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Tariff Authority for Major Ports

G.No. 200

New Delhi,

7 June 2019

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 reference tariff for the project "Mechanization of Berth No. 3 at Haldia Dock Complex (HDC) of KOPT on Design, Build, Finance, Operate, and Transfer ("DBFOT") basis" for the period of thirty years, as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports

Case No. TAMP/41/2018-KOPT

Kolkata Port Trust

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Applicant

QUORUM

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

ORDER

(Passed on this 29th day of March 2019)

This case relates to the proposal received from Kolkata Port Trust (KOPT) for fixation of reference tariff for the project "Mechanization of Berth No. 3 at Haldia Dock complex (HDC) of KOPT on Design, Build, Finance, Operate, and Transfer ("DBFOT") basis", for the period of thirty years.

2.1. The KOPT had initially filed a proposal dated 11 May 2018 for fixation of reference tariff for the project "Mechanization of Berth No. 3". The said proposal was taken up on consultation with the concerned users/ user organisations, Major Coal importers/ Iron ore exporters and the prospective bidders as suggested by the KOPT. Some of the users/ user organisations had furnished their comments. These comments were forwarded to the KOPT as feedback information. The KOPT has responded vide its letter dated 26 February 2019.

2.2. The Joint hearing on the proposal was held on 07 June 2018 at the KOPT premises. At the joint hearing, the KOPT and the users/ user organisations, prospective bidders made their submissions. Accordingly, the KOPT was requested to review its proposal with regard to proposed storage schedule in light of the feedback of bidders and other user organisations received during the joint hearing.

2.3. We have vide our letter dated 5 June 2018 sought certain additional information/ clarification on the proposal from KOPT.

2.4 After several reminders dated 5 July 2018, 1 August 2018, 27 August 2018, 21 September 2018 and 04 December 2018 to furnish all the requisite information to us to enable us to pass Orders, the KOPT vide its letter dated 15 January 2019 has forwarded a revised proposal for fixation of Upfront tariff for Mechanization of Berth No.3 at Haldia Dock Complex on DBFOT basis on PPP mode for a concession of 30 years.

3.1 The main submissions of the KOPT in its revised proposal are as follows:

- (i). A proposal for approval of up-front Tariff on PPP mode related to Mechanization of Berth no. 3 of Haldia Dock Complex was sent to TAMP vide letter no.(Engg)/1037/67 dated 11/05/2018.
- (ii). The pre-bid conference w.r.t the RFQ of the aforesaid project was held on 28/03/2018. The hearing of TAMP was also held on 07.06.2018.
- (iii). In the meeting taken by Hon'ble Minister of Shipping on 12.07.2018 at Visakhapatnam, it was decided that the proposed project would be taken up on EPC mode from KOPT's internal resources. Accordingly, DIB proposal was sent to Ministry of Shipping.
- (iv). In the DIB meeting held on 14.12.2018 at New Delhi chaired by Secretary (Shipping), it was decided that the Project will be implemented through PPP mode. Accordingly, the KOPT was asked to submit a fresh proposal for appraisal by the SFC at the earliest. [The KOPT has furnished the Minutes of the DIB meeting along with its revised proposal.]
- (v). Hence, revised proposal for fixation of tariff on PPP mode has been prepared.

3.2. The backdrop of the project as furnished by KOPT along with its proposal dated 15 January 2019 are as follows:

- (i). The assessed capacity of the Haldia Dock Complex (HDC) is 50.9 million tonnes. The traffic at HDC has increased during the financial year 2017-18 at 40.5 million tonnes as compared to the last year at 34.14 million tonnes. The traffic at HDC had declined during the last few years from 42.3 million tonnes in 2005-06 to minimum of 28.08 million tonnes in 2012-13 and picked up gradually. The traffic handled at HDC during last eight years is as follows:

(in Million Tonnes)							
Year	POL	Iron Ore	Fertilizers & Fert. Raw Materials	Coal	Containers	Other/ Misc. Cargo	Total
2010-11	9.65	5.95	0.46	8.18	2.84	7.92	35.00
2011-12	7.91	3.94	0.52	7.29	2.62	8.74	31.02
2012-13	6.19	1.71	0.39	6.48	2.87	10.44	28.08
2013-14	6.10	2.17	0.56	6.95	2.23	10.50	28.51
2014-15	5.52	2.34	0.80	7.24	1.96	13.15	31.01
2015-16	7.09	0.87	0.64	7.27	1.37	16.27	33.51
2016-17	6.78	1.16	0.47	7.34	2.47	15.92	34.14
2017-18	8.14	1.58	0.70	9.50	2.67	17.91	40.50

