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

Tariff Authority for Major Ports

G.No. 204 **New Delhi,** **18 May 2016**

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 Kolkata Port Trust (KOPT) for fixation of tariff for the Floating Crane facility to be set up for handling of dry bulk cargo and Other cargo at Haldia Dock Complex (HDC) of KOPT as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports

Case No. TAMP/6/2016-KOPT

Kolkata Port Trust … Applicant

QUORUM

(i). Shri. T.S. Balasubramanian, Member (Finance)
(ii). Shri. Rajat Sachar, Member (Economic)

O R D E R

(Passed on this 30th day of March 2016)

This case relates to a proposal received from the Kolkata Port Trust (KOPT) vide letter dated 30 December 2015 regarding fixation of tariff for transfer of cargo between Mother Vessel and Daughter Vessel / barges within the limits of KOPT by Floating Crane Facilities.

2.1. The main points made by the KOPT in its proposal dated 30 December 2015 are summarised below:

(i). Haldia Dock Complex (HDC) and KOPT have a vast economic hinterland comprising major Steel Plants of SAIL and TATA Steel, Power Plants of NTPC, CESC, WBPDCL, high grade Iron Ore & Coal mines, local Sugar, Coke & Fertilizer manufacturing industries etc. and has tremendous potential to handle substantial volume of dry bulk cargo consisting of Coking Coal, Non coking Coal, Coke, Lime Stone, Fertilizer Raw Materials, Raw Sugar, Iron Ore etc.

(ii). KOPT has initiated action for upgrading its cargo handling capacity at the existing location of Haldia Dock Complex by way of constructing riverine Jetties both for handling Ships and Barges.

(iii). In order to ensure materialization of the potential cargo at HDC, while obviating the draft constraints, KOPT has taken up projects such as transloading facilities in the open sea for handling fully laden dry bulk Mother Vessels.

(iv). This apart, KOPT has also decided to use the higher draft availability at Sagar and other deep draft locations for handling additional cargo by lighterage operations by using Floating Crane Facilities.

(v). Upon implementation of this facility, the trade will bring cargo at Sagar draft which is about 2 meters higher than HDC draft and the additional cargo so brought will be transferred into barges by the Floating Crane. Thereafter, the lightened Mother Vessel and the Barges will come to HDC for discharge. The reverse operation will take place in case of export cargo.

(vi). The Floating Crane Facilities so envisaged by HDC, KOPT would benefit the trade in increasing their cargo throughput at HDC at a reduced overall logistic cost because of low railway freight as well as better availability of rakes at Haldia for the Industries.

(vii). In pursuance of this, KOPT has decided to engage a service provider by granting licence, in terms of which the service provider(s) will be authorized to levy charges for rendering Floating Crane Services to the trade as per Scale of Rates to be approved by TAMP.

2.2. The physical feature of the facility to be developed as given by KOPT are as follows:

(i). A Crane of 32 metric ton capacity with 36 meters out reach.

(ii). A Dumb Barge of size 50 m x 20 m x 2.5 m with the above crane mounted on the deck.

(iii). A Front End Loader with 3 CBM bucket capacity for aggregation of cargo inside the hatch.

(iv). 1 no. of 50 ton Bollard Pull Tug for manoeuvring and making fast the floating crane. The tug will be provided on charter hire basis.

(v). 1 set of Floating Fender to be utilized between the Floating Crane and the vessel

(vi). A steel body launch to be provided for to & fro transportation of man and material between shore and the location of operation of floating crane. The launch will be provided on charter hire basis.

(vii). The Floating crane will be berthed alongside the Mother vessel with the help of the Tug. The barge will be made fast alongside the Floating Crane. The cargo between the mother vessel and the Barge will be transferred by the Floating Cranes.

2.3. The project has been designed on the basis of the following parameters:-

(i). **Optimal Floating Crane Capacity Calculation**

Crane Considered : CBG 350 of Liebherr (35 T SWL with 36 m outreach) ,Grab capacity (Max) : 25 CBM with 22 Cycles /hr		
Maximum Handling Rate/ hr (25cbm grab* 0.9 density * 22 cycle/ hr.)	495	tons / Hr
Maximum Handling rate /day (495 *20)	9900	tons / Day
Operating Load factor	80%	
a)Handling rate of Dry Bulk cargo per day (9900*0.8)	7920	
b) Handling rate of Other cargo per day (53.33% of Dry bulk)	4224	
Maximum Cargo to be handled per Annum :		
a) Dry Bulk Cargo : (7920 MT x 0.7x 365 days x 99 %)	2003324.4	**tons**
b) other Cargo : (4224 MT x 0.7x 365 days x 1 %)	10792.32	**tons**
Total	**2014116.72**	**tons**
Optimal capacity Of Floating Crane (say)	**2.02**	**MMTPA**
Assumptions:		
(i). 92% of volume of dry bulk cargo will be treated as foreign cargo while 8% of dry bulk cargo will be treated as Coastal Cargo.		
(ii). 98% of volume of other cargo will be treated as foreign cargo while 2% of dry bulk cargo will be treated as Coastal Cargo.		

(ii). **Capital Cost**

The estimated total capital of the project is ` 31.44 crores as given below:

Sl. No.	Equipment to be used	Reasons	` in lakhs
1.	Dumb Barge with genset (Barge size: 50m x 22m x 2.5m)	As per the budgetary offer obtained from M/s Eastern Navigation in respect of a new Dumb Barge including the cost of mounting the crane on the top of the deck and standby Generator set. The rate is also inclusive of all taxes and duties. (` 1100 lakhs x 1no.)	1100.00

2.	Floating Crane	As per budgetary offer obtained from M/s. LIEBHERR in respect of a crane (CBG – 350 of Liebherr) with 35 ton SWL at 36 meter out-reach with a grab of capacity 25 CBM. The rate has been given in euro which has been duly converted into Indian rupees by means of conversion factor. The rate includes the taxes and duties. (2.2 MI Euros @ `72.56 per Euro + 14.71% custom duties)	1831.13
3.	Cost of Frontend Loader (for placement inside ship hatch for aggregation of cargo)	As per budgetary quotation of manufacturer (BEML) which includes taxes and duties. (` 30 lakhs x 1 no.)	30.00
4.	Pneumatic Fender	The cost of the fenders have been taken from the tariff proposal submitted by KOPT in case of transloading already approved by TAMP (TAMP/63/2014-KOPT dated 08.01.2015) (` 11 lakhs x 3 nos.)	33.00
5.	Contingency and pre-operative expenses @5%		149.71
		Total	**3143.84**

(iii). **Operation and Maintenance Cost**

(` in lakhs)

Fuel	**1. Tug operation :** – 160 litres per hour for 12 hours operation per day.	As per the tariff proposal of transloading facilities at KOPT approved by TAMP. This has been considered as a nature of operation of tug will be almost the same as that of transloading operation. TAMP ORDER NO. (TAMP/63/2014-KOPT dated 08.01.2015) (160 litres per hour x 12 hours operation per day x 255 days x ` 60.25 per litre)	294.98
	2. Crane operation :– (a) 96 liter per hour per crane when the crane is in operation (operation of main engine) for 6132 hours per crane.	As per specification of the manufacturer of the crane. (96 Litres/ hour/ crane x 6132 hours per crane x `60.25 per litre)	354.67
	(b) 32 liter per hour per crane when the carne is not in operation for 8760 hours per crane	As per specification of the manufacturer of the crane. (32 Litres/ hour/ crane x 8760 hours per crane x `60.25 per litre)	168.89
	3. Frontend Loader operation:- 20 liter per hour when in operation. (It is assumed that payloader will work for 6 hours in a day)	As per specification of the manufacturer of the crane. (20 Litres/ hour x 1530 hours x `60.25 per litre)	18.44

