

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

G. No. 39

New Delhi,

29 January 2015

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 transloading facility to be set up for handling of dry bulk 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/63/2014-KOPT

Kolkata Port Trust

...

Applicant

QUORUM

- (i). Shri. T.S. Balasubramanian, Member (Finance)
- (ii). Shri. Chandra Bhan Singh, Member (Economic)

ORDER

(Passed on this 8th day of January 2015)

This case relates to the proposal received from Kolkata Port Trust (KOPT) for fixation of tariff for the transloading facility to be set up for handling of dry bulk cargo at Haldia Dock Complex (HDC) of KOPT.

2.1. The main points made by KOPT in its proposal dated 26 November 2014 are summarized below:

(i). **General:**

- (a). 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. This apart, HDC has also initiated action for setting up of a new Greenfield Dock System (Haldia Dock II) at deep drafted locations upstream of Haldia for handling vessels at a draft of about 9 mtrs. On implementation of all these projects, HDC will be able to add additional capacity of more than 20 million tonnes of cargo.
- (b). In order to ensure materialization of the projected cargo at HDC, while obviating the draft constraints for handling fully laden Mother Vessels, HDC, has decided to engage a Transloading Service Provider (TSP) by way of granting license for creation of transloading facilities at deep drafted location where round the year transloading operations are possible. The TSP will provide transloading services both within the KOPT limits and within the radius of two nautical mile around a position earmarked by Latitude 21 08' 12 N Longitude 87 14 00' E falling within the limits of PPT.
- (c). The transloading operations envisaged by KOPT would comprise deployment of suitable Transshipper together with adequate daughter vessels. The fully laden Mother Vessels (hereinafter termed as OGV) carrying import cargo would directly call at the Transshipper where the Transloading Service Provider (TSP) will unload full/ part cargo from the OGV into the Transshipper/ daughter vessels. The transshipped cargo will be brought to Haldia by daughter vessels.
- (d). The dry bulk cargo being imported at HDC viz. coking coal, non-coking coal, Lime Stone, Raw Sugar etc. can be handled in this mode. The reverse operation will be done in case of export cargo like iron ore, thermal coal (coastal shipment) etc.
- (e). The transloading arrangement so envisaged by HDC, would benefit the trade in increasing their cargo throughput at HDC at a reduced overall logistic cost because of the following advantages:

- (i). To import/ export cargo by fully laden Panamax/ Capesize vessels and unload/ load them from/to a single point viz. the Transhipper.
 - (ii). Low turn round time of the OGVs by way of obviating existing system of two port handling mode and allowing fully laden OGV to be handled at the facilities under control of KOPT.
 - (iii). Low railway freight as well as better availability of rakes at Haldia for the Industries.
- (f). The Ministry of Shipping vide office order No. PD-11020/16/2014-PD.III dated 10.07.2014 has issued order under section 111 of the MPT Act., which contains the Standard Operating Procedure (SOP) for undertaking transloading operations by KOPT which, inter-alia, stipulates that KOPT may create transloading facilities by engaging suitable service providers.
- (g). In pursuance of this order of the Ministry, KOPT has decided to engage the service provider by granting licence, in terms of which the service providers will be authorized to levy charges as per Scale of Rates to be approved by TAMP.
- (h). The facility proposed to be created will comprise the following:-
- (i). A Panamax size Transhipper of following specification:
 - i. DWT: about 75000
 - ii. Hold capacity of transshipper - 75000 tons
 - iii. 4 cranes each with hoisting capacity of 30 tons under grab at 28 meters out reach for unloading of cargo from mother vessel.
 - iv. Mechanized loading system with hoppers, conveyors, shiploaders etc. for loading of daughter vessels.
 - (ii). Multi-Purpose Vessel (for various conservancy functions, supply of provision, movement of customs officials etc. This MPV can also perform the operations of a Tug.
 - (iii). 1 no. of 60 ton Bollard Pull Tug for berthing / unberthing of mother vessel alongside the transhipper.
 - (iv). Front-end Loader – 4 nos. for inside hatch cargo operations.
 - (v). 4 set of Fenders
- (i). The mother vessels carrying the cargo will be berthed alongside the transhipper with the help of the Tug and the MPV. The cargo from the mother vessels will be unloaded by the 4 cranes into the hoppers and from where the cargo will go directly into the daughter vessels through the mechanized loading system. Depending upon the operational requirement, the cargo can also be unloaded into the hold of the transhipper initially for subsequent loading into the daughter vessels through the mechanized loading system.
- (j). The consultant appointed to prepare operational feasibility report and revenue calculation for framing upfront tariff in creation, operation and maintenance of transloading facility has assessed the upfront tariff for undertaking transloading operation comprising of the following activities:

- (a). For transfer of cargo between mother vessels and daughter vessels with intermediate storage in the transhipper.
- (b). For berthing/unberthing of mother vessels alongside the transhipper.

(ii). **Optimal capacity:**

- (a). **Optimal quay capacity:**

Ship day Output:

The ship day output so computed with the help of the proposed equipping plan has been found as below:-

- (i). Each 30 ton crane with the grab will be able to hoist maximum of 20 ton after deducting the weight of the grab.
- (ii). Each crane will have 15 cycles per hour with the load in the prevailing open sea conditions with two ships in double banked conditions.
- (iii). In each cycle, every crane will on an average hoist 18 (90% of 20 tons) ton of cargo.

On the basis of the above, the shipday output has been computed as:
 $18 \times 4 \times 15 \times 25 = 25920$ tons i.e. 26000 tons per shipday.

Note: (i) The projected output has been compared with the actual output achieved by the Transloading Operator viz. M/s Jindal ITF engaged by IWA and NTPC for transloading of NTPC coal at Sand-heads/ Kanika Sand (Paradip Limit where exactly the proposed Transloading operation of KOPT will take place). These data are placed below:

Vessel	Effective Shipday output (after deducting idle hours due to weather related constraints)	Average output ship-day
MV Huayang Pioneer	7996	5905
MV Loch Crinan	20234	14132
MV Atout	17010	10924
MV Medi Venezia	17096	9351

It is clear from above that the output considered by KOPT is much higher than what have been actually achieved for same kind of transshipment operation in the same location where KOPT is proposing to set up transloading facility.

Capacity calculation

Transloading System capacity is the maximum cargo that can be handled by a transloader, which has been assessed at 6.6 million tonnes as shown in the table below:

Particulars	working	Capacity
Average Output Per Day of Transloader (tonnes per day)		
Average Cycle Time Per Crane ¹	4 minutes	
Number of Lifts per Hour	$60/4 = 15$	

Cargo Lifting Capacity of Grab	20 ² tonnes	
Grabbing Efficiency	90%	
Average Output Per hour per Crane ¹	Tonnes per hour (15 X 20 X 90%) = 270	
Average Output Per Day Per Crane	24 x 270 = 6480 tonnes per day	
Number of Cranes	4 Nos.	
Average Output Per Day of Transloader (O = N*C*H* F)	Tonner per day (6480x4) = 25920 ~26000	
Capacity of Transloading System = O X 365 X 70%	(26000x365x70%)	6.64 mts.

[Average Crane Output Per Day per Crane

1 Average cycle time = 4 min (during the Pre-bid meeting it was indicated by the bidders that due to rough sea conditions only 15 cycles may be achieved in an hour)

Maximum grabbing = 85% of the Grab Capacity = 85% X 20 tonnes = 17 tonnes

2 Grab lifting capacity = 30 tonnes including the weight of grab (10 tonnes). Hence the cargo lifting capacity = 20 tonnes]

(iii). **Capital Cost:**

The total capital cost is estimated at ₹252.44 crores. The breakup of the transhipper cost, cost of multipurpose vessel, equipment cost along with unit rate, number of equipment, etc furnished by the port is summarized in the table below:

(₹ in crores)				
Sl. No.	Particulars	Qty	Rate	Total
(i)	<u>Transloader Cost of Panamax Vessel</u>	1		
	(a) Cost of Panamax Vessel	1		74.2
	(b) Installation of Cranes	4		34.4
	(c) Cost of conveyor system	1		69.6
	(d) Refurbishing and Conversion Cost		10%	17.8
	(e) Customs Duty		10.3%	20.2
	(f) Miscellaneous		10%	19.6
	Total (i) – Transloader cost			235.8
(ii)	Fenders	4		0.44
(iii)	Front End Loaders	4	0.59	2.40
(iv)	Multi-Purpose Vessel	1	13.80	13.80
	TOTAL CAPITAL COSTS [(i) to (iv)]			252.44

(iv). **Operating cost:**

There are no guidelines/ norms prescribed for assessment of optimum transloading capacity, capital and O&M cost etc. in respect of transloading facilities proposed to be created by KOPT. However, the guideline of 2008 issued for fixing up of upfront tariff for PPP project with specific reference to “Coal Terminal” has been taken into account to the extent relevant. The details of operating cost estimates considered by the KOPT are tabulated below:

I. For Transloading system :

Sl. No.	Particulars	Workings	₹ in crores
(i).	Fuel	Transhipper - When in operation - 12 Tons per day - When idle : 4 tons per day The consultant has assumed the consumption rate of fuel of transhipper during operations as follows : 70 litres per hour per crane i.e.	

Sl. No.	Particulars	Workings	₹ in crores
		280 tons • 50 litres per hour of the mechanized system • 170 litres per hour of the transhipper accommodation, running of boilers, ballasting / de-ballasting etc. This consumption will continue throughout MPV / Tug - 160 liters per hour (160 Ltrs per hr * 12 hr per day for 365 days) Front end Loader : 10 liters per hour (4000 Hrs of working per year for 10 T front loaders) Charter Hire Cost of Tug – Rs. 5.475 crores @ Rs. 1.50 lakhs per day for 365 days IFO for Transloader (12 tonnes per day for 270 days @77.07879 ₹ per Ltr.)	5.402 26.164
(ii).	Hours of operations in a year	Transhipper : 365 X 24 X 0.7 = 6132 hours MPV / Tug : 12 X365 = 4380 hours As assessed by the consultant for berthing and un-berthing of mother vessels Front End Loader :- 4000 hours	
(iii)	Repair & Maintenance	7% of capital cost of ₹252.44	17.64
(iv).	Insurance	1% of capital cost of ₹252.44	2.52
(iv).	Depreciation	10.34% of capital cost of ₹252.44	26.06
(vi).	Other expenses	5% of capital cost of ₹252.44	12.60
	Total Operating cost		91.61

II. For Fenders and Tugs :

Sl. No.	Particulars	Workings	₹ in crores
(i).	Fuel	@160 Ltr. Per hour, 12 hr operation per day	5.402
(ii)	Charter Hire Tug	@200000 per day, 1 Tug	5.475
(iii)	Repair & Maintenance	7% of capital cost of ₹0.44	0.031
(iv).	Insurance	1% of capital cost of ₹0.44	0.004
(iv).	Depreciation	10.34% of capital cost of ₹0.44	0.046
(vi).	Other expenses	5% of capital cost of ₹0.44	0.022
	Total Operating cost		10.98

(v). Accordingly, the annual revenue requirement estimated by KOPT is as follows:

I. For Transshipment of Cargo:

Sl. No.	Particulars	(₹ in crores)
(i).	Operating cost	91.61
(ii).	Allowable ROCE @ 16% on ₹252.44 crores	40.39
	Total Revenue Requirement	132.00

II. For berthing of mother vessels (Fenders and Tugs) :

Sl. No.	Particulars	(₹ in crores)
(i).	Operating cost	10.98
(ii).	Allowable ROCE @ 16% on ₹0.44 crores	0.07
	Total Revenue Requirement	11.05

(vi). The KOPT has proposed the following tariff to meet the estimated revenue requirement:

(a). For the Transloading System:

Sl. No.	Particulars	
1.	Total Revenue Requirement	₹ 132.00 cr
2.	Optimum capacity of the system	6.64 million tonnes
3.	Tariff	₹ 198.70 per tonne

(b). For the Mother Vessel:

Sl. No.	Particulars	
1.	Total Revenue Requirement	₹ 11.05 cr
2.	Estimated GRT of Vessels called	6.64 million tonnes x 55% = 3.65 million tonnes
3.	Tariff	₹ 30.24 per GRT

2.2. The KOPT along with its proposal has furnished the draft Feasibility Report and the draft Scale of Rates for transloading operation of Dry Bulk cargo in the deep drafted areas of KOPT, at the transloading point under the limits of Paradip Port and any other areas to be designated by KOPT for this purpose.

