handling of mainly bottom cargo vessels, a reduction of 20% in the handling rate was considered with reference to the productivity level considered in other upfront tariff cases where deployment of MHCs was envisaged.

Taking into account the position that this Authority has already recognised the peculiarity of the situation at KOPT and considered a reduction of 20% in the productivity level of MHCs, the norm for ship berth day output for panamax vessels prescribed in the guidelines is scaled down by the same percentage. Accordingly, the ship day output for the Panamax vessels is considered at 28000 tonnes per day (i.e. 35000 tonnes x 80%) with 2 nos. of Grab unloaders.

For the handymax vessels, though the upfront guidelines prescribe a ship day output of 15000 tonnes per day, the KOPT has effectively considered a ship day output of 20700 tonnes per day, as stated earlier. The proposal in this regard is supported by the Feasibility Report. Since the handymax vessels would be comparatively smaller vessels and given that the KOPT has considered a higher ship day output considering deployment of higher capacity grab unloaders, the ship day output of handymax vessels as proposed by the port is relied upon. It is noteworthy that the ship day output at multipurpose berths using 2 MHCs for similar cargo is around 20000 tonnes per day.

(iii). Considering the ship day output at 28000 tonnes per day for Panamax vessels and 20700 tonnes per day for Handymax vessels at 70% utilisation, the optimal quay capacity of the Mechanised berth works out to 6.59 million tonnes per annum as against the optimal quay capacity of 5.25 million tonnes per annum as estimated by the port.

(b). Optimal Yard Capacity:

(i). The upfront tariff guidelines stipulate that the yard capacity is to be assessed for the area of the yard made available by the port for development. In its updated proposal, the port envisages allotment of total land area of around 9.89 hectares of land per mechanised berth. Out of the said area, an area of 5 hectares has been earmarked for storage purpose and the balance area of 4.89 hectares of land is envisaged to be used for ancillary purposes. Incidentally, in the original proposal, KOPT envisaged a storage area of 5.4 hectares per berth. The KOPT has considered around 50% utilization of the total area for storage of cargo, as against the indicative norm of 70% prescribed for calculation of yard capacity for mechanized coal terminal.

By considering only around 50% of the total area available towards stacking purpose, yard capacity becomes the restricting factor of the terminal capacity. In other words, there will be a mismatch of more than 20% between the revised quay capacity and the yard capacity assessed by KOPT.

In this regard, it is relevant to mention here that KOPT being a riverine port and due to tidal and navigational constraints, the quay side capacity generally acts as a limiting factor. In this case, when quay capacity is available, restricting the terminal capacity due to insufficient yard capacity does not appear to be reasonable. In real terms, it does not appear that the land availability is a constraint. Out of the total back up area of 9.89 hectares proposed for each of the mechanised berths, KOPT has assumed utilisation of about 50% of that area for storage purposes, perhaps as such allocation would be sufficient to cater to the quay capacity of 5.25 million tonnes assessed by it. For the stated reasons, quay capacity is revised to 6.59 million tonnes. Storage area required to cater to this volume, with other parameters remaining unaltered, will be about 6.27 hectares. It does not appear impossible to provide this area for storage out of the total area of 9.89 hectares available. The increased storage area will only be about 63.5% of the total area, when the indicative norm is 70%.

It is noteworthy that even in respect of the multipurpose berth, the KOPT has considered a utilisation factor of around 66.67%.

Therefore, keeping all other parameters at the level given by the port and by considering utilisation factor of about 63.5%, the optimal yard capacity is considered at 6.59 million tonnes per annum, to match with the optimal quay capacity of 6.59 million tonnes per annum.

(ii). The guidelines for upfront tariff setting prescribe the stacking factor norm at 3 tonnes per square metre for stacking coal. The KOPT has considered the stacking factor at 5 tonnes per square metre. Inspite of a specific query to justify the stack height with actuals achieved at HDC and that at berths handled by other private operators, KOPT has not furnished the requisite details. It is noteworthy that while fixing upfront tariff for coal terminal at VPT, VOCPT a stack height of 6 tonnes per sq. metre was considered. In this regard, the KOPT has argued that the stack height considered for coal in other cases is based on a stacking height of 9 metres due to better soil condition. However, considering the type of soil available at Haldia Dock-II, a stacking height of 7 metres is possible, which works out to a stacking factor of around 5 tonnes per sq. metre. It is noteworthy that even in respect of fixation of upfront tariff for handling of thermal coal and steam coal at East Quay – 1A berth of VPT, a stack height of 5 tonnes per sq. metre was considered for a stack height of 7 metres. This Authority, therefore, relies upon the stack factor as considered by the port.

(iii). The norm for plot turnover for a coal terminal prescribed in the guidelines is 12, based on the dwell time of 30 days. Since the proposed evacuation of coal from the stackyard will be through mechanised wagon loading system, the KOPT has considered a dwell time of 12 days and has adopted a plot turnover ratio of 30. Correspondingly, lesser number of free days in storage charges calculations is considered. This position is relied upon.

(iv). By considering 63.5% of the total land for the purpose of stacking, a stacking factor of 5 tonnes per sq. metre and turnover ratio of 30, the optimal yard capacity of the mechanised berth works out to 6.59 million tonnes per annum at 70% utilisation.

(c). The optimal capacity for the mechanised terminal is accordingly considered at 6.59 million tonnes per annum in the calculation of upfront tariff.

(xx). Capital Cost:

The capital cost as estimated by the KOPT in its revised proposal is ₹480.02 crores and ₹482.50 crores respectively for the two mechanised berths. Accordingly, the average capital cost of ₹481.27 crores per berth is considered, of which ₹423.52 crores is estimated for cargo handling services and ₹57.75 crores for berthing activity. Out of the capital cost for the handling activity, ₹116.73 crores is estimated towards civil capital costs and the balance ₹306.78 crores towards equipment cost.

(a). Civil Cost:

(i). Cargo handling activity:
The upfront tariff guidelines broadly indicate the civil works involved for the mechanised coal terminal and requires considering the civil cost as per the estimates given by the Port Trust. The items of civil works estimated by KOPT broadly adhere to normative list of items stipulated in the guidelines for the mechanised coal terminal. The KOPT has also furnished the rate analysis for some of the items of civil cost. Provisions are also made in the estimates towards Soil investigation, Project supervision, Contingencies, detailed engineering, works contract tax etc. The civil cost for the Cargo handling activity as estimated by the Port is relied upon.

Under the civil capital cost, the KOPT has considered miscellaneous capital cost @ 5% of the estimated civil cost. Similarly, the KOPT has considered miscellaneous capital cost @ 5% of the estimated equipment cost. It may be relevant to mention here that the Upfront tariff guidelines of 2008 stipulate estimating Miscellaneous capital cost @ 5% of the total of the estimated civil and equipment. The KOPT, instead, has separately considered the Miscellaneous cost under the respective category.

(ii). Berthing activity:
As per the upfront tariff guidelines, the capital cost for berthing services includes cost of construction of berth and cost of dredging, if any, carried out alongside the berth. The guidelines require considering the civil cost as per the estimates given by the Port Trust.

The capital cost for construction of berth is estimated at ₹45.54 crores. The KOPT has furnished the rate analysis for some of the items of civil cost, which is relied upon.

With regard to cost of capital dredging, the KOPT has stated that the capital dredging alongside the berth would be the responsibility of the successful bidder. KOPT has considered a lump sum amount on this account and despite a request, no documentary evidence or analysis to support the quantity to be dredged and the unit rate is furnished. The dredging cost estimate of ₹2.50 crores, as furnished by the Port is considered.

The port has also estimated miscellaneous capital cost at 5% of the cost of the berthing activity. The upfront tariff guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. It is noteworthy that in case of the upfront tariff proposals determined for various projects of VPT, Coal terminal at VOCPT and Mormugao Port Trust (MOPT), this Authority has considered the miscellaneous capital cost at 5% to meet contingencies under the Berthing Service. Even in respect of the fixation of tariff for the riverine jetty at Outer Terminal – I, miscellaneous capital cost at 5% has been considered under the Berthing Service to meet contingencies. Keeping in view the decision taken by this Authority in the above mentioned cases, it may not be unreasonable to allow miscellaneous capital cost of under the berthing activity, in this case also.

(b). Equipment Cost:

(i). The equipping plan proposed by the KOPT for the mechanised berth generally adheres to the normative level of equipment listed in the upfront guidelines for the mechanised coal terminal. The mechanised terminal envisages the deployment of Grab unloaders, Conveyor, Stackers, Reclaimer, Wagon Loader, Dozer, Payloaders. Further, the KOPT has also stated that the equipping of the mechanised berth has been planned in such a manner that all vessels turnaround within the minimum time.

(ii). The number of equipment proposed to be deployed at the berth viz., 2 nos. of grab loaders, 2 nos. of stackers, 1 no. of wagon loaders and conveyors is in line with the requirements of the upfront guidelines.

Against 2 nos. of Reclaimer stipulated in the guidelines, the KOPT has considered one reclaimer of a higher capacity. Against 2 nos. of cranes and 4 nos. of pay loaders and dozers as stipulated in the guidelines, the KOPT has proposed the deployment of 2 nos. of Dozers instead of cranes for proper stacking of cargo and 3 nos. of 5 cu.m Pay loaders for working inside the hatches of the vessel.