Hours of operations in a year	Main engine of crane in operation : (365 X 24 X 0.7) = 6132 hours	During the operation of the crane for cargo transfer.	
	Auxiliary Engine when the crane is not in operation: (365 x 24) = 8760 hours	The auxiliary engine will be in operation round the clock for supplying power to the accommodation etc. even when the crane is not in operations.	
	Tug : (12 X 255) = 3060 hours	As per the tariff proposal of transloading facilities at KOPT approved by TAMP. Only the number of days in a year has been estimated by taking 70% of 365 days. This operating hours of 12 hours a day has been considered as a nature of operation of tug will be almost the same as that of transloading operation. TAMP ORDER NO. (TAMP/63/2014-KOPT dated 08.01.2015).	
	Front End Loader : 6 hours x 255 = 1530 hour	The hours of operation has been taken on the basis of actual requirement for cargo aggregation inside the hatch during cargo transfer operations.	
Hire charge	Tug hire- 1.5 lakhs per day (` 1.5 lakhs / day x 365 days)	As per the tariff proposal of transloading facilities at KOPT approved by TAMP. This has been considered as a nature of operation of tug will be almost the same as that of transloading operation. TAMP ORDER NO. (TAMP/63/2014-KOPT dated 08.01.2015).	547.50
	Steel body launch hire (including operating man & material) : `1750/- per day with fuel cost ` 550/- per hour. (Assumed run 3 hours per day for 255 days)	As per current market price at Haldia.	10.60
Repair & Maintenance	5% of capital cost	As per TAMP guideline	157.19
Insurance	1% of capital cost	As per TAMP guideline	31.44
Depreciation	10% of capital cost	As per TAMP guideline	314.38
Other expenses	5% of capital cost	As per TAMP guideline	157.19
		Total	**2055.29**

(iv). **Estimation of Annual Revenue Requirement**

Sl. No.		**(` in Lakhs)**
1.	For operation of Floating Crane :	

(a).	Operation & Maintenance Cost	2055.29
(b).	Capital Cost	3143.837
(c).	Allowable Return on Capital Employed (16%) of (b)	503.01
	Total revenue Requirement (a+b)	**2558.30**

(v). **Calculation showing unit tariff to meet the Estimated Revenue Requirement from each tariff items.**

(a) Handling Charge – The Calculation of Cargo Handling Charges is as follows:

% share of Annual Revenue requirement in case of Dry Bulk Cargo (99%) (` in Lakhs)	2532.72
% share of Annual Revenue requirement in case of other Cargo of (1%) (` in Lakhs)	25.58
TARIFF CALCULATION :	**Rate per MT in `**
A) HANDLING RATE OF FOREIGN CARGO PER MT	
DRY BULK CARGO (92 %)	**137.42**
OTHER CARGO (98%)	**241.89**
B) HANDLING RATE OF COASTAL CARGO PER MT	
DRY BULK CARGO (8 %)	**82.45**
OTHER CARGO (2%)	**145.13**

(vi). The KOPT has furnished the proposed Scale of Rates (SOR) and Calculation of tariff for Floating Crane Facilities for the said project as given below:

Sl. No.	Commodity	Unit	Rate in `	
			Foreign	Coastal
(i).	Dry Bulk Cargo	Per Metric Tonne	137.42	82.45
(ii).	Other than Dry Bulk Cargo		241.89	145.13

3.1. While acknowledging the proposal, the KOPT was requested vide our letter dated 7 January 2016 to forward the Performance Standards to all users/ user organisations, with a copy endorsed to us. Further, the KOPT was requested to note that since the authorisation arrangement under section 42(3) is other than by way of a BOT concession agreement, as stipulated in clauses 9.1 and 9.2 of the Tariff Policy, 2015, ceiling rates would be prescribed for the service to be applied commonly at the KOPT without reference to any individual service provider.

3.2. In response to our letter dated 7 January 2016, the KOPT has made following submissions vide its email dated 13 January 2016:-

(i). The Performance Standard on which the optimum capacity of the floating crane facilities have been proposed and mentioned in the Tariff proposal are as follows:

(a). Dry Bulk cargo – 7920 tonnes per day.
(b). Break Bulk Cargo – 4224 tonnes per day

The above may be considered as performance standards to be achieved by the service provider.

(ii). The ceiling rates that would be prescribed for the services of Floating Crane shall be applied commonly at the KOPT without reference to any individual service provider.

4. In accordance with the consultative procedure prescribed, a copy of the proposal of the KOPT dated 30 December 2015 was forwarded to the users/ user organisations vide our letter dated 7 January 2016. The users were given 10 days' time to forward their comments. The users were also informed that no further extension will be granted to respond and if no comments are

received from them, it would be presumed that they have no comments to offer. The Federation of Indian Exports Organisation (FIEO) and Steel Authority of India (SAIL) have furnished their comments**.** These comments were forwarded to KOPT as feedback information. The KOPT vide its email dated 15 February 2016 has responded to their comments.

5. Based on a preliminary scrutiny of the proposal, additional information/ clarifications were sought from KOPT vide our letter dated 28 January 2016. The KOPT vide its email dated 15 February 2016 has furnished the information / clarification. While responding to the information / clarification sought by us, the KOPT has modified its calculations, Scale of Rates and Performance Standards. The information / clarification sought by us and response of KOPT thereon are tabulated below:

Sr. No.	Information/ clarification sought by us	Response of KOPT
(A).	**General:**	
(i).	The tariff arrangement envisaged for transfer of cargo from Daughter Vessel / Barges to berth in import cycle and vice-a-versa in the export cycle to be clarified.	The tariff arrangement envisaged is for transfer of cargo between mother vessel and Daughter vessel /barge only.
(B).	**Capacity of the Floating Crane:**	
(i).	While fixing upfront tariff for the Barge handling facility at Bunder Basin at Kandla Port Trust (KPT) as well as at Tuna at KPT vide Order no. TAMP/6/2013-KPT dated 22 February 2013, the maximum handling rate of a Floating Crane has been considered at 1300 tonnes per hour in respect of Dry Bulk cargo. Thereafter, by considering an Operating load factor of 73% and 24 hours of operation, the handling rate of dry bulk cargo by a Floating Crane has been considered at 22,776 tonnes per day. As against this, the KOPT is seen to have considered the handling rate of Floating Crane for handling dry bulk cargo at only 495 tonnes per hour. Thereafter, by considering an operating load factor of 80% and 20 hours of operation, the handling rate of dry bulk cargo by a Floating crane has been worked out by KOPT at 7920 tonnes per day only. The KOPT to, therefore, review the capacity of Floating Crane by considering a handling rate of 22,776 tonnes per hour in respect of dry bulk cargo, as considered in the case of KPT. The handling rate of other cargo is also to be modified suitably.	The Handling rate of cargo by Floating crane has been fixed in consultation with the prospective bidders who have experience in operating floating crane. According to them the conditions prevailing at Sagar in terms of current & wave force, wind speed etc, are rather adverse as compared to other ports, where the Floating cranes work under favourable conditions. Hence, the handling rate possible at other ports will not be possible at Sagar where the floating crane facilities are proposed to be created for round the year operations. As such, the hook cycle time in the instant case will be longer as compared to other ports. Besides in the instant proposal, the Floating crane is proposed to be used for partial unloading (between 5000 to 10000 tons) of the mother vessels to bring her up to the HDC draft and not for full unloading. This will also affect the transfer rate. The transfer rate of 7920 tons has been proposed keeping all the above factors into view.
(ii).	The consideration of operation for only 20 hours instead of 24 hours in a day to be justified. KOPT to also clarify why 24 hour operation should not be considered.	All the mother vessels will come with part load because of draft restrictions at Saugor also. Hence, during the cargo transfer operations, there will be occasions when the Floating Crane will have to wait for aggregation of cargo by the Payloaders inside the hatches. So practically, there will be 440 hook cycles by the Floating Crane in a day for unloading of cargo. This will be achieved at a rate of 22 hook cycles per hour for 20 hours of actual crane operation and the remaining 4 hours will be used for

