

(Published in Part - III Section 4 of the Gazette of India, Extraordinary)

Tariff Authority for Major Ports

G No. 170

New Delhi,

17 August 2011

NOTIFICATION

In exercise of the powers conferred by Section 48 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from the Kandla Port Trust for setting upfront tariff for deployment of Mobile Harbour Crane of 60 tonne capacity at Kandla Port in pursuance of the guidelines for upfront tariff setting at Major Port Trusts which was notified vide this Authority's Notification No.TAMP/52/2007-Misc. dated 26 February 2008 as in the Order appended hereto.

(Rani Jadhav)
Chairperson

Tariff Authority for Major Ports
Case No. TAMP/8/2011-KPT

Kandla Port Trust

Applicant

O R D E R

(Passed on this 29th day of June 2011)

This case relates to a proposal dated 11 January 2011 received from the Kandla Port Trust (KPT) for fixation of upfront tariff for mechanization of Dry Cargo Berth Nos.7 and 8 at the Kandla Port.

2.1. In order to achieve higher levels of productivity, the port has proposed to equip berth Nos.7 and 8 with four new Mobile Harbour Cranes (MHC) of 60 Tonnes capacity through Public Private Participation mode on BOT basis. In this context, the KPT has filed the proposal for fixation of upfront tariff for mechanization of dry cargo berth Nos.7 and 8.

2.2. The highlights of the proposal filed by KPT are given below:

- (i). The concessionaire shall finance, install and commission four numbers of 60 Tonnes Mobile Harbour Cranes (MHC) at berth Nos.7 and 8 and operate and maintain it for the concession period of 15 years. After the concession period, the cranes will be transferred to KPT.
- (ii). MHC will be used for handling all types of dry bulk cargo, steel & bagged cargo, timber logs & other break bulk cargo. It shall be used for unloading cargo from vessels upto wharf as well as for loading cargo from wharf into vessels.
- (iii). The total capital cost for the proposed mechanisation i.e. deployment of 4 MHCs is estimated to be ₹ 8060.64 lakhs. The capital cost has been estimated based on the average rate of budgetary quotations received from different vendors for 2 numbers of 60 Tonnes MHC. The break-up of capital cost furnished by the KPT is given below:

(₹ in lakhs)	
FOB Cost (2 Cranes)	3173.83
FOB cost of grab bucket, 4 rope clamshell type, 18 cum capacities	179.35
Transportation charges	315.37
Custom duty	167.66
Total	3836.21
Contingencies @ 3%	115.09
Total	3951.30
Establishment cost @ 2%	79.02
Cost of 2 cranes	4030.32
Cost of 4 cranes	8060.64

- (iv). Optimal Capacity of the MHCs:
 - (a). The optimal capacity of four MHCs is estimated cargo-wise with reference to different handling rates for the different cargo groups viz. dry bulk cargo, steel and bagged cargo and other break bulk cargo.
 - (b). The KPT has considered a handling rate of 540 Tonnes per hour for dry bulk cargo. Handling rate for steel & bagged cargo and other break bulk cargo are taken at 53.33% and 33.33% respectively of the handling rate considered for handling dry bulk cargo. The port has stated that the ratio of 100%, 53.33% and 33.33% for dry bulk cargo, steel & bagged cargo and other cargo is obtained based on the TAMP norms which specify a handling rate of 7500 tonnes/ day for dry bulk cargo viz. food and fertiliser (parcel size of vessel < 30000 tonnes), 4000 tonnes/ day for steel & bagged cargo and 2500 tonnes/ day for timber logs in case of 3 ELL

cranes each of 20 Tonnes capacity. The detailed capacity calculation as given by the KPT is hereunder:

➤ For Dry Bulk Cargo:

Sl. No.	Particulars	Dry bulk cargo
1.	Moves per hour	30
2.	Cargo handled in one move	60 x 0.3 = 18 tonnes
3.	Cargo handled in one hour by one crane	30 x 18 = 540 tonnes
4.	Cargo handled in one hour by one crane	540 tonnes
5.	Annual handling capacity of four cranes for 4000 hours (in tonnes)	540 x 4 x 4000 = 86,40,000

➤ For Steel/ Bagged Cargo and other break bulk cargo:

Sl. No.	Particulars	Steel & Bagged cargo	Other break bulk cargo
1.	Cargo handled in one hour by one crane	53.33% of 540 tonnes = 287.982 tonnes	33.33% of 540 tonnes = 179.98 tonnes
2.	Annual handling capacity of four cranes for 4000 hours (in tonnes)	287.982x4x4000 = 46,07,712	179.982x4x4000 = 28,79,680

(v). Estimation of total Revenue Requirement:

The operating cost is estimated adopting the norms prescribed in the guidelines for multipurpose berth and ROCE is computed at 16% as tabulated below:

Sl. No.	Particulars	Workings	Amount (₹ in lakhs)
1.	Operation and maintenance cost		
	(i). Repairs and maintenance cost	5% of ₹ 8060.64 lakhs (capital cost)	403.03
	(ii). Fuel	32 litres per hour x 4000 hours x 4 cranes x ₹ 40 per litre	204.80
	(iii). Insurance	1% of ₹ 8060.64 lakhs	80.60
	(iv). Depreciation	10.34% of ₹ 8060.64 lakhs	833.47
	(v). Salary & wages and other expenses	5% of ₹ 8060.64 lakhs	403.03
	(vi). License fee	₹ 200 per 10 sq. m. per month for 200 sq. m per crane for 4 cranes	2.04
	Total Operating cost		1926.99
2.	ROCE	@ 16% * ₹ 8060.64 lakhs	1289.70
3.	Total Estimated Revenue Requirement from four MHCs		3216.69

(vi). In order to meet the estimated Annual Revenue Requirement of ₹ 3216.69 lakhs, the port has proposed the upfront tariff for MHC with reference to optimal capacity assessed for each categories of cargo as follows:

Particulars	Dry Bulk Cargo	Steel and bagged cargo	Other Bulk Cargo
Annual Revenue Requirement (in lakhs)	3216.69	3216.69	3216.69
Capacity in tonnes	86,40,000	46,07,712	28,80,000
Foreign Cargo (90%) (in tonnes)	77,76,000	41,46,941	25,92,000
Coastal Cargo (10%) (in tonnes)	8,64,000	4,60,771	2,88,000
Proposed Hire Charges			
Foreign cargo per tonne	₹ 38.78	₹ 72.72	₹ 116.34
Coastal Cargo per tonne	₹ 23.27	₹ 43.63	₹ 69.81

2.3. The KPT has submitted the extracts of the feasibility report along with the proposal. The port has, however, not submitted the proposed Scale of Rates (SOR) separately.

2.4. The KPT has stated that the Board of Trustees of KPT has approved the upfront tariff proposal in its meeting held on 19 August 2010.

3. In accordance with the consultation process prescribed, the proposal of the KPT dated 11 January 2011 was circulated to the concerned users/ user organisations and prospective users/ shortlisted bidders (as forwarded by KPT) seeking their comments. The comments received from the users / user organisations and prospective users/ shortlisted bidders were forwarded to the KPT as feedback information. The KPT has furnished its remarks on the comments of users / user organisations and prospective users/ shortlisted bidders.

4. Based on the preliminary scrutiny of the proposal, the KPT was requested to furnish additional information/ clarifications on a few points vide our letter dated 23 February 2011. The KPT vide its letter dated 27 April 2011 has furnished its response on a few points. It has furnished reply on the remaining queries subsequent to the joint hearing. The queries raised by us and reply furnished by KPT are brought out in the subsequent paragraph.

5. A joint hearing in this case was held on 5 May 2011 at the Kandla Port Trust (KPT). The KPT made a power point presentation of its proposal. At the joint hearing, KPT and the concerned users/ organisation bodies/ prospective users/ shortlisted bidders have made their submissions.

6. At the joint hearing, the KPT was advised to furnish its response on the following points:

- (i). Since the response of the KPT vide its letter dated 27 April 2011 to the queries raised by us vide our letter dated 23 February 2011 is incomplete, the KPT was requested to comprehensively address the queries and furnish its reply.
- (ii). Re-look its proposal along with its other proposal filed for fixing hire charges for Mobile Harbour Crane to be operated by the KPT and file a revised proposal by 19 May 2011. The KPT was requested to simultaneously circulate its proposal to the concerned users advising them to furnish their comments within 7 days.
- (iii). Furnish its comments on the comments to be furnished by Kandla Port Stevedores Association and M/s.ABG-LDA Bulk Handling Private Limited, within 7 days after receipt of their comments.