3.1. From the copy of the KOPT proposal, the arrangement between KOPT and the Transloading Service Provider (TSP) was not clear. Accordingly, the KOPT was requested vide our dated 3 December 2014 to clarify the following position:

- (i). KOPT has stated that it has decided to engage TSP by way of granting authorization under a license. It is not clear whether the arrangement between KOPT and the TSP would be governed u/s 42(3) of the MPT Act.
- (ii). If the authorization arrangement u/s 42(3) is by way of a BOT concession agreement, then, in the absence of availability of an upfront tariff for the transloading operations at other major port trusts fixed in pursuance to the 2008 upfront tariff guidelines, the KOPT proposal may have to be processed in line with the stipulation contained in clause 2.4 of the 2013 Guidelines i.e. wherein Reference tariff would have to be fixed by following the stipulations contained in the 2008 Guidelines.
- (iii). If the authorization arrangement u/s 42(3) is other than by way of a BOT concession agreement, then as stipulated in clause 7.2 of the 2005 tariff guidelines, ceiling rates are to be prescribed for such service to be applied

commonly at the concerned port without reference to the individual service provider.

3.2. The KOPT has responded vide its letter dated 29 December 2014 which have been brought out in the subsequent paragraphs.

4. In accordance with the consultative procedure prescribed, a copy of the proposal of the KOPT dated 25 November 2014 was forwarded to the concerned users/ user organisations seeking their comments vide our letter dated 3 December 2014. Some of the users/ user organisations/ prospective service providers have furnished their comments. These comments were forwarded to the KOPT as feedback information. The KOPT has not furnished its comments on the comments of users/ user organisations/ prospective service providers till the finalization of the case.

5. Since the prospective bidders also have to be consulted in the case in reference, the KOPT was requested to directly forward a copy of its proposal to all prospective bidders requesting them to furnish their comments to KOPT directly and with a copy endorsed to us. The KOPT was also requested to confirm this position. In this connection, the KOPT vide its e-mail dated 08 December 2014 has endorsed to us a copy of the letter issued by it to 4 bidders forwarding a copy of the proposal.

6. Based on a preliminary scrutiny of the proposal, the KOPT was requested vide our letter dated 11 December 2014 to furnish additional information/ clarifications on few points. The KOPT has responded vide its letter dated 29 December 2014. The queries raised by us and the response of KOPT thereon are given below:

	Queries raised by TAMP	Reply furnished by KOPT
A.	<u>GENERAL:</u>	
(i).	As already requested by us under cover of our letter of even number dated 03 December 2014, the KOPT to clarify the following position:	
(a).	In its proposal, the KOPT has stated that it has decided to engage Transloading Service Provider (TSP) by way of granting authorization under a license. From the proposal, it is not clear whether the arrangement between KOPT and the TSP would be governed u/s 42(3) of the MPT Act. The KOPT to clarify the position.	The licensing arrangement between KOPT and TSP would be governed under Section 42(3) of the MPT Act.
(b).	If the authorization arrangement u/s 42(3) is by way of a BOT concession agreement, then, in the absence of availability of an upfront tariff for the transloading operations at other major port trusts fixed in pursuance to the 2008 upfront tariff guidelines, the KOPT proposal may have to be processed in line with the stipulation contained in clause 2.4 of the 2013 Guidelines i.e. wherein Reference tariff would have to be fixed by following the stipulations contained in the 2008 Guidelines. However, if the authorization arrangement u/s 42(3) is other than by way of a BOT concession agreement, then as stipulated in clause 7.2 of the 2005 tariff guidelines, ceiling rates are to be prescribed for such service to be applied commonly at the concerned port without reference to the individual service provider. The KOPT to clarify the position in this regard	The proposed licensing arrangement between KOPT and the TSP does not envisage transfer of Transloading assets to be deployed by the TSP. Hence, the licensing arrangement is not contemplated on a BOT mode. It may be added in this regard that the Ministry of Shipping vide Office Order No. PD-11020/16/2014-PD.III dated 10.07.2014 issued under Section-111 of the MPT Act approved engagement of Service Provider by Kolkata Port Trust for creation of transloading facilities. The tariff may accordingly, be notified by TAMP under the relevant provisions of Tariff Guidelines of 2005. The transloading arrangement proposed to be created by KOPT comprises the following operations:- (i) Transfer of cargo between the mother

	also.	vessels and the daughter vessels using a Transloader and other facilities. TSP shall charge tariff for this operation within the framework of the SOR proposed for approval of TAMP. (ii) Transportation of cargo by the daughter vessels upto Haldia Dock Complex. The pre-qualified applicant quoting the lowest freight for transportation of cargo by daughter vessels in the RFP stage will be declared as the successful bidder (TSP) for award of the licence. This procedure has been adopted to ensure that the overall transloading cost for bringing cargo to HDC remains attractive to the consignee / consignors. The licensing arrangement with TSP is proposed for 10 years. As such, the SOR to be notified by TAMP for item no. (i) above should be valid for 10 years to take care of the proposed period of licensing. Besides, it is also to be appreciated that the pre-qualified applicants will quote daughter vessel freight rate keeping the TAMP notified ceiling rates for transshipment operation in mind. The said freight rate to be identified through tender will be valid for 10 years with pre-determined escalation formula. In keeping with the uniqueness of this project, TAMP may consider as a very special case to give the tariff to be fixed valid for 10 years as per clause-3.1.8 of the 2005 Tariff Guidelines. The KOPT has revised the transloading tariff to ₹194.86 per ton (for foreign cargo) and has also proposed productivity linked tariff to be charged in ship basis. The revised SOR is furnished.
(c).	The KOPT to confirm the position regarding KOPT forwarding a copy of its proposal to all relevant RFQ applicants requesting them to furnish their comments to KOPT directly and with a copy endorsed to us and also about communicating the details about the joint hearing scheduled on 16 December 2014 to the RFQ applicants, while forwarding the proposal to them. The names and contact details of the RFQ applicants so consulted by KOPT to be furnished to us.	Confirmed. Incidentally, all the applicants in response to the RFQ have attended the joint hearing in Kolkata on 16.12.2014.
(ii).	The KOPT in its proposal has made a mention about the Transloader handling dry bulk cargo viz., coking coal, non-coking coal, Lime Stone, Raw Sugar etc. in the import cycle and cargo like iron ore, thermal coal (coastal shipment) etc. in the export cycle. Given that the KOPT envisages handling of multipurpose cargo through the Transloaders, the reason for generally adopting the norms prescribed for a Coal terminal in the Upfront tariff Guidelines of 2008, to be clarified.	The major cargo to be handled through transloading arrangement will be the imported Coal required by the steel industries and power utilities. Hence, KOPT had adopted the norms prescribed for a Coal Terminal in the Upfront Tariff Guidelines of 2008. However, we have proposed for having rates for other commodities like indigenous Thermal Coal, Iron Ore and other dry bulk cargo in the SOR so that the TSP does not face any difficulty in handling such commodities in case of necessity. However, it is reiterated that Coal will be the major commodity

		for handling through Transloading arrangement.
(iii).	The tariff arrangement of transfer of cargo from transloaders to berth by daughter vessel in import cycle and vise-versa in the export cycle may be clarified.	The tariff for transfer of cargo will be determined through the bidding process. Incidentally, KOPT has decided to award the licence to the pre-qualified applicant who will quote lowest tariff for transfer of cargo from the Transhipper to the designated berths of Haldia Dock Complex.
B.	Capacity of the Transloader:	
(i).	The KOPT has reported to have considered the average cycle time per crane at 4 minutes based on the indication received from the bidders during the pre-bid meeting. In this connection, the KOPT to confirm whether the average cycle time per crane at 4 minutes is the standard norm for a Transloader which is deployed for similar operations elsewhere in India or in other ports in the world. The KOPT to clarify whether it is technically feasible to have a lower average cycle time per crane for a Transloader, given that this can possibly lead to achieving higher productivity by the Transloader.	The entire transshipment operation is going to take place in the open sea condition at Sandheads and at Konica Sands and as such is exposed to the waves and swells continuously. From the data furnished by M/s. Jindal ITF relating to transshipment of NTPC coal, it has been noted that the vessels operations get intermittently disturbed due to weather related issues. Hence, the cycle time normally achieved by cranes at a sheltered port location cannot be considered in open sea conditions at Sandheads and Konica Sands. The Consultant after discussing with various agencies involved in such operations have assumed an average cycle time of 4 minutes which may be possible throughout the days of operations of the Transhipper.
(ii).	The reason behind considering deployment of 4 no. of cranes on the Panamax Vessel may be explained. The KOPT to clarify whether it is technically feasible to deploy higher number of cranes, thereby possibly leading to achieving higher productivity by the Transloader.	The Consultant has proposed for deployment of 4 cranes for achieving the productivity of about 26000 tonnes per day. It may be stated that the cargo after transshipment will have to come to Haldia Dock Complex by daughter vessels. Because of draft constraints, the daughter vessels can carry maximum of 25000 tonnes of cargo to HDC in a single parcel. Owing to limited capacity of Lock for ingress of loaded vessels, the tidal window available for movement of vessels to and from HDC etc., it has been noted that about one daughter vessel carrying about 25000 tonnes per day may be brought to HDC from the Transshipper. Hence, for achieving synchronized operation of transfer of cargo from the mother vessel and evacuation of the same by the daughter vessels, the transfer rate of cargo from the mother vessel has been planned at about 26000 tonnes per day. Keeping this productivity in view, the Consultant has optimized the requirement of cranes for unloading of mother vessels to 4.
(iii).	KOPT to furnish documentary evidence in support of the cargo lifting capacity of the grab at 30 tonnes including the weight of the grab (10 Tonnes).	The cargo lifting capacity of 30 tons with grab of the proposed cranes may be seen at the technical data sheet of M/s. Macgregor (copy enclosed). The tare weight of the grab is about 10 tonnes as gathered from the various agencies that provide grabs at HDC for unloading of cargo.
(iv).	A utilization factor of 70% is built in the capacity calculation of the Transloader by KOPT. In addition, the Grabbing efficiency of the Grab has been considered at 90%. It thus appears that the port has provided cushion at two places. It is to be noted that the upfront	The utilization factor of 70% is relating to the time when the cargo handling operations at the berths are expected to take place after absorbing all the idle hours, maintenance periods etc. However, the 90% grabbing efficiency has been considered during cargo