- (ii). Kolkata/ Haldia have a vast hinterland, comprising the entire Eastern India including West Bengal, Bihar, Jharkhand, eastern part of Uttar Pradesh, north east of Madhya Pradesh, Chhattisgarh, Assam and other North Eastern States and the two landlocked neighboring countries viz. Nepal and Bhutan. But the primary hinterland consists of West Bengal, Jharkhand and Bihar which have major industries consuming fuel/ raw materials imported through this port. The industrial development, commerce and trade of this vast hinterland are inseparably linked to the life and development of Kolkata Port and vice-versa.
- (iii). The existing facilities for handling dry bulk at Port is as follows:

Berth	Length in m	Cargo Handled	Capacity * (million tonnes)	Remarks
Inside Dock Basin				
Berth 2	260	Coal, Coke, Limestone, Iron ore	4.00	2 MHC's for loading / unloading of coal
Berth 3	337	POL products, Paraxylene, Chemicals	1.75	Bare berth
Berth 4	284	Coal, Coke, Ore	3.70	Mechanized berth for loading Thermal coal
Berth 4 A	245	Coal	3.50	Mechanized berth for unloading Coal
Berth 4 B	181	Coal, coke, iron ore	4.00	2 MHC's for loading / unloading of coal
Berth 6 & 7	234	Vegetable oil, chemicals, iron ore	2.00	Berth no.6 & 7 is presently used for unloading of Liquid cargo
Berth 8	218	Coal, coke	4.00	2 MHC's for loading / unloading of coal
Floating Jetty	150	Coal, Gypsum	2.50	One Floating & one crane for grab unloading
Total:			25.45	

(*) Capacity as re-assessed by HDC.

- (iv). The existing Coal Berths Occupancy (BO) at Port is as follows:

Berth No	Cargo	2013-14	2014-15	2015-16	2016-17	2017-18
2	Coal	81.10%	85.98%	86.43%	78.11%	86.80%
8	Coal	79.88%	83.78%	88.02%	78.62%	83.99%
4A	Coking coal	73.71%	65.99%	70.71%	71.99%	78.02%
4B	Mix coal	64.82%	76.69%	83.74%	78.90%	86.31%
All	All coals	62.12%	58.80%	71.35%	66.59%	72.83%
Total	All 13 berths	*69.53%	*66.92%	73.98%	69.38%	72.83%

*Excluding Berth No. 5

** Berth No. 2, 4, 4A, 4B & 8.

- (v). Due to growing need for handling dry bulk and other developments in the hinterland, HDC has decided to review the proposal of Mechanisation of Berth 3 with reference to the traffic demands. Accordingly, HDC engaged IPA to prepare a Feasibility Report of the proposed investment. [The Feasibility Report for Mechanisation of Berth No 3 at Haldia Dock Complex has been submitted by IPA.]
- (vi). However, HDC saw that capacity of some of the equipment recommended by IPA is on higher side. Accordingly, HDC has prepared a Detailed Project Report (DPR) and concept layout of the Plant. Estimate of ₹ 331.94 Crores plus GST of the project have been prepared based on budgetary offer from the EPC Contractors and on the basis of existing order rate of HDC.

3.3. The salient features of the project as furnished by the KOPT are as follows:

- (i). The project envisages a fully mechanized berth with a dedicated stockyard with equipment for dispatch by Rail. Such a system can handle only import of Coal. However, considering the uncertainties in the coal traffic, it is recommended that the facility could have a flexibility to handle suitable other dry bulk cargo, which, could be handled with certain provisions for cleaning the conveyors and the stockpiles. One of such commodity could be limestone whose traffic has been generally on the rise.
- (ii). The berth is located inside the impounded Dock basin of Haldia Dock Complex. The berth no. 3 has a length of about 337 M and a width of 15.75 m. The berth can handle panamax vessels upto 90,000 DWT with LOA up to 230 m and an average parcel size of 24,000 tonnes.
- (iii). The berth will be equipped with 2 no rail mounted gantry grab type unloaders with a capacity of 1500 TPH each. For this purpose, the existing berth no 3 structure has to be provided with rails over which the unloaders will travel on the quay. The rail span of the proposed gantry grab unloaders have to be tailor made (13.687) to suit its width.
- (iv). The coal/ coking coal unloaded by the two unloaders will be discharged into a single dock conveyor to be located on the rear side of the main berth structure on the piles and interconnecting beams. This conveyor will be an elevated one with a rated capacity of 3000 TPH commensurate with the capacity of two unloaders. The coal from the dock conveyor will be conveyed through an elevated conveyor system to cross over the main road behind berth and then to the yard conveyor for stacking.
- (v). The coal from the stack yard reclaimed by stacker cum reclaimer (operating in reclaiming mode) will be conveyed to a stationary silo. Two no Stacker cum Reclaimers each having a rated capacity of 3000 TPH for stacking 2000 TPH capacity for reclaiming are planned for stock piling coal into the stack yard and then for evacuation through wagon loading.
- (vi). The coal from the stationary silo will be loaded into railway wagons through a rapid wagon loading system in which the wagons will be moving.