7.1. As agreed at the joint hearing, the KPT has reportedly circulated the revised proposal to the concerned users/ bidders vide letter No.FA/COST/1272/563 dated 4 June 2011 advising them to furnish their comments within 7 days. We have not received any comments on the revised proposal of KPT from any other users/ bidders except Kandla Port Stevedores Association (KPSA). A copy of the comments received from KPSA has been forwarded to KPT for its remarks/ views. No response is received from KPT in this regard.

7.2. The KPT vide its letter dated 4 June 2011 has furnished its response to the issues raised in the joint hearing. The port has also furnished its replies to the remaining queries raised by us vide our letter dated 23 February 2011. A summary of the queries raised by us and replies of KPT are tabulated below comprehensively:

Sl. No.	Queries raised by us	Reply of KPT
(i).	The port has only forwarded a summary of the Feasibility Report as part of Annex - I. The port is requested to forward complete Feasibility Report.	The KPT has furnished a complete copy of the feasibility report.
(ii).	The KPT has proposed upfront tariff for deployment of four 60T Mobile Harbour Cranes (MHCs). In this context it is brought out that with reference to a proposal filed by VOCPT for fixation of upfront tariff for mechanization of berths which involved deployment of two MHC of	It varies from project to project and it is not possible to take 100 Tonne capacity crane tariff as a standard one. Various types of cranes are available in market. Hence it should be project specific.

	different capacities, the Authority has vide Order No.TAMP/16/2010-TPT dated 23 February 2010 prescribed upfront tariff for standard capacity of crane of 100 Tonne capacity and prescribed the tariff linked to the performance of the crane to take care if the actual capacity of the crane deployed by service provider varies within the range of the standard capacity of MHC. Upfront tariff fixed once will apply in the same port for next five years for handling identical commodity or service. Further, users of MHC will be concerned with the productivity and reliability of service offered by the crane and not with the capacity of the crane deployed. KPT is, therefore, requested to confirm that it does not envisage deployment of higher capacity MHC at its port in the next five years under PPP model. If the KPT envisages deployment of higher capacity crane under PPP model in the next five years, it may consider to propose upfront tariff for a standard capacity of crane of 100 Tonne capacity and link the tariff to the performance of the crane as done in the case of the VOCPT.							
(iii).	Optimal Capacity:							
	(a). The basis of considering moves of a 60T Mobile Harbour Crane (MHC) at 30 per hour may be explained.	Number of moves depends on various factors like densities of cargo, types of vessel, crane driver's expertise, angle at which loading and discharging take place, size of hatch and evacuation rates, length of berth etc. Generally, it has been seen that theoretical moves for the cranes in the range of 63 T / 64 T crane is less than 35 moves for bulk cargo including containers per hour. Hence 30 moves per hour is assumed looking to various factors mentioned above.						
	(b). Explain the basis of arriving at the load capacity of MHC at 18 tonnes for each move applying 30% on the capacity of MHC i.e. 60T x 0.30.	As far as 0.3 factor is concerned, the Port is procuring 2 Nos. of MHCs with 18 m ³ capacity grab. If we consider average density 1 (one), it comes to 18 Tonnes per move. If the crane is 60 T, then factor for 18 T comes to 0.3.						
	(c). The upfront tariff guidelines for a multipurpose cargo handling terminal prescribe output norms for three numbers of 20 tonne capacity luffing crane at 10000 tonnes per day for handling dry bulk cargo viz. coal, limestone, etc. Even if the same level of output is assumed as the aggregate of three luffing crane capacity comes to 60T, the per hour output will be 595 tonnes [i.e. 10000T/ day / 16.8 hours (24*0.7)] as against output of 540 tonnes / hour considered by KPT for dry bulk cargo. For steel and bagged cargo and other cargo, the port has assumed the output at 53.33% and 33.33% of the output obtained by the port for arriving at the optimal capacity for dry bulk cargo.	As per handling norms prescribed in the guidelines of 2008, the ratio of handling rates for Dry Bulk, Steel and Bagged Cargo and Break bulk Cargo is 1:0.53:0.33.						
	The parameters assumed by the KPT for assessing the optimal capacity are not found to be in line with the output norms prescribed in the	The optimal cargo handling capacity of the four cranes is estimated as following:- <table><tr><td>Number of Cranes</td><td>60 T Mobile Harbour Cranes – 4 Numbers</td></tr><tr><td>Handling rate / day / for bulk Cargo</td><td>(4 cranes) * (60 * 0.3 Tonnes / move)* (30 moves/ hour)*(24 hours a day)* 0.7= 36,288 Tonnes / day</td></tr><tr><td>Handling rate / day for steel and Bagged cargo</td><td>53% of 36,288 tonnes = 19233 Tonnes / day</td></tr></table>	Number of Cranes	60 T Mobile Harbour Cranes – 4 Numbers	Handling rate / day / for bulk Cargo	(4 cranes) * (60 * 0.3 Tonnes / move)* (30 moves/ hour)*(24 hours a day)* 0.7= 36,288 Tonnes / day	Handling rate / day for steel and Bagged cargo	53% of 36,288 tonnes = 19233 Tonnes / day
Number of Cranes	60 T Mobile Harbour Cranes – 4 Numbers							
Handling rate / day / for bulk Cargo	(4 cranes) * (60 * 0.3 Tonnes / move)* (30 moves/ hour)*(24 hours a day)* 0.7= 36,288 Tonnes / day							
Handling rate / day for steel and Bagged cargo	53% of 36,288 tonnes = 19233 Tonnes / day							

	guidelines for determining the optimal capacity. The KPT may, therefore, modify the optimal capacity calculation following the norms prescribed in the guidelines.	Handling rate / day for timber logs = Percentage of cargo to be handled	33.3% of 36,288 = 12084 Tonnes / day									
		Cargo share Bulk Cargo Steel & bagged Cargo Timber logs	60% 30% 10%									
		Optimal Capacity of the cranes	$365 * 0.7 * (0.6 * 36288 + 0.3 * 19233 + 0.1 * 12084) = 7.35$ Million MTs									
		Note : Percentage of cargo to be handled by the cranes has been based on dry cargo handled at Kandla Port in the past. As could be seen from the above table, the optimal capacity of the four cranes is obtained at 7.35 Million Metric Tonnes per annum. We have tried to formulate a scientific way of calculating the optimal capacity of the Mobile Harbour cranes since the guidelines for calculations of Mobile Harbour Crane capacity are not available. However, if TAMP provides any observations / modifications on the methodology adopted, suitable changes shall be made to the proposal.										
	(d). In this regard it may be noted that based on performance of 100T MHC reportedly achieved at Paradip Port Trust (PPT), output of a 100 Tonnes MHC was considered at 12500 tonnes/day. With reference to break bulk cargo and other cargo, handling rate was considered at 50% above the norms prescribed in the guidelines.	Kindly refer above calculation for 7.35 million tonnes, considered for 60 Tonne capacity cranes based on the justification pointed above.										
	(e). Average output in terms of tonnes/ day achieved by the MHCs, if any, presently deployed by the port may please be furnished cargo-wise (dry bulk cargo, steel and bagged cargo and other cargo) for the last three years 2008-09 to 2010-11.	Kandla Port does not own any Mobile Harbour Cranes (MHCs). However, the port has permitted a private registered stevedore to install two 100 MTs MHCs near its Dry Cargo berth No.10. This stevedore is permitted to operate these cranes for handling only that dry cargo for which it has been nominated to carry out the stevedoring job. Based on information pertaining to the 'deployed time' of these cranes and the cargo tonnage handled by these cranes against each ship, the average output in terms of tonnes per day achieved by these MHCs, for each of the three categories viz. 'Dry bulk cargo', Steel and bagged cargo' and 'Timber logs/ other break bulk cargo', for each of the three years 2008-09 to 2010-11 and the average of these three years has been compiled. The computed average of these three years (for both the MHCs combined) indicates that the average output in tonnes/ day is: <table><tr><td>Dry bulk</td><td>:</td><td>9850 MTs</td></tr><tr><td>Steel & Bagged cargo</td><td>:</td><td>5152 MTs</td></tr><tr><td>Timber logs/ other break bulk cargo</td><td>:</td><td>2459 MTs</td></tr></table>		Dry bulk	:	9850 MTs	Steel & Bagged cargo	:	5152 MTs	Timber logs/ other break bulk cargo	:	2459 MTs
Dry bulk	:	9850 MTs										
Steel & Bagged cargo	:	5152 MTs										
Timber logs/ other break bulk cargo	:	2459 MTs										