	guidelines of 2008 do not prescribe cushion in each parameter while assessing the capacity. The KOPT to, therefore, review the capacity calculation of the transloader in the light of the above position.	operational hours only. The Consultant has considered that a grab while picking up cargo from inside the hold of the ship in the open sea condition will be able to pick 90% of the grab volume on an average. This is a practical phenomenon which cannot be ignored while computing the optimum cargo transfer capacity of a Transhipper.
(v).	The KOPT has envisaged deployment of Panamax size Transloader. The average output per day of the said Transloader has been worked out at 26000 tonnes. The Upfront tariff Guidelines of 2008 for the Coal Terminal, which has been taken as base by the KOPT, prescribes the ship day output of a Panamax Vessel at 35000 tonnes for unloading and 40,000 tonnes for loading of cargo. Further, from the details about the Transshipment Performance of NTPC Coal Vessels at Sandheads/ Kanika Sand as furnished by the KOPT, it is seen that on some occasions the daily productivity of Transloaders has been 28168 and 31923. In such a scenario, the KOPT to justify considering the average output per day of the Transloader at 26000 tonnes.	The Upfront Tariff Guidelines are for cargo handling terminals in a sheltered port. It has already been stated that the transloading arrangement are going to be placed in an open sea condition at Sandheads and at Konika Sands which are exposed to vagaries of swell, wind and waves. As such, the productivity parameters mentioned in the Upfront Tariff Guidelines for sheltered ports cannot be made applicable for transshipment operations for all practical purposes. It is also to be stated from the performance data received from M/s. Jindal ITF, they have achieved maximum average productivity of 14000 tones. Only on two occasions, out of 33 occasions, they have achieved daily productivity of more than 26000 tonnes. The two incidents out of 33 situations do not reflect the overall scenario and therefore, cannot be considered as reference for assessing the average productivity.
C.	Capital cost:	
(i).	The KOPT has not furnished documentary evidence in support of the capital cost of the Panamax Vessel considered at ₹ 74.21 crores in its calculation. The documentary evidence to be furnished along with the detailed working to arrive at the capital cost as considered in the cost statement.	The consultant has taken into account the construction of a transshipper by converting an old Panamax vessel having residual life of about 10 years. The cost of old Panamax vessel has been considered by the Consultant on the basis of the sale data given in the "Clarksons Data Base" and taking average of those sale data. The sale figures considered by the consultant is furnished.
(ii).	Also, furnish documentary evidence with break-up of cost in support of the cost towards Conversion and Refurbishing considered at ₹17.82 crores and cost towards Miscellaneous cost viz., Mobilisation, Insurance and Freight considered at ₹ 19.60 crores. The documentary evidence to be furnished along with the detailed working to arrive at the capital cost as considered in the calculations in respect of each of the above said two components.	The conversion of a secondhand vessel into a Transhipper would require substantial modification of the vessel and steel works such as strengthening of Deck and other structures of the Panamax vessel, change of the hatch covers, upgrading the generators for operating the mechanized equipment and cranes for installations of cranes for unloading of cargo, mechanized loading system comprising hoppers, conveyors, ship-loaders etc., and for their subsequent operations with generators. Besides from the technical specification given by M/s MACGREGOR in their offer to the consultant (copy of which has been sent to TAMP), it may be seen that a number of works are to be done by the shipyard to be engaged by the TSP (page 20 to 29 of the technical specification given by M/s MACGREGOR). The consultant had accordingly assessed the lump sum cost for such refurbishing and modification as 10% of the capital cost after discussing with the shipyards. It may not be possible for giving any cost breakup

		of the same as the same would depend upon the condition of the vessel to be converted and many other factors. During the modification of the Panamax vessel into a Transshipper in the yards, the Panamax vessel will have to travel upto the yards and back as well as stationed at the yards during modification work. The modification work as per offer of M/s MACGREGOR will take 18 months of time. Besides 15 days of travel time has been considered. During the time of modification and conversion at the yards, the Panamax vessel will remain manned as also will incur other expenditure towards fuel etc. For this moderate cost of US\$ 5000 has been considered. The mobilization cost has been assessed as follows:- • Cost of fuel during travel (both way journey) - 15 days x 30 ton per day x ₹ 77079/- per ton = ₹ 3.4 crores • Operating cost of Panamax vessel at the yards - US \$5000 x 60 x 540 days = ₹ 16.2 crores • Total cost: – 16.2 + 3.4 = ₹ 19.60 crores.
(iii).	The requirement of 4 nos. of Fenders and 4 nos. of Front end Loaders for the transloading operation as considered by the port to be justified.	For berthing of mother vessels (Panamax/ Capesize) alongside the transshipper (Panamax size), 4 fenders will be required. Moreover, 4 cranes will operate at 4 hatches and so each hatch will be required to have one front-end loader in each of the hatch for pushing cargo from the sides of the ships into the hatch square for the grabs of the cranes to lift the same. Such requirement of front-end loader for unloading of dry bulk cargo is a normal cargo handling activity.
(iv).	The KOPT has not furnished documentary evidence in support of the capital cost of the 4 nos. of Front end Loaders considered at ₹ 2.40 crores in its calculation. The documentary evidence may be furnished along with the detailed working to arrive at the capital cost as considered in the cost statement.	The documentary evidence as sought for are enclosed. These were furnished along with the proposal earlier also.
(v).	The cost of 4 no. of Fenders have been considered at ₹ 0.44 crores in the calculation. However, it appears that the said cost is only the base price of the fenders and do not take into account the components of various taxes and cess as reflected in the Quotation. The KOPT to, therefore, take into these components in its calculation.	This has been taken into account in the revised calculation.
D.	Operating cost:	
(i).	With regard to the estimation of fuel cost, the KOPT to furnish the basis for:	
(a).	Considering the fuel consumption of Front end	The frontend loaders are used inside the

	loaders at 10 litres per hour.	hatches of the mother vessels for unloading of cargo. KOPT on the basis of fuel consumption of frontend loaders deployed inside the hatches assessed by PCRA in respect of berth no. 4B, has reworked the fuel consumption. As per PCRA report, the frontend loaders consume 0.015398 ltrs per ton. On the basis of this recent assessment, the fuel consumption for the frontend loaders for handling of 6.64 million tonnes of cargo comes to 102243 tonnes per annum. This has been considered as against 1, 60,000 tonnes considered earlier.
(b).	Considering the fuel consumption of Multipurpose Vehicle at 160 litres per hour.	The MPV will basically be an old 50 ton bollard pull tug to be used for various purposes such as fire-fighting, combating oil pollution situation, transport of Customs officials, etc. Besides, this will also be used as a tug as and when required to supplement the tug support of berthing of Capesize and Panamax vessels. The fuel consumption has been assumed similar to that of a tug approved by TAMP while notifying Scale of Rates for Kandla Port Trust vide Order No. TAMP/60/2011-KPT dated 02.05.2012. In the said order, TAMP had considered consumption of fuel at 160 ltrs per hour.
(c).	Considering the working of Multipurpose Vehicle at 4380 hours.	It has been assumed that the MPV would be used for 12 hours on an average per day for a period of 365 days. This has also been considered by TAMP in its Order No. TAMP/60/2011-KPT dated 02.05.2012 in respect of Kandla Port Trust.
(d).	Considering the fuel cost for transloader based on 12 tonnes/ day during the working period and 4 tonnes/ day during the idle period.	The cranes and the mechanized systems are going to be operated by electric power. As per the offer of M/s MACGREGOR, the installed motor power will be 1984 KW for the mechanized loading facilities and the 4 cranes will 345x4 KW additional motor load. It is seen that the power requirement of the mechanized system is about 5 times of each crane. The electric power will be supplied by operating generators. The fuel consumption has been assessed on the basis of consumption of fuel for feeding the above power requirement for running the generator sets for operating 04 cranes and a mechanized loading system comprising the ship loaders, conveyor system. Besides they have also considered the fuel consumption for providing power to other installation of the ships. The consultant has assessed consumption of 12 tonnes per day of IFO during operations by considering that each of the 4 cranes would consume 1 ton per day i.e. 4 tons per day by 4 cranes. The mechanized system would consume 5 tons per day. Hence for running the handling system, 9 tons of fuel would be consumed. In addition, there would be other load of 3 tons for the accommodation, de-ballasting pumps etc. This consumption of 12 tons has been assumed for 70% of 365 days and 03 tons per day when there will be no cargo handling operations (30%

		of 365 days).
(e).	Considering working period of the transloader at 255 days and idle period at 110 days.	The 255 days has been considered as per Tariff Guidelines for calculation of the optimum capacity.
(ii).	The KOPT to justify consideration of Repairs and Maintenance cost @ 7% of the capital cost based on the norm for the Coal Terminal in the 2008 Upfront tariff guidelines, given that the KOPT envisages handling various types of cargo at the transloading facility. Thus, the Repairs and Maintenance cost may have to be estimated @ 5% of the capital cost based on the norm for the Multipurpose cargo berth as prescribed in the 2008 Upfront tariff guidelines.	It has already been stated that the proposed Transshipper will have mechanized facilities comprising ship loaders, hoppers conveyors etc and would be akin to a mechanized terminal for handling of coal for both unloading and loading of coal.
(iii).	The KOPT to rework the cost of depreciation in respect of Transloader, Front end loaders, Multipurpose Vehicle and Fenders, based on the provisions of the Companies Act, 2013. The rate of depreciation so considered may also be indicated, quoting reference to the relevant provisions of the Companies Act, 2013.	Based on the suggestion from TAMP the consultant has checked the provisions regarding depreciation in the Companies Act 2013. However, the same is made in provision keeping new assets in mind which have a longer useful life cycle than second hand purchased assets. For such case it is a general practice to ascertain a rate of depreciation by deducting the salvage value (here capped to 5% of capital cost of second hand vessel as maintained in the provisions of Companies Act.) The revised Company Act does not specify the rates of depreciation of different class of assets in a very specific form. , and instead indicate the useful life of the asset concerned. However the below have been mentioned in the aforesaid Act and consequently a team of Chartered Accounts have ascertained below. Depreciation Rate under Straight Line Method for new assets: i) Building a) RCC Structure : 1.58 % p.a b) Other than RCC : 3.17 % p.a ii) Plant & Machinery (other than continuous plant) with three shift operation (6.33 % X 2): 12.66% p.a iii) Tugs, Barges, Survey Launches : 6.79% p.a iv) Bulk Carriers & Liner Vessels : 3.80 % p.a There is no specific provision dealing with depreciation for second hand assets in the Act. If the cost of new asset is available then the above rate can be applied on the same for the entire life. However, if the purchase value of a second hand asset with balance 10 year life is to be depreciated over the 10 year life and cost of new asset is not available, we may consider 9.5% p.a depreciation on the acquisition cost of the second hand asset; considering the principle of depreciating the value of asset (net of salvage value of 5%) over the useful life.