		aggregation of cargo at the hook point by using Payloaders inside the hatches. So for computation of transfer rate of 7920 per day, 440 hook cycles per day has been considered.
(iii).	The reason for considering a load factor of 80% in the calculation of capacity in addition to the 70% utilization factor considered by KOPT to be justified.	It has been envisaged that on an average 80 % volume of the grab will be filled up with cargo in each cycle of transfer operations by the Floating Crane. This will also ensure spillage free operations which are required for addressing cargo loss and environmental issues for midstream transfer. The factor of 70% was taken as the actual days of operation in a year by the Floating Crane.
(iv).	The ratio of dry bulk cargo and other cargo at 99:1 to be justified with actuals for the years 2012-13 to 2014-15 and upto December 2015.	The cargo to be handled by the Floating Crane will be predominantly dry bulk cargo. As such, this project has been conceived to encourage handling of additional volume of dry bulk cargo at HDC through the proposed facility. However, there may be occasions when HDC may be required to handle break bulk cargo using the Floating Crane because of draft constraints in the navigable channel leading to HDC, for avoiding situations of neaping of vessels etc. As such, a provision is required to be kept along with tariff for handling break bulk cargo on very limited occasions at Saugor by the Floating Crane. As such, only 1% of the total Floating Crane capacity has been assigned for handling of break bulk cargo. In view of the above, the ratio of dry bulk and break bulk has not been estimated on the basis of actual cargo but for reasons stated above.
(v).	The KOPT has considered deployment of one no. of Floating Crane on the Dumb Barge. In this context, the KOPT to clarify whether it is technically feasible to deploy more number of cranes on the Dumb barge, thereby possibly leading to achieving higher productivity by the Floating Crane.	It is technically not possible as because in such a situation the stability of the dumb Barge may be severely affected considering that the Floating Crane will have to work in adverse sea condition in Saugor.
(C).	**Capital Costs:**	
(i).	The KOPT has not furnished documentary evidence in support of the capital cost of the Front End Loader and Pneumatic Fenders. The same to be furnished. The KOPT to furnish detailed working to arrive at the capital cost of the Front End Loader and Pneumatic Fenders as considered in the cost statement.	The Cost of Front End loaders & Pneumatic fenders has been taken from the tariff order passed by TAMP for setting up of Transloading Facilities at KOPT vide order No. TAMP/63/2014-KOPT dated 08 January 2015.

(ii).	From the documentary evidence furnished by the KOPT, it is seen that the cost of Dumb barge including the cost of setting crane on top of the deck is estimated at `11 crores. However, as per the documentary evidence furnished by the KOPT, the said rate is exclusive of taxes and duties. The KOPT to, therefore, review the cost of dumb barge by taking into account the applicable taxes and duties.	This cost is inclusive of taxes & duties.
(iii).	The requirement of 3 nos. of Pneumatic Fenders for the Floating Crane operation as considered by the port to be justified.	1 no of Pneumatic Fenders will be required to make fast the Floating crane unit with the mother vessel while another fender will be utilised between the Floating crane and the Barge on the other side. The 3rd set of Fender will be kept as reserve in case of any emergency situation/ damage to the other two sets. This is more so because the cargo transfer will take place at a distance significantly away from HDC.
(D).	**Operating Costs:**	
(i).	The cost of hire of Tugs at ` 1.50 lakhs per day is reported to be based on the hire charges considered in KOPT transloading operation vide Order no. TAMP/63/2014-KOPT dated 08 January 2015. In this regard, it may be recalled that the tug hire charges of ` 150000/- per day was relied upon considering the position that this rate was reasonable considering the tug hire charges of about ` 167000/- per day considered in the Order No. TAMP/60/2011-KPT dated 02.05.2012 passed by this Authority pertaining to Kandla Port Trust. Considering the time gap and the possible increase in the hire cost of tugs during the intervening period, due to inflation the KOPT to take into account the latest hire charge of tugs in its calculation. Documentary evidence in support of the hire of tugs is also to be furnished.	As per present market survey, the cost of hiring a Tug of 50 ton bollard pull at ` 1.50 lakhs per day is considered to be adequate to serve the requirement and therefore such rate does not call for any upward increase. TAMP may accordingly, consider the said hiring rate for computing the reference tariff.
(ii).	KOPT to furnish the basis for considering fuel cost of Tugs for only 12 hour operation per day.	According to the Marine Division of Haldia Dock Complex, Tug Operation will be required on an average for 12 hours a day during cargo transfer operations.
(iii)	KOPT to furnish the documentary evidence i.e. "specification of manufacturer of crane" in support of the fuel consumption of main engine at 96 liters per hour per crane and auxiliary engine at 32 liters per hour per crane. It may be noted that while fixing tariff for the use of Floating Crane at Mormugao Port Trust (MOPT) and KPT, a fuel consumption of 12 liters per hour was considered during idle hours. It may also be noted that the aggregate of working	CBG 350 crane runs by power and such power is supplied from the main & Auxiliary Gen sets installed on Dumb barge. The Power to Crane is supplied from main generator set during the days of operation envisaged under this tariff calculation and the fuel consumption of main generator set is 96 lit per hour**.** The auxiliary generator set will run for 365 days for 24 hours to supply the electrical power to the accommodations etc. of the dumb barge