(iv).	Capital Cost:	
	(a). The KPT may confirm that the capital cost of the MHC is based on the prevailing market rate and furnish documentary support.	The copies of quotations of suppliers are furnished.
	(b). If the MHC is proposed to be imported, then the exchange rate adopted for estimating the capital cost may updated to reflect the prevailing exchange rate. The exchange rate adopted in the calculation may please be indicated.	The exchange rate @ ₹ 67.33 per Euro is considered for calculation of capital cost (estimate) of ₹ 80.60 crores. However, it is not possible to change/ incorporate the euro rate at this point of time because we have already freezed the project cost and floated the RFQ documents.
	(c). For estimating the capital cost of MHC, the KPT has provided for contingency at 3% of capital cost and 2% of the total capital cost towards establishment cost. Kindly explain the purpose for which these provisions are made in the estimation of capital cost.	The contingency cost and establishment cost will cover 5% miscellaneous cost as per defined guidelines. IDC and other charges are part of cost.
(v).	Operating Cost:	
	(a). The basis of adopting fuel consumption at 32 litre/ hour may be explained and justified with reference to the actual consumption of fuel for similar capacity MHC operating in the port or with reference to equipment manufacturer's specifications.	As per manufacturer's manual for the 60 Tonne Mobile crane, the fuel tank of 4800 litres can last for 150 hours, giving an approximate fuel consumption rate of 32 litres / hour. (The KPT has updated the fuel consumption to 33.3 litres per hour in the revised upfront tariff calculation).
	(b). Confirm the fuel rate adopted is the prevailing rate and substantiate it with a copy of recent bill.	The fuel rate ₹ 41.006 per litre is based on M/s.IOC Ltd.'s letter dated 26 April 2011. However, fuel rate of ₹ 42.11 per litres (as on 15.05.2011) has been considered.
	(c). Confirm that the license fee considered in the estimation is as per the prevailing Scale of Rates and give a reference thereof to the Scale of Rates of KPT.	When the proposal was submitted in January, 2011, the SOR prevailing at that time has been considered for the calculation of license fee which is ₹ 210.00 per 10 Sq. Mtrs. or part thereof per month or part thereof. However, after TAMP's approval to KPT's General Tariff Revision on 18.02.2011, the rates prescribed in the present SOR is ₹ 252.00 per 10 sq. mtrs. or part thereof per month or part thereof. (However, in the revised upfront tariff calculation, the KPT has considered a rate of ₹ 216/- per 10 sqm. per month.)
(vi).	(a). The basis of assuming 10% of cargo capacity as coastal and 90% of cargo capacity of MHC as foreign may be explained.	As per the KPT's cargo data.
	(b). The ratio of foreign and coastal cargo handled at the port's berths by MHCs deployed at present for each type of cargo viz. dry bulk cargo, steel and bagged cargo and other break bulk cargo may please be furnished for the last three years 2008-09 to 2010-11.	As mentioned at Sl. No.(iii) (e) above, the registered stevedore has furnished the information pertaining to the vessel-wise cargo throughput handled by its two MHCs at Kandla Port. Based on this information, the ratio of foreign and coastal cargo handled at the port's berths by these MHC's for each of the three categories of Dry Cargo viz. Dry bulk, Steel and Bagged Cargo and Timber logs/ other break bulk cargo, for the last three years i.e. 2008-09, 2009-10 and 2010-11,

		and also the average of these three years has been compiled. The computed average of these three years for both the MHCs combined indicates that the ratio of coastal and overseas cargo for each of the three dry cargo categories is: <table border="1"> <tr> <td>Dry bulk</td><td>:</td><td>Coastal-1%, Overseas-99%</td></tr> <tr> <td>Steel & Bagged cargo</td><td>:</td><td>Coastal-8%, Overseas-92%</td></tr> <tr> <td>Timber logs/ other break bulk cargo</td><td>:</td><td>Coastal-0%, Overseas-100%</td></tr> </table>	Dry bulk	:	Coastal-1%, Overseas-99%	Steel & Bagged cargo	:	Coastal-8%, Overseas-92%	Timber logs/ other break bulk cargo	:	Coastal-0%, Overseas-100%
Dry bulk	:	Coastal-1%, Overseas-99%									
Steel & Bagged cargo	:	Coastal-8%, Overseas-92%									
Timber logs/ other break bulk cargo	:	Coastal-0%, Overseas-100%									
(vii).	The port is advised to propose performance linked tariff scheme for different cargo groups along with conditions governing the scheme. For this purpose, the approach followed in the VOCPT case may be drawn for reference and, if necessary, suitably modify in its case based on its experience in the port operation. The basis adopted for performance linked tariff (to be) proposed may also be explained.	Performance based tariff was not initially proposed because already other cranes are handling the cargo on 7 th and 8 th berth at KPT. While addressing this query, the KPT has, however, proposed performance based tariff and also incorporated the same in the proposed draft Scale of Rates.									
(viii).	The KPT has not forwarded the proposed Scale of Rates mechanisation facility envisaged to be developed on PPP basis. The port is requested to forward a draft proposed Scale of Rates incorporating definition of some of the common terms and general conditions in line with the prescription in the upfront case of VOCPT cited in this letter.	The KPT furnished the draft Scale of Rates.									

7.3. With reference to the point made at the joint hearing to relook at its proposal alongwith its other proposal for fixing hire charge of MHC to be operated by the KPT, the port has made the following submissions:

- (i). Justifying the differential tariff for the same optimal capacity of Mobile Harbour Cranes proposed to be operated by the port and the BOT operator does not arise, as tariff proposed for the port owned cranes to TAMP is on the basis of order placed at M/s.Italgru s.r.l., Italy for 2 nos. of MHCs. Whereas the capital cost of MHC to be deployed by BOT operator has been arrived at based on the quotations given by various suppliers of MHCs like Gottwald, Libherr, etc.
- (ii). The fuel oil consumption is based on the data given by the various manufacturers of MHCs like Gottwald, Libherr, Italgru, etc. It will depend on the make of crane, which the BOT operator will bring and it can be seen the average fuel consumption of different equipment specification.

7.4. While furnishing the reply to the queries, the KPT has also furnished the revised proposal for upfront tariff fixation based on the discussions at the joint hearing. The main points / modifications made by the KPT in the revised proposal are given below:

- (i). The port has updated the fuel rate at ₹ 42.11 per litre as against ₹ 40/- per litre considered earlier. The port has also revised the fuel consumption for MHC to 33.3 litres per hour from 32 litres per hour considered earlier.
- (ii). It has also updated the estimation of license fee adopting the unit rate of ₹ 216/- per 10 sqm. per month, applicable for storage of general cargo at open space (pucca plots) for stay beyond 180 days, prescribed in the port's Scale of Rates approved by the Authority vide Order No.TAMP/61/2009-KPT dated 18 January 2011.

- (iii). The revised revenue requirement and the revised rates proposed by the port after the above modifications are given below:

(a). **Revised Revenue Requirement:**

Sl. No.	Particulars	Amount (₹ in lakhs)
1.	Operating cost	1946.61
2.	ROCE	1289.70
3.	Total Estimated Revenue Requirement from four MHCs	3236.31

(b). **Revised proposed rates:**

(₹ per tonne)

Particulars	Foreign cargo	Coastal cargo
Dry bulk cargo	39.02	23.41
Steel and bagged cargo	73.16	43.90
Other break bulk cargo including timber logs	117.05	70.23

- (iv). The KPT has furnished the draft Scale of Rates along with the Efficiency Linked Tariff (ELT). The ELT furnished by the port for different types of cargo is given below:

(a). For Dry Bulk Cargo:

Average daily performance for 1 crane (in Metric Tonne)	Ceiling rate per tonne (in ₹)	
	Foreign	Coastal
7072-8071	35.12	21.07
8072-9071	37.07	22.24
9072	39.02	23.41
9073-10072	40.97	24.58
10073-11072	42.92	25.75

Note: To calculate the incremental ceiling rates as shown above, the base rate was enhanced to 105% for first thousand tonnes and for the 2nd thousand tonnes the rate was enhanced to 110% of the base rate. The same methodology shall also be adopted to calculate the rate beyond 11,072 tonnes. Likewise, ceiling rates for performance for 1000 tonnes less than the base rate is calculated at 95% of the base rate and next 1000 tonnes less than the base rate, the rate is calculated at 90% of the base rate. For performance below 6072 tonnes the rate is calculated by reducing the base rate accordingly.