- (vii). The system will have a substation for receipt and distribution of HT and LT power for operating the mechanized system consisting of two no gantry grab unloaders, the belt conveyor system, two no stacker cum reclaimers, rapid wagon loading system, supporting utilities etc. The estimated power requirement of about 1.8 MVA will be available from the port's main substation where adequate spare capacity is available. As such the prospective BOT operator has to lay HT power supply cables from the port's substation to the proposed substation of the Berth 3.
- (viii). The stack yard for transit storage of coking coal, non-coking coal will be located in the designated stack yard to be situated in the back-up area of berth no 3. This area is same as the area in which the iron ore used to be stacked when berth no 3 was an iron ore loading facility. The land earmarked for the purpose will have an area of about 1,13,000 sq.m. excluding silo. However, total area earmarked for complete project is 1,46,984 sq.m except Berth no. 3.
- (ix). The railway yard for evacuating the material from the transit stack yard will be located in the existing railway yard where an old iron ore tippler was located (now defunct). The evacuation of coal will be through a rapid in-motion wagon loading system with a SILO. The proposed railway yard for Berth 3 will have two railway lines with a length go about of 1900 m for each line. One line is meant for rapid wagon loading and the line is planned to accommodate two rake lengths and the second line is planned for engine escape. The two lines proposed are planned adjacent to the existing lines in a green field area.
- (x). The material handling system has been designed as ship-shore transfer through Rail Mounted Gantry Grab Unloaders, a conveyor system for transfer from berth to stack yard and handling at yard through two Stacker cum Reclaimer for stacking and a conveyor to carry the material from the stack yard to rapid loading SILO and finally loading of coal from SILO into wagons in-motion. The system will incorporate necessary pollution control measures.
- (xi). Ship - Shore Transfer:
 - (a). Considering the capital cost, operational flexibility and proven performance, it is proposed to equip the berths with two Gantry Grab Unloaders each having a rated capacity of 1500 TPH.
 - (b). Due to draft limitations in Haldia, vessels come with part load, having discharged the top portion of the hatches at another deep draught port.
 - (c). When a fully loaded ship is discharged, the productivity will be higher as the grabs can take bite at the top of hatch with full grab content and less lifting height as compared to part discharged vessel. Thus, its average discharge rate will be high. But in a partially loaded ship, the initial lift height itself will be more as the hatch content is already reduced. For clearing the last portion, the lifting height is more and the grab content is also less. All these cumulatively reduce the average productivity. Hence the quantity of coal available for the cream bite of the grab will be limited.
 - (d). As the hatch gets emptied, the remaining coal is to be heaped at one place by a baby dozer to be lowered into the hatch. The baby dozer moves around shifting the scattered coal into a heap sufficient for the grab to bite into and lift. This process will involve some operational time as the grab content will largely get reduced as compared to a cream bite.
 - (e). The average productivity for coking coal and non-coking coal has been 18,084 TPD and 20,834 TPD for 2016-17. For 2015-16 the corresponding figures are 16,981 TPD & 17,116 TPD. Hence, taking the aforesaid issues into consideration, it is proposed that an average productivity of 20,000 TPD could be considered.