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 KOPT and also since none of the prospective bidders nor the users have raised any pointed objection to the proposed equipping plan, this Authority is inclined to consider the equipping plan as proposed by the port, which is based on the Feasibility Report.

(iii). The KOPT has furnished documentary evidence in support of the cost of Grab unloaders, Stackers, Reclaimers and Wagon loaders. Excise duty, sales tax and service tax components have been added by KOPT to the unit cost, as reflected in the Quotation. A minor variation in the cost of equipment calculated based on the Quotation and the cost considered by KOPT in its calculation is observed. The cost as per the Quotation for the above mentioned equipment is considered in the analysis.

The documentary evidence furnished in support of the cost of Conveyors is seen to be ₹100 crores, which is exclusive of the various duties and tax components. The amount of ₹104.87 crores as estimated by the port is relied upon.

The KOPT has furnished quotation with reference to the cost of the Dozer. Excise duty, and sales tax component have not been added by KOPT to the unit cost, as reflected in the Quotation. Therefore, the cost of Dozer as furnished by KOPT is updated to reflect this position. The cost works out to around ₹4.13 crores for 2 nos. of Dozers.

The base rate considered by KOPT for estimation of cost of 5 cu.m loaders is the same as considered at the time of fixation of upfront tariff of the riverine jetty at Outer Terminal – I of KOPT. By considering the exchange rate of ₹69.131 per Euro prevailing at the time of analysis of this case and taking into account NIL customs duty, the cost of each pay loader works out to ₹1.15 crores.

The KOPT has furnished documentary evidence with regard to cost of Rail Weigh Bridge. The KOPT has, however, not considered the components of excise duty, sales tax, service tax as mentioned in the Quotation. By considering the above mentioned components based on the percentage as mentioned in the Quotation, the cost of Rail weigh bridge works out to around ₹30 lakhs. This amount is considered in the analysis.

The KOPT has furnished costing with reference to electrical works amounting to ₹17.25 crores, which is considered in the analysis.

The provisions made towards Project supervision, Contingencies, detailed engineering, works contract tax etc. are relied upon as furnished by the port.

For the reasons explained earlier, Miscellaneous cost @ 5% of the equipment cost considered by KOPT is relied upon.

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

(xxii). Operating Cost:

(a). Power cost:

Power cost has been estimated by the port based on the power consumption of 1.4 units per tonne at the rate of ₹5.38 per unit.

The power consumption of 1.4 units per tonne is the norm prescribed in the upfront guidelines for the coal terminal. The KOPT has furnished documentary evidence to support the unit cost of power at ₹5.38 per unit.

(b). Repairs and maintenance cost on civil work is estimated by KOPT at 1% on the civil cost and 7% on mechanical equipment and electrical equipment cost, which is in line with the norms prescribed in the guidelines.

(c). 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 KOPT, which is in line with the norms prescribed in the guidelines.

(d). 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.

(e). The guidelines for upfront tariff stipulate that licence fee for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts. Licence fee has been estimated by the port for around 9.8 hectares of land area and for around 3.66 hectares of water front area.

This Authority vide Order no.TAMP/40/2011-KOPT dated 14 February 2012 has fixed the Rent Schedule for the land of KOPT at Haldia Dock – II. The lease rental for allotment of bare land in the Dock Interior Zone has been fixed at ₹1229/- per 100 sq.m per month. Similarly, 50% of the scheduled rent/ licence fee of the land i.e. ₹614/- per 100 sq.m per month has been prescribed for using the waterfront abutting Haldia dock–II. There appears to be a minor error in the rate of licence fee in the calculation made by KOPT, which is rectified. Accordingly, licence fee is arrived for the allotted land and water front area at ₹1.71 crores.

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

The KOPT has considered insurance @ 1% and depreciation @ 3.34% on the aggregate capital cost relating to construction of berth and dredging while estimating the operating cost of berthing service apart from the prescribed norm of 1% towards maintenance.

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

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

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

(a). The annual revenue requirement for the Cargo handling activity which is the sum of the operating cost and return on capital employed is estimated at ₹157.73 crores as against ₹157.08 crores estimated by the port.

(b). In line with the guidelines for mechanised coal berth, 98% of the total revenue requirement has been apportioned towards handling charge, 1% each towards storage charge and miscellaneous charge, by KOPT.

(c). The upfront tariff caps are determined so as to meet the estimated revenue requirement to operate the berth at the optimal capacity. It is relevant to mention here that the cost for the cargo handling facility includes the cost of Weigh Bridge also. 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. The KOPT has considered the charges for the use of Weigh Bridge 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 KOPT has proposed concessional rates for handling coal in line with the Government policy. Since the KOPT has considered the entire traffic of coal to avail of the concessional rates applicable for coastal vessels, it is presumed that thermal coal (which does not enjoy concessional tariff) is not envisaged to be handled at the mechanised berth.

The KOPT has proposed concessional rates for handling coal by assuming the share of foreign and coastal cargo in the total optimal capacity as 90% and 10% respectively for coal and other dry bulk cargo. The port has clarified that the share of coastal/ foreign cargo/ vessel assumed by it is based on the present pattern. Though IVRCL Assets and Holding Limited (IAHL) have stated that the share of foreign to coastal cargo should be changed to 60% and 40%, it has not furnished any analysis in support of its statement. However, the KOPT has also stated that if in future the actual earning of the successful bidder gets affected due to change in the composition of coastal/ foreign cargo/ vessel, the bidder may have to take up the matter with the concerned Authority as per the rules and guidelines prevailing at the relevant point of time. It is not clear as to how a different share of coastal/ foreign cargo/ vessel could be considered at a later stage after the bidding for the project is concluded based on the upfront tariff caps to be set now. In this case, the percentage share of coastal/ foreign cargo/ vessel values as reported by KOPT are relied upon.

Accordingly, the handling rate for coal has been arrived with reference to the composition of foreign/ coastal cargo to meet the estimated revenue requirement.

(e). KOPT has proposed 6 free days in respect of import coal, as against 25 days prescribed in the guidelines. It is noteworthy that the free period of 25 days prescribed in the guidelines is based on an average dwell time of 30 days. Considering that the KOPT, for the reasons explained, has proposed the average dwell time at 12 days, the prescription of 6 free days appears to be reasonable.

KOPT has estimated that 75% of the total cargo would be cleared within the free days and the balance 25% of the total cargo would attract storage charges. Further, out of this cargo, 50% of the cargo is estimated to be cleared within the first five days, 40% cargo in the next five days and the balance 10% of the cargo in the third slab. 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 five days, 50% of the cargo would remain in the port during the next five days and the balance 10% cargo to be cleared in the next five days. The calculation furnished by KOPT contains some inconsistencies in this regard and, therefore, revised to reflect the above said position. The rate so arrived at works out to ₹0.98 per tonne per day during the first five days after free period. The rate for the subsequent slabs is prescribed at 1.5 times and 2 times the rate of the first slab, as proposed by KOPT.

(f). Based on the modified revenue requirement, a common upfront tariff cap for miscellaneous charge is prescribed at ₹2.39 per tonne as against the rate of ₹2.99 per tonne proposed by the port. The miscellaneous charge covers miscellaneous services such as sweeping, weighment, receiving and delivery charges etc.

(g). The revenue requirement from berthing service is estimated at ₹12.32 crores by the port. The KOPT has proposed berth hire in rupee terms for foreign going vessel at ₹0.64 per GRT per hour or part thereof.

Out of the total cargo proposed to be handled at the terminal, the KOPT has considered that 70% of the cargo would be handled by Panamax vessels and the balance 30% of the cargo would be handled by Handymax vessels. Further, the KOPT has considered that 90% of the cargo would be handled by Foreign going vessels and the balance 10% of the cargo would be handled by Coastal Vessels.

With the average parcel size of 42000 tonnes incase of panamax vessels and 30000 tonnes incase of handymax vessels and considering the ship day output of 28000 tonnes per day incase of panamax vessels and 20550 tonnes per day incase of handymax vessels, an average vessel will require 36 hours to complete its cargo operations. However, the vessel will continue to stay on an average for 6 more hours for favorable tidal conditions to sail out. As seen from the calculations, the berth hire is leviable on a vessel for the entire stay of 42 hours. Hence, the additional time of 6 hours also needs to be captured in the berth hire calculation, to arrive at the total GRT hours. Such an approach has been adopted at the time fixation of upfront berth hire charges for the riverine jetty at the Outer Terminal – I of KOPT.

Based on the revenue requirement from berthing service at ₹12.32 crores and considering the ratio of the GRT hours of the coastal vessels and GRT hours of foreign going vessels, the upfront berth hire rate works out to ₹0.69 per GRT per hour or part thereof for foreign going vessels and ₹0.41 per GRT per hour or part thereof for the coastal vessels.

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

(xxv). In the proposed upfront schedule for the mechanised coal berth, the KOPT has proposed definitions for common terms like coastal vessel, foreign going vessel, free period, per day, port, week. The definitions are found to be in line with the definitions prescribed for the respective terms in the other upfront tariff cases.

(xxvi). In the proposed upfront schedule, the KOPT has proposed some conditionalities prescribing criteria for categorizing of a vessel as a foreign going vessel or coastal vessel, conditionalities governing levy of interest on delayed payments/ refunds, non levy of charges for delay beyond a reasonable level attributable to the terminal, conditionalities governing levy of concessional rates for coastal vessels/ cargo, conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates are found to be in line with the general conditionalities prescribed in the Scale of Rates of the port.