(b). For Steel and Bagged Cargo:

Average daily performance for 1 crane (in Metric Tonne)	Ceiling rate per tonne (in ₹)	
	Foreign	Coastal
2838-3837	65.85	39.51
3838-4837	69.51	41.70
4838	73.16	43.90
4839-5838	76.82	46.09
5839-6838	80.48	48.29

Note: To calculate the incremental ceiling rates as shown above, the base rate was enhanced to 105% for first thousand tonnes and for the 2nd thousand tonnes the rate was enhanced to 110% of the base rate. The same methodology shall also be adopted to calculate the rate beyond 6838 tonnes. Likewise, ceiling rates for performance for 1000 tonnes less than the base rate is calculated at 95% of the base rate and next 1000 tonnes less than the base rate, the rate is calculated at 90% of the base rate. For performance below 2805 tonnes the rate is calculated by reducing the base rate accordingly.

(c). For other break bulk cargo including timber logs:

Average daily performance for 1 crane (in Metric Tonne)	Ceiling rate per tonne (in ₹)	
	Foreign	Coastal
1024-2023	105.33	63.21
2024-3023	111.20	66.72
3024	117.05	70.23
3025-4024	122.91	73.74
4025-5024	128.76	77.26

Note: To calculate the incremental ceiling rates as shown above, the base rate was enhanced to 105% for first thousand tonnes and for the 2nd thousand tonnes the rate was enhanced to 110% of the base rate. The same methodology shall also be adopted to calculate the rate beyond 5024 tonnes. Likewise, ceiling rates for performance for 1000 tonnes less than the base rate is calculated at 95% of the base rate and next 1000 tonnes less than the base rate, the rate is calculated at 90% of the base rate. For performance below 1024 tonnes the rate is calculated by reducing the base rate accordingly.

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 information collected during the processing of this case, the following position emerges:

- (i). The tariff guidelines of 2008 for upfront tariff fixation prescribe norms / guidelines for dedicated facilities such as coal, iron ore, container, liquid handling terminal and multipurpose cargo terminal. The guidelines of 2008 for upfront tariff fixation do not prescribe separate norms/ guidelines for operating Mobile Harbour Crane (MHC) as a stand-alone facility.
- (ii). As brought out earlier, the port envisages deployment of the proposed MHC at berth Nos.7 and 8 to handle dry bulk cargo, steel and bagged cargo and break bulk cargo including timber logs. Hence, the relevant norms prescribed for multipurpose cargo terminal in the upfront tariff guidelines of 2008 which cover handling of dry bulk cargo and break bulk cargo seem to be more relevant in this case. The Kandla Port Trust (KPT) has also in general adopted the norms/ guidelines prescribed for the multipurpose cargo terminal. The deviations proposed by the KPT mainly with reference to the estimation of the optimal capacity is discussed in the subsequent paragraphs.
- (iii). The KPT has proposed deployment of 60 tonne capacity MHCs. Major Port Trusts such as Paradip Port Trust (PPT), Visakhapatnam Port Trust (VPT) and New Mangalore Port Trust (NMPT) have proposed deployment of MHC of around 100 tonne capacity for cargo handling operation. Even, V.O. Chidambaranar Port Trust (VOCPT) in its proposal for mechanisation of berths under PPP mode proposed to deploy MHC of 100 tonne and 140 tonne MHC. In all these cases this Authority has prescribed tariff for standard capacity of 100 tonne MHC and linked the tariff to the performance of the crane to take care if the actual capacity of the crane deployed by service provider varies within the range of the standard capacity of MHC. Even the KPT has reported that Mobile Harbour Cranes of 100 tonnes capacity are already put into operation at some of other berth of the port. The proposal of the KPT did not explain the reasons for not considering higher capacity HMC which can return higher productivity. It is to be borne in mind that a user is not concerned with the capacity of the equipment deployed but pays for the services to be provided at the stated level of efficiency.

In this context, the port was requested to confirm that it does not envisage deployment of higher capacity MHC at its port in the next five years under PPP model. If it is otherwise, the port was requested to consider proposing upfront tariff for a standard capacity crane of 100 Tonne and link the tariff to the performance of the crane as done in the case of the VOCPT. The port has clarified that the requirement varies from project to project and it is not possible to take 100 Tonne capacity MHC tariff as a standard one.

The extract of the minutes of the Board meeting of the KPT held on 19 August 2010 forwarded by the KPT along with the proposal reveals that one of Trustees had also raised a point about considering deployment of 100 T capacity MHC. To this, the port has clarified that berth nos.7 and 8 are not designed to handle 100 T MHC.

In view of the assertion made by the port that it proposes deployment of 60 T MHC only and relying on the position reported by the port in its Board meeting that the said berths are not designed to handle 100 Tonne capacity crane, the proposal for fixation of upfront tariff for 60 Tonne capacity MHC is taken up for consideration subject to the condition that the upfront tariff so determined will hold good for operation of 60 tonne MHC and not for higher capacity MHC. If higher capacity cranes are deployed, then the KPT need to approach this Authority for review of the upfront tariff fixed in this Order.

As per Clause 2.2. of the guidelines of February 2008 for upfront tariff setting for PPP Projects at the Major Ports, the upfront tariff caps prescribed would be applicable for handling dry bulk and break bulk cargo by 60 tonne MHC at the Kandla Port Trust during the next five years.

(iv). Optimal Terminal Capacity:

- (a). The KPT has proposed optimal capacity of the MHCs for different cargo groups by assuming certain parameters. For dry bulk cargo, the port has estimated the handling rate per hour at 540 tonnes considering the number of moves per hour at 30 and average load per move at 18 tonnes. The annual optimal capacity of one MHC is estimated at 21,60,000 Tonnes for handling dry bulk cargo adopting 4000 working hours as per the norms prescribed in the 2008 guidelines for fuel consumption. The total annual capacity for 4 cranes for handling dry bulk cargo is, thus, assessed at 86,40,000 Tonnes per annum.

For steel & bagged cargo and other break bulk cargo, the port has estimated the handling rate per hour at 53.33% (i.e. 287.982 tonnes per hour) and 33.33% (i.e. 179.98 tonnes per hour) respectively of the handling rate considered for dry bulk cargo, reportedly adopting the ratio obtained as per the handling rate norms prescribed in the upfront tariff guidelines for such cargo groups. The optimal capacity for 4 MHC based on the said output rate and adopting normative working hours of 4000 is assessed at 46,07,712 tonne per annum and 28,80,000 tonnes per annum for steel & bagged cargo and other break bulk cargo respectively.

While furnishing replies to our queries, KPT has indicated that combined optimal capacity of four MHC at 7.35 million tonnes per annum considering the cargo share for dry bulk cargo at 60%, for steel & bagged cargo at 30% and 10% for timber logs. Such combined optimal capacity is, however, not adopted by the port to arrive at the proposed rates.

- (b). The estimation of optimal capacity adopting 4000 working hours per annum of working of crane is based on normative level of working hours prescribed in the 2008 guidelines for estimating the power/ fuel cost for multipurpose cargo berth and is in line with the position maintained while fixing hire charge of MHC at PPT, VOCPT, NMPT and VPT.

- (c). The upfront tariff guidelines for a multipurpose cargo handling terminal prescribe output norms for three numbers of 20 tonne capacity luffing crane at 10000 tonnes per day for handling dry bulk cargo like coal, limestone, minerals, etc., 4000 tonnes per day for steel and bagged cargo and 2500 tonnes per day for other break bulk cargo. When the deviation from the guidelines in the estimation of optimal annual capacity was pointed out to the port, the port has stated that it has attempted to formulate a scientific way of calculating the optimal capacity of the MHC since the guidelines for calculations of MHC capacity are not available.

In the cases pertaining to NMPT, VPT and upfront tariff determination for mechanization of berth at VOCPT with deployment of MHC, the handling rate for dry bulk cargo had been considered at 12500 Tonnes per day i.e. 25% over the handling rate prescribed in the guidelines considering the higher handling capacity of 100 T MHC as compared to the aggregate capacity of the wharf cranes prescribed in the 2008 guidelines and based on the performance of 100 tonnes capacity MHC reportedly operated in PPT for bulk cargo.