	hours and idle hours for the main engine was considered at 8760 hours i.e. (365 days x 24 hours), whereas the KOPT proposal has not captured the fuel cost for idle hours for main engine.	when the fuel consumption will be 32 liters per hour. (The documentary evidence furnished by KOPT vide its email dated 23 February 2016 states that crane can be operated either by shore power supply or through generator and that the fuel consumption of the generator is approximately 90 to 100 litres / hour. The KOPT has not furnished any document in support of fuel consumption of auxiliary engine at 32 litres / hour.) (Copy of Fuel Bill of IOCL for December 2015 is furnished by KOPT vide email dated 23.02.2016, reflecting a rate of ` 60.25 per litre).
(iv).	KOPT to furnish the documentary evidence i.e. "specification of manufacturer of crane" in support of fuel consumption of 20 litres per hour in respect of Front end loaders.	[Copy of confirmation from the crane manufacturer in support of fuel consumption of front end loaders is not provided by KOPT, inspite of a specific request made in this regard]
(v).	The basis for assuming that the Front end loader will work for only 6 hours per day is reported to be based on actual requirement for cargo aggregation inside the hatch during cargo transfer operations. KOPT to furnish actual data for the past 3 years upto December 2015 in support of this position.	On the basis of cargo handling experience of KOPT, it has been envisaged that on an average 6 hours of time will be required per day of operations for aggregation of cargo at the hold of vessel during transfer of cargo from vessel to barge by means of Floating crane operation. During this period, the Front-end loaders will be used for aggregation of cargo.
(vi).	KOPT to confirm that the depreciation rate of 10% considered by KOPT across all equipment, is as per the Companies Act, 2013.	TAMP has considered 10% as rate of depreciation for the floating crane arrangements for the VOC Port Trust in its order passed on 23rd December,2013. We have taken the same rate of depreciation.
(vii).	With respect to cost towards hire of launch, KOPT to clarify / furnish the following: (a). Documentary evidence in support of fixed charge of ` 1750 per day.  (b). Documentary evidence in support of fuel cost at ` 550/- per hour. (c). Basis for assuming that the launch would be in operation for only 3 hours per day.	 The KOPT has furnished copy of Budgetary offer from M/s Eastern Navigation Private Limited for evidence. This reflects the hire charge at ` 1750/- per day and fuel cost of ` 550 per day. As per experience of marine department of port, the average operational requirement of steel body launch will not be more than 3 hours per day.
(viii).	In the case pertaining to fixation of cargo handling charges for use of Transhipper (30 TPD) provided by authorised service providers at the Mormugao Port Trust vide Order no. TAMP/30/2011-MOPT dated 02 May 2012, the MOPT has considered the component of port charges as one of the items of operating towards recovery of	The Floating Crane facilities are being proposed to increase throughput of cargo at HDC by taking advantage of incremental draft at Saugor. However, the Floating Crane facilities will add to the cost of handling to the importers / exporters for bringing additional cargo at Saugor. Therefore, with a view to promote Floating

	vessel related charges on the transloader. In this context, the KOPT to examine whether vessel related charges pertaining to Floating Crane has to be taken into account for estimation of operating cost of Floating Crane.	Crane facilities at a competitive rate, KOPT does not intend to levy any charge on the Floating Crane. This has also been considered for the transloader. It may also be added that the cargo that will be handled by the Floating Crane will add cargo related revenue to KOPT when such cargo will be loaded / unloaded at KOPT berths.
(E).	**Handling Rates:**	
(i)	The ratio of foreign and coastal dry bulk cargo at 92:8 to be supported with actuals for the years 2012-13 to 2014-15 and upto December 2015	The details have been reworked and it has been found that the average foreign coastal ratio taking the 3 years in view comes to 83:17. On the basis of this, the calculations have been reworked and the revised tariff has been proposed accordingly which is marginally lower than the proposed tariff. The revised calculations and Scale of Rates are furnished.

6. A joint hearing in this case was held on 1 February 2016 at the KOPT premises. At the joint hearing, the KOPT made a brief power point presentation of its proposal. At the joint hearing, the KOPT and the concerned users/ user organizations have made their submissions.

7.1. As stated earlier, the KOPT while furnishing the additional information/ clarification vide its letter dated 15 February 2016 has modified its calculations, Scale of Rates and Performance Standards. The modification in the calculation is to the limited extent of changing the ratio of foreign and coastal of dry bulk cargo from the earlier ratio of 92:8 to 83:17 and changing the ratio of foreign and coastal of other cargo from the earlier ratio of 99:1 to 98:2. In view of this position, keeping the annual revenue requirement intact, the KOPT has proposed the following handling charges:

Sl. No.	Commodity	Unit	Rate in `	
			Foreign	Coastal
1.	Dry Bulk cargo	Per Metric Tonne	135.65	81.39
2.	Other than dry bulk cargo		238.00	142.80

7.2. The KOPT has also proposed productivity linked tariff as given below:

(a). **For Dry Bulk cargo**

Performance Standard in tons	Foreign	Coastal
8501-9000	142.43	85.46
7921-8500	139.04	83.42
7920	135.65	81.39
7919-7500	132.26	79.36
7499-7000	128.87	77.33

(b). **For other cargo**

Performance Standard in tons	Foreign	Coastal
4726-5225	250	149.94
4225-4725	243.95	146.37
4224	238	142.80
4223-3725	232.05	139.23
3724-3225	226.10	135.66

Note: To calculate the ceiling rates for Performance below 7920 tonnes (for Dry Bulk Cargo) and 4224 tonnes (for other Cargo) per WWD as shown above, the base

rate was reduced by 2.5% for first five hundred tonnes and for the 2nd five hundred tonnes the rate was reduced by 5% of the base rate. Likewise performance below 7000 tonnes (for dry bulk cargo) and 3225 tonnes (for other cargo) per WWD shall be calculated by reducing the base rate accordingly.

The same methodology shall also be adopted to calculate the incremental ceiling rate beyond 7920 tonnes (for Dry Bulk Cargo) and 4224 tonnes (for other Cargo) per WWD and in such case the base rate is increased by 2.5% for first five hundred tonnes, 5% for 2nd five hundred tonnes over the base rate. The same methodology shall be adopted to calculate the rate beyond 9000 tonnes (for dry bulk cargo) and 5225 tonnes (for other cargo) per WWD.

The Cargo Transfer Rate shall be computed on WWD basis as per the provisions of the license using following formula:

$$\frac{\text{Total cargo transferred between mother vessel and the barges/Daughter vessels} \times 24}{\text{Cargo transfer time in hours}}$$

8.1. Since the KOPT was seen to have recast its earlier proposed tariff and had also proposed productivity linked tariff, which was not proposed by it earlier, the KOPT was requested vide our letter dated 12 February 2016 to forward a copy of its proposed Scale of Rates and Performance Standards to all users/ prospective applicants who have been consulted in the case in reference. The KOPT was requested to confirm this position to us.

8.2. In this connection, the KOPT has endorsed to us, a copy of its email dated 15 February 2016, wherein it has forwarded the revised Scale of Rates and Performance linked tariff to users/ prospective applicants. The KOPT vide the said email has also requested the users/ prospective applicants to furnish their comments within 18 February 2016 to KOPT with a copy endorsed to TAMP. We are not in receipt of any comments from users/ prospective applicants till the case was taken up for finalization.

9. Thereafter, the KOPT vide its e-mail dated 25 February 2016 has stated that since the Floating Crane facilities are proposed to be created on licence basis for a period of 15 years, the notified tariff be kept valid for a period of 15 years subject to the indexation as follows:-

> "*The Tariff will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 April, 2014 and 1 January of every succeeding year. Such automatic adjustment of Tariff will be made every year and the adjusted tariff cap will come into force from 1 April of the relevant year to 31 March of the following year.*"

The KOPT has also stated that TAMP had earlier allowed validity of the tariff in respect of the transloading project for a period of 10 years, commensurate with the period of licence of the said project subject to the above indexation. The project of Floating Crane is a project similar to transloading and is going to be implemented through licensing arrangement in the same manner for a period of 15 years.