(xxvii). In the Berth hire Schedule, the common conditionalities like berth hire is to be levied from the time the vessel occupies the berth till she vacates the berth, no berth hire charges to be levied for the period when the vessel idles at the berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, berth hire charges include charges for occupation of berth and for rendering services like cleaning, fire watch, prescription of penal berth hire charges for false signal, ousting priority/ priority berth hire are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront tariff Schedule.

(xxviii). The KOPT has prescribed a conditionality stating that Berth hire shall stop 6 hours after the time of the vessel signaling its readiness to sail subject to availability of favourable tide. This conditionality is modified to reflect 4 hours, as stipulated at Clause 6.6.1 of the tariff guidelines of 2005.

(xxix). The KOPT has proposed a provision to state that the composite handling charges for coal is for unloading of coal from the vessel, transportation of the cargo upto the stackyard, storage at stack yard upto a free period of 6 days and loading on to trucks/ wagons. The composite charge for coal also includes wharfage and supply of labour and/ or equipment, wherever necessary and all other miscellaneous charges not specifically prescribed in the Scale of Rates.

10.1. 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 year 2012, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2012, as proposed by KOPT.

10.2. 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.

10.3. 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.

10.4. 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.

10.5 The upfront tariff approved by this Authority for the multipurpose berth is with reference to the use of 2 nos. of MHCs of 100 tonne capacity to be deployed by the BOT operator. Similarly, the upfront tariff approved by this Authority for the mechanised berth is with reference to the use of 2 nos. of grab unloaders to be deployed by the BOT operator. If any change in the equipping plan considered in this analysis, the upfront tariff of the multipurpose berth and the mechanised berth will have to be reviewed.

10.6. 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 Kolkata Port Trust. If any action is to be taken against the private operator, the Kolkata Port Trust shall initiate appropriate action in accordance with the provisions of the relevant Concession Agreement.

10.7. 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 Kolkata Port Trust a report containing the terminal's physical and financial performance during the preceding three months.

11. In the result, and for the reasons given above and based on a collective application of mind, this Authority approves upfront tariff schedule for handling iron ore, coal and other dry bulk cargo at the Multipurpose berth at the Kolkata Port Trust which is attached as **Annex - II (a)** and the upfront tariff schedule for handling coal at the Mechanised berth at the Kolkata Port Trust which is attached as **Annex - II (b)**.

(Rani Jadhav)
Chairperson

ANNEX - I (a)

UPFRONT TARIFF CALCULATION FOR THE MULTIPURPOSE BERTH AT HALDIA DOCK - II (NORTH) AND HALDIA DOCK - II (SOUTH) OF KOLKATA PORT TRUST.

₹ in crores

Sr. No.	Particulars	Updated Estimates furnished by KOPT	Estimates modified by TAMP
	MULTIPURPOSE BERTH:		
I	**Optimal capacity**		
	Optimal Quay Capacity		
(a)	Share of capacity of different cargo items		
	Percentage share of capacity of Coal & Other Dry Bulk cargo (S1)	72.42%	72.42%
	Percentage share of capacity of Iron Ore (S2)	27.58%	27.58%
(b)	Handling rate of Vessels		
	- Handling rate of vessels carrying Coal & Other Dry Bulk cargo (P1)	17025	20000
	- Handling rate of vessels carrying Iron Ore (P2)	17025	20000
(c)	Optimal Capacity of one Berth = 0.7*((S1*P1)+(S2*P2))*365	**4349888**	**5110000**
	Optimal Capacity of one Berth in million tonnes / annum	**4.35**	**5.11**
II	**Capital Cost**		
A.	**Cargo Handling Activity**	₹ in crores	
	(i). Civil Cost (average cost per berth)		
	- Approach Trestle	103.20	103.20
	- Approach Road	1.43	1.43
	- Hardening of stack yard	20.70	20.70
	- Development of paverblock siding	2.93	2.93
	- Railway track at Marshalling yard	2.25	2.25
	- Development of one ballasted reclaimer track	2.00	2.00
	- Compund wall/ fencing	1.01	1.01
	- Construction of transfer tower/ drive house	0.10	0.10
	- Conveyor Trestle	4.05	4.05
	- Soil Investigation, Project supervision, detailed engineering	9.64	9.64
	- Contingencies	4.42	4.42
	- Works Contract tax	5.89	5.89
	- Miscellaneous cost @ 5%	7.88	7.88
	Total	**165.50**	**165.50**
	(ii). Equipment Cost per berth		
	- 100 tonne Mobile Harbour Crane (2 nos.)	46.49	45.67
	- 20 tonne Dumper trucks (25 nos.)	5.00	5.95
	- Front end loaders (12 nos.)	12.95	11.48
	- Reclaimer (1 no.)	16.21	16.21
	- Conveyor (500 to 600 metres)	7.76	7.76
	- Dozer (2 nos.)	3.82	4.13
	- Poclain (Excavators) (3 nos.)	5.40	5.51
	- Road Weigh Bridge (1 no. each)	0.21	0.21
	- Transformers, electrical cable, 24 nos. high mast towers	3.78	3.78
	- Project supervision	0.56	0.56
	- Contingencies	3.07	3.04
	- Works Contract tax	0.17	0.17
	- Miscellaneous cost @ 5%	5.27	5.22
	Total	**110.68**	**109.68**
	Total Capital Cost for Handling Activity (i + ii)	**276.19**	**275.18**
B.	**Berth Hire Activity**		
	- Construction of berth	79.20	79.20
	- Cost of dredging	2.50	2.50
	- Soil Investigation, Project supervision, detailed engineering	5.72	5.72
	- Contingencies	2.62	2.62
	- Works Contract tax	3.50	3.50
	- Miscellaneous cost @ 5%	4.68	4.68
	Total capital cost for Berth hire Activity	**98.22**	**98.22**
	Total Capital Cost (A + B)	**374.40**	**373.40**

III	**Operating Cost for Cargo Handling Activity**	**₹ in crores**	
	(a). Power cost		
	- Illumination	1.03	1.03
	(KOPT - 2.4 lakh units/annum/hectare for 1.2 hecatres for iron ore & 6.76 hectares for coal @ Rs.5.38 per unit) TAMP - 2.4 lakh units/annum/hectare for 1.2 hecatres for iron ore & 6.76 hectares for coal @ Rs.5.38 per unit)		
	- Reclaimer	0.53	0.62
	(KOPT - 300 units/ hour/ reclaimer * Rs.5.38 per unit * 3272 hours pa for 1 Reclaimer) (TAMP - 300 units/ hour/ reclaimer * Rs.5.38 per unit * 3853 hours pa for 1 Reclaimer)		
	(b). Fuel Cost		
	- Harbour Mobile Crane	2.66	3.32
	(KOPT - 70 ltrs/ hour/ crane* Rs.43.74 per litre * 4350 hours pa * 2 HMC) (TAMP - 70 ltrs/ hour/ crane * Rs.43.74 per litre * 5427 hours pa * 2 HMC)		
	- Dumpers	2.82	2.95
	(KOPT - 4 ltrs/ hour/ truck * Rs.43.74 per litre * 6450 hours pa * 25 trucks) (TAMP - 4 ltrs /hour /truck * Rs.43.74 per litre * 6734 hours pa * 25 Trucks)		
	- Pay Loaders	3.34	3.34
	(KOPT - 12 ltrs /hour/ loader * Rs.43.74 per litre * 5305 hours pa * 12 pay loaders) (TAMP - 12 ltrs /hour /loader * Rs.43.74 per litre * 5305 hours pa * 12 pay loaders)		
	- Dozer	0.66	0.69
	(KOPT - 12 ltrs /hour/ dozer * Rs.43.74 per litre * 6300 hours pa * 2 dozers) (TAMP - 12 ltrs /hour /dozer * Rs.43.74 per litre * 6602 hours pa * 2 dozers)		
	- Excavators (Poclain)	0.99	1.04
	(KOPT - 12 ltrs/ hour/ excavator * Rs.43.74 per litre * 6300 hours pa * 3 excavators) (TAMP - 12 ltrs/ hour/ excavator * Rs.43.74 per litre * 6602 hours pa * 3 excavators)		
	(c). Repair & Maintenance		
	- Civil Assets (1% on civil work)	1.66	1.66
	- Mechanical & Electrical Equipment including spares (5% on equipment cost)	5.53	5.48
	(d). Insurance (1% on Gross fixed assets)	2.76	2.75
	(e). Depreciation		
	- Civil Work @ 3.34%	5.53	5.53
	- Mechanical Work @ 10.34%	11.44	11.34
	(f). License Fee	2.11	2.12
	(g). Other Expenses towards salaries and overheads (5% on gross value of assets)	13.81	13.76
	Total Operating Cost	**54.88**	**55.63**
IV	**Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity**		
A.			
(i).	**Estimated Revenue Requirement**		
	(a). Total Operating Cost	54.88	55.63
	(b). Return on capital Employed @ 16%	44.18	44.02
	(c). Total Revenue requirement from cargo handling activity	**99.06**	**99.65**
(ii).	**Apportionment of Revenue Requirement**		
	(a). Cargo Handling Charges (90% of ARR)	89.15	89.69
	(b). Storage Charges (5% of ARR)	4.95	4.98
	(c). Miscelleneous Charge (5% of ARR)	4.95	4.98
	(d).Total Revenue requirement from cargo handling activity	**99.06**	**99.65**
(iii).	**Cargo Handling charge**		
	(a). Cargo Handling Charge		
	- Revenue Requirement (₹ in crores)	89.15	89.69
	- Capacity (Lakh Tonnes per annum)	43.50	51.10
	- Per Tonne rate for handling of Iron Ore	**199.02**	**180.75**
	- Per Tonne rate for handling of Coal & Other dry bulk cargo	**215.85**	**180.75**
	- Per Tonne rate for handling of coastal Coal & Other dry bulk cargo	**129.51**	**108.45**
	(b). Storage Charge		
	- Revenue Requirement (₹ in crores)	4.95	4.98
	- % of Cargo to attract storage charge		
	- Coal & Dry Bulk cargo Import	25.00%	25.00%
	- Iron Ore Export	25.00%	25.00%
	- Capacity of cargo to attract storage charge (lakh tonnes)		
	- Coal & Dry Bulk cargo Import	7.88	9.25
	- Iron Ore Export	3.00	3.52
	(i) Storage Charge (beyond the free period) for Coal & Dry Bulk Cargo	**Rate Per tonne per day or part thereof**	**Rate Per tonne per day or part thereof**
	-Free period	5 days	5 days
	-First five days	**8.00**	**3.95**
	-6th day to 10th day	**12.00**	**5.92**
	-11th day onwards	**18.00**	**7.90**
	(ii) Storage Charge (beyond the free period) for Iron Ore	**Rate Per tonne per day or part thereof**	**Rate Per tonne per day or part thereof**
	-Free period	15 days	15 days
	-First five days	**8.00**	**3.95**
	-6th day to 10th day	**12.00**	**5.92**
	-11th day onwards	**18.00**	**7.90**
	(c). Miscelleneous Charge		
	- Revenue Requirement (₹ in lakhs)	4.95	4.98
	- Capacity (Lakh Tonnes per annum)	43.50	51.10
	- Miscellenous Charge for Coal & Other dry bulk cargo (₹ per tonne)	**11.51**	**9.75**
	- Miscellenous Charge for Iron ore (₹ per tonne)	**11.06**	**9.75**