(iv).	As per clause 2.6.3. of the 2005 tariff guidelines, when Major Port Trusts procure any equipment, floating craft/ asset etc., they are required to analyse the least cost option between the expenses to be incurred if craft/ equipment / other assets are owned by the port/ hired. The KOPT to, therefore, furnish the cost benefit analysis of Hire vs. Purchase option undertaken by the KOPT for arriving at decision to hire Tugs for the transloading facility.	The Consultant has proposed for procurement of a 50 ton Bollard Pull second hand Tug to be used as Multipurpose Vessel. The Consultant has taken ₹ 13.8 crores as capital cost of the MPV. He has assessed fuel consumption at the scale approved by TAMP in respect of hiring of 50 ton Bollard Pull Tug at Kandla Port and notified vide order no. TAMP/60/2011-KPT dated 02.05.2012. Taking 16% ROCE on the above capital cost along with depreciation, operation and maintenance cost, insurance cost and other miscellaneous cost as per TAMP Guidelines, the total amount comes to ₹ 108305462 per annum. On the basis of charter hire cost of ₹ 1.5 lakhs per day and fuel consumption as per rate approved for Kandla Port, the annual amount comes to ₹108766262. It may therefore, be said that both the expenses are almost same. As such, it may be considered to accept hiring of one tug for vessel operations.
(v).	KOPT to furnish documentary evidence in support of the hire charges of tug at ₹ 200000/- per day.	The consultant has in fact, considered daily charter hire rate of Rs 150000 of a 50 ton bollard pull tug. However, in the report, it is wrongly mentioned as Rs 2 lakh per day. The assumed rate of Rs 1.5 lakh per day compares favorably with the charter hire rate considered by TAMP for similar tug at Kandla Port while passing the order vide no. TAMP/60/2011-KPT dated 02.05.2012.
(vi).	KOPT to furnish the basis for considering the fuel consumption of tug at 160 litres per hour. It may be noted that in the case of Kandla Port Trust (KPT), as referred by the KOPT, the fuel consumption of tug has been considered at 100 litres per hour.	The consumption factor has been taken from the order of TAMP vide Order No. TAMP/60/2011-KPT dated 02.05.2012 in respect of Kandla Port Trust.
(vii).	The reason for considering the fuel consumption of tug for 12 hour operation per day to be clarified.	Taken from Order No. TAMP/60/2011-KPT dated 02.05.2012 in respect of Kandla Port Trust.
(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 the 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 vessel related charges on the transloader. Similarly, in a recent case filed by PPT for fixation of tariff for its transhipper assets, the PPT has proposed recovery of port dues, pilotage and berth hire as applicable for transhipper. In this context, the KOPT is to examine whether vessel related charges pertaining to transloader has to be taken into account for estimation of operating cost of transloaders.	The transloading arrangements contemplated by KOPT is for bringing additional cargo to HDC, KOPT by way of handling fully laden cape size / Panamax vessels at the transshipment point and bringing the cargo to HDC by daughter vessels. This entire transloading arrangement is going to add cost to the consignee / consigner in bringing cargo to HDC. KOPT Board with a view to minimize the transloading cost have decided not to levy any charges on the transhipper, considering that the cargo and the daughter vessels would come to Haldia from where KOPT will earn revenue as per its SOR.
(E).	Scale of Rates:	

	To arrive at the marine charges to be levied on the Mother Vessel worked out at ₹ 30.24 per GRT, the KOPT has applied a factor of 55% on the capacity of the transloader assessed by it at 6.64 million tonnes, to arrive at the estimated GRT of the vessels at 3.65 million GRT. The basis for considering the factor of 55% to convert tonnes into GRT may be explained, supported by documentary evidence.	The consultant has relied on a study to assume a factor of 55% on the transloading capacity for arriving at rate per GRT for vessel related charges. The copy of the study is furnished. It is envisaged that 50% of the optimum capacity of the transhipper is going to be met by cape size vessels and the remaining 50% by Panamax vessels. In the proposal KOPT had furnished the DWT and GRT of typical cape size and Panamax vessels as follows:- <table border="1"> <thead> <tr> <th>Type of vessel</th><th>DWT(carrying capacity)</th><th>GRT</th></tr> </thead> <tbody> <tr> <td>Panamax</td><td>75106</td><td>40622</td></tr> <tr> <td>Cape size</td><td>150393</td><td>77255</td></tr> </tbody> </table> Assuming the above capacity distribution, the total GRT of 22 cape size and 44 Panamax vessels for bringing 6.64 million tonnes of cargo will be about 3486978. This corresponds to about 53% of the transloading capacity. Hence, the factor of 55% assumed by the consultant for arriving at rate per GRT is in order.	Type of vessel	DWT(carrying capacity)	GRT	Panamax	75106	40622	Cape size	150393	77255															
Type of vessel	DWT(carrying capacity)	GRT																								
Panamax	75106	40622																								
Cape size	150393	77255																								
(F).	Additional issue																									
		KOPT is proposing to introduce the following productivity linked tariff for handling by the Transloader as follows:- For Dry Bulk Cargo: <table border="1"> <thead> <tr> <th></th><th>Foreign</th><th>Coastal</th></tr> </thead> <tbody> <tr> <td>20000-21999</td><td>189.01</td><td>113.41</td></tr> <tr> <td>22000-23999</td><td>190.96</td><td>114.58</td></tr> <tr> <td>24000-25999</td><td>192.91</td><td>115.75</td></tr> <tr> <td>26000</td><td>194.86</td><td>116.92</td></tr> <tr> <td>26001-28000</td><td>195.83</td><td>117.50</td></tr> <tr> <td>28001-30000</td><td>196.81</td><td>118.09</td></tr> <tr> <td>30001-32000</td><td>197.78</td><td>118.67</td></tr> </tbody> </table> <u>Note:</u> To calculate the ceiling rates for performance below 26000 tonnes as shown above, the base rate was reduced by 1% for first two thousand tonnes and for the 2nd two thousand tonnes the rate was reduced by 2 % of the base rate. The rate for third thousand tonnes was arrived by reducing the base rate by 3%. Likewise performance below 20000 tonnes 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 26000 tonnes with the change that in such case the base rate is increased by 0.5% for first two thousand tonnes, 1% for 2nd two thousand tonnes and 1.5% for the third two thousand tonnes. The same methodology shall be adopted to calculate the rate beyond 32000 tonnes. The above slab rates have been computed on		Foreign	Coastal	20000-21999	189.01	113.41	22000-23999	190.96	114.58	24000-25999	192.91	115.75	26000	194.86	116.92	26001-28000	195.83	117.50	28001-30000	196.81	118.09	30001-32000	197.78	118.67
	Foreign	Coastal																								
20000-21999	189.01	113.41																								
22000-23999	190.96	114.58																								
24000-25999	192.91	115.75																								
26000	194.86	116.92																								
26001-28000	195.83	117.50																								
28001-30000	196.81	118.09																								
30001-32000	197.78	118.67																								

		the basis of the contract entered into by NPTC, IWAI and Jindal ITF for transportation of Coal to Farakkha after transloading where the contract provides that in case of delays in unloading of the mother vessel (OGV), TSP shall be liable to pay demurrages which shall not increase \$ 15000 per day for Panamax / Capesize vessels. The rate of dispatches will be half of the demurrage rate. The demurrage/ dispatch shall be settled on ship to ship basis.
--	--	--

7. A joint hearing on the case in reference was held on 16 December 2014 at the KOPT premises. At the joint hearing, KOPT and users/ user organisations/ prospective bidders have made their submissions.

8. 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>.

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

- (i). The proposal from Kolkata Port Trust (KOPT) is for fixation of upfront tariff for the transloading facility project to be set up for handling of various dry bulk cargo like Coking coal, non-coking coal, Limestone, Raw sugar etc in the import cycle and iron ore and thermal coal in the export cycle. In this connection, the KOPT has reportedly decided to engage Transloading Service Provider (TSP) by way of granting authorization under a license and where the licensing arrangement between KOPT and TSP would be governed under Section 42(3) of the MPT Act for a period of 10 years.
- (ii). Since the operation pertains to transshipping of goods between the vessels, it is one of the services listed under Section 42 of the MPT Act. In this connection, Section 42(4) of the Major Port Trusts Act, 1963, read with Section 48 requires this Authority to notify the rates in respect of identified services provided by persons authorised under Section 42(3) of the Major Port Trusts Act.

The Licensing arrangement is not contemplated on a BOT mode. In cases where authorisation arrangement u/s 42(3) is other than by way of a BOT concession agreement, Clause 7.2 of the tariff guidelines of 2005 requires this Authority to fix ceiling rates for such services to be applied commonly 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. Though the KOPT has stated that the proposal is to be processed based on the provisions of the 2005 guidelines, it has not categorically referred to Clause 7.2 of the 2005 Guidelines for fixation of tariff for the transloading facility. In the case in reference, the port does not envisage rendering the service on its own, nor is it under BOT mode. As stated above, it envisages to grant an authorization under a license to a TSP. Thus, the arrangement envisaged at KOPT will fall within the ambit of Clause 7.2 of the 2005 Guidelines. This case is, therefore, taken up for prescription of ceiling rates for the transloading facilities at KOPT to be applied commonly at the KOPT without reference to any individual service provider, following the stipulation contained in Clause 7.2. of the tariff guidelines of March 2005.

- (iii). The KOPT had filed its proposal in fag-end of November 2014. Subsequently, while responding to the queries raised by us in fag-end of December 2014, it has made some modifications in its proposal. The modifications are seen to be only with reference to the estimates of operating costs. The said modified proposal of December 2014, along with the information/ clarification furnished by the port during the proceedings of the case, has been considered in this analysis.
- (iv). Clause 2.4.1 of the tariff guidelines of 2005, *inter alia*, calls for making attempts to evolve normative cost of each component of port operations. No specific guidelines have been laid down to fix tariff for the transloading facilities, either under 2005 tariff guidelines nor under 2008 tariff guidelines.

Clause 7.2 of the said tariff guidelines, under which the proposal is being considered, does not specify any particular tariff fixing methodology but only talks about the procedural aspects of filing tariff proposal and fixing tariff irrespective of the operator. There are no specific guidelines for determining the normative tariff for the transloading facilities under the 2005 tariff guidelines.