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

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

(i). Owing to a vast economic hinterland comprising of major Steel Plants, Power Plants and Sugar, Coke & Fertilizer manufacturing industries etc., Haldia Dock Complex (HDC) of Kolkata Port Trust is reported to have a tremendous potential to handle substantial volume of dry bulk cargo consisting of Coking Coal, Non coking Coal, Coke, Lime Stone, Fertilizer Raw Materials, Raw Sugar, Iron Ore etc. In order to ensure materialization of the potential cargo at HDC, while obviating the draft

constraints, KOPT has decided to use the higher draft availability at Sagar and other deep draft locations for handling additional cargo by lighterage operations by deployment of Floating Crane. Deployment of Floating Crane is reported to benefit the trade by way of reduction of the overall logistic cost. According to KOPT, the cargo would be brought at Sagar and other deep draft locations of KOPT, where the additional cargo brought in will be transferred into barges by the Floating Crane. Thereafter, the lightened Mother Vessel and the Barges will come to HDC for discharge. The reverse operation is to take place in case of export cargo.

(ii). In this connection, the KOPT has reportedly decided to engage a Service Provider by way of granting authorization under a license and where the licensing arrangement between KOPT and Service Provider would be governed under Section 42(3) of the MPT Act for a period of 15 years.

The Licensing arrangement is not contemplated on a BOT mode as confirmed by KOPT. In cases where authorisation arrangement u/s 42(3) is other than by way of a BOT concession agreement, Clause 9.1 and 9.2 of the Tariff Policy, 2015, requires this Authority to fix ceiling rates for such services at the concerned ports without reference to individual service provider. For this purpose, proposals for regulating these charges should be initiated by the concerned Major Port Trust and the tariff so fixed, will not undergo a change whether the port itself provides this service or has permitted a private operator to render the services. In the case in reference, the port does not envisage rendering the service on its own and has envisaged to grant an authorization under a license to a Service Provider, other than by way of a BOT concession agreement. This case is, therefore, taken up for prescription of ceiling rates for the Floating Crane to be deployed at KOPT, following the stipulation contained in Clause 9.1 and 9.2 of the Tariff Policy, 2015.

(iii). As per Clause 9.2 of the Tariff Policy, 2015, in case there is no ceiling tariff prescribed in the concerned Major Port for a particular service / facility under such arrangement, the port shall adopt the tariff prescribed for the similar service/ facility prescribed in any other Major Port Trust. If there is no tariff prescribed in any Major Port Trust or the rate prescribed is not representative for the cargo/ service/ facility envisaged, the Port Trust may file a proposal with reference to optimal capacity following the principles of 2008 guidelines or based on rated capacity. [with reference to the technical specification of the service/ facility/ equipment]. Accordingly, the KOPT has filed a proposal with reference to optimal capacity following the principles of 2008 guidelines to determine the tariff for the deployment of the Floating Crane.

(iv). The KOPT had filed its proposal on the last day of December 2015. Subsequently, while responding to the additional information/ clarification sought by us, the KOPT vide its letter dated 15 February 2016 has modified its calculations, Scale of Rates and Performance Standards. The modification in the calculation is to the limited extent of changing the ratio of foreign and coastal vessels carrying dry bulk cargo from the earlier ratio of 92:8 to 83:17 and changing the ratio of foreign and coastal vessels carrying other cargo from the earlier ratio of 99:1 to 98:2, by keeping the annual revenue requirement intact. The said modified proposal of February 2016, along with the information/ clarification furnished by the port during the proceedings of the case in reference, has been considered in this analysis.

(v). Optimal Capacity:

(a). KOPT has assessed the optimal capacity of the floating crane at 2.02 million tonnes per annum. By considering the handling rate of dry bulk cargo at 495 tonnes per hour with a load factor of 80% and based on 20 operating hours per crane per day, the KOPT has arrived at the handling rate of dry bulk cargo at 7920 tonnes per day. Applying the ratio of handling rate of dry bulk cargo and other cargo as prescribed in the Upfront Guidelines for

multipurpose berth, the KOPT has arrived at the handling rate of Other cargo at 4224 tonnes per day.

(b). For arriving at the optimal capacity of the floating crane, the KOPT has provided for the cushion factor at two places. One being towards the load factor of the Floating Crane at 80% and the other as the 70% utilisation factor in the capacity calculation.

In this connection, it is relevant to mention here that factoring of cushion on two parameters while determining optimal capacity has been considered by this Authority in the capacity calculation of Floating crane in the Bunder Basin case of Kandla Port Trust (KPT) as well as in the capacity calculation of Floating crane at the Barge jetty at Tuna at KPT.

(c). With regard to considering the operating period of the Floating Crane at 20 hours, the KOPT has reported that all the mother vessels will come with part load because of draft restrictions at Saugor also. Hence, during the cargo transfer operations, there will be occasions when the Floating Crane will have to wait for about 4 hours for aggregation of cargo by the Pay loaders inside the hatches. Given that none of the users/ prospective applicants have objected to the aggregation time considered by KOPT, the judgment of the port in this regard is relied upon.

(d). The approach of considering the ratio of handling rate of dry bulk cargo and other cargo as prescribed in the Upfront Guidelines for multipurpose berth, to arrive at the handling rate of Other cargo, has been considered in the capacity calculation of Floating crane in the Bunder Basin case of Kandla Port Trust (KPT) as well as in the capacity calculation of Floating crane at the Barge jetty at Tuna at KPT.

(e). Though the project envisages handling of predominantly dry bulk cargo, the KOPT is of the view that there may be limited occasions when project is required to handle break bulk cargo by using the Floating Crane. In view of this position, the ratio of dry bulk cargo and other cargo has been considered by KOPT at 99:1, which is relied upon in the analysis.

(f). Thus, based on the above parameters, the optimal capacity of the floating crane with regard to dry bulk cargo works out to 2 million tonnes per annum and the optimal capacity of the other cargo works out to 0.02 million tonnes per annum, thereby resulting in the aggregate optimal capacity of the floating crane at 2.02 million tonnes per annum at 70% utilization, as calculated by the KOPT, which is considered in this analysis.

(vi). Capital Cost:

(a). The capital cost considered by the KOPT comprises of cost of 1 no. of Dumb Barge (50 m X 22 m x 2.5 m) with Genset, 1 no. of Floating Crane on the Dumb Barge, 1 no. of Front End Loader, 3 nos. of Pneumatic Fenders and Miscellaneous Costs @ 5%.

(b). The cost of Dumb barge at ` 11 crores is supported by documentary evidence. This cost is reported to be inclusive of cost of setting crane on top of the deck as well as inclusive of taxes & duties.

(c). The cost of the Floating Crane at 2.2 million Euros is supported by documentary evidence and is inclusive of Custom duties. The cost of Floating Crane has been updated with the exchange rate of `76.3297 per Euro prevailing at the time of finalization of the case, as against the exchange rate of `72.56 per Euro considered by KOPT.

The KOPT has considered deployment of one no. of Floating Crane on the Dumb Barge. In this context, the KOPT has confirmed that it is technically not possible to deploy more than one number of floating crane on the Dumb barge, as it would severely affect the stability of the dumb Barge, considering that the Floating Crane will have to work in adverse sea condition in Saugor.

(d). The KOPT has envisaged deployment of Front end Loaders for placement inside ship hatch for aggregation of cargo. The KOPT has not furnished any documentary evidence in support of the cost of Front end loader at ` 30 lakhs and has stated that the cost has been taken from the tariff order passed by the Authority for setting up of Transloading Facilities at KOPT vide order No. TAMP/63/2014-KOPT dated 08 January 2015. However, in the tariff Order referred by KOPT, the cost of Front end loader has been considered at ` 52.97 lakhs, as estimated by KOPT then. In view of this position, the cost of the Front end loader has been considered at ` 52.97 lakhs in our analysis.