B.	**BERTH HIRE CHARGES**		
(i).	**Revenue Requirement**	**₹ in lakhs**	
	(a). Repairs & Maintenance Charge (1% on captial cost for berth)	0.98	0.98
	(b). Depreciation	3.28	3.28
	(c). Insurance (1% on total cost for berth hire service)	0.98	0.98
	Subtotal (i)	**5.24**	**5.24**
(ii).	Return on capital Employed @ 16%	**15.71**	**15.71**
	Total Revenue requirement from Berthing services (i + ii)	**20.96**	**20.96**
	Berth hire Charge		
	Foreign going vessel (Rate per GRT per hour) in ₹	**1.100**	**0.950**
	Coastal vessel (Rate per GRT per hour) in ₹	**0.660**	**0.570**

Berth Hire Calculation as furnished by KOPT

Sr. No.	Particulars	Unit	Panamax Foreign Vessel	Handimax Foreign Vessel	Total
i	Ship day output	Tonnes/day	20000	20000	
ii.	Average GRT	Tonnes	38000	22000	
iii.	Average parcel size	Tonnes	42000	30000	
iv.	Tonnage expected to be handled	Tonnes	3045000	1305000	4350000
v.	Average no. of berth days (iv / i)	Days	152.25	65.25	217.5
vi.	No. of berth hours {24 x (v)}	Hours	3654	1566	5220
vii	Additional hours towards waiting time {6 x (viii)}	Hours	435	261	696
viii.	Expected number of vessels (iv / iii)	Nos.	72.5	43.5	116
ix.	Total GRT hours (ii * (vi + vii))	GRT hours	155382000	40194000	195576000
x.	Revenue Requirement				20.96
					20.96
	Berth hire - foreign going vessel				**1.100**
	Berth hire - coastal vessel				**0.660**

Berth Hire Calculation as per TAMP Estimates

Sr. No.	Particulars	Unit	Panamax Foreign Vessel	Handimax Foreign Vessel	Total
i	Ship day output	Tonnes/day	20000	20000	
ii.	Average GRT	Tonnes	38000	22000	
iii.	Average parcel size	Tonnes	42000	30000	
iv.	Tonnage expected to be handled	Tonnes	3577000	1533000	5110000
v.	Average no. of berth days (iv / i)	Days	179	77	256
vi.	No. of berth hours {24 x (v)}	Hours	4292	1840	6132
vii	Additional hours towards waiting time {6 x (viii)}	Hours	511	307	818
viii.	Expected number of vessels (iv / iii)	Nos.	85	51	136
ix.	Total GRT hours (ii * (vi + vii))	GRT hours	182529200	47216400	229745600
x.	Revenue Requirement				**20.96**
	Working for foreign vessel 90% and coastal vessel 10%)				
	229745600 * 90% * x + 229745600 * 10% * 0.6x =				20.96
	206771040 x + 22974560 * 0.6x =				20.96
	x = Foreign going vessel rate				**0.950**
	Coastal vessel Rate = 0.6 x foreign going vessel rate				**0.570**

ANNEX - I (b)

UPFRONT TARIFF CALCULATION FOR THE MECHANISED BERTHS AT HALDIA DOCK - II (NORTH) AND HALDIA DOCK - II (SOUTH) OF KOLKATA PORT TRUST.

₹ in crores

Sr. No.	Particulars	Updated Estimates furnished by KOPT	Estimates modified by TAMP
	MECHANISED BERTHS:		
I	**Optimal capacity**		
	Optimal Quay Capacity		
(a)	Share of capacity of different Vessels		
	Percentage share of capacity of Panamax Vessels (S1)	70.00%	70.00%
	Percentage share of capacity of Handymax Vessels (S2)	30.00%	30.00%
(b)	Shipday Output of Vessels		
	- Handling rate of Panamax vessels (P1)	20700	28000
	- Handling rate of Handymax vessels (P2)	20700	20700
(c)	Optimal Quay Capacity of one Berth = 0.7*((S1*P1)+(S2*P2))*365	**5288850**	**6594455**
	Optimal Yard Capacity		
	Area of yard made available by the port for development in Sq.metres (A)	98861	98861
	Percentage of total yard that could be used for stacking (U)	50.57%	63.50%
	Quantity that could be stacked per sq.m of area (Q)	5	5
	Turnover Ratio (T)	30	30
	Optimal Yard Capacity of one Berth = 0.7*A*U*Q*T	**5249371**	**6591557**
	Optimal Capacity of one Berth in million tonnes / annum	**5.25**	**6.59**
II	**Capital Cost**		
A.	**Cargo Handling Activity**		₹ in crores
	(i). Civil Cost (average cost per berth)		
	- Approach Trestle	49.00	49.00
	- Concrete Conveyor Trestle from jetty on land	3.94	3.94
	- Construction of transfer tower/ drive houses	0.40	0.40
	- Hardening of stck yard	13.10	13.10
	- Stacker & Reclaimer tracks	8.88	8.88
	- Concrete Conveyor Trestle from stackyard to wagon loading platform	9.40	9.40
	- Wagon loading platform with wagon loader tracks	2.88	2.88
	- Service roads	1.07	1.07
	- Miscellaneous Buildings	5.25	5.25
	- Laying of railway tracks for wagon loading	2.10	2.10
	- Compound wall fencing	1.08	1.08
	- Soil Investigation, Project supervision, detailed engineering	6.80	6.80
	- Contingencies	3.12	3.12
	- Works Contract tax	4.16	4.16
	- Miscellaneous cost @ 5%	5.56	5.56
	Total	**116.73**	**116.73**
	(ii). Equipment Cost per berth		
	- Grab Unloader (2 nos.)	92.65	92.13
	- Conveyor (7500 metres)	104.87	104.87
	- Stackers (2 nos.)	27.80	27.64
	- Bucket Wheel Reclaimer (1 no.)	16.21	16.13
	- Wagon Loader (1 no.)	13.32	12.74
	- Dozer (2 nos.)	3.82	4.13
	- 5 cum Pay Loaders (3 nos.)	3.24	3.30
	- Railway Weigh Bridge (I no. each)	0.21	0.30
	- Electrical works	17.25	17.25
	- Project supervision	3.33	3.32
	- Contingencies	8.48	8.45
	- Works Contract tax	1.00	1.00
	- Miscellaneous cost @ 5%	14.61	14.56
	Total	**306.78**	**305.82**
	Total Capital Cost for Handling Activity (i + ii)	**423.52**	**422.55**
B.	**Berth Hire Activity**		
	- Construction of berth	45.54	45.54
	- Cost of dredging	2.50	2.50
	- Soil Investigation, Project supervision, detailed engineering	3.36	3.36
	- Contingencies	1.54	1.54
	- Works Contract tax	2.06	2.06
	- Miscellaneous cost @ 5%	2.75	2.75
	Total capital cost for Berth hire Activity	**57.75**	**57.75**
	Total Capital Cost (A + B)	**481.27**	**480.30**