In respect of KOPT and as stated earlier, the Transloader is envisaged to handle dry bulk cargo viz., coking coal, non-coking coal, Lime Stone, Raw Sugar etc. in the import cycle and cargo like iron ore, thermal coal (coastal shipment) etc. in the export cycle. However, on the ground that the major cargo to be handled through transloading arrangement will be the imported Coal required by the steel industries and power utilities, the KOPT has reported to have borrowed the norms prescribed for a Coal Terminal in the Tariff Guidelines of 2008 for fixation of upfront tariff in respect of some components of operating cost . The handling rates for other commodities are reported to have been prescribed in the SOR so that the TSP does not face any difficulty in handling such commodities in case of necessity. The proposal of KOPT is discussed elaborately in the subsequent paragraphs.

- (v). Capacity of the facility:
 - (a). Considering the average cycle time taken by each Crane at 4 minutes, the KOPT has worked out 15 Lifts per hour (60 minutes/ 4 minutes). Based on Cargo Lifting Capacity of Grab at 20 tonnes per lift and with a Grabbing Efficiency of 90%, the KOPT has determined the Average Output Per hour per Crane at 270 tonnes (15 lifts per hour x 20 tonnes per lift x 90% Grabbing Efficiency), which works out to Average Output Per Day Per Crane at 6480 tonnes (270 tonnes x 24 hours per day). Thereafter, considering the Average Output per Day per Crane at 6480 tonnes for 4 cranes and for a period of 365 days and at 70% utilization, the KOPT has determined the capacity of the Transloading facility at 6643000 tonnes per annum.
 - (b). The KOPT has reported to have considered the average cycle time per crane at 4 minutes based on the indication received by it from the bidders during the pre-bid meeting. According to KOPT, the entire transshipment operation is envisaged to take place in the open sea, which is exposed to the waves and swells continuously and that the average cycle time of 4 minutes has been assumed after discussing with various agencies involved in such operations and may be possible throughout the days of operations of the Transhipper. Based on the reasoning furnished by the KOPT and since no users/ prospective service providers have objected to the said parameter adopted by the KOPT, the average cycle time per crane at 4 minutes is relied upon in the analysis, as proposed by the Port.
 - (c). The Cargo Lifting Capacity of Grab at 20 tonnes per lift is reported to be the maximum hoisting capacity of each 30 tonne crane with the grab after

deducting the weight of the grab of 10 tonnes. This position is relied upon in the analysis.

- (d). With regard to the grabbing efficiency of 90% considered by the KOPT, the KOPT is of the view that a grab while picking up cargo from inside the hold of the ship in the open sea condition will be able to pick 90% of the grab volume on an average. In this regard, it is noteworthy that during the proceedings relating to the case in reference, though the users/ prospective bidders have expressed the lower grabbing efficiency ranging from 70% to 80%, the port has considered a higher grabbing capacity at 90%. The users/ prospective bidders have not furnished any basis for suggesting a lower grabbing efficiency. When a higher grabbing efficiency is proposed by the port and in the absence of any basis in support of the lower grabbing efficiency as sought by the users/ prospective bidders, the higher efficiency as proposed by the port is considered in this analysis.
- (e). In view of the draft constraints and operational restrictions, the cargo after transshipment will come to HDC by daughter vessels, which is reported to carry a maximum of 25000 tonnes of cargo in a single parcel. To achieve synchronized operation of transfer of cargo from the mother vessel and evacuation of the same by the daughter vessels, the transfer rate of cargo from the mother vessel has been planned closer to 26000 tonnes per day, which is possible by deploying 4 no. of cranes for unloading of mother vessels. Based on the position of KOPT and since none of the users/ prospective bidders have objected to the deployment of four cranes and also given that there are no norms prescribed with regard to deployment of cranes for the transloading facility, the proposal of the port envisaging deployment of 4 cranes for the transloading facility is relied upon in the analysis.
- (f). Based on the above parameters, the KOPT has arrived at the Average Output per Day per Crane for 4 cranes at 25920 tonnes, which has been rounded off to 26000 tonnes by KOPT in its calculation. The Upfront tariff Guidelines of 2008 for the Coal Terminal, which has been taken as base by the KOPT, prescribes the ship day output of a Panamax Vessel at 35000 tonnes for unloading and 40000 tonnes for loading of cargo. From the details of the Transshipment Performance of NTPC Coal Vessels at Sandheads/ Kanika Sand furnished by the KOPT, it is seen that on two occasions the daily productivity of Transloaders has been 28168 tonnes and 31923 tonnes.

In this connection, the KOPT is of the view that the Upfront Tariff Guidelines are for cargo handling terminals in a sheltered port, whereas, the transloading facilities are envisaged to be placed in an open sea condition, which are exposed to vagaries of swell, wind and waves and that, therefore, the productivity parameters mentioned in the Upfront Tariff Guidelines for sheltered ports cannot be made applicable for transshipment operations. Further, the KOPT has also stated that the two incidents out of 33 situations cannot be considered as reference for assessing the average productivity. The prospective bidders viz., JITF Limited (Jindal) during the joint hearing has stated that the average productivity of 26000 tonnes per day is high and that it should be about 20000 tonnes per day. The JITFL has, however, not furnished any analysis in support of the average productivity of 20000 tonnes per day.

Based on the reasoning furnished by the port and in the absence of any analysis in support of the lower productivity of the cranes, the position as furnished by the port is relied upon.

- (g). Accordingly, the optimal capacity of the transloading facility at 6643000 tonnes per annum, as furnished by the KOPT, is taken into account in the analysis.
- (vi). Based on the position that charges relating to the Fenders and tugs will be collected in the form of port charges to the mother vessel while berthing/unberthing of Mother Vessels along with the Transhipper, the KOPT has considered the capital and operating cost in respect of Fenders and Tugs separately, so as to enable recover the said costs from the tariff to be recovered from the mother vessels.
- (vii). Capital Cost:
- (a). The capital cost considered by the KOPT comprises of cost of Panamax Vessel with Residual life 10 years, Installation of 4 nos. of new Cranes, Installation of new Conveyor System, Conversion and Refurbishing Cost of the old Panamax vessel @ 10%, Customs Duty @ 10.31%, Miscellaneous cost @ 10%, Cost of 4 nos. of new Front End Loaders, old Multipurpose Vehicle (MPV) and cost of Fenders. It is assumed that the KOPT would have ensured and satisfied itself that the above mentioned capital assets would be sufficient to operate the transloading facility in a smooth manner.
- (b). The KOPT has envisaged deployment of a second hand Panamax vessel having residual life of about 10 years, as a Transhipper. Since the vessel will be static in water, the KOPT has compromised on the cost of the Panamax vessel. At the same time, brand new equipment like cranes, hoppers, conveyors etc., are envisaged to be deployed so as to get better productivity.
- (c). The cost of old Panamax vessel at 12.37 million dollars is reported to have been considered based on the average of the past sale data obtained by KOPT from outside parties. The position as reported by the KOPT is relied upon. The exchange rate of ₹ 60/- per US dollar as considered by KOPT is updated at ₹ 63.3183 per US dollar, as prevailing at the time of finalization of the case in reference.
- (d). The KOPT has furnished documentary evidence in support of the cost of the cranes, conveyor system and Multi-Purpose Vehicle, (MPV). However, the exchange rate of ₹ 60/- per US dollar as considered by KOPT is updated at ₹ 63.3183 per US dollar, as prevailing at the time of finalization of the case in reference.
- (e). As stated earlier, the KOPT has envisaged deployment of a second hand Panamax vessel as a Transhipper. Accordingly, the KOPT has estimated the lump sum cost at 10% of the capital cost for refurbishing/ modification/ conversion of a secondhand vessel into a Transhipper, reportedly based on the discussion with the shipyards. The KOPT has, however, expressed its inability to furnish any cost breakup as the same is reported to depend upon the condition of the vessel to be converted and many other factors. In this regard, it is relevant to mention here that none of the users/ prospective service providers have objected to the lump sum cost considered for Conversion and Refurbishing. The lump sum cost as estimated by the port is considered in the analysis.
- (f). The Customs duty at 10.3% of the cost of Panamax Vessel, Cranes, Conveyor System and Conversion and Refurbishing Cost, as furnished by the port is taken into account.

- (g). The Miscellaneous cost of 10% estimated by the KOPT is reported to be towards the operating cost including fuel required during the period of modification of 18 months as well as 15 days' time for the travel of the Panamax vessel upto the yards and back. For the purpose, the KOPT has considered the fuel cost during travel at 30 ton per day for 15 days at ₹ 77079/- per tonne of fuel and the operating cost of the Panamax vessel at the yards at US \$5000 per day for 540 days. No basis has been furnished by the port in respect of these components of capital costs. At the same time, it is to be recognized that such costs are essential to put the transloading facility into operation. Given that no users/ prospective bidders have objected to these components of capital costs, the same is taken into account in the analysis.
 - (h). Cost of each Front end loaders is estimated to cost about ₹ 0.5927 crores. As reported by KOPT, since 4 cranes will operate at 4 hatches, each hatch will be required to have one front-end loader in each of the hatch for pushing cargo from the sides of the ships into the hatch square for the grabs of the cranes to lift the same. Since the Front end loaders appear to be integral to the unloading operation and given that no users/ prospective bidders have objected to the capital cost of Front end loaders, the same is taken into account in the analysis, though no documentary evidence is produced by KOPT in support of the cost.
 - (i). The KOPT has furnished documentary evidence in respect of the cost of 4 nos. of Fenders at a total cost of ₹ 0.44 crores. The said cost is only the base price of the fenders and do not take into account the components of various taxes and cess as reflected in the Quotation. In spite of a specific request, the KOPT has not taken into account, these cost components to arrive at the cost of Fenders. The same are taken into account in the analysis, in addition to the base price of the Fenders.
- (viii). Operating cost:
- (a). Fuel Cost:
 - (i). Based on the consumption of fuel by each of the asset viz., Front loaders, MPV, Transloader and Tug and considering the cost of fuel at ₹ 77.07879 per litre, the Fuel Cost has been estimated by KOPT in respect of each of the asset.
 - (ii). In case of Front end Loaders, the KOPT has considered the fuel consumption at 0.15398 litres per tonne of cargo handled through the transloader, based on the Report of Petroleum Conservation Research Association (PCRA). Considering that there is no objection from the users/ prospective bidders, this Authority is inclined to consider the fuel consumption of front end loaders as estimated by KOPT. A calculation error noticed in the computation of estimate of fuel cost of front end loader by KOPT, is rectified.
 - (iii). Based on the position that the MPV envisaged to be deployed will basically be an old 50 ton bollard pull tug to be used for various purposes such as fire-fighting, combating oil pollution situation, transport of Customs officials, etc., and also to be used as a tug as and when required to supplement the tug support of berthing of Capesize and Panamax vessels, the KOPT has reported to have considered the consumption of fuel of MPV at 160 litres per hour, based on the fuel consumption for tug considered in the Order No. TAMP/60/2011-KPT dated 02.05.2012 passed by this

Authority pertaining to Kandla Port Trust. In this connection, it is relevant to mention here that the Order of KPT referred by KOPT above is an Order disposing of the proposal received from the KPT for revision of Pilotage Charges. In the said Order, the fuel consumption of Tugs has been considered at 160 litres per hour based on the actual position at KPT. Considering that the KOPT has treated the MPV as similar to a tug, the fuel consumption of 160 litres per hour in respect of MPV is accepted.