(e). The KOPT has not furnished any documentary evidence in support of the cost of Pneumatic Fender at ` 11 lakhs each and has stated that the cost has been taken from the tariff order passed by the Authority for setting up of Transloading Facilities at KOPT vide order No. TAMP/63/2014-KOPT dated 08 January 2015. The amount of ` 11 lakhs per fender as considered by KOPT is seen to be as per the cost of Fender considered in the tariff Order referred by KOPT and hence relied upon.

With regard to the reason for deploying 3 nos. of Pneumatic Fenders, the KOPT has stated that 1 no. will be required to make fast the Floating crane unit with the mother vessel while another fender will be utilised between the Floating crane and the Barge on the other side. Further, since the cargo transfer is to take place at a distance significantly away from HDC, the KOPT has envisaged to keep the 3rd Fender as reserve in case of any emergency situation/ damage to the other two fenders.

(f). The KOPT has considered miscellaneous capital cost @ 5% of the estimated equipment cost, which is seen to be in line with the Upfront tariff guidelines of 2008.

(g). In view of the changes in the Capital cost of floating crane and front end loader as discussed above, the Capital cost works out to ` 32.68 crores as against ` 31.44 crores, estimated by the Port.

(vii). Operating Cost:

(a). A 50 tonne Bollard pull tug is envisaged to be deployed for maneuvering and making fast the floating crane, on hire basis. The cost of hire of Tugs at ` 1.50 lakhs per day is reported to be based on the hire charges considered in KOPT transloading operation case vide Order no. TAMP/63/2014-KOPT dated 08 January 2015. In this regard, it was pointed out to KOPT that the tug hire charges of ` 150000/- per day was relied upon considering the position that this rate was reasonable considering the tug hire charges of about ` 167000/- per day considered in the Order No. TAMP/60/2011-KPT dated 02.05.2012 passed by this Authority pertaining to Kandla Port Trust. Considering the time gap and the possible increase in

the hire cost of tugs during the intervening period due to inflation, the KOPT was requested to take into account the latest hire charge of tugs in its calculation. The KOPT has, however, stated that the hire charge is adequate and therefore does not call for any upward increase. The same is, therefore, considered in the analysis.

(b). (i). The Fuel cost has been considered in respect of Tug, Floating Crane and Front end Loader. The unit cost of diesel is considered at ` 48.33 per litre prevailing on the date of finalization of the case, instead of ` 60.25 per litre considered by KOPT

(ii). The fuel consumption of 160 litres per hour is reported to be based on the fuel consumption of tugs considered in KOPT transloading operation case vide Order no. TAMP/63/2014-KOPT dated 08 January 2015 and hence relied upon.

The basis for considering the fuel cost with regard to 12 hours of operation of a tug in a day is reported to be based on the internal data of KOPT, according to which, Tugs are deployed on an average for 12 hours a day during cargo transfer operations.

(iii). In respect of the Floating Crane, the fuel consumption of main engine at 96 liters per hour per crane is supported by documentary evidence, and the same is relied upon. The KOPT has, however, not furnished any document in support of fuel consumption of auxiliary engine at 32 litres / hour. None of the users/ prospective applicants have objected to the fuel consumption of auxiliary engine considered by KOPT. The judgment of the port in this regard is relied upon.

The main engine is reported to be operational for 6132 hours per annum and the auxiliary engine is reported to be operational for the entire 8760 hours per annum. According to KOPT, the auxiliary engine will be in operation round the clock for supplying power to the accommodation etc. even when the crane is not in operation.

(iv). Inspite of a specific request, the KOPT has not furnished documentary evidence in support of the fuel consumption of the front end loader at 20 litres per hour. Though the Front end loader was considered in the Transloading case of KOPT, as discussed earlier, the fuel consumption of Frontend loaders was considered on tonnage basis and not hourly basis. Considering the said fuel consumption on tonnage basis and by converting the same on hourly basis, the fuel consumption of KOPT at 20 litres per hour appears to be reasonable and hence relied upon in the analysis.

The hours of operation of Front end loader at 1530 hours per annum is reported to be based on the actual time requirement for cargo aggregation inside the hatch during cargo transfer operations. This is considered.

(c). The estimation of Insurance at 1% of Total capital Cost, Repairs & Maintenance cost at 5% of Total Capital Cost, Depreciation at 10% of total capital Cost and Miscellaneous Expenses at 5% of total capital Cost are seen to be as per the provisions prescribed in the 2008 Upfront tariff guidelines for a multipurpose cargo berth.

(d). A steel body launch is envisaged to be deployed on hire basis for to and fro transportation of men and material between shore and the location of

operation of floating crane. In this regard, the KOPT has considered a fixed charge of ` 1750 per day and a fixed fuel cost at ` 550/- per hour. The KOPT has furnished documentary evidence in support of the above referred charges.

The KOPT has assumed that the launch would be in operation for only 3 hours per day, based on the internal data of KOPT, which is relied upon.

(viii). Return on Capital Employed is allowed at 16% of the estimated capital cost of the facility.

(ix). Thus, the annual revenue requirement, which is the sum total of the operating cost and the return on the capital employed, works out to ` 5.23 crores as against the revenue requirement of ` 5.03 crores estimated by the KOPT.

(x). The ratio of foreign and coastal dry bulk cargo at 83:17 and the ratio of foreign and coastal other cargo at 98:2 is reported to be the average foreign coastal ratio of the past three years.

(xi). Considering the Annual revenue requirement of ` 5.23 crores and considering the handling rates and the ratio of foreign and coastal in respect of dry bulk cargo and other cargo, the rate for the Floating Crane works out to ` 129.33 per tonne for dry bulk cargo and ` 227.84 per tonne for other cargo as against ` 135.65 per tonne for dry bulk cargo and ` 238.00 per tonne for other cargo, as proposed by the Port.

(xii). Based on the above position, the Cost statement furnished by the KOPT has been modified. The modified Cost statement is attached as **Annex I (a)** and **I (b).**

(xiii). (a). The KOPT has furnished a full-fledged tariff Schedule containing definitions, general notes and the proposed rate along with its conditionalities. On perusing the draft Scale of Rates furnished by KOPT, it is observed that:

(i). The Definitions for the terms like coastal vessel and foreign going vessel as prescribed at S.1 of the proposed draft SOR are same as per existing SOR of KOPT approved in February 2014. They would continue to apply for the proposed facility also.

(ii). The General Principles of Assessment in the proposed draft SOR at S.2 are also seen to be same as per existing SOR of KOPT approved in February 2014. They would continue to apply for the proposed facility also.

(iii). The Note at S.4 which states that for facilities like Fresh Water Supply to the mother vessel, which the Service Provider may have to arrange by sourcing the same from KOPT; the Service Provider will be entitled to recover the actual cost of same paid by them to KOPT, is seen to be same as per existing SOR of KOPT approved in February 2014. It would continue to apply for the proposed facility also.

(b). Therefore, only S.3 and S.5 of the proposed draft SOR, which prescribes the Cargo Transfer Charge by Floating Crane and the conditionalities governing the rates is prescribed now.