III	**Operating Cost for Cargo Handling Activity**	₹ in crores	
	(a). Power cost		
	(KOPT - 1.4 units per tonne @ Rs.5.38 per unit) TAMP - 1.4 units per tonne @ Rs.5.38 per unit)	3.95	4.97
	(b). Repair & Maintenance		
	- Civil Assets (1% on civil work)	1.17	1.17
	- Mechanical & Electrical Equipment including spares (7% on equipment cost)	21.47	21.41
	(c). Insurance (1% on Gross fixed assets)	4.24	4.23
	(d). Depreciation		
	- Civil Work @ 3.34%	3.90	3.90
	- Mechanical Work @ 10.34%	31.72	31.62
	(e). License Fee	1.70	1.71
	(f). Other Expenses towards salaries and overheads (5% on gross value of assets)	21.18	21.13
	Total Operating Cost	**89.33**	**90.13**
IV	**Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity**		
A.			
(i).	**Estimated Revenue Requirement**		
	(a). Total Operating Cost	89.33	90.13
	(b). Return on capital Employed @ 16%	67.75	67.60
	(c). Total Revenue requirement from cargo handling activity	**157.08**	**157.73**
(ii).	**Apportionment of Revenue Requirement**		
	(a). Cargo Handling Charges (98% of ARR)	153.94	154.57
	(b). Storage Charges (1% of ARR)	1.57	1.58
	(c). Miscelleneous Charge (1% of ARR)	1.57	1.58
	(d). Total Revenue requirement from cargo handling activity	**157.08**	**157.73**
(iii).	**Cargo Handling charge**		
	(a). Cargo Handling Charge		
	- Revenue Requirement (₹ in crores)	153.94	154.57
	- Capacity (Lakh Tonnes per annum)	52.49	65.94
	- Per Tonne rate for handling of Coal (foreign)	**305.45**	**244.16**
	- Per Tonne rate for handling of Coal (Coastal)	**183.27**	**185.16**
	(b). Storage Charge		
	- Revenue Requirement (₹ in crores)	1.57	1.58
	- % of Cargo to attract storage charge	15%	15%
	- Capacity of cargo to attract storage charge (lakh tonnes)	787500	787500
	Storage Charge (beyond the free period)	**Rate Per tonne per day or part thereof**	**Rate Per tonne per day or part thereof**
	-Free period	6 days	6 days
	-First five days	**4.00**	**0.98**
	-6th day to 10th day	**6.00**	**1.47**
	-11th day onwards	**8.00**	**1.96**
	(c). Miscelleneous Charge		
	- Revenue Requirement (₹ in lakhs)	1.57	1.58
	- Capacity (Lakh Tonnes per annum)	52.49	65.94
	- Miscellenous Charge (₹ per tonne)	**2.99**	**2.39**

B.	**BERTH HIRE CHARGES**		
(i).	**Revenue Requirement**	**₹ in lakhs**	
	(a). Repairs & Maintenance Charge (1% on captial cost for berth)	0.58	0.58
	(b). Depreciation	1.93	1.93
	(c). Insurance (1% on total cost for berth hire service)	0.58	0.58
	Subtotal (i)	**3.08**	**3.08**
(ii).	Return on capital Employed @ 16%	**9.24**	**9.24**
	Total Revenue requirement from Berthing services (i + ii)	**12.32**	**12.32**
	Berth hire Charge		
	Foreign going vessel (Rate per GRT per hour) in ₹	**0.640**	**0.548**
	Coastal vessel (Rate per GRT per hour) in ₹	**0.384**	**0.329**

Berth Hire Calculation as furnished by KOPT

Sr. No.	Particulars	Unit	Panamax Foreign Vessel	Handimax Foreign Vessel	Total
i	Ship day output	Tonnes/day	24000	24000	
ii.	Average GRT	Tonnes	38000	22000	
iii.	Average parcel size	Tonnes	42000	30000	
iv.	Tonnage expected to be handled	Tonnes	3675000	1575000	5250000
v.	Average no. of berth days (iv / i)	Days	153.1	65.6	218.75
vi.	No. of berth hours {24 x (v)}	Hours	3675	1575	5250
vii	Additional hours towards waiting time {6 x (viii)}	Hours	525	315	840
viii.	Expected number of vessels (iv / iii)	Nos.	88	53	140
ix.	Total GRT hours (ii * (vi + vii))	GRT hours	159600000	41580000	201180000
x.	Revenue Requirement				12.32
					12.32
	Berth hire - foreign going vessel				**0.64**
	Berth hire - coastal vessel				**0.38**

Berth Hire Calculation as per TAMP Estimates

Sr. No.	Particulars	Unit	Panamax Foreign Vessel	Handimax Foreign Vessel	Total
i	Ship day output	Tonnes/day	28000	20700	
ii.	Average GRT	Tonnes	38000	22000	
iii.	Average parcel size	Tonnes	42000	30000	
iv.	Tonnage expected to be handled	Tonnes	4614090	1977467	6591557
v.	Average no. of berth days (iv / i)	Days	165	96	260
vi.	No. of berth hours {24 x (v)}	Hours	3955	2293	6248
vii	Additional hours towards waiting time {6 x (viii)}	Hours	659	395	1055
viii.	Expected number of vessels (iv / iii)	Nos.	110	66	176
ix.	Total GRT hours (ii * (vi + vii))	GRT hours	175335421	59140597	234476018
x.	Revenue Requirement				**12.32**
	Working for foreign vessel 90% and coastal vessel 10%)				
	201180000 * 90% * x + 201180000 * 10% * 0.6x =				12.32
	181062000 x + 20118000 * 0.6x =				12.32
	x = Foreign going vessel rate				**0.55**
	Coastal vessel Rate = 0.6 x foreign going vessel rate				**0.33**

Annex - II (a)

KOLKATA PORT TRUST/ HALDIA DOCK COMPLEX

UPFRONT TARIFF SCHEDULE FOR MULTIPURPOSE TERMINAL FOR HANDLING IRON ORE, COAL AND OTHER DRY BULK CARGO.

S.1.1 Definitions:

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

(i). 'Coastal Vessel' shall mean 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 Going Vessel' shall mean any vessel other than coastal vessel.

(iii). 'Day' shall mean the period starting from 6 am of a day and ending at 6 am on the next day.

(iv). 'Free period' shall mean the period during which cargo is allowed storage free of demurrage and this period shall exclude Customs notified holidays and Terminal's non-operating days.

(v). 'Per Day' shall mean a calendar day or part thereof.

S.1.2 General Principles of Assessment:

(i). The status of the vessel, as borne out by its certification by the Customs or Director General of Shipping, shall be the deciding factor for its classification as 'Coastal' or 'Foreign-going' for the purpose of levy of vessel related charges; and, the nature of cargo or its origin will not be of any relevance for this purpose.

(ii). (a). A foreign going vessel of Indian flag having a General Trading License can convert to coastal run on the basis of a Customs Conversion Order.

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

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

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

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

(iii). 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 Base Rate declared by the State Bank of India. The penal interest rate will apply to both the Terminal Operator and the user equally.

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

(d). The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. The provision shall, however, not apply to the cases where payment is to be made before availing the services as stipulated in the Major Port Trusts Act, 1963 and/ or where payment of charges in advance is prescribed in this Scale of Rates.

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

(iv). No claims for refund shall be entertained unless the amount refundable is ₹100/- or more. Likewise, terminal operator shall not raise any supplementary or under charge bills, if the amount due to the terminal is ₹100/- or less.

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

(vi). The berth hire charges for all Coastal vessels should not exceed 60% of the corresponding charges for other vessels.

(vii). (a). The cargo related charges for all Coastal cargo, other than thermal coal and Iron ore, should not exceed 60% of the normal cargo related charges.

(b). For the purpose of this concession, cargo from a foreign port which reaches an Indian Port 'A' for subsequent transshipment to Indian Port 'B' will also qualify insofar as the charges relevant for its coastal voyage. In other words, cargo from / to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.

(c). In case of cargo related charges, the concessional rates should be levied on all the relevant handling charges for ship-shore transfer and transfer from/ to quay to/from storage yard including wharfage.

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

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

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

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

S.1.3 Berth Hire

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 following rates:

Sl. No.	Description of vessel	Rate in ₹ per hour per GRT
1.	Foreign going vessel	0.95
2.	Coastal vessel	0.57

Notes to S.1.3:

(i). The time for the purpose of levy of the berth hire shall be reckoned from the time the vessel occupies the berth till she vacates 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 vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator.

(iv). (a). Berth hire shall stop 4 hours after the time of the vessel signaling its readiness to sail. The time limit prescribed for cessation of berth hire shall exclude the ship's waiting time for want of favorable tidal conditions or on account of inclement weather or due to absence of night navigation facilities.

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

(v). The penal berth hire shall be equal to one day's (24 hours) berth hire charge for a false signal.

'False signal' would be when the vessel signals readiness even when she is not ready for un-berthing due to engine not being ready or cargo operation not being completed or such other reasons attributable to the vessel.

(vi). In case a vessel idles due to non-availability or breakdown of the equipment of Terminal Operator or power failure at the Jetty or any other reasons attributable to the Terminal Operator, rebate equivalent to berth hire charges accrued during the period of idling of vessel shall be allowed.

(vii). Ousting priority / Priority berth Hire:
The rate and conditions for granting ousting priority berthing / priority berthing will be governed by extant Government guidelines/ orders in the matter and the provisions prescribed in the Scale of Rates of Kolkata Port Trust.