The instant proposal of the KPT is with reference to MHC of 60 Tonne capacity. As the aggregate of three luffing crane capacity comes to 60T prescribed in the guidelines which matches with the 60 tonne capacity MHC proposed by the port, the same level of output norms as prescribed in the guidelines is considered.

Accordingly, for the output norm of 10000 tonnes per day prescribed in the guidelines for dry bulk cargo, the per hour output will be 595 tonnes as against output of 540 tonnes assumed by the KPT. For steel and bagged cargo and other break bulk cargo, hourly output per MHC will be 238 tonnes and 149 tonnes as against hourly output of 287.98 tonnes and 179.98 tonnes assumed by the KPT for the corresponding cargo.

The hourly output for the steel and bagged cargo and break bulk cargo arrived by the KPT is higher than the output level considered in the analysis. The KPT has wrongly adopted the deriving factors to arrive at the output level of steel and bagged and other break bulk cargo from that of dry bulk cargo. In our analysis, the output norms prescribed in the guidelines is followed for each cargo group and adjusted for hourly output as the optimal capacity is to be assessed for normative working hours of 4000.

- (d). The share of individual cargo capacity (to be furnished by the port) included in the formula prescribed in the tariff guidelines for determining the optimal capacity is with reference to cargo handling terminals where comprehensive services are provided by a single operator. When a stand alone equipment is proposed to be operated, the optimal capacity has been determined for individual cargo category for arriving at the tariff in the other upfront tariff case such as the VOCPT for mechanization of berth. Even for determining the hire charges for MHC at PPT, NMPT, VPT the optimal capacity of the MHC is determined for individual cargo and the rate is prescribed for the individual cargo group. Even though the KPT has indicated the overall capacity considering the share of each cargo, for arriving at the proposed rate, the optimal capacity of individual cargo group has been considered in line with the approach followed by this Authority in the other similar cases.

Considering the handling rate for different cargo groups as per norms, as stated in the preceding paragraph, and taking into account 4000 working hours as stipulated in the norms, the optimal capacity for 4 numbers of 60 tonne MHC is 95,20,000 tonnes for handling dry bulk cargo, 38,08,000 tonnes per annum for handling steel and bagged cargo and 23,84,000 tonnes for other break bulk cargo including timber.

(v). Capital Cost:

The capital cost estimated by the KPT in its proposal for four MHCs is ₹ 8060.64 lakhs, i.e. ₹ 2015.16 lakhs per MHC. The port has reportedly estimated the capital cost based on the average rate of budgetary quotations obtained by the port from different vendors which pertain to July 2009.

In the another proposal filed by the KPT for fixation of hire charges for port owned MHC of 60 tonne capacity, the port has already placed an order in August 2010 for procurement of 2 MHCs of 60 tonne capacity, which is reported at ₹ 1387.69 lakhs for one MHC with grab.

The port has maintained that difference in the capital cost reported in both the proposal is mainly because the cost of port owned cranes is based on the order placed by the port for MHC with M/s.Italgru s.r.l, Italy whereas in the upfront case, the capital cost is estimated based on the average rate quoted by suppliers of MHCs like Gottwald, Libherr, etc.

It is not unreasonable to presume that KPT has procured the cranes to be operated by it, after a thorough technical scrutiny and the operational requirement. The cranes to be deployed under PPP mode are shown to operate in the same port and handle more or less similar commodities. Moreover, the optimal capacity derived by the KPT for port owned MHC and the MHC to be operated by the BOT operator is assessed at the same level, which shows the productivity levels will be comparable.

When the KPT itself has recently purchased two 60 T MHC at the cost of ₹ 1387.69 lakhs per MHC, there does not appear to be any reason for accepting high capital cost by considering budgetary quotations for same capacity MHC to be operated by the operator under the PPP mode. Incidentally, even the Kandla Port Stevedores Association has stated that there is no justification for higher cost for MHC by a private operator in comparison to recently procured cranes by the port.

The capital cost of MHC of 60 Tonne capacity is considered at ₹ 14.57 crores per MHC based on the actual cost of MHC procured by the KPT in the August 2010 and applying an adhoc escalation of 5% thereon to arrive at 2011 cost of the MHC. Accordingly, the capital cost for 4 MHC is considered at ₹ 58.28 crores as against ₹ 80.60 crores estimated by the KPT.

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

(vii). Operating cost:

(a). The KPT had estimated the fuel cost assuming fuel consumption at 32 litres per hour which has been subsequently revised to 33.3 litre per hour in line with fuel consumption assumed in its another proposal relating to port owned MHC.

The consumption norm of fuel prescribed in the guidelines for multipurpose cargo terminal is with reference to operation of 3 nos. of luffing cranes.

The KPT has reportedly arrived at the fuel consumption of 33.33 litre/ hour for 60T MHC based on the manufactures manual. ABG-LDA Bulk Handling Private Limited has made a general remark that the power consumption assumed by the KPT is on the lower side but it has not suggested any revised fuel consumption for such MHC.

The fuel consumption of 33.33 litres per hour per crane as considered in its proposal relating to port owned MHC which is reportedly based on the manufacturers manual is relied upon and considered in the analysis.

The KPT has updated the fuel cost at ₹ 42.11 per litre in its revised calculation based on the rate prevailing on 15 May 2011. ABG-LDA Bulk Handling Private Limited has stated that the fuel cost is ₹ 47/- litre as on date. The unit cost of fuel is considered at ₹ 45.98 per litre as obtained at the time of finalising this case as against ₹ 42.11 per litre assumed by the KPT.

Accordingly, the fuel cost for 4 MHCs is estimated at ₹ 245.20 lakhs per annum for normative working hours of 4,000 as prescribed in the guidelines.

- (b). The repairs and maintenance cost and insurance are estimated at 5% and 1% respectively of capital cost of crane as per the norms prescribed in the guidelines of 2008 for multipurpose cargo terminal.
- (c). The guidelines of 2008 stipulate estimation of license fee based on the rates prescribed in the Scale of Rates of the respective Major Ports. The KPT has estimated license fee for space proposed to be provided at wharf i.e. 200 sq. mtrs. per MHC and applied the licence fee of ₹ 216/- per 10 sq. mts. per month prescribed in the Scale of Rates of KPT.

The KPT has estimated license fee for the entire year for the area expected to be occupied by the MHC at the wharf. In the upfront tariff case of VOCPT, the port expected the MHC to move anywhere in seven berths earmarked for it. Since it did not envisage any storage area for MHC, license fee was not estimated in that case. In the case relating to fixation of ceiling rate for MHC at NMPT, VPT and PPT, the license fee has been allowed for the period the MHC is idling. Since the MHC is expected to be operated for 4000 hour, the license fee in this case is also estimated for the idling period in line with the approach followed in the other cases.

The unit rate adopted by the port for estimating the license fee pertains storage of cargo at open space (pucca plots) for stay beyond 180 days and is in nature of demurrage charge. It is relevant to state that in the earlier upfront tariff cases of KPT for multipurpose cargo terminal, the license fee estimated by the KPT which was prescribed in its comprehensive Scale of Rates was allowed. At that point of time no lease rental was approved by this Authority for KPT estate.

This Authority has recently vide its Order dated 25 March 2011 for the first time fixed lease rentals for the lands of KPT, for three cycles commencing from July 1999, January 2004 and January 2009 respectively. The lease rental for land within docks prescribed in the said Order is ₹ 180.60 per sq. m. per annum with effect from January 2009 subject to annual escalation of 2%.

The license fee in the instant case is estimated adopting the rate of ₹ 187.90 per sq. mtr. per annum considering the unit rate of 180.60 per sq. mtr. per annum for January 2009 and applying annual escalation of 2% to arrive at the 2011 rate. The license fee is estimated on prorata basis for the period the MHC is not in operation. Accordingly, the license fee works out to ₹ 0.82 lakhs per annum for 4 MHCs, as against the estimate of ₹ 2.12 lakhs considered by the port.

- (d). Depreciation is estimated at 10.34% on the capital cost of the crane as per the rate prescribed under the Companies Act 1956.
- (e). Other expenses are estimated at 5% of the capital cost of crane as per the norms prescribed in the guidelines of 2008.