With regard to considering the fuel consumption for 12 hours in a day, the operational period of 12 hours for MPV is also based on the above referred Order of KPT, where the operational hours of tug was considered at 12 hours based on the actual position prevailing in Kandla then. The same position is relied upon in the current analysis also.

- (iv). The fuel cost for transloader is estimated to be based on the fuel consumption of 12 tonnes/ day during the working period (255 days) and 4 tonnes/ day during the idle period (110 days). The cranes and the mechanized systems are going to be operated by electric power supplied by operating generators. By considering that each of the 4 cranes would consume 1 ton per day and the mechanized system would consume 5 tons per day, 9 tons of fuel per day has been assessed by KOPT for running the generator sets for operating 04 cranes and a mechanized loading system comprising the ship loaders, conveyor system. Besides, there would be a load of 3 tons for the accommodation, de-ballasting pumps etc., thereby aggregating to 12 tons of fuel per day. Thus, the consumption of 12 tons has been considered in respect of operational days and 3 tons has been considered in respect of idle days. This position is relied upon in the analysis.
- (v). The consumption of fuel of Tug at 160 litres per hour is seen to be based on the fuel consumption for tug considered in the Tariff Order of KPT as referred above and hence considered in the analysis.
- (vi). The KOPT has furnished documentary evidence in support of the cost of High Flash High Speed Diesel (HFHSD) considered by it in its calculations. The same is taken into account for computation of fuel cost.
- (vii). During the joint hearing, the KOPT has requested to keep a provision to accommodate fuel escalation. Since the tariff is to be linked to Wholesale Price Index (WPI), for the reasons explained subsequently, the need for prescription of a separate escalation factor pertaining to fuel alone is not found necessary.
- (b). The estimation of Repairs and Maintenance Cost at 7% of the Capital cost, Insurance cost at 1% of the Capital cost and Other Expenses at 5% of the Capital cost, are seen to be as per the provisions prescribed in the 2008 Upfront tariff guidelines for a Coal terminal. For the reasons brought out above, the adoption of the provisions as applicable for a Coal terminal is considered and accordingly, the estimation of various expenses at the said percentage is relied upon in the analysis. However, the amount as estimated by us has undergone a change owing to the change in the exchange rate considered in the estimation of capital cost of the assets.
- (c). The port has calculated depreciation on all assets at the rate of 9.50%, on the ground that there is no specific provision dealing with depreciation for

second hand assets in the Companies Act of 2013. In this regard, it is relevant to state that it is only the MPV and Panamax Vessel refurbished into a Transloader are old assets. All other assets would be new assets. In such a situation, considering of depreciation of 9.5% across all assets does not appear to be appropriate. Based on the reasoning furnished by the port, the depreciation of cost of the MPV and panamax vessel including the refurbished cost is considered at 9.5%. However, depreciation on all other assets is considered at 10%, as is considered in respect of equipment in other upfront tariff cases.

- (d). The tug hire charges of ₹ 150000/- per day is reported to be reasonable considering the tug hire charges of about ₹ 167000/- per day considered in respect of the KPT case, as referred above. The tug hire charge as considered by the port is relied upon.
- (ix). Return on Capital Employed is allowed at 16% of the estimated capital cost of the facility.
- (x). Thus, the Annual Revenue Requirement (ARR), which is the sum total of the annual operating cost and the return on the capital employed, works out to ₹ 142.54 crores as against the revenue requirement of ₹ 129.43 crores estimated by the KOPT, in respect of transloading system and the ARR works out to ₹ 11.10 crores as against the revenue requirement of ₹ 11.05 crores estimated by the KOPT, in respect of fenders and tugs.
- (xi). (a). Considering the ARR of ₹142.54 crores and considering the optimal capacity of the transloading facility at 6643000 tonnes per annum, the rate for the transloading facility works out to ₹ 214.57 per tonne as against the rate of ₹194.84 proposed by the port.
- (b). Further, considering the ARR of ₹11.10 crores and considering the estimated GRT of the vessels (at 55% of the optimal capacity of the transloading facility at 6643000 tonnes per annum), the rate to be levied on the Mother Vessel works out to ₹30.39 per GRT as against the rate of ₹30.23 per GRT proposed by the port.

As stated above, to arrive at the marine charges to be levied on the Mother Vessel worked on per GRT basis, the KOPT has applied a factor of 55% on the capacity of the transloader assessed by it at 6.64 million tonnes, to arrive at the estimated GRT of the vessels at 3.65 million GRT. The factor of 55% is reported to be based on a Study and hence is relied upon in the analysis.

- (c). The difference in the respective rate is mainly attributable to difference arising due to consideration of updated exchange rate in the estimation of capital costs.
- (xii). Based on the above position, the Cost statement furnished by the KOPT has been modified. The modified Cost statement is attached as **Annex**.
- (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). Except for the definition of 'Transloading Point', 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.
- (b). Therefore, only S.3 and S.4 of the proposed draft SOR, which prescribe the rate per GRT to be levied towards marine charges on Mother Vessels and the per tonne rate towards transloading respectively and the conditionalities governing the rates, along with the definition of the term 'Transloading point' are prescribed now.
- (xiv). The KOPT has furnished description to S.3 relating to levy of Marine Charges on Mother Vessels stating that Charges are to be levied by the Service Provider on the Mother Vessels calling at the Transloading Facility against provision of required marine related services like tug assistance, fenders as well as for providing conservancy services at the Transloading points. The proposed description is approved.
- (xv). The KOPT has proposed a note in S.4 of the proposed draft SOR so as to mention that the charge prescribed under S.4 is a composite charge for unloading of the cargo from the mother vessel and transfer of the same to a daughter vessel directly or unloading the cargo from the mother vessel to Transloader first and subsequently loading of the same from transloader to a daughter vessel, or vice versa in case of export, including stevedoring and all other allied services. The note also states that the charge will be applicable for transloading operation in the 'Transloading Point' as well as any other area of KOPT and shall be applicable on the quantity transloaded, as determined through the Draft Survey Report. Since the proposed note elaborates about the scope of work that would be undertaken with regard to the proposed levy, the proposed note is approved.
- (xvi).
 - (a). Clause 5.9 of the 2005 Guidelines calls for linking tariff to the benchmark levels of productivity, providing incentive for better performance and disincentive for performance below the benchmark levels. Accordingly, as agreed by the KOPT during the joint hearing, in the presence of users and prospective bidders, it has subsequently, 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.
 - (b). The performance linked tariff structure proposed by KOPT provides for reward by way of an increment in the base rate by 0.5% for the 1st 2000 tonnes, 1% for 2nd 2000 tonnes and 1.5% for the 3rd 2000 tonnes and so on, and a reduction in the base rate by 1% for the 1st 2000 tonnes, 2% for the 2nd 2000 tonnes and 3% for the 3rd 2000 tonnes. For the purpose, the KOPT has considered the average output of 26000 tonnes per day, as considered in the optimal capacity calculation, as a cut-off point for formulating the performance linked tariff. The port has stated that the proposed slab structure is based on some arrangement with regard to the transloading operations prevailing elsewhere.
 - (c). Based on the position put forth by KOPT and given that the prescription of performance linked tariff would enhance the productivity levels and safeguard the interest of the users, the proposal of the port to prescribe performance linked tariff as furnished by it, is approved.

- (d). With regard to prescription of disincentive for under performance, if the rate for performance below the benchmark level is prescribed, it may lead to the service provider not in a position to recover the estimated annual revenue requirement. It was in this backdrop that while recently disposing of the proposal received from Paradip Port Trust (PPT) for prescription of a common ceiling tariff for use of HMC, no disincentive for under performance of the HMC was prescribed as proposed by the PPT. However, in the case of KOPT in reference, since the KOPT itself has proposed for disincentive for under performance, it may be appropriate to prescribe slab wise rates for the performance level below the base level, as proposed by the Port.
- (xvii). The KOPT has also proposed a note in S.5 of the proposed Scale of Rates to the effect that a fee, as would be notified by this Authority from time to time, will be levied on the cargo transloaded from the mother vessel at the 'Transloading Point' under the limits of PPT, for remittance of the same to Paradip Port. The said fee will be levied on the cargo transloaded from/ to the mother vessel only, as determined by the Draft Survey Reports and that the present rate of the fee is ₹ 10.00 per MT as per notification of TAMP vide G. No. 226 dated 25 July 2014. The proposed note flows from the Order no. TAMP/33/2014-General dated 17 July 2014 passed by this Authority in compliance of the direction issued by the Central Government under Section 111 of the Major Port Trusts Act, 1963, and hence, is prescribed.
- (xviii). The KOPT has also proposed a note in S.6 of the proposed Scale of Rates to the effect 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. Since the proposed note provides clarity, the same is also prescribed.
- (xix). The KOPT has also proposed a note in S.7 of the proposed Scale of Rates to the effect that the tariff caps will be indexed to inflation but only to an extent of 60% of the variation in the Whole sale Price Index (WPI) occurring between 1 January 2015 and 1 January of the relevant year is based on 2008 guidelines. This is discussed in the following paragraph.
- (xx). Clause 3.1.8 of the tariff guidelines of 2005 stipulate fixation of tariff for the period of 3 years. However, the said Clause also provides for prescription of a different period in any individual case. Citing that the KOPT would authorize TSP by way of issue of a licence for a period of 10 years, the port has proposed a tariff validity for a period of 10 years. Generally, by prescribing a tariff validity period of 3 years, the port, after the end of the validity period gets an opportunity to submit a fresh proposal by factoring into the parameters prevailing then. However, if the validity is to be prescribed for a period of 10 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 10 years and to have a stability in tariff for a period of 10 years, it may be appropriate to prescribe validity for 10 years, based on the discretion available to this Authority in Clause 3.1.8. Incidentally, incase of a BOT operator operating at Cochin Port Trust (COPT), tariff was prescribed for a period of 6 years covering two tariff cycles. However, inorder 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 1 April 2014 and 1 April of every succeeding year, by borrowing the provision available in the 2008 upfront tariff guidelines, as proposed by the KOPT.

10.1. In the result, and for the reasons given above and based on a collective application of mind, this Authority approves the following:

- (i). The definition of 'Transloading Point':

“‘Transloading Point’ shall mean the area notified under the limits of Paradip Port Trust, presently comprising radius of 2 nautical miles around a position earmarked by Lat 20 08 12” N Long 087 14 00” E, to be used exclusively for transloading operations.”

(ii). **Marine Charges on Mother Vessels:**

Charges to be levied by the Service Provider on the Mother Vessels calling at the Transloading Facility against provision of required marine related services like tug assistance, fenders as well as for providing conservancy services at the Transloading points.