- (xii). **Berth - Stockyard Transfer:**
Keeping in mind the level of pollution that could be created due to handling by Dumper and Payloader system, it is planned to have a conveyor system. The Unloaders planned will have integral hoppers, the coal unloaded will be conveyed through hopper and shuttle conveyor to an elevated jetty conveyor located on the rear side of Unloaders. The jetty conveyor will transfer the material into another conveyor through which the coal will be transferred to the yard stacking conveyors and finally transferred through stacker cum reclaimers into the stack yard. The conveyor system will have a matching rated capacity of 3000 TPH.
- (xiii). **Layout of Stackyard:**
The material received through the conveyors and the stacker cum reclaimer into the stack yard will be stacked in a geometric shaped stockpiles. The stack yard is proposed to be equipped with two no Stacker cum reclaimers. The conceptual layout of stack yard as proposed will have a capacity of about 2.00 Lakh tonnes.
- (xiv). **Evacuation**
It is proposed that 80% the cargo will be evacuated by rail and 20% of the cargo will be evacuated through Road. Thus about 2 to 3 rakes per day will be required for evacuation of planned annual throughput.
- (xv). **Mainly Coal, Coke, Limestone and other compatible dry bulk cargoes are proposed to be handled at this facility.**
- (xvi). **Calculation of Optimal Capacity**
The optimal capacity of the terminal is reckoned as 70% of the maximum capacity. The optimal capacity is the lower value of the optimal quay capacity and optimal stack yard capacity.

(a). **Optimal Capacity of Stockyard (As per TAMP guidelines)**

For a coal terminal TAMP guide line stipulates that the optimum yard capacity is 70% of maximum coal that could pass through the yard and is derived from the following formula.

$$\text{Optimal Yard capacity} = \frac{0.7 \times A \times U \times Q \times T}{100} \text{ tons.}$$

Where

A - Area of the yard made available by the port for development in sq.m.

Q - Quantity that could be stacked per sq.m. of area

T - Turnover ratio of the plot in a year

U - Percentage of total yard area that could be used for stacking

Total area of stockpiles = 54,000 m²

Quantity that could be stacked per m² = 5.2 Tonne

Considering an evacuation rate of 2.6 rakes per day with each rake carrying 3800 Tons, the rate of evacuation per day is taken as 9880

$$\text{Dwell time} = 0.7 \times 54,000 \times 5.2 / 9,880 = 20 \text{ days}$$

$$\text{The average Plot turnover ratio in a year would therefore be } 360/20 = 18$$

$$\text{Yard capacity } (0.7 \times 54,000 \times 5.2 \times 20) = 3.538 \text{ MTPA,}$$

Say 3.5 MTPA

(b). **Optimal Quay capacity**

Average handling rate is 20,000 tonnes per day. Following TAMP Guidelines, the optimal capacity of the terminal is calculated using the following formula.

Optimal capacity

$$= 0.7 \times \frac{S_1 \times P_1}{100} + \frac{S_2 \times P_2}{100} + \frac{S_3 \times P_3}{100} + \dots \times 365$$

Where, S1 - Percentage share of capacity of Cargo type 1
P1 - Handling rate of the vessel carrying Cargo type 1
S2 - Percentage share of capacity of Cargo type 2
P2 - Handling rate of the vessel carrying Cargo type 2

S1, P1, S2, P2 and so on depending on the number of different types of Cargo to be handled at the berth of the particular port.

In the present proposal, the share of Panamax vessels and Handymax vessels are considered as 80% and 20% respectively based on the current trend.

According to the formula, the optimum capacity of the new berth (where only coal will be handled), works out to

$$365 \times 0.7 \times 20,000 \approx 5.11 \text{ MTPA} \quad \text{say } 5.00 \text{ MTPA}$$

Therefore, the Optimum capacity of the TERMINAL: **3.5 MTPA** (Lower of the two)

Hence the optimal capacity of the terminal is considered as 3.5 MTPA.

(xvii). Capital Cost

The total capital cost of the project is estimated at ₹. 331.94 Crores. The summary break-up is as follows:

No	Description	Amount (₹ in Crore)
A. Civil Cost		
1	Revamping of the Existing Berth to accommodate the Loaders and other Machineries	2.54
2	Civil Foundation for Conveyer Structure	5.00
3	Civil Works for Silo System	5.00
4	Construction of New Railway Lines for Rapid Wagon Loading System	24.25
5	Extension of existing Track Line of Stacker cum Reclaimer	3.28
6	Service Road	4.65
7	RCC Drain	2.66
8	Compound Wall	3.65
9	Laterite Hard Standing of the Yard	8.10
10	Detailed Designs & Project Supervision costs @ 2%	1.18
11	Contingencies @ 3%	1.77
12	GST on Civil works @ 18%	11.18
	Civil Cost including GST (Total A)	73.26
B. Mechanical Equipment Cost		
1	1500 TPH Rail Mounted Gantry Grab Unloader including 25 CBM Grab with rail span of 13.687 M.	90.00
2	Conveyor 3000 TPH capacity (Approx 2200 m) including transfer points	38.00
3	Stacker cum Reclaimer– Stacking-3000 TPH, Reclaiming - 2000 TPH, with Boom Length-30 m, Long travel rail gauge- 6m	35.10
4	SILLO- for rapid Wagon Loading site 2000 MT	19.25