(xiv). The KOPT has furnished description to S.3 relating to levy of Cargo Transfer Charge by Floating Crane stating that the charges prescribed is a composite charge

for unloading of the cargo from the mother vessel and transfer of the same to a vessel/ Barge directly in case of import or vice versa in case of export, including stevedoring & all other allied services. The note also states that the charge will be applicable for the floating crane operation in the location of setting up of floating crane facility as well as any other deep drafted area within KOPT limit and shall be applicable on the quantity unloaded/ loaded by use of the Floating Crane, as determined through the Draft Survey Report. Further, the note also states that the anchorage charge for vessels as well as wharfage and other levies applicable for handling cargo at the Anchorages shall be paid by the Vessel owner/ cargo interest separately to Kolkata Port Trust, as per Scale of Rates of KoPT time being in force. Since the proposed notes lists down the services included in the prescribed levy and also gives more clarity and reduces ambiguity, the proposed notes are approved.

(xv). (a). Clause 9.2 of the Tariff Policy, 2015, stipulates that the Port Trust shall propose the Performance Standards to be achieved by the service provider and tariff linked to Performance Standards. Accordingly, subsequent to the joint hearing, the KOPT has proposed performance linked tariff, where lower the productivity, lower the rate and higher the productivity, higher the rate is leviable. Thus, the performance linked tariff proposed by the KOPT provides for incentive for better performance and disincentive for under performance. In this regard, it is noteworthy that cargo wise performance linked tariff has been prescribed in the case of some major port trusts where the Harbour Mobile Cranes (HMCs) are envisaged to be deployed by the service providers and also in the Transloading facility at KOPT.

(b). The performance linked tariff structure proposed by KOPT provides for reward by way of an uniform increment in the rate by 2.50% over the previous slab for each slab and a reduction in the rate by 2.50% over the previous slab for each slab. For the purpose, the KOPT has considered the average output of 7920 tonnes per day for the dry bulk cargo and 4224 tonnes per day for the other cargo, as considered in the optimal capacity calculation, as a cut-off point for formulating the performance linked tariff.

(c). Based on the position put forth by KOPT and given that the prescription of performance linked tariff would enhance the productivity levels and protect the interest of the users, the proposal of the port to prescribe performance linked tariff as furnished by it, is approved.

(xvi). The KOPT has stated that since the Floating Carne facilities are proposed to be created on licence basis for a period of 15 years, the tariff be kept valid for a period of 15 years subject to the indexation, in line with the approach followed in respect of the Transloading facility at KOPT. With regard to indexation, the KOPT has proposed a note to the effect that the Tariff will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 April 2016 and 1 January of the relevant year and that 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.

If the validity is to be prescribed for a period of 15 years, then the initial tariff fixed now cannot remain constant without capturing the impact of the price fluctuations. Since the KOPT envisages to issue a license for a period of 15 years and have a stability in tariff for a period of 15 years, it is appropriate to prescribe validity for 15 years, as was done in the case of Transloading facility at KOPT. Thus, in order to capture impact of price fluctuation on the tariff fixed now, a provision is kept in the Scale of rates to index the tariff fixed now, to inflation but only to an extent of 60% of variation of WPI occurring between 60% of variation of WPI occurring between 1 January 2016 and 1 January of every succeeding years, by borrowing the norms prescribed in the 2008 upfront tariff fixation guidelines.

12.1. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves insertion of the following provision in the existing Scale of Rates of KOPT:

Cargo Transfer Charge by Floating Crane:

Sl No	Commodity	Unit	Rate in Rupees	
			Foreign	Coastal
(1)	Dry Bulk Cargo	Per Metric Tonne	129.33	77.60
(2)	Other than Dry Bulk Cargo		227.84	136.70

Notes

(i) The charges prescribed above is a composite charge for unloading of the cargo from the mother vessel and transfer of the same to a vessel/ Barge directly in case of import or vice versa in case of export, including stevedoring & all other allied services.

The charge will be applicable for the floating crane operation in the location of setting up of floating crane facility as well as any other deep drafted area within KoPT limit and shall be applicable on the quantity unloaded/ loaded by use of the Floating Crane, as determined through the Draft Survey Report.

(ii) The anchorage charge for vessels as well as wharfage and other levies applicable for handling cargo at the Anchorages shall be paid by the Vessel owner/ cargo interest separately to Kolkata Port Trust, as per Scale of Rates of KoPT time being in force.

Performance Linked Tariff:

The prescribed rate is the base rate for achieving minimum level of cargo transfer rate of 7920 tonnes per day to be computed as per the formula provided in the Licence Agreement. The productivity wise slab rates shall be as follows:

For Dry Bulk Cargo: (Rate in ` per MT)

Performance Standard in tons	Foreign	Coastal
8501-9000	135.88	81.53
7921-8500	132.56	79.54
7920	**129.33**	**77.60**
7919-7500	126.10	75.66
7499-7000	122.94	73.77

For other Cargo: (Rate in ` per MT)

Performance Standard in tons	Foreign	Coastal
4726-5225	239.37	143.62
4225-4725	233.54	140.12
4224	**227.84**	136.70
4223-3725	222.14	133.29
3724-3225	216.59	129.95

Note:

To calculate the ceiling rates for performance below 7920 tonnes (for Dry Bulk cargo) and 4224 tonnes (for other Cargo) per WWD as shown above, the base rate was reduced by 2.5% for first five hundred tonnes and for the 2nd five hundred tonnes the rate was reduced by 5% of the base rate. Likewise performance below 7000 tonnes (for dry bulk cargo) and 3225 tonnes (for other cargo) per WWD shall be calculated by reducing the base rate accordingly.

The same methodology shall also be adopted to calculate the incremental ceiling rate beyond 7920 tonnes (for Dry Bulk cargo) and 4224 tonnes (for other Cargo) per WWD and in such case the base rate is increased by 2.5% for first five hundred tonnes, 5% for 2nd five

	hundred tones over the base rate. The same methodology shall be adopted to calculate the rate beyond 9000 tonnes (for dry bulk cargo) and 5225 tonnes (for other cargo) per WWD. The Cargo Transfer Rate shall be computed on WWD basis as per the following formula: **<u>Total cargo transferred between mother vessel and the barges / daughter vessels x 24</u>** **Cargo Transfer Time** (in hours) Immediately after completion of cargo transfer operations, and before the sailing of the Mother Vessel (OGV) from the Transfer Point, Statement of Facts shall be made out duly signed by Master of the Mother Vessel (OGV) and the authorized representatives of the Licensee's Floating Crane and Barge / Daughter Vessel and shall be distributed at the transfer point amongst the following concerns: a) Master of the vessel / agents of the vessel. b) Representative of Licensee c) Representative of the barge / daughter vessel. d)The consignee / consigner, if so desires, may also depute their agents / representatives for signing of the SOF. The Cargo Transfer Time for the purpose of assessment of performance standard of the Floating Crane arrangement to fulfil the provisions of the Scale of Rates of the Floating Crane Charges shall be strictly calculated on the basis of SOF duly signed by the above said parties.
	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 2016 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.
	The rates approved will come into effect after expiry of 30 days from the date of notification of the Order passed in the Gazette of India and shall remain in force for a period of fifteen years, subject to indexation, as explained above.

12.2. The rates approved will come into effect after expiry of 30 days from the date of notification of the Order passed in the Gazette of India and shall remain in force for a period of fifteen years, subject to indexation, as explained earlier.