Sl.No.	Description of vessel	Rate in ₹ per GRT
1.	Vessel engaged in Foreign trade	30.39
2.	Vessel engaged in Coastal trade	18.23

(iii). **Transloading Charge:**

SI No	Commodity	Rate in ₹ per Metric Tonne	
		Foreign	Coastal
(1)	Thermal Coal /Iron Ore	214.57	214.57
(2)	All Other Dry Bulk Cargo	214.57	128.74

Notes:

- The charges prescribed is a composite charge for unloading of the cargo from the mother vessel and transfer of the same to a daughter vessel directly or unloading the cargo from the mother vessel to Transloader first and subsequently loading of the same from transloader to a daughter vessel, or vice versa in case of export, including stevedoring and all other allied services.
- The charge will be applicable for transloading operation in the ‘Transloading Point’ as well as any other area of KOPT and shall be applicable on the quantity transloaded, as determined through the Draft Survey Report.
- The prescribed rate is the base rate for achieving minimum level of productivity of 26000 tonnes per day to be computed as per the formula provided in the Licence Agreement.

The productivity wise slab rates shall be as follows:-

(₹ per MT)

Average Rate of Transfer of Cargo between mother vessel and Transshipper/ daughter vessel	Ceiling Rate for Iron Ore, Thermal Coal and other Foreign Cargo	Ceiling Rate for Coastal Cargo (Other than Iron Ore and Thermal Coal)
20000-21999	208.13	124.88
22000-23999	210.27	126.17
24000-25999	212.42	127.45
26000	214.57	128.74
26001-28000	215.64	129.38
28001-30000	216.71	130.03
30001-32000	217.78	130.67

Note:

The Average rate of transfer of cargo between mother and Transhipper / daughter vessel will be calculated by the formula –

**Total cargo transferred between OGV and the Transhipper and / OR
between OGV and daughter vessel x 24
Cargo Transfer time (in hours) [CTT].**

The CTT will be calculated on the basis of Statement of Facts to be signed by the Master of the mother vessel or its agent. The SoF will mention the time to be considered for computation of cargo transfer rate.

To calculate the ceiling rates for performance below 26000 tonnes as shown above, the base rate was reduced by 1% for first two thousand tonnes and for the 2nd two thousand tonnes the rate was reduced by 2 % of the base rate. The rate for third thousand tonnes was arrived by reducing the base rate by 3%. Likewise performance below 20000 tonnes 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 26000 tonnes with the change that in such case the base rate is increased by 0.5% for first two thousand tonnes, 1% for 2nd two thousand tonnes and 1.5% for the third two thousand tonnes. The same methodology shall be adopted to calculate the rate beyond 32000 tonnes.

- (d). A fee, as would be notified by TAMP from time to time, will be levied on the cargo transloaded from to the mother vessel at the 'Transloading Point' under the limits of PPT, for remittance of the same to Paradip Port. The said fee will be levied on the cargo transloaded from/to the mother vessel only, as determined by the Draft Survey Reports.

The present rate of the fee is ₹ 10.00 per MT as per notification of TAMP vide G. No. 226 dated 25 July 2014.

- (e). 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.
- (f). 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."

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

10.3. The KOPT is directed to incorporate the rate and conditionalities approved under paragraph no. 10.1 of this Order suitably in its Scale of Rates.

(T.S. Balasubramanian)
Member (Finance)

COST STATEMENT FOR FIXATION OF CHARGES FOR THE TRANSLOADING FACILITY PROJECT TO BE SET UP FOR HANDLING OF DRY BULK CARGO AT HALDIA DOCK COMPLEX OF KOLKATA PORT TRUST.

₹ in Crores

Sr. No.	Particulars	Estimates furnished by KOPT in its original proposal of November 2014		Estimates furnished by KOPT in its revised proposal of December 2014		Estimates modified by TAMP	
I	Capacity of Transloading System						
	Average Cycle Time Per Crane	In minutes	4	In minutes	4	In minutes	4
	Number of Lifts per Hour	60 minutes/ 4 minutes	15	60 minutes/ 4 minutes	15	60 minutes/ 4 minutes	15
	Cargo Lifting Capacity of Grab	In tonnes	20	In tonnes per lift	20	In tonnes per lift	20
	Grabbing Efficiency		90%		90%		90%
	Average Output Per hour per Crane (in tonnes)	15 X 20 X 90%	270	15 X 20 X 90%	270	15 X 20 X 90%	270
	Average Output Per Day Per Crane (in tonnes)	24 hours x 270 tonnes per hour	6480	24 hours x 270 tonnes per hour	6480	24 hours x 270 tonnes per hour	6480
	Number of Cranes		4		4		4
	Average Output Per Day of Transloader	6480 Tonnes per day x 4 cranes	25920	6480 Tonnes per day x 4 cranes	25920	6480 Tonnes per day x 4 cranes	25920
	Output per day rounded off (in tonnes)		26000		26000		26000
	Capacity of Transloading System (in tonnes)	(26000 tonnes per day x 365 days x 70%)	6643000	(26000 tonnes per day x 365 days x 70%)	6643000	(26000 tonnes per day x 365 days x 70%)	6643000
II	Capital Cost						
A	For Transloading System						
	Panamax Vessel (Residual life 10 years)	12.37 million \$ x Rs. 60 per \$	74.22	12.37 million \$ x Rs. 60 per \$	74.22	12.37 million \$ x Rs. 63.3183 per \$	78.32
	Installation of Cranes (4 nos.)	5.73 million \$ x Rs. 60 per \$	34.38	5.73 million \$ x Rs. 60 per \$	34.38	5.73 million \$ x Rs.63.3183 per \$	36.28
	Installation of Conveyor System	11.60 million \$ x Rs. 60 per \$	69.60	11.60 million \$ x Rs. 60 per \$	69.60	11.60 million \$ x Rs.63.3183 per \$	73.45
	Conversion and Refurbishing Cost @ 10%	2.97 million \$ x Rs. 60 per \$	17.82			10% on Rs.189.06 crores	18.81
	Customs Duty @ 10.3%		20.19		20.19	10.3% on Rs.206.86 crores	21.31
	Miscellaneous cost @ 10%		19.60		19.60	10% on Rs.206.86 crores	20.69
	Front End Loaders (4 nos.)	Rs. 0.5927 crore per loader x 4 loaders	2.37	Rs. 0.5927 crore per loader x 4 loaders	2.37	Rs. 0.5927 crore per loader x 4 loaders	2.37
	Multi Purpose Vehicle	2.30 million \$ x Rs. 60 per \$	13.80	2.30 million \$ x Rs. 60 per \$	13.80	2.30 million \$ x Rs.63.3183 per \$	14.56
	Total (A)		251.98		251.98		265.79
B	For Tugs and Fenders						
	Fenders	Rs. 0.11 crore per fender x 4 fenders	0.44	Rs. 0.11 crore per fender x 4 fenders	0.44	(Rs.0.11 crore per fender x 4 fenders)+Taxe	0.58
	Total (B)		0.44		0.44		0.58
	Total Capital cost (A + B)		252.42		252.42		266.37
III	Operating Cost						
A	For Transloading System						
	Fuel cost for Front loaders	10 litres per hour x Rs 77.07879 per litre x 4000 hours x 4 Cranes	1.23	0.15398 litres per tonne x Rs 77.07879 per tonne x 6643000 tonnes	0.79	0.15398 litres per tonne x Rs 77.07879 per tonne x 6643000 tonnes	7.88
	Fuel cost for MPV	160 litres per hour x Rs 77.07879 per litre x 12 hours per day x 365 days	5.40	160 litres per hour x Rs 77.07879 per litre x 12 hours per day x 365 days	5.40	160 litres per hour x Rs 77.07879 per litre x 12 hours per day x 365 days	5.40
	Fuel Cost for Transloader	(12 tonnes of fuel per day on working days x 255 days x Rs. 77078.79 per tonne) + (3 tonnes of fuel per day on idle days x 110 days x Rs. 77078.79 per tonne)	26.16	(12 tonnes of fuel per day on working days x 255 days x Rs. 77078.79 per tonne) + (3 tonnes of fuel per day on idle days x 110 days x Rs. 77078.79 per tonne)	26.16	(12 tonnes of fuel per day on working days x 255 days x Rs.77078.79 per tonne) + (3 tonnes of fuel per day on idle days x 110 days x Rs. 77078.79 per tonne)	26.13
	Repair & Maintenance	7% of Capex	17.64	7% of Capex	17.64	7% of Capex	18.61
	Insurance	1% of Capex	2.52	1% of Capex	2.52	1% of Capex	2.66
	Depreciation	10.34% of Capex	26.06	9.50% of Capex	23.94	9.50% on cost of Panamax Vessel incl. Refurbishing cost & MPV and 10% in respect of Other assets	26.04
	Other expenses	5% of Capex	12.60	5% of Capex	12.60	5% of Capex	13.29
	Total (A)		91.61		89.05		100.01
B	For Tugs and Fenders						
	Tug hire charges	Rs. 150000 per day per tug x 365 days	5.48	Rs. 150000 per day per tug x 365 days	5.48	Rs. 150000 per day per tug x 365 days	5.48
	Fuel cost of Tug	160 Litres per Hour x 12 Hours operation per day x 365 days x Rs.77.07879 per litre	5.40	160 Litres per Hour x 12 Hours operation per day x 365 days x Rs.77.07879 per litre	5.40	160 Litres per Hour x 12 Hours operation per day x 365 days x Rs.77.07879 per litre	5.40
	Repair & Maintenance Cost	7% of Capex	0.03	7% of Capex	0.03	7% of Capex	0.04
	Insurance	1% of Capex	0.00	1% of Capex	0.00	1% of Capex	0.01
	Depreciation	9.50% of Capex	0.04	9.50% of Capex	0.04	10% of Capex	0.06
	Others	5% of Capex	0.02	5% of Capex	0.02	5% of Capex	0.03
	Total (B)		10.98		10.98		11.01
	Total Operating cost (A + B)		102.58		100.02		111.02
IV	Return on Capital Employed						
A	For Transloading System		40.39	16% on Rs 251.98 crores	40.39	16% on Rs 265.79 crores	42.53
B	For Tugs and Fenders		0.07	16% on Rs. 0.44 crores	0.07	16% on Rs. 0.58 crores	0.09
			40.46		40.46		42.62
V	Annual Revenue Requirement						
A	For Transloading System						
	Operating Cost		91.61		89.05		100.01
	Return on Capital Employed		40.39		40.39		42.53
			132.00		129.43		142.54
B	For Tugs and Fenders						
	Operating Cost		10.98		10.98		11.01
	Return on Capital Employed		0.07		0.07		0.09
			11.05		11.05		11.10
VI	Tariff						
A	For Transloading System						
	Annual Revenue Requirement		132.00		129.43		142.54
	Optimal Capacity		6643000		6643000		6643000
	Cost per tonne		198.70		194.84		214.57
B	For Tugs and Fenders						
	Annual Revenue Requirement		11.05		11.05		11.10
	Optimal Capacity		6643000		6643000		6643000
	Estimated GRT of vessels called	55% of 6643000 tonnes	3653650	55% of 6643000 tonnes	3653650	55% of 6643000 tonnes	3653650
	Cost per GRT		30.24		30.23		30.39