S.1.4 Cargo Handling Charges:

Sl. No.	Commodity	Unit Rate in ₹ per Metric Tonne	
		Foreign	Coastal
(1)	Iron Ore	180.75	180.75
(2)	Coal (other than thermal coal) & Other Dry Bulk Cargo	180.75	108.45

Notes to S.1.4:

The Cargo handling charges prescribed above is a composite charge for:

(a). unloading of the coal and other dry bulk cargo from the vessel and transfer of the same up to the point of storage, storage at stack yard upto a free period of 5 days and loading on the wagons and

(b). unloading of the iron ore from the wagons at the stack yard, storage at the stack yard up to a free period of 15 days, transfer the cargo to the loading point at the berth and loading onto the vessel.

This composite charge includes wharfage and supply of labour and/ or equipment wherever necessary and all other charges not specifically prescribed in the Scale of Rates.

S.1.5 STORAGE CHARGES:

The Storage charges for the cargo stored in the stack yard beyond the free period allowed shall be as follows:

Description	Rate in Rupees per MT per Day or part thereof	
	Iron Ore	**Coal (other than thermal coal) & Other dry bulk cargo**
Free period	15 days	5 days
First five days after expiry of free period	3.95	3.95
6th day to 10th day after expiry of free period	5.92	5.92
From 11th day onwards	7.90	7.90

Notes to S.5:

(i). Free period shall commence from the day following the day of complete discharge/ loading of cargo.

(ii). For the purpose of free time, terminals non working days and Custom's notified holidays shall be excluded.

(iii). Storage charge shall be payable for all days including terminals non-working days and Custom's notified holidays for stay of cargo beyond the prescribed free days.

(iv). Storage charge on cargo shall not accrue for the period when the terminal operator is not in a position to deliver/ ship the cargo when requested by the user due to reasons attributable to the operator.

S.1.6 MISCELLENEOUS CHARGES:

Composite charge for all the miscellaneous services such as sweeping, weighment of wagons, trucks, receiving/ delivery of cargo etc., shall be levied at ₹9.75 per tonne for Iron Ore, Coal and other dray bulk cargo.

S.1.7. GENERAL NOTE TO SECTION-1.3 TO SECTION-1.6 ABOVE:

The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2012 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year.

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Annex - II (b)

KOLKATA PORT TRUST/ HALDIA DOCK COMPLEX

UPFRONT TARIFF SCHEDULE FOR MECHANISED TERMINAL FOR HANDLING COAL.

S.1.1 Definitions:

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

(i). 'Coastal Vessel' shall mean 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 Going Vessel' shall mean any vessel other than coastal vessel.

(iii). 'Day' shall mean the period starting from 6 am of a day and ending at 6 am on the next day.

(iv). 'Free period' shall mean the period during which cargo is allowed storage free of demurrage and this period shall exclude Customs notified holidays and Terminal's non-operating days.

(v). 'Per Day' shall mean a calendar day or part thereof.

S.1.2 General Principles of Assessment:

(i). The status of the vessel, as borne out by its certification by the Customs or Director General of Shipping, shall be the deciding factor for its classification as 'Coastal' or 'Foreign-going' for the purpose of levy of vessel related charges; and, the nature of cargo or its origin will not be of any relevance for this purpose.

(ii). (a). A foreign going vessel of Indian flag having a General Trading License can convert to coastal run on the basis of a Customs Conversion Order.

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

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

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

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

(iii). 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 Base Rate declared by the State Bank of India. The penal interest rate will apply to both the Terminal Operator and the user equally.

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

(d). The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. The provision shall, however, not apply to the cases where payment is to be made before availing the services as stipulated in the Major Port Trusts Act, 1963 and/ or where payment of charges in advance is prescribed in this Scale of Rates.

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

(iv). No claims for refund shall be entertained unless the amount refundable is ₹100/- or more. Likewise, terminal operator shall not raise any supplementary or under charge bills, if the amount due to the terminal is ₹100/- or less.

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

(vi). The berth hire charges for all Coastal vessels should not exceed 60% of the corresponding charges for other vessels.

(vii). (a). The cargo related charges for all Coastal cargo, other than thermal coal and Iron ore, should not exceed 60% of the normal cargo related charges.

(b). For the purpose of this concession, cargo from a foreign port which reaches an Indian Port 'A' for subsequent transshipment to Indian Port 'B' will also qualify insofar as the charges relevant for its coastal voyage. In other words, cargo from / to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.

(c). In case of cargo related charges, the concessional rates should be levied on all the relevant handling charges for ship-shore transfer and transfer from/ to quay to/from storage yard including wharfage.

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

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

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

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

S.1.3 Berth Hire

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 following rates:

Sl. No.	Description of vessel	Rate in ₹ per hour per GRT
1.	Foreign going vessel	0.55
2.	Coastal vessel	0.33

Notes to S.1.3:

(i). The time for the purpose of levy of the berth hire shall be reckoned from the time the vessel occupies the berth till she vacates 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 vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator,

(iv). (a). Berth hire shall stop 4 hours after the time of the vessel signaling its readiness to sail. The time limit prescribed for cessation of berth hire shall exclude the ship's waiting time for want of favorable tidal conditions or on account of inclement weather or due to absence of night navigation facilities.

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

(v). The penal berth hire shall be equal to one day's (24 hours) berth hire charge for a false signal.

'False signal' would be when the vessel signals readiness even when she is not ready for un-berthing due to engine not being ready or cargo operation not being completed or such other reasons attributable to the vessel.

(vi). In case a vessel idles due to non-availability or breakdown of the equipment of Terminal Operator or power failure at the Jetty or any other reasons attributable to the Terminal Operator, rebate equivalent to berth hire charges accrued during the period of idling of vessel shall be allowed.

(vii). Ousting priority / Priority berth Hire:

The rate and conditions for granting ousting priority berthing / priority berthing will be governed by extant Government guidelines/ orders in the matter and the provisions prescribed in the Scale of Rates of Kolkata Port Trust.

S.1.4 Cargo Handling Charges:

Sl. No.	Commodity	Unit Rate in ₹ per Metric Tonne	
		Foreign	Coastal
1.	Coal (other than thermal coal)	244.16	185.16

Note to S.1.4:

The Cargo handling charges prescribed above is a composite charge for unloading of the coal (other than thermal coal) and other dry bulk cargo from the vessel and transfer of the same up to the point of storage, storage at stack yard upto a free period of 6 days after completion of unloading, reclaiming from stack yard and loading on the wagons. This composite charge includes wharfage and supply of labour and/ or equipment wherever necessary and all other charges not specifically prescribed in the Scale of Rates.

S.1.5 STORAGE CHARGES:

The Storage charges for the coal (other than thermal coal) stored in the stack yard beyond the free period allowed shall be as follows:

Description	Rate in Rupees per MT per Day or part thereof
Free period	6 days
First five days after expiry of free period	0.98
6th day to 10th day after expiry of free period	1.47
From 11th day onwards	1.96

Notes to S.1.5:

(i). Free period shall commence from the day following the day of complete discharge/ loading of cargo.

(ii). For the purpose of free time, terminals non-working days and Custom's notified holidays shall be excluded.

(iii). Storage charge shall be payable for all days including terminals non-working days and Custom's notified holidays for stay of cargo beyond the prescribed free days.

(iv). Storage charge on cargo shall not accrue for the period when the terminal operator is not in a position to deliver/ ship the cargo when requested by the user due to reasons attributable to the operator.

S.1.6 MISCELLANEOUS CHARGES:

Composite charge for all the miscellaneous services such as sweeping, weighment of wagons, trucks, receiving/ delivery of cargo etc., shall be levied at ₹2.39 per tonne.

S.1.7. GENERAL NOTE TO SECTION-1.3 TO SECTION-1.6 ABOVE:

The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2012 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year.

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

TAMP/57/2011-KOPT	:	**Proposal from the Kolkata Port Trust for fixation of upfront tariff in respect of its Project at Haldia Dock-II (North) & Haldia Dock-II (South) at Shalukkhali alongwith all required back-up facilities on Design, Build, Finance, Operate & Transfer (DBFOT) basis.**

A summary of comments received from the users/user organisations bodies/major Coal importers/Iron ore exporters and prospective bidders and the comments of Kolkata Port Trust (KOPT) thereon are tabulated below:

Sl. No.	Comments of users / user organisations bodies / major Coal importers / Iron ore exporters and prospective bidders	Reply furnished by KOPT under cover of its letter dated 10 May 2012
1.	**MMTC Limited**	
	MMTC Ltd. does not possess necessary expertise and technical knowhow to assess tariff of such upcoming facilities for handling of iron ore, coal, etc. As such, MMTC is unable to offer its comments. However, it is expected that the upfront tariff rates would be fixed by the concerned Port authorities by following guidelines laid down by the TAMP.	No specific comments have been furnished by KOPT.
2.	**IVRCL Assets and Holdings Ltd.**	
(i).	With siltation/ maintenance dredging in the berthing area being an important item of the feasibility report, it appears that there is no comment by CWPRS on silting pattern and maintenance dredging required annually. Please explain whether the prospective bidder can assume there is no maintenance dredging required annually. If any separate studies are made on this, 1) what is the rate of siltation in the docks 2) what is the siltation rate in the approach 3) since there will be two operators in the dock II, what is the dredging arrangement suggested by the port trust. We could not find any material in the feasibility report regarding implications if any capital dredging and maintenance dredging. If proper care is not taken now for Haldia Dock-II project on dredging requirements, the fate of new Haldia Dock II project will be repeated as that of Haldia Dock-I. So kindly provide as much information as possible relating to the capital dredging and maintenance dredging for Haldia Dock-II project.	The capital dredging in front of the berth is the responsibility of the successful bidder. The consultant appointed by the port for preparation of the Feasibility Report has projected a minimal capital dredging in front of the berth for which they have considered a lump sum amount. The said amount has been considered as the Capital Cost as per upfront tariff guidelines for fixing the upfront tariff. Besides maintenance cost on the basis of the capital cost as per tariff guidelines has also been taken into account for fixing the upfront tariff. It may also be stated that obligation of the port and the successful bidder relating to dredging and other functions will be defined in the concession agreement.
(ii).	The tables give in the Annual maintenance and operation cost section do not indicate any item of maintenance dredging: this gives strength that there is no maintenance dredging required in the docks and approaches. Can this be taken as guarantee from the port trust.	
(iii).	With regard to viability analysis, it is stated that base case IRP for operator I and II is 19.32 and 17.59 respectively. When 10% up and downs are considered, it falls to 14.3 and 12.74. In all these	The upfront tariff proposal on the basis of upfront tariff guidelines issued by TAMP has been prepared.

	calculations TAMP has taken into consideration of statutory payment of land lease to the lessor by the lessee. Revenue to the licensee on capital employed is considered at 16% on the cost of assets. If thresh hold revenue share is made a part of the revenue calculations, it would be advantageous to both lessor and lessee. The lessor can ensure any bidder quoting less than the thresh hold revenue share, the bid can be rejected. If TAMP has not formulated this factor in the tariff fixation guidelines, it is high time for TAMP to consider this factor and suggest a thresh hold revenue share in tariff calculations. It is easy for TAMP / Port Trust to say that the present guidelines of TAMP do not specify threshold share to be included in the upfront tariff calculations. If it is not there earlier it should be considered at least now.	
(iv).	With regard to Section 5, the ratio of share of coastal cargo and foreign cargo should be relooked. This is very essential due to differential tariff structure. 100% of iron ore cargo for export may not hold good as lot of steel plant on the west coast such as Ispat in Maharashtra and Essar in Gujarat get iron ore from west coast. With upcoming 9m draft, there is large opportunity for shift of thermal coal back to Haldia (they shifted to Paradip for due to lower draft at Haldia) for coastal movement. Hence, the % share for cargo handling of 90% foreign and 10% coastal should be relooked into. In the present scenario of tariff evaluation, the operator have to discourage and refuse coastal cargo which may be firm in anticipation of foreign cargo which move in large ships of capesize and go to other competing ports like Dhamra. This would affect financial performance. The share of foreign to coastal cargo should be changed to 60% and 40%.	The concession in Scale of Rates for iron ore moved coastally is not applicable as per extant Government orders. Our consultant has considered a share of 90% foreign and 10% coastal cargo for preparing the upfront tariff. However, if in future the actual earning of the successful bidder gets affected due to this factor, he may take up the matter with the Authority concerned as per the rules and guidelines prevailing at the relevant point of time.
(v).	Cargo handling charges for coastal movement of iron ore has completely been left out. In future, if any company from the west coast requires iron ore by costal movement, what tariff will charged by the port. Therefore it is necessary to keep the cargo handling charges of iron ore also for coastal.	If any iron ore is moved to West Coast, it will not get the coastal rate benefit as iron ore is not covered for coastal rate benefit.
(vi).	Several of the prospective customers are located nearby, like CESC is located at stone's throw distance. These companies may not store their cargo in stackyard for long. Hence, we should reduce the maximum limit of free period. Total revenue requirement of ₹129 crore will be difficult to meet in the current tariff arrived. This needs to be looked into.	The updated proposal may please be considered against this query.
(vii).	There should be rationalization of tariff structure between multipurpose berth and mechanised berth. The differential in tariff renders customers at a disadvantage and is detrimental for Dock-II. By design we could be penalizing customer handling bulk cargo at multipurpose berth. So, all the shippers would like their cargo to be handled at mechanized berth as this has lower tariff, faster turnaround. Whereas, for multipurpose berth since charges are higher and handling rate is also low, a cargo unloaded at multipurpose berth will have to pay much higher charges to port. It will also spend more money in shipping as ship's turnaround would be lower. All the shippers would try to use mechanized berth.	The upfront tariff for the mechanised and the multipurpose terminals has been prepared as per the Tariff Guidelines of TAMP.

<table>
<tr><td></td><td>Hence, revenue and return on multipurpose berth would be affected. TAMP guidelines fixes the maximum tariff. So please fix same tariff for same cargo. Let operator give discount on case to case basis.

For handling non coal and iron ore cargo, a multipurpose berth could charge higher tariff.</td><td></td></tr>
<tr><td>3.</td><td>Federation of Indian Mineral Industries</td><td></td></tr>
<tr><td>(i).</td><td>Iron Ore export from India is completely dependent on Indian Government policies and consequently economic viability.</td><td>It is a matter of record.</td></tr>
<tr><td>(ii).</td><td>Storage area of 20000 sq.mtr considered for Iron Ore is inadequate considering the fact that, it can stock maximum upto 2,00,000 MTs only at any point in time.</td><td>The updated proposal may please be considered against the query.</td></tr>
<tr><td>(iii).</td><td>The prevailing tariff of other government ports for handling of Iron Ore as compared to the tariff proposed for this new complex is given below.

<table>
<tr><th colspan="4">Cargo Handling Cost INR PMT exclusive of Service Tax</th></tr>
<tr><th>Visakhapatnam Port</th><th>Paradip</th><th>Vizag Sea Ports Ltd.</th><th>Haldia Port</th></tr>
<tr><td>115</td><td>89</td><td>194.5</td><td>133</td></tr>
</table>

<table>
<tr><th colspan="4">Storage Charges per Sq.mtr INR exclusive of Service Tax</th></tr>
<tr><th>Visakhapatnam Port</th><th>Paradip</th><th>Vizag Sea Ports Ltd.</th><th>Haldia Port</th></tr>
<tr><td>3.87</td><td>13.2</td><td>Allowed free time up to 30 days</td><td>37.52</td></tr>
</table>

<table>
<tr><th colspan="4">Berth Hire Charges per GRT per hour in US$ exclusive of Service Tax</th></tr>
<tr><th>Visakhapatnam Port</th><th>Paradip</th><th>Vizag Sea Ports Ltd.</th><th>Haldia Port</th></tr>
<tr><td>0.00153</td><td>0.002375</td><td>0.002</td><td>0.002875</td></tr>
</table>
</td><td>It is a matter of record.</td></tr>
<tr><td>(iv).</td><td>The loading rate fixed 20000 Mts per day which is far below the mechanical loading at Paradip - 49000 Mts, Vizag - 70000 Mts and Dhamara - 25000 Mts.</td><td>The loading rate may vary and will depend on the terminal operator.</td></tr>
<tr><td>(v).</td><td>The most economical vessel size is that of Supramax which requires full cargo of 50000 Mts and needs draft of at lease 12 meters. At the proposed 9m draft it is barely possible to load a full handy size vessel which is not attractive for large Miners / Exporters.</td><td>The project will have the draft limitation of 9m.</td></tr>
<tr><td>(vi).</td><td>Spillage from the conveyors is not accounted for.</td><td rowspan="2">The upfront tariff proposal on the basis of upfront tariff guidelines issued by TAMP has been prepared.</td></tr>
<tr><td>(vii).</td><td>Shortage % of cargo from receipt to shipment is not defined.</td></tr>
<tr><td>(viii).</td><td>Considering the above points, the new upfront tariff is not economically viable from Haldia new Complex – II for Iron Ore exports as compared to Paradip Port, Visakhapatnam Port, Vizag Seaports Limited and Dhamra.</td><td></td></tr>
<tr><td>4.</td><td>Transstroy - OJSC Consortium</td><td></td></tr>
<tr><td></td><td>We have no comments to offer.</td><td></td></tr>
<tr><td>5.</td><td>Adani Ports and Special Economic Zone Limited</td><td></td></tr>
<tr><td>(i).</td><td>In section 3 - Planning Parameters, we feel that yard capacity has been calculated on a higher side. The</td><td>The updated proposal may please be considered against the query.</td></tr>
</table>