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

- (a). Subject to the above modifications, the total estimated annual revenue requirement of operating MHC, which is the aggregate of operating cost of ₹ 1489.79 lakhs plus ROCE of ₹ 932.53 lakhs, is estimated at ₹ 2422.32 lakhs as against ₹ 3236.31 lakhs estimated by the port.
- (b). Since the present proposal relates to fixation of hire charges for MHC on stand-alone basis and cargo handling is the only activity to be performed, the need for apportioning the revenue requirement for storage charges and miscellaneous charges does not arise.
- (c). As per the policy of the Government, concessional tariff is to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) and coastal vessels not exceeding 60% of the normal cargo/ vessel related charges. The KPT has proposed concessional rates for coastal cargo in line with the Government policy, assuming the share of foreign and coastal cargo in the total optimal capacity as 90% and 10% respectively for each of the three cargo groups. The port has clarified that the share of coastal/ foreign cargo assumed by it is based on the cargo profile of the Kandla Port Trust. The share of foreign/ coastal cargo assumed by the port is relied upon in this analysis.

The KPT has arrived at the handling rate for each cargo category with reference to their individual composition of foreign/ coastal cargo to meet the estimated revenue requirement. The approach followed by the KPT is in line with the approach followed in the upfront tariff determined for MHC at VOCPT and hire charge determined for MHC(s) at other ports.

- (d). Subject to modification in the optimal capacity and the estimated revenue requirement as explained in the preceding part of the analysis, the hire charge for one MHC of 60 tonne capacity for different cargo categories works out as follows:

Particulars	(₹ in per tonne)	
	Foreign cargo	Coastal cargo
Dry bulk cargo	26.50	15.90
Steel and bagged cargo	66.26	39.76
Other break bulk cargo including timber logs	105.84	63.50

- (ix). In cases where the upfront tariff is determined for terminal as a whole, the operator remains responsible for the comprehensive service offered at the terminal; in such cases the performance linked tariff has not been prescribed.

Where only a part of the total services in a terminal is provided by an operator, it is essential that the service offered is at the stated level of efficiency, else the user will end up paying other port related tariff such as berth hire, etc., on the higher side for any deficiency in the performance of services. This Authority has prescribed tariff linked to performance of MHC wherever only MHC is allowed to be provided by the private operator like the upfront tariff for mechanization of berth at the VOCPT and while fixing hire charge for MHC at PPT, NMPT and VPT where the port has authorised service provider to provide the MHC. It is relevant to state that in the other case relating to fixation of hire charge of port owned MHC, the Kandla Stevedores Association has also endorsed the view to prescribe percentage increase/ reduction over the base rate for efficiency/ performance below the efficiency level.

At our advice, the KPT has also proposed tariff linked to the performance of the MHC allowing increase / decrease in the base rate by 5% for increase/ decrease in the productivity by 1000 tonnes per day from the base productivity levels considered for the 60 Tonne MHC for different cargo groups. The proposed performance linked tariff scheme in principle is in line with the incentive/ disincentive scheme prescribed earlier in the other cases. The incentive/ disincentive scheme proposed by the KPT is allowed subject to modifying the rates in view of revised rates determined in this analysis.

- (x). The KPT has filed another proposal for fixation of hire charge for 60 tonne MHC owned by the port which is being processed simultaneously with this case. By way of abundant caution, it is stated that the unit upfront tariff prescribed for MHC in this case should not be compared with the hire charges for 60 Tonne MHC prescribed for port owned MHC as they are governed by the tariff guidelines of 2005 and are subject to review once in the three years following the cost plus method. Whereas the upfront tariff fixed in the instant Order is subject to indexation at 60% of the WPI as per the tariff guidelines of 2008.

ABG-LDA Bulk Handling Private Limited has made a point that the operating cost will not remain the same during the life cycle of the crane. Since the upfront tariff prescribed is subject to indexation, it takes care of the point made by the ABG-LDA Bulk Handling Private Limited.

- (xi). The KPT was advised to propose performance linked tariff scheme along with conditions governing this scheme. In this regard, the port was advised to refer the performance linked tariff along with conditionalities prescribed in the VOCPT case and suitably adopt it in its case. Whilst, the port in its revised proposal has proposed performance linked tariff following the approach followed in the VOCPT upfront tariff case, it has not proposed conditionalities governing performance linked tariff prescribed there. The conditions for arriving at the average berth day output of HMC, provisions to measure performance in case of breakdown of HMC for more than an hour, stoppage of operations of HMC, penalty in case of shifting of vessel on account of breakdown/ non-performance of vessel, etc. prescribed in the VOCPT upfront case as well as hire charge for MHCs fixed at PPT, VOCPT, VPT and NMPT are incorporated in the Scale of Rates for the proposed facility.
- (xii). Definitions of some of the common terms like foreign going vessel and coastal vessel included in upfront schedule are in line with the definitions prescribed in the Scale of Rates (SoR) of KPT. 'Per Day' is defined as calendar day or part thereof which is in line with the definition prescribed in the other upfront tariff cases of KPT and hence is incorporated in the SoR for the proposed facility.

The port has also proposed the definitions of some of the terms like crane operator and crane. These terms have not been defined in the other cases relating to MHC and hence not incorporated.

The definition of the term 'Port area' proposed by the KPT is not found relevant and hence not incorporated.

Definition of some trade terminology like tonne is not included in the upfront tariff schedule approved in the other Major Port Trusts including KPT. Since standard definition of 'tonne' already exists which are commonly applicable, it is not necessary to prescribe separately again.

- (xiii). The general terms and conditions for classification of vessel as foreign-going or coastal vessel, status of vessel, review of exchange rate, etc. are relevant for levy of vessel related charges. This may not be relevant in the instant case and hence not incorporated in the Scale of Rates.

Some of the common conditions stipulated in the guidelines of 2005 and uniformly prescribed in the Scale of Rates of other major ports such as users should not be required to pay charges for delays beyond reasonable level attributable to the private terminal operator, interest on delayed payment/ refund, concessional tariff

applicable for coastal cargo, tariff fixed by this Authority are ceiling levels, etc. as proposed by the KPT are incorporated in the Scale of Rates subject to minor modifications to the extent they are not in consistent with the general prescription in the other cases.

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 with reference to January 2011, it may be appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2011.

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 projects 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. The upfront tariff determined is with reference to 60 tonne MHC. If the BOT operator deploys higher capacity MHCs, in that event, the KPT should approach this Authority for review of the upfront tariff fixed in this case.

10.5. The actual performance of the private operators 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 KPT. If any action is to be taken against the private operators, the KPT shall initiate appropriate action in accordance with the provisions of the relevant Concession Agreement.

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

11. In the result, and for the reasons given above and based on a collective application of mind, this Authority approves the upfront tariff caps for mechanisation of berth Nos.7 & 8 by deploying four number of Mobile Harbour Crane of 60 tonne capacity at the Kandla Port Trust attached as **Annex - II**.

(Rani Jadhav)
Chairperson

**Formulation of Upfront Tariff for the proposed Mechanisation of Cargo Berth No.7 & 8 at Kandla Port
by providing 4 Nos. 60 Tonnes Harbour Mobile Cranes on BOT basis through PPP model**