5	Dust suppression system and Fire Fighting facilities including water supply and distribution.	6.90
6	In motion Weigh Bridge	0.86
7	Bull Dozer	4.00
8	Detailed Designs & Project Supervision costs @ 2%	3.88
9	Contingencies @ 3%	5.82
10	GST on Mechanical Works @ 18% [Assumed Full ITC] *	0.00
	Mechanical Cost (Total B)	203.82
	C. Electrical Works	
1	Electrical Power supply and distribution System including substation	36.20
2	Illumination including High mast lighting	1.00
3	Detailed Designs & Project Supervision costs @ 2%	0.74
4	Contingencies @ 3%	1.12
5	GST on Mechanical Works @ 18% [Assumed Full ITC] *	0.00
	Electrical Works Cost (Total C)	39.06
	Total (A + B + C)	316.13
	D. Miscellaneous Costs	
	5% of civil & equipment cost	15.81
	TOTAL CAPITAL COST (A+B+C+D)	331.94
	E. Berth Hire Activity	0.00
	GRAND TOTAL OF CAPITAL COST	331.94

* **Note:** Input Tax Credit can be availed on GST paid on Mechanical/ Electrical costs. Hence not considered as Cap-ex and consequent Fixed assets.

(xviii). **Calculation of Total Operating Cost**

		₹. Crores
Sl. No	Particulars	Amount
1.	Hire Charge	
	One High Power Locomotive (without Fuel)	2.09430
	Four Baby Dozers (All inclusive rate)	1.94481
	One Excavator (All Inclusive Rate)	0.33293
	One Hydra (All inclusive rate)	0.17856
	Two 10 MT Pay Loaders for road evacuation (All inclusive)	2.96352
2.	Power Cost 1.4 units/ tonne, Effective Levy-Rs 11.91 per KWH Energy Charge- Rs 7.15 per KWH, Demand Charge-₹ 384.00 per KVA for 1600 KVA, Govt Duty- 17.5%, Line Loss-2.6%, KOPT's Overhead Charge-19.25%]	5.90
3.	Fuel Cost	
	Locomotive 32 ltrs per hour * Rs.66.00 per litre *1788 hours p.a.	0.38
	Bull Dozer (12 ltrs per Hour @ Rs 66.00 per ltrs for 2 shifts per day for 300 days)	0.38
4.	Repair & Maintenance	
	Civil Assets (1% on civil work)	0.77

	Mechanical & Electrical Equipment including spares (7% on equipment cost)	17.85
5.	Insurance (1% on Gross fixed assets)	3.32
6.	Depreciation	
	Civil Work @ 3.17%	2.44
	Mechanical Work @ 6.33%	13.55
	Electrical Assets @ 9.5%	3.90
7.	License Fee [146984 sqm @ 27.346 per sqm per month)	4.82
8.	Other Expenses towards salaries and overheads (5% on gross value of assets)	16.60
	Total Operating Cost	77.41

(xix). **Calculation of Annual Revenue Requirement**

As per TAMP guidelines, the Annual Revenue Requirement is the aggregate of operating cost and Return on Capital @ 16% on capital employed. The following table provides the calculations.

(a) **Revenue Requirement for Cargo Handling Activity**

(₹. in Crores)

Estimated Revenue Requirement	Amount
(a) Operating Cost	77.41
(b) Return of Capital Employed @ 16%	53.11
Total Revenue Requirement (a) + (b)	130.52

(b) **Apportionment of Annual Revenue Requirement (Cargo Handling Activity):**

The TAMP guidelines, prescribed that the Annual Revenue Requirement (ARR) of Cargo handling activity be divided into three categories i.e. Cargo handling charges, Storage Charges and Miscellaneous charges at @ 98%, 1% and 1% respectively. Accordingly, the ARR is further apportioned as under:

(₹.in crores)

Activity		Amount
a) Cargo Handling Charges	98%	127.90
b) Storage Charges	1%	1.31
c) Miscellaneous Charges	1%	1.32
Total Revenue Requirement (a) + (b) +(c)	100%	130.52

- (xx). The share of Overseas and Coastal movements for Dry Bulk Cargo (Coal, Limestone etc.) is considered to be around 90% and 10% respectively. Accordingly, based on the Optimum capacity of the cargo to be handled at the proposed project facilities and the annual revenue requirement, the KOPT has calculated proposed tariff.