	reason being, Dwell Time is kept low and the quantity to be stacked per sq.m is kept high. We have been given to understand that the dwell time for coal cargo handled at Haldia Port currently is around 15 days. It will be even more for the cargo imported by traders for stock and sell. In this scenario, the turnover of the storage space cannot be more than 24 times in a year. However in the proposal it can be seen that the turnover of the plot is considered 38 times in a year for handling coal at mechanised berth. Putting this in the formula gives an optimal yard capacity of 5.03 mil tonnes which is incorrect. If we consider a turnover of 24 times in a year, the optimal yard capacity will change to 3.2 mil tonnes approx. Further the quantity that can be stacked per sq m is taken as 5.25 tonnes which is on a higher side. We are herewith attaching a layout drawing for 720 X 50 m of area proposed for stacking coal in case of mechanised berth. The total storage capacity will be 1,38,000 MT considering a stack height of 10 meters. Here if there are 18 turnarounds then the capacity of the terminal will be 2.5 mil tonnes per annum and if there are 24 turnarounds then it will go to 3.3 mil tonnes per annum. This is much less than the calculated capacity in the proposal. This will have substantial impact in calculating the coal handling charges and minimum guaranteed throughput. Similar is the case with calculation of yard capacity for multi-purpose berths. Here again the dwell time for coal cargo is required to be increased to 15 days instead of 10 days.	
(ii).	From the information provided in Point No.7 of the executive summary, the design ship size is Panamax bulk carrier of 75,000 DWT (22.5 m length) with parcel size of 42,000 tonnes. It is expected that Panamax carrier will bring the cargo, partially lighten at the proposed trans-loading facility at Sandhead / Kanika Sand and thereafter visit Haldia Dock II with a reduced parcel of 42,000 tonnes. In this case the systematic study on feasibility of lighterage operation at Sandhead/ Kanika Sand should be carried out by the authority so as to ascertain whether the vessel can be handled during the monsoon months. This can have substantial impact on the vessel traffic and cargo volumes for Haldia Dock II.	The Transloading facilities being contemplated by KOPT will be an all weather facility.
(iii).	As per Point No.8 of the executive summary, it is mentioned regarding the water depth of (-) 9m CD which will enable berthing of Panamax vessels with a maximum draft of 9 m. In this case the under keel clearance is not considered. This will have impact on the vessel size considered for the project.	Draft of 9m is acceptable considering the adequate under keel clearance.
6.	**TM International Logistics Limited (TMILL)**	
(i).	From the tariff proposal it is observed that for the multipurpose berths the tariff has been proposed for iron ore and coal cargoes only. Accordingly, the equipping plan has been considered for these 2 types of cargoes only. Thus, kindly clarify that the multipurpose berths will not be allowed to handle other cargo types like steel, fertilizer, limestone, project and bag cargoes etc. If the project allows handling of such	

	cargoes also, provided for handling import coal and export of iron ore only and accordingly rates are proposed for these two types of cargoes only.	This aspect has been considered in the revised proposal of upfront tariff and uploaded in the website.
(ii).	The proposed equipment plan for the multipurpose berth does not address the equipment plan / cargo handling plan for unloading iron ore from rake, transportation and stacking at storage yard. The tripper truck requirements, pay loader requirements are all based on handling of cargo between vessel and the storage yard. The wagon loading system for coal is stated to be with the use of reclaimer, wagon loader and conveyor but nothing has been provided for unloading of iron ore from the rake and transportation to storage yard. The authority is requested to consider the handling plan for iron ore from rakes and accordingly include costs for the same in the tariff computation.	
(iii).	For cleaning of hatch at the time of unloading of coal from the vessel, small pay-loaders of capacity about 2 to 3 mt are required to be provided inside the hatch of the vessel as pay loaders of capacity 6 mts cannot be used for hatch operations in panamax/supramax vessel size. The equipment plan does not provide for these equipments. The authority may include equipment required for this part of the activity also.	
(iv).	For quay capacity calculation 9 mtrs of draft has been assumed by KoPT. Presently draft ranges between 7 and 8 mtrs. The average output rate (vessel productivity) of coal unloading is bound to be significantly reduced with the drop in the parcel size as a result of lower draft due to low cargo bite factor and increased crane cycle time. Thus the Authority is requested to apply reasonable assumption of productivity considering these factors. Furthermore, the loss of time due to tidal waits should also be reasonably accounted for both for inward and outward movement of the vessel.	
(v).	Since, the stacking of cargo at storage yard in the case of multipurpose berths will be done with the use of the payloaders and dozer, the stack height that can be reached would be considerably less than that can be achieved in mechanized handling system and hence the norms prescribed for mechanized iron ore and coal berths in the upfront tariff fixation guidelines can not be used in the case of multipurpose berth. It is proposed that stack height of maximum 3 should be taken for calculating yard capacity. Though quantity of coal that can be stacked is taken as 2.4 mt/SQM which is on the basis of 3 metres of stack height but in the case of iron ore the stack height of 3 mtrs has been ignored by considering 15 mt/sq. mtr of stacking capacity. The authority is requested to consider the yard capacity on the basis of possible stack height both for coal and iron ore.	
(vi).	Since, the project will be used on common user basis and separate stacks are required to be built for each customer and cargo type, and furthermore the multipurpose berth is to be operated using mobile handling equipments, tipper and wagon loader, conveyor etc. for which adequate space has to be left out not only at the periphery of the yard but also between the stacks in the same yard to allow movement of equipments. Hence the assumption of	

	utilizing 100% of the yard area will not be possible. Thus 9% free space is a very optimistic estimate. In our opinion atleast 30% of the space would be required to be kept for free movement of mobile equipments even in the case of manual handling as is considered for mechanized terminal.	
(vii).	The Dwell time at the yard depends on the likely dispatch pattern to be followed by the customer. Turnover ratio of 12 as provided in the guidelines for coal and iron ore are reasonable. Consideration of 10 days of dwell time for coal (i.e. turnover ratio of 36) as considered in the proposal appears to be on a very higher side.	
(viii).	Whether an operator would be allowed to handle other dry bulk cargoes like fertilizer at the multipurpose terminal with value added services (like bagging) and if yes then whether such value added services falls within the purview of ceiling tariff to be set by TAMP.	

2.1. A joint hearing on the case in reference was held on 25 January 2012 at the KOPT premises. At the joint hearing, the concerned users / user organisations bodies / major Coal importers / Iron ore exporters and prospective bidders have made the following submissions:

TM International Logistics Limited (TMILL)

(i). It is not clear whether all types of cargo will be allowed in multipurpose berth.
(Chairman, KOPT – we will allow all types of cargo to be handled).

(ii). Atleast a pay-loader is necessary on board for hatch cleaning. The proposed equipment plan does not include it.
(Chairman, KOPT – yes, it is required).

(iii). Dwell time of 10 days for coal is unrealistic. It should be higher.
(Chairman, KOPT – If any additional land is required to store coal, we will allot land on short term license basis for a month or so which will follow the rates and conditions prescribed in the normal scale of rates of the Port.).

(iv). If other cargo like fertiliser etc. are handled at multipurpose berth, then value added services like bagging, stacking, etc. may be necessary. The proposal is silent on this aspect.

M/s. LANCO Infratech Limited (LIL)

If multiple cargo is to be handled, then the proposed area for backup land is inadequate. Mechanised equipment would also be needed in the yard of multipurpose berths to achieve higher rate of evacuation.

Steel Authority of India Limited (SAIL)

Tariff computation assumes certain productivity level. If the level actually achieved is low, then users suffer. Port should ensure the operators maintain the optimum productivity levels as envisaged.

2.2. As agreed at the joint hearing, the KOPT has forwarded a copy of the updated proposal alongwith the updated Feasibility Report to all the users/user organisations bodies/major Coal importers/Iron ore exporters and prospective bidders. A summary of comments received from M/s. CESE Limited and reply of KOPT is given below:

Sl. No.	Comments of CESE Limited	Reply furnished by KOPT under cover of its letter dated 2 June 2012
(i).	CESE Limited is not in a position to comment upon the capital cost estimates and/or justification of selection of equipment.	
(ii).	The charges indicated, especially for the mechanized operation, appear to be on the higher side as compared to the existing rates applicable at HDC.	The mechanized berth proposed for Haldia Dock-II will inter-alia provide the following benefits as compared to the existing mechanized berth at HDC: - 1. Handling of vessels of higher parcel load. 2. Ensuring higher productivity 3. Minimum post completion delay primarily because of non-existence of Lock Gate. As such, the proposed rate in respect of the proposed mechanized berth of Haldia Dock-II is comparable and competitive from the commercial point of view.
(iii).	The extent of responsibilities and costs to be borne by the Users are not made clear in terms of services to be provided by the Operator to the Users. Some of the unknown areas are – whether or not the rates include railway terminal and haulage charges, accountability & process of reconciliation of quantity dispatched vis-à-vis quantity received to be offered by the Operators, etc. To this end we request that scope of services and responsibilities of the Operators may be intimated to users to enable them to assess overall cost implications/economic viability.	The proposed tariff has been prepared as per the Upfront Tariff guidelines circulated by TAMP in respect of PPP projects. The said guidelines are available in the web site of Tariff Authority for Major Ports which gives detailed account of the procedure followed. The Railway Haulage and Terminal charges are fixed by Indian Railways and the same would be payable by the user in addition to the cargo handling charges, as per the procedure /system in vogue at present for HDC, in view of the fact that Railway Infrastructure would also be set up by KOPT at Haldia Dock-II.
(iv).	For Optimal capacity, calculation has been based on the assumption that deliveries shall be made by Panamax and Supermax/ Handymax class vessels only. Given that KOPT is looking at the possibility of facilitating unloading of bulk cargo to a Transloader in the near future, the entire economic exercise should also take into account that some cargo may have to be brought by smaller Barges to HDC-II.	The tariff proposed is relating to the ceiling rate what the terminal operator will be entitled to charge the user for rendering the services at his terminal. The cargo to the terminal may also be brought by barges through transloading or by coastal movement, depending on feasibility.

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