(T.S. Balasubramanian)
Member (Finance)

			Annex - I (a)

Cost Statement for fixation of tariff for transfer of cargo between Mother Vessel and Daughter Vessel / barges within the limits of Kolkata Port Trust (KOPT) by Floating Crane.

Sl. No.	Particulars	Estimates furnished by KOPT in its proposal dated 30.12.2015 and clarification dated 15.02.2016 and 23.02.2016	Estimates Modified by TAMP
A	**OPTIMAL CAPACITY OF FLOATING CRANE**		
	Handling Rate per hour (25cbm grab x 0.9 density of Material x 22 cycles per hr.)	495	495
	Maximum Working Hours	20	20
	Maximum Handling Rate /day	9900	9900
	Operating Load factor	80%	80%
	Handling rate of Dry Bulk cargo per day (MT / Day)	7920	7920
	Handling rate of Other cargo per day (MT / Day) 53.33% of handling rate of Dry bulk Cargo	4224	4224
	Maximum Cargo to be handled per Annum :		
	Dry Bulk Cargo 7920 MT per day x 365 days x 70% x 99 % (Envisaged Cargo Share)	2003324	2003324
	Other Cargo 4224 MT x 365 days x 70% x 1% (Envisaged Cargo Share)	10792	10792
	Optimal capacity Of Floating Crane (Metric Tonnes per annum)	**2014117**	**2014116**
	Optimal capacity Of Floating Crane (Million Metric Tonnes per annum)	**2.02**	**2.02**
		`	**in Lakhs**
B	**CAPITAL COST**		
(i)	Floating crane		
	- Dumb Barge (50 m X 22 m x 2.5 m) with Genset	1100.00	1100.00
	- Floating Crane on the Dumb Barge [KOPT: - (2.2 Million Euro @ 72.56 per Euro + 14.71% custom duties)] [TAMP: - (2.2 Million Euro @ 76.3297 per Euro + 14.71% custom duties)]	1831.13	1926.27
(ii)	Front End Loader	30.00	52.97
(iii)	Pneumatic Fender (3 nos.) (Rs. 11 Lakhs per unit x 3 fenders)	33.00	33.00
(iv)	Miscellaneous Costs @ 5%	149.71	155.61
	TOTAL	**3143.84**	**3267.85**
C	**OPERATING COST**		
(i)	50 T Bollard pull Tug Hire Cost [KOPT: - (Rs.1.50 lakhs per day x 365 days)] [TAMP: -(Rs.1.50 lakhs per day x 365 days)]	547.5	547.50
(ii)	Fuel cost		
	- Tug KOPT- (160 Litres per Hour x 12 Hours operation per day x 365 days x 70% x Rs.60.25 per litre) TAMP- (160 Litres per Hour x 12 Hours operation per day x 365 days x 70% x Rs.48.33 per litre)]	294.98	237.09
	- Floating Crane [KOPT- (Main Engine - 96 lit/Hr x 6132 hours x Rs.60.25 per Litre) + (Auxiliary engine- 32 lit/Hour x 8760 hours x Rs.60.25 per Litre)] [TAMP-(Main Engine- 96 lit/Hr x 6132 hours x Rs.48.33 per Litre) + (Auxiliary engine- 32 lit/Hour x 8760 hours x Rs.48.33 per Litre)]	523.57	419.98
	- Front End Loader KOPT- (20 lit/ hr x 1530 hours x Rs.60.25 per Litre) TAMP-(20 lit/ hr x 1533 hours x Rs.48.33 per Litre)	18.44	14.82
(iii)	Insurance (1% of Total capital Cost)	31.44	32.68
(iv)	Repairs & Maintenance (5% of Total Capital Cost)	157.19	163.39
(v)	Depreciation (10% of total capital Cost)	314.38	326.79
(vi)	Launch Hire KOPT- [Fixed Charge- Rs.1750.00 per Day + Fuel Cost - Rs 550/- per hour x 3 hours per day x 255 days] TAMP-[Fixed Charge- Rs 1750.00 per Day + Fuel Cost - Rs.550/- per hour x 3 hours per day x 255 days]	10.60	10.60
(vii)	Miscellaneous (5% of Gross Fixed Asset Value)	157.19	163.39
	TOTAL	**2055.29**	**1916.23**
D	**RETURN ON CAPITAL EMPLOYED @ 16%**	**503.01**	**522.86**
E	**ANNUAL REVENUE REQUIREMENT**		
	- Operating Cost	2055.29	1916.23
	- Return on Capital Employed	503.01	522.86
		2558.30	**2439.09**
F	**PER TONNE HANDLING RATE (Foreign cargo)**		
	- Dry Bulk Cargo	**135.65**	**129.33**
	- Other Cargo	**238.00**	**227.84**
	PER TONNE HANDLING RATE (Coastal cargo)		
	- Dry Bulk Cargo	**81.39**	**77.60**
	- Other Cargo	**142.80**	**136.70**

								Annex - I (b)		
As per TAMP										
	Tonnage	**Foreign**	**Coastal**	**Handling rate**	**Cargo working days**	**% of working days**	**Revenue Requirement**		**Per tonne Foreign rate**	**Per tonne Coastal rate**
Dry Bulk	2003324	1662759	340565	7920	253	99%	2439.09	2414.70	129.33	77.60
Other Bulk	10792	10576	216	4224	3	1%		24.39	227.84	136.70
	2014116	**1673335**	**340781**		**256**		**2439.09**	**2439.09**		
As per KOPT										
	Tonnage	**Foreign**	**Coastal**	**Handling rate**	**Cargo working days**	**% of working days**	**Revenue Requirement**		**Per tonne Foreign rate**	**Per tonne Foreign rate**
Dry Bulk	2003324	1662759	340565	7920	253	99%	2558.30	2532.72	135.65	81.39
Other Bulk	10792	10576	216	4224	3	1%		25.58	238.96	143.38
	0	**1673336**	**340781**		**256**		**2558.30**	**2558.30**		

Annex - I (b)

As per TAMP

	Tonnage	Foreign	Coastal	Handling rate	Cargo working days	% of working days	Revenue Requirement		Per tonne Foreign rate	Per tonne Coastal rate
Dry Bulk	2003324	1662759	340565	7920	253	99%	2439.09	2414.70	129.33	77.60
Other Bulk	10792	10576	216	4224	3	1%		24.39	227.84	136.70
	2014116	**1673335**	**340781**		**256**		**2439.09**	**2439.09**		

As per KOPT

	Tonnage	Foreign	Coastal	Handling rate	Cargo working days	% of working days	Revenue Requirement		Per tonne Foreign rate	Per tonne Foreign rate
Dry Bulk	2003324	1662759	340565	7920	253	99%	2558.30	2532.72	135.65	81.39
Other Bulk	10792	10576	216	4224	3	1%		25.58	238.96	143.38
	0	**1673336**	**340781**		**256**		**2558.30**	**2558.30**		

For Dry Bulk Cargo:

Performance Standard in tons	Foreign	Coastal
8501-9000	135.88	81.53
7921-8500	132.56	79.54
7920	**129.33**	**77.60**
7919-7500	126.10	75.66
7499-7000	122.94	73.77

For other Cargo:

Performance Standard in tons	Foreign	Coastal
4726-5225	239.37	143.62
4225-4725	233.54	140.12
4224	**227.84**	**136.70**
4223-3725	222.14	133.29
3724-3225	216.59	129.95