3.4. The KOPT has sought approval for the following:

(i). **Cargo Handling Charges**

Sl. No	Commodity	Unit Rate in ₹. per Metric Tonne or part thereof	
		Foreign	Coastal

1	All types of Coal / Coke, Limestone and other Dry Bulk Cargoes (Other than Thermal Coal, Iron Ore & Iron Ore Pellets).	376.65	225.99
2	Thermal Coal, Iron Ore & Iron Ore Pellets.	376.65	376.65

(ii). **Storage Charges**

The Annual Requirement towards storage charges is ₹ 1.31 crores. It is expected that only 35% of the cargo may be stored beyond the free days of 10. Accordingly, the working of Storage charges for the cargo stored in the stack yard beyond the free period is as under:

Working for calculation of storage charges (Berth No.3)						
Sr. No	Particulars	Free days	1st slab	2nd slab	3rd slab	Total
1	Optimum Capacity	35,38,080				
2	Days in each slab	10	5	5	0	
3	%age of cargo in each slab	40%	40%	20%	0%	100%
4	Qty in each slab	1415232	1415232	707616	0	3838080
5	Weights assigned		1.00	1.50	2.00	
6	50% time is taken in each slab on an average		3538080	8845200	0	12383280
7	Weighted Qty in each slab (50% time taken in each slab on an average)		3538080	13267800	0	16805880
8	Revenue requirement					13051143
9	Tariff for each slab		0.78	1.17	1.56	

Hence, the proposed storage charges for the cargo stored in the stack yard beyond the free period are as follows:

Description	Rate in ₹. per MT per Day or part thereof
Free period	10 days
First five days after expiry of free period	0.78
6th day to 10th day after expiry of free period	1.17
From 11th day onwards	1.56

(iii). **Miscellaneous Charges**

The Annual Requirement towards Miscellaneous charges is ₹.1.31 crores. Accordingly, composite charge for all the miscellaneous services is proposed by KOPT at ₹. 3.69 per tonne.

Sr. no.	Particulars	₹. in crores
i.	Revenue Requirement (a)	1.31
ii.	Capacity of the Terminal (MMTPA) (b)	3.50
	Misc charges per tonne (a) / (b)	3.69

3.5. The Performance Standards as proposed by the KOPT is as follows:

- (i). The parameter deals with the productivity of the terminal (Gross Berth Output) for different types of cargo.

- (ii). In case of coal/coke/limestone/other dry bulk cargo, the capability of the terminal (mechanization, method of handling) and parcel size will determine the Gross Berth Output. Higher terminal capability and greater parcel size will lead to high productivity.
- (iii). The Gross Berth Output shall be calculated by taking the total cargo unloaded from the ships during a month in the terminal divided by the total number of working days of the ships in that month at that terminal.
- (iv). The number of working days of the ships shall be determined by subtracting 4 hours per ship from the total hours spent by all the ships at that terminal in the month in question and dividing it by 24.
- (v). The norms of Gross Berth Output for Coal/ Coke/Limestone/Other Dry Bulk Cargoes are as follows:
 - Gross Berth Output for the Panamax Vessels – 20,000/ Day /Berth.
 - Gross Berth Output for the Handymax Vessels – 20,000/ Day /Berth.

3.6. The KOPT vide its letter no. GM/(Engg)/1017/TAMP/264 dated 08 February 2019, has forwarded a copy of the Board Resolution approving the revised proposal of KOPT.

4.1. The salient differences between the earlier proposal of KOPT filed in May 2018 and the proposal of January 2019 are tabulated below:

Sl. No.	Salient features	May 2018 proposal	January 2019 Proposal
1	Capital Cost (₹. in crores)	323.44	331.94
2	Storage area (in Sq.m)	45000	54000
3	Optimal Terminal Capacity (in MTPA)	3.276	3.530
4	Evacuation	100% through rail	80% through rail & 20% through road
5	Total operating cost (₹.in crores)	66.36	77.41
6	Total revenue Requirement (₹. in crores)	118.11	130.52
7	Foreign Cargo Handling Charges per MT in ₹	368.05	376.65
8	Coastal Cargo Handling Charges per MT in ₹	220.83	225.99

4.2. As per KOPT, the changes have arisen in the KOPT proposal of January 2019 vis-à-vis May 2018 proposal on account of the following:

- (i). In the revised proposal, the capital cost estimate has been changed on account of the following:
 - (a). The capacity of some of the equipments have been changed.
 - (b). The cost of Jetty revamping and yard development has been taken into consideration in the estimate.
 - (c). Some of the Equipments like Locomotive and Front End Loader have been considered on Hiring basis rather than owning as the equipment will be used as per the operational and maintenance requirements only. Normally Ports own Locomotive for operation. However, nowadays Ports are Hiring Locomotive for avoiding owning of equipment and manpower. If the PPP operator owns the above equipment, the idling cost of equipments and manpower will be loaded in the estimate. So the estimate by considering hired equipment will make it more realistic.

- (ii). IPA did not consider the equipment like high capacity Front End Loader as the evacuation was proposed 100% through rail. However, two nos. High Capacity Front end loader has been considered for road evacuation. These equipments have been considered on hiring basis as those equipment may not be required every day and 24 hours. Hence, the hiring will reduce the idling cost of the equipments. However, for operational requirement like road evacuation and maintenance those equipment's are essential which has not been considered by IPA.

4.3. A comparative statement of the charges proposed in the revised proposal dated 15 January 2019 vis-à-vis the earlier proposal of KOPT dated 11 May 2018 for the proposal in reference is given below:

Sr. No.	Particulars	As Per Revised Proposal dated 15.01.2019	As Per Earlier Proposal dated 11.05.2018
I	<u>Optimal capacity</u>		
(a)	<u>Optimal Quay Capacity</u>		
	Percentage Share of capacity of Vessels		
	- Panamax Vessels (S1)	70%	70%
	- Handymax Vessels (S2)	30%	30%
	Shipday Output		
	- Panamax vessels (P1)	20000	20000
	- Handymax vessels (P2)	20000	20000
	Optimal Quay Capacity = $0.7*((S1*P1)+(S2*P2))*365$ (in tonnes)	5110000	5110000
(b)	<u>Optimal Yard Capacity</u>		
	- Area of the yard made available by the port as usable storage (in m2) (A)	54000	45000
	- Percentage of total yard area that could be used for stacking (U)	100%	100%
	- Quantity that could be stacked per m2 of area (Q)	5.2	5.2
	- Turnover ratio of the plot in an year (T)	18	20
	Optimal yard capacity ($0.7 \times (A \times U\% \times Q \times T)$ tons) (in tonnes)	3538080	3276000
	Optimal Capacity of the terminal (lower of (a) and (b)) (in tonnes)	3538080	3276000
	Optimal Capacity of the terminal (in million metric tonnes per annum)	3.538	3.276
II	<u>Capital Cost</u>		
A.	<u>Cargo Handling Activity</u>	₹ in crores	₹ in crores
	<u>(i). Civil Cost</u>		
	Revamping of the Existing Berth to accommodate the Loaders and Other Machineries	2.54	0.00
	Civil Foundation for Conveyor Structure	5.00	0.00
	Civil works for Silo System	5.00	2.00
	Construction of New Railway Lines for Rapid Wagon Loading System	24.25	23.40
	Extension of railway tracks upto wagon loading yard & provision of sidings	3.28	0.00