Sr. No.	Particulars	As furnished by KPT		As considered by TAMP	
		Workings	Estimates	Norms prescribed in 2008 tariff guidelines for multipurpose cargo berth (workings)	Estimates
I	Optimal Capacity				
(a)	Dry bulk cargo				
	Handling rate (tonnes per hour)	30 x 18 (30 moves per hour x 18 tonnes per move)	540	Handling rate as per norms for dry bulk cargo like food grains, coal, etc. is 10000 tonnes per day. [Handling rate per hour: 10000 / (24*70% utilisation factor)]	595
	Working hours per annum	As per norms	4000	A norm of 4000 hours of working in a year is prescribed for estimating power / fuel cost	4000
	Annual Handling Capacity (in tonnes) per crane	540 x 40000	2160000	595 x 4000 hours	2380000
	Annual Handling Capacity (in tonnes) for 4 cranes	4 x 2160000	8640000	4 x 2380000	9520000
	Total Annual Capacity (in Million tonnes)		8.640		9.520
(b)	Break Bulk cargo				
	(i) Steel & bagged cargo				
	Handling rate (tonnes per hour)	53.33% of handling rate for dry bulk cargo (53.33% of 540)	287.98	Handling rate as per norms for steel & bagged cargo is 4000 tonnes per day. [Handling rate per hour: 4000/ (24*70% utilisation factor)]	238
	Working hours per annum	As per norms	4000	A norm of 4000 hours of working in a year is prescribed for estimating power / fuel cost	4000
	Annual Handling Capacity (in tonnes) per crane	287.98 x 40000	1151928	238 x 4000 hours	952000
	Annual Handling Capacity (in tonnes) for 4 cranes	4 x 1151928	4607712	4 x 2380000	3808000
	Total Annual Capacity (in Million tonnes)		4.608		3.808
	(ii) Other cargo including timber logs				
	Handling rate (tonnes per hour)	33.33% of handling rate for dry bulk cargo (53.33% of 540)	179.98	Handling rate as per norms for other cargo is 2500 tonnes per day. [Handling rate per hour: 2500/ (24*70% utilisation factor)]	149
	Working hours per annum	As per norms	4000	A norm of 4000 hours of working in a year is prescribed for estimating power / fuel cost	4000
	Annual Handling Capacity (in tonnes) per crane	180 x 40000	720000	149 x 4000 hours	596000
	Annual Handling Capacity (in tonnes) for 4 cranes	4 x 720000	2880000	4 x 2380000	2384000
	Total Annual Capacity (in Million tonnes)		2.880		2.384
			₹ in lakhs		₹ in lakhs
			Capital cost of one crane of same capacity considered by KPT in a separate proposal filed by it for fixation of Hire charge for HMC owned by KPT, based on the Order placed by KPT in August 2010, is ₹1387.69 lakhs. This is taken as base and escalated by 5% on adhoc basis to bring it to the current level. The revised capital cost of 4 cranes works out to ₹5828.30 lakhs (4 x 1387.69 x 1.05).		
II	Capital Cost for 4 Mobile Harbour Cranes of 60 Tonnes capacity	As furnished by KPT	8060.64		5828.30
III	Operating cost				
(a).	Fuel cost	33.3*42.11*4000 (33.3 Ltrs./hr. @ ₹42.11 /Ltr. for 4000 hrs for 4 cranes)	224.36	33.33 Ltrs./hr. for 4000 hrs @ ₹45.98 / ltr. for 4 cranes (33.33 x 4000 x 45.98 x 4)	245.20
(b).	Repairs & Maintenance cost	@ 5% of capital cost	403.03	5% on total capital cost	291.42
(c).	Insurance	@ 1% of capital cost	80.60	1% on total capital cost	58.28
(d).	Depreciation	@ 10.34% of capital cost	833.47	As per norms prescribed in Companies Act (@ 10.34%)	602.65
(e).	Rent (License Fee)	₹216 / 10 sqm / month for 200 sqm for each crane		Lease rental rates as per Order dated 25 March 2011 for land within docks which is ₹180.60 / sqm / annum effective from Jan'09 is considered with escalation in Jan'10 and Jan'11. 2.12 Lease rental estimated for the idle period. Area considered at 200 sqm per crane as furnished by KPT. (180.60x1.02x1.02x 200x4 x198 days/365)	0.82
(f).	Salaries and wages of management and staff including welfare and other expenses	@ 5% of capital cost	403.03	5% of Gross fixed Asset Value	291.42
	Total (a) to (f)		1946.61		1489.79
IV	ROCE	@ 16% of capital cost	1289.70	16% on capital cost	932.53
V	Annual Revenue Requirement	(III + IV)	3236.31	(III + IV)	2422.32
VI	Proposed rate (₹ per tonne)		₹ per tonne		₹ per tonne
(a)	Dry bulk cargo				
	Foreign	3236.31 / (8640000*90% + (8640000*10%*60%))	39.02	2422.32 / (9520000*90% + (9520000*10%*60%))	26.50
	Coastal	60% of rate for foreign cargo	23.41	60% of rate for foreign cargo	15.90
(b)	Break bulk - Steel & bagged cargo				
	Foreign	3236.31 / (4607712*90% + (4607712*10%*60%))	73.16	2422.32 / (3808000*90% + (3808000*10%*60%))	66.26
	Coastal	60% of rate for foreign cargo	43.90	60% of rate for foreign cargo	39.76
(c)	Break bulk - Other cargo including timber logs				
	Foreign	3236.31 / (2880000*90% + (2880000*10%*60%))	117.05	2422.32 / (2384000*90% + (2384000*10%*60%))	105.84
	Coastal	60% of rate for foreign cargo	70.23	60% of rate for foreign cargo	63.50

KANDLA PORT TRUST

**UPFRONT TARIFF SCHEDULE FOR OPERATING MOBILE HARBOUR CRANE (MHC) OF
60 TONNE CAPACITY AT BERTHS 7 AND 8 IN KANDLA PORT TRUST (KPT)**

1.1. Definitions – General

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 licence issued by the competent authority.
- (ii). **“Foreign going Vessel”** shall mean any vessel other than a Coastal Vessel.
- (iii). **“Port”** shall mean Kandla Port Trust.
- (iv). **“Per day”** means per calendar day unless otherwise stated.

1.2. General Terms & Conditions

- (i).
 - (a). The cargo related charges for all coastal cargo, other than crude including POL, Iron ore and Iron pellets and thermal coal should not exceed 60% of the normal cargo related charges.
 - (b). In case of cargo related charges, the concessional rates should be levied on all the relevant handling charges for ship shore transfer.
 - (c). Cargo from a foreign port which reaches an Indian Port “A” for subsequent transshipment to Indian Port “B” will be levied the concession charges relevant for its coastal voyage. In other words, cargo from/to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.
 - (d). The charges for coastal cargo vessels shall be denominated and collected in Indian rupee.
- (ii). Interest on delayed payments / refunds.
 - (a). The user shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the terminal operator shall pay penal interest on delayed refunds.
 - (b). The rate of penal interest will be 2% above the Prime Lending Rate of the State Bank of India.
 - (c). The delay in refunds by the terminal operator will be counted only 20 days from the day 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 terminal operator will be counted only 10 days after the date of raising the bills by the terminal operator. This provision shall, however, not apply to the cases where payment is to be made before availing the services where payment of charges in advance is prescribed as a condition in the scale of rates.
- (iii). All charges worked out shall be rounded off to the next higher rupee on the grand total of the bill.

- (iv). In calculating the gross weight or measurement by volume or capacity of any individual item, fractions upto 0.5 shall be taken as 0.5 unit and fractions of 0.5 and above shall be treated as one unit, except where otherwise specified.
- (v). (a). The rates prescribed in the Scale of Rates are ceiling levels: likewise, rebates and discounts are floor levels. The terminal operator may, if they so desire, charge lower rates and / or allow higher rebates and discounts.
- (b). The terminal operator may also, if they so desire rationalise the prescribed conditionalities governing the application of rates prescribed in the Scale of Rates if such rationalisation gives relief to the user in rate per unit and the unit rates prescribed in the Scale of Rates do not exceed the ceiling levels.
- (c). The terminal operator should notify the public such lower rates and / or rationalisation of the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rates notified by the TAMP.
- (vi). Users will not be required to pay charges for delays beyond reasonable level attributable to the terminal operator.

2. CHARGES FOR HIRE OF 60 TONNE MOBILE HARBOUR CRANE :

(I). For Dry Bulk Cargo

Average daily crane performance (in Metric Tonne)	Rate per tonne (in ₹)	
	Foreign	Coastal
7000-7999	22.53	13.52
8000-8999	23.85	14.31
9000-9999	25.18	15.11
10000	26.50	15.90
10001-11000	27.83	16.70
11001-12000	29.15	17.49
12001-13000	30.48	18.29

Note: To calculate the incremental ceiling rates as shown above, the base rate was enhanced to 105% for first thousand tonnes and for the 2nd thousand tonnes the rate was enhanced to 110% of the base rate. The rate for third thousand tonnes was arrived by enhancing the base rate by 115%. The same methodology shall also be adopted to calculate the rate beyond 13000 tonnes. Likewise, ceiling rates for performance below 7000 tonnes shall be calculated by reducing the base rate accordingly.

(II). For Break-bulk cargo:

(A). Steel and Bagged Cargo

Average daily crane performance (in Metric tonne)	Ceiling rate per tonne (in ₹)	
	Foreign	Coastal
3000-3999	62.95	37.77
4000	66.26	39.76
4001-5000	69.57	41.74

Note: To calculate the incremental ceiling rates as shown above, the base rate was enhanced to 105% for first thousand tonnes. The same methodology shall also be adopted to calculate the rate beyond 5000 tonnes. Likewise, ceiling rates for performance below 3000 tonnes shall be calculated by reducing the base rate accordingly.

(B). Other break bulk cargo including Timber logs

Average daily crane performance (in Metric tonne)	Ceiling rate per tonne (in ₹)	
	Foreign	Coastal
1500-2499	100.55	60.33
2500	105.84	63.50
2501-3500	111.13	66.68

Note: To calculate the incremental ceiling rates as shown above, the base rate was enhanced to 105% for first thousand tonnes. The same methodology shall also be adopted to calculate the rate beyond 3500 tonnes. Likewise, ceiling rates for performance below 1500 tonnes shall be calculated by reducing the base rate accordingly.