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/63/2014-KOPT	- Proposal from the Kolkata Port Trust for fixation of tariff for the Transloading facility project to be set up for handling dry bulk cargo at Haldia Dock Complex, Kolkata Port Trust.
--------------------------------	---

1. A summary of the comments of the users/ user organisations is summarized below:

Federation of Indian Mineral Industries (FIMI)

- (i). This is a welcome step considering the constraints at Haldia Port due to which handling cargo is not economically viable. However, the facility excludes major cargoes handled from Eastern Region like thermal coal, iron ore and pellets. Further, the facility is only for domestic coastal movement and not for international cargo. Hence, the objective/ motive of the proposal in its present form will be limited and would not prove to be sustainable.
- (ii). Transloading facility at HDC is a good proposal created to overcome the constraints of Haldia. However, to make the proposal cost effective and economical the above mentioned exclusions needs to be revisited as the concession of 40% is not available for major cargo and international cargo. Further, the concessional charge of 60% is not adequate due to the following reasons:-
 - (a). Competitive advantage of other eastern region ports like Vizag Port, Paradip Port and Dhamra Port which are deep sea port capable of handling large cape size vessel vis a vis Haldia Port like- higher draft which facilitate direct loading to the Vessel, higher number of berths which facilitate smooth berthing, cheaper cargo handling cost, higher discharge/ loading rate resulting in lower ocean freight, minimum cargo handling loss due to mechanized cargo handling facility, etc.
 - (b).The proposal is limited in scope as international cargo and major cargo are outside its purview.
 - (c). Barging operations are not cost effective.
- (iii). Furthermore, the peculiar condition at Haldia Dock Complex needs to be assessed while laying down the tariff schedule for transloading facility:-
- (iv). This facility will be operative only for part of the year, say 8 months due to rough condition. Even with arrangements of tugs, fenders, moorings etc. it would not be possible to carry out transloading operations during rough weather conditions.
- (v). There are Lock gate operational restrictions as Lock gates open only during the Tide and therefore, frequency of trips will be limited whereas, the overall cost of hiring barges due to underutilization would be high and uneconomical.
- (vi). In view of Barge capacity of small size of barges of say 2000-3000 tonnes transportation from Sand head to Haldia and vice versa will require more number of trips which will further increase the effective cost of transshipment.
- (vii). For success of the proposal the economies of the project providing 40% concession is not economically viable and in view of the competition from the ports in the vicinity like Dhamra Port, Paradip Port, Vizag Port, etc., it would not be an attractive option. Consequently, overall economic costs need to be worked out from end to end i.e. point of loading to point of discharge.

- (viii). Hence, the norms of the proposal need to be revisited by broadening its scope to include international and major cargo and not confined to coastal domestic cargo as with more cargo there will be proper utilization of facility leading to its cost effectiveness.

TM International Logistics Ltd (TMILL)

- (i). General - Integrated Logistics Cost
The proposal focuses on fixation of tariff for transloading operation only. However, transloading cost alone will not be the decision making criterion for using this facility. Any potential user will be interested in knowing the "Integrated Logistics Cost" (ILC) consisting of cost towards transloading, barging, port handling etc., Therefore, the port may assess ILC for the facility.
- (ii). Optimal Capacity:
- The estimated ship day out for transloading operations is proposed as ~ 26000 tpd. It appears to be very optimistic.
 - We have estimated ship day output as below:
 - No. of lifts per cycle = 15
 - Cargo lifting capacity of grab = 20ton
 - Grabbing efficiency = 70 % (Basis our experience, it is not feasible to achieve an average grabbing beyond 70 % during the full discharge cycle)
 - No. of cranes = 4
 - Daily working hours = 24x65% 15.6 hours/day (The feasibility Report also mentions that 35% if the operational time is wasted due to intermittent weather related stoppages)
 - Ship day Output = **15x20x70%x24x65%x4=13104 TPD**
 - The estimated optimal capacity = **13104x365x0.7=3.35MTPA**
 - The tariff may also be revised suitably
- (iii). Period of operation in KOPT limits
Due to inclement weather conditions during pre-monsoon as well as throughout the monsoon period, it would not be feasible to carry out transloading operations beyond 5 months within the limits of KOPT. The operation shall be carried out in the identified transloading points under Paradip port during remaining 7 months of the year, This will adversely impact the ILC.
- (iv). Draft at Transloading point in Paradip Port
The report mentions that the identified transloading point within the limits of Paradip Port has an available depth of 18.3 mtr. Taking various factors e.g. Swell, wind, etc. of open sea condition into accounts, an under keel clearance of 3.5 mtr will be required. Thus vessels with permissible draft of 14.8 mtr only can be the handled at this location. Such scenario restricts the vessel sizes predominantly to Panamax type. It may be noted that Panamax vessels are already discharging at neighboring deep-drafted ports as first port of discharge and completing discharge in deep-drafted ports as first port like Haldia. Therefore, the commercial benefit of transloading operation vis-à-vis two-port discharged model for Panamax vessels must be examined to establish viability of the project.
- (v). Capital Cost Estimate of Transloader
The regular Panamax vessel needs to be fitted with additional generators for supply power to crane and conveyor system. Hence, the cost of suitable generator system should also be factored in CAPEX estimates.
- (vi). Daily Charter hire of tug
The daily charter hire of 60 ton BP tug is considered as ₹ 200000 / ton. In our opinion, it is on a lower side compared to prevailing market prices. This may be looked into.

2. A joint hearing on the case in reference was held on 16 December 2014 at the KOPT premises. At the joint hearing, KOPT and users/ user organisations have made the following submissions:

Kolkata Port Trust (KOPT)

- (i). You are all aware about the inherent difficulties of Haldia viz. draft restrictions. We have been looking for a long time for a way out.
- (ii). After many stages of study, we have decided to go ahead with the transloading operation and thus we are keen to complete the process as soon as possible. Draft restriction restrains Haldia to handle full load of Panamax vessel. Transloading is the solution.
- (iii). The transloading operation will basically involve, three operations viz., actual transloading at the designated site, transportation of cargo to berth and thereafter handling of cargo at HDC.
- (iv). Tariff fixation for transloading operation falls within the purview of TAMP.
- (v). As per Govt. direction u/s 111, we have decided to have a service provider to undertake transloading facility.
- (vi). The project is primarily a coal based project. The licence will be for a period of 10 years and the service provider will charge according to TAMP approved rates.
- (vii). The proposal is based on 2008 Guidelines.
- (viii). Except the Panamax vessel, all other assets to be deployed for the operation will be brand new. Since the vessel will be static in water, the cost of the vessel can be compromised. At the same time, having brand new equipment like cranes, hoppers, conveyors etc., without compromising, will give better productivity.
- (ix). There is uncertainty over considering 255 working days in the open sea. Working days may differ from what we have considered. But then, we have gone based on 70% utilization as prescribed in the Guidelines.
- (x). We have missed to propose incentive/ penalty for better / non performance of the transhipper. We will examine.
- (xi). Working days considered incase of KOPT is more than MOPT, because of operations envisaged at Kanika Sands also.
- (xii). We do not envisage any coastal vessel to utilize the transloader. The transloader will handle only foreign cargo. We only want to prescribe coastal rate as per Government Policy.
- (xiii). An exercise has been carried out to ensure that the transloading operation will gel with the core system of handling cargo.
- (xix). We have worked out cost to the end user.

i-Maritime (Consultant of KOPT)

- (i). Makes a brief power point presentation of KOPT proposal on behalf of KOPT. The i-Maritime Consultant explain the method of tariff fixation as already described in the proposal filed by the port.

- (ii). The facility is proposed to handle coal traffic which is going away from Haldia.
- (iii). Though the coal cargo is available, the coal traffic at HDC is stagnant at about 10 million tonnes during the years 2012, 2013 and 2014,
- (iv). The transloading facility will enable KOPT handle capesize vessels. Further, there will be improvement in the turnaround time of the Mother Vessels.
- (v). There are many views on the grabbing capacity in the range of 70% to 80%. We have considered the maximum grabbing capacity of 90%.
- (vi). The capacity of the facility has been considered at 6.64 million tonnes based on some parameters as explained in the proposal.
- (vii). Macgregor had suggested six Cranes. After discussing with them, they said that four Cranes will be sufficient. Therefore, we have considered four Cranes minimizing the overall capital cost.
- (viii). You can deploy a capesize vessel with LOA of 180 mtrs. as the reach of the Crane is 45 mtrs.

India Power

- (i). What, if the cost of my transloader is different from yours, as I may bring brand new assets. Capex of new transloaders will be higher than the capex of transloaders considered in the proposal.

[Shri A.K. Datta, HDC: Though we have compromised on the cost of transloaders, we have considered brand new cranes.]

- (ii). KOPT has considered a uniform handling rate for loading and discharge operations, which is not possible, as seen from international data. This is because, loading operations are much smoother/ faster. The parameters have to be revised.
- (iii). 6 Million Tonnes not workable. Maximum capacity of the transloader should be about 4.1 to 4.2 million tonnes per annum. Calculation of KOPT are purely theoretical.
[Dy. Chairman, HDC: Concerns have been taken care in our calculation]
- (iv). There is no capesize vessel with LOA of 150 mtrs., it should be of 180 mtrs.
- (v). By considering the average life of the vessel at 25 years, KOPT has considered the last 10 years of the panamax vessel, which would be used as a transloader. Considering that the last five years of a vessel is treated as Scrap years, the KOPT should consider deploying a panamax vessel which is about 5-10 years old.
- (vi). Grab efficiency in respect of cargo like coal can be maximum of 80%, instead of 90% considered by KOPT.
- (vii). The rate proposed for transloader constitute for $\frac{1}{3}^{\text{rd}}$ of the total operation involved. However, no thinking has gone into the balance $\frac{2}{3}^{\text{rd}}$ of the total operation involved.

JITF Limited (Jindal)

- (i). Average productivity of 26000 tonnes per day is high. It should be about 20000 tonnes per day.

[Shri. Ritvik Mitra, COO, Capstan Shipping: Productivity should not be compromised.]

- (ii). The total handling capacity should be in the range of 4 to 4.5 million metric tonnes per annum because of weather conditions. It is to be kept in view that even it is not possible to handle at Kanika Sands during the months of June and July.
- (iii). There should be no concession for Coastal cargo. Operators cannot bear the cost of coastal concessions.
- (iv). Fuel escalation should be captured. We have no problem on the estimates of capital cost.

[Chairman, KOPT: There can be some scope to consider fuel escalations even under normative approach]

Capstan Shipping

- (i) The rate should be competitive.
- (ii). There should be option available to deploy more transloaders if there is sufficient cargo.
- (ii) For capesize vessel, the handling rate should be atleast 25000 tonnes per day.

SAIL

- (i). There is no capesize vessel with LOA of 150 mtrs., it should be of 180 mtrs.