Notes:

- (i). The formula for calculation of average berth-day out put is as follows:

$$\frac{\text{Total Quantity loaded / unloaded by the MHC}}{\text{Total time taken from vessel commencement to completion}} \times 24 \text{ hours}$$

- (ii). According to the average berth-day output for the vessel from commencement to completion of loading / discharge of cargo, the appropriate rate of crane hire charge will be chosen for recovery from port users for the full quantity of cargo loaded / discharged.
- (iii). If one MHC works with another MHC, the Berth-day output for the crane will be ascertained on the basis of the quantity as recorded by the MHC load meter.
- (iv). In case of breakdown of the crane for more than one hour till the vessel leaves the berth, the quantity handled by MHC will be determined taking into account cargo loaded / discharged prior to break-down divided by crane working hours and multiplied by 24.
- (v). In case of stoppages of operation of MHC for more than two hours at a stretch for reasons not attributable to the MHC, appropriate allowance will be allowed to the crane while calculating the total time of crane operation in the vessel. Stoppages of MHC for less than 2 hours will not be taken into consideration for the above purpose. No allowance will be allowed for stoppages attributable to the MHC. All stoppages in loading / unloading operations during working of MHC are required to be certified by the KPT Officers or any other agency nominated by the KPT in the daily vessel performance report.
- (vi). In case shifting of a vessel becomes necessary due to breakdown / non-performance of MHC, the shifting charges of the vessel from berth to anchorage will be recovered from the crane operator in addition to a penalty of ₹ 1,00,000/- (Rupees one lakh only). The shifting charges so recovered will be refunded to the vessel's agent while the penalty will be retained by the port.
- (vii). In case of dispute on the average output, the decision of the port trust will be final and binding.

3. GENERAL NOTE TO SCHEDULE (2) 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 2011 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 31st March of the following year.

* * * *

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

F. No.TAMP/8/2011 - KPT - Proposal from the Kandla Port Trust for Upfront Tariff Fixation for Mechanization of Cargo Berth No. 7 & 8 at the Kandla Port Trust.

A summary of comments received from the users / user organisations and prospective users / shortlisted bidders and the comments from Kandla Port Trust (KPT) are given below:

Sl. No.	Comments of users / user organisations and prospective users/ shortlisted bidders	Comments of KPT
1.	Central Warehousing Corporation	
	Considering the prevailing tariff of cargo handling in and around Kandla/ Gandhidham, the rates for foreign cargo proposed by KPT for use of four Mobile Harbour Crane appears to be on higher side and needs reduction to extent possible.	The port has not furnished its comments.
2.	Aditya Marine Limited	
	There will be an investment of about ₹ 30 crore against the proposal. TAMP will be best judge to decide about fixation of upfront tariff.	The estimated investment for the proposal is about ₹ 80.60 crores and not ₹ 30.00 crores.
3.	M/s. ABG-LDA Bulk Handling Pvt. Ltd.	
(i).	We have on several occasions furnished our numerous genuine comments/ suggestions and requested for clarifications on various PPP projects. Unfortunately, the replies are far from satisfactory and not at all encouraging. Very often the reply that we receive is referred to the TAMP guidelines.	All Major Ports of India have to follow the TAMP guidelines and submit their proposals according to TAMP guidelines. Hence it is not possible for us to comment on the TAMP guidelines, but we would like to state that the TAMP provides a basic framework or a standard format to bring transparency in the port sector which also influence the flexibility, hence the proposals shall be customized on case to case basis considering various aspects of projects like technical requirement, financial viability, location and other important factors.
(ii).	We have already very carefully explained that TAMP's assumption in calculating the upfront tariff for MHC mechanization is not realistic. The throughput assumptions are only theoretical and by no means practical. There are number of MHC's working in Indian Ports. The average throughput is less than half of TAMP's throughput assumption. In addition maintenance costs of MHC are much, much higher than Gantry cranes.	
(iii).	Therefore, whilst we have been giving out comments over and over again and since TAMP is adamant to give only around ₹ 29.75/MT, the only way an investor can get returns is by having an understanding with the port to earn	

	additional revenue outside the MHC TAMP Tariff.	
(iv).	We feel that no end objective will be met by us furnishing any further comments. The whole exercise of obtaining comments is only an eyewash, since no heed is paid to our comments.	

2. A joint hearing in this case was held on 5 May 2011 at the Kandla Port Trust (KPT) premises. The KPT made a power point presentation of its proposal. At the joint hearing, KPT and the concerned users/ organisation bodies/ prospective users/ shortlisted bidders have made the following submissions:

Kandla Port Trust

- (i). We will update the proposal and introduce Efficiency Linked Tariff.

Kandla Port Stevedores Association

- (i). No justification in higher tariff for private cranes in comparison to recently procured port cranes.
- (ii). In Bunder Basin case, port proposes around ₹ 25/ tonnes for high sea floating crane with barge. How can the rate be more for a shore based MHC?

M/s.ABG-LDA Bulk Handling Pvt. Ltd.

- (i). MHC cannot handle more than 1.5 million tonnes/ annum. The proposal can't consider maximum capacity.

3.1. M/s.ABG-LDA Bulk Handling Private Limited (ABG-LDA BHPL) has furnished its further comments as agreed at the joint hearing. The further comments received from ABG-LDA BHPL was forwarded to KPT seeking their remarks/ views. We have not received any remarks / views from the KPT. A summary of further comments made by ABG-LDA BHPL is given below:

Sl. No.	Comments of M/s.ABG-LDA Bulk Handling Private Limited
(i).	Kindly enlist the foot notes/ guidelines that are to be followed for the allotment of vessels, for the better understanding of the entire process and to avoid any confusion amongst the Port, MHC operator and the end users.
(ii).	Grab Hire charges, handling capacity etc. evaluated is based on the capital expenditure for one type of grab, but the requirement is for 3 Nos. of grab with 3 different specifications or more to handle different types of cargoes. The ABG-LDA BHPL has requested to check number of grabs required for the proposed facility to handle different cargoes proposed for the project.
(iii).	Per day performance/ productivity for different cargo (steel and other cargoes) cannot be a percentage share of dry bulk cargo. Per day performance/ productivity for different cargo should be evaluated individually.
(iv).	The tariff is evaluated on maximum capacity of the cranes. The maximum capacity can never be achieved.
(v).	The cost assumed for operating and maintenance is unrealistic, it can never be a percentage. The KPT should get the actual figures form the existing cranes operators for existing/actual cost for operating and maintenance the crane. The operating and maintenance cost of the cranes increases during the operating periods and never remains same throughout the life cycle of crane.

(vi).	Fuel consumption values, Optimal Capacity, etc. are indicated in the proposal are the figures provided by manufacturer, which can never be achieved. Eg. A Hero Honda motorcycle manufacturer claims fuel consumption of 80 KMPL in ideal condition, which is never achieved. The actual consumption is between 50% of the consumption value indicated by the manufacturer.
(vii).	TAMP may please get the latest budgetary offers from the MHC's suppliers, as per our review/market information the rates have been hiked by 20-30%.
(viii).	The current prevailing rates of 1 ltr. of diesel is ₹ 47/ ltr. The same would be hiked by ₹ 3/- to ₹ 5/- in few days as per the indication given by Govt. of India. Please incorporate these figures in the proposal. TAMP should consider this and should incorporate fuel escalation clause.
(ix).	Today at KPT there are 2 nos. of MHC operated by stevedores and 1 no. brand new MHC ordered by KPT. To ensure bidders interest, KPT shall guarantee us with the volume envisaged in the proposal for the proposed facilities.

3.2. As agreed at the joint hearing, the KPT has reportedly circulated the revised proposal to the concerned users/ bidders vide letter No.FA/COST/1272/563 dated 4 June 2011 advising them to furnish their comments within 7 days. We have not received any comments on the revised proposal of KPT from any other users/ bidders except Kandla Port Stevedores Association (KPSA). The KPSA has vide its letter dated 9 June 2011 stated that the data submitted by KPT are based on records, hence no comments to offer. The only submission is ROCE @ 16% is much high, which needs to be brought to 12% as per market rates. A copy of the comments received from KPSA has been forwarded to KPT for its remarks/ views. No response is received from KPT in this regard.