Sr. No.	Particulars	As Per Revised Proposal dated 15.01.2019	As Per Earlier Proposal dated 11.05.2018
	Service Roads	4.65	9.72
	RCC Drain	2.66	2.88
	Compound wall	3.65	1.62
	Laterite Hard Stading of the Yard	8.10	
	Construction of 4 transfer towers/ drive houses @ 0.25 Cr per drive house	0.00	1.00
	2 Stacker cum reclaimer tracks	0.00	3.76
	Buildings consisting of Admin building, sub-station, control room, workshop, stores, employees rest room, canteen etc.,	0.00	6.50
	1.2 m high RCC Concrete retaining Walls along the edge of Stacker-Re-claimer Track to prevent spillages	0.00	1.25
	RCC settling tank 2 m depth and an area of 50 sq.m	0.00	0.15
	Detailed Designs & Project Supervision costs @ 2%	1.18	1.05
	Contingencies @ 3%	1.77	1.57
	GST on Civil works @ 18%	11.18	9.88
		73.26	64.77
	(ii). Equipment Cost		
	1500 TPH Rail Mounted Grantry Grab Unloader including 25 CBM with rail span of 13.687 M.	90.00	80.00
	Conveyor 3000 TPH capacity (Approx 2200 m) including transfer points	38.00	32.58
	Stacker cum Reclaimer - Stacking - 3000 TPH, Reclaiming - 2000 TPH, with Boom length - 30 m. Loan travel Guage - 6m	35.10	50.00
	Silo - For rapid Wagon Loading Site 2000 MT	19.25	16.00
	Dust Suppression System and Fire Fighting facilities including Water Supply and distribution	6.90	12.00
	Baby dozers (FELs)	0.86	1.20
	Other Equipment, Weigh Bridge, Work Shop facilities etc.	4.00	7.00
	Electrical Power Supply and Distribution System including Substation	36.20	12.00
	Illumination with High Mast Lighting System	1.00	0.90
	Shunting Loco		20.00
	Detailed Designs & Project Supervision costs @ 2%	4.63	4.63
	Contingencies @ 3%	6.94	6.95
	Total	242.88	243.26
	(iii). Miscellaneous		
	5% on Civil Cost and Equipment Cost	15.81	15.40
	Total Capital Cost for Handling Activity (i + ii + iii)	331.94	323.44
III	<u>Operating Cost for Cargo Handling Activity</u>	₹ in crores	₹ in crores
	(a). Hire Charges	7.51	0.00
	- 1 no. High Power Locomotive (without Fuel) Revised Proposal- (₹ 17.45 Lakhs per month x 12 months)	2.09	0.00
	- 4 nos. Four Baby Dozers Revised Proposal - (4 nos. x ₹. 13230 per Shift x 368 shifts)	1.95	0.00
	- 1 no. Excavator Revised Proposal - (₹.1156 per Hr.x 8 Hrs. per shift x 360 shifts)	0.33	0.00
	- 1 no. Hydra Revised Proposal – (₹..520 per Hr. x 360 days x9.54 hrs per day)	0.18	0.00
	- 2 nos. 10 MT Pay Loaders for road evacuation	2.96	0.00

Sr. No.	Particulars	As Per Revised Proposal dated 15.01.2019	As Per Earlier Proposal dated 11.05.2018
	Revised Proposal - (2 nos.x ₹. 1715 per Hr. x 24 Hrs x 360 days)		
	(b). Power Cost	5.90	3.88
	Revised proposal (1.4 units/ tonne * ₹. 11.91 unit * 3.538 MTPA)		
	Earlier proposal (1.4 units/ tonne * ₹. 8.47 unit * 3.28 MTPA)		
	(c). Fuel Cost	0.76	0.91
	- Locomotive Revised Proposal (32 ltrs per hour x ₹.66 per litre x 3.5 MTPA * 0.80 / 3800 Tons x 3 hrs x 1.20)	0.38	0.64
	Earlier Proposal (30 ltrs per hour x ₹..68.63 per litre x 3.276 MTPA /3800 tonnes x 2 hrs x 1.20)		
	- Bull Dozer Revised Proposal (12 ltrs per hour x ₹. 66 per litre x 2 shifts per day x 8 hrs per shift x 300 days)	0.38	
	- Baby Dozers Earlier Proposal (12 ltrs per hr. * 3 dozers x 68.63 per ltr * 8 hrs per vessel x 138 vessels.)		0.27
	(d). Repair & Maintenance	18.62	18.56
	- Civil Assets (1% on civil work)	0.77	0.68
	- Mechanical & Electrical Equipment including spares (7% on equipment cost)	17.85	17.88
	(e). Insurance (1% on Gross fixed assets)	3.32	3.23
	(f). Depreciation	19.88	18.78
	- Civil Work @ 3.17%	2.44	2.16
	- Mechanical Work @ 6.33%	13.55	15.27
	- Electrical Assets @ 9.5%	3.90	1.35
	(g). License Fee (146984 sqm @ 27.346 per sqm per month)	4.82	4.82
		16.60	16.17
	Total Operating Cost	77.41	66.36
IV	<u>Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity</u>		
(i).	<u>Estimated Revenue Requirement</u>		
	(a). Total Operating Cost	77.41	66.36
	(b). Return on capital Employed @ 16%	53.11	51.75
	(c). Total Revenue requirement from cargo handling activity	130.52	118.11
(ii).	<u>Apportionment of Revenue Requirement</u>		
	(a). Cargo Handling Charges (98% of ARR)	127.91	115.75
	(b). Storage Charges (1% of ARR)	1.31	1.18
	(c). Miscellaneous Charge (1% of ARR)	1.31	1.18
	(d).Total Revenue requirement from cargo handling activity	130.52	118.11
(iii).	<u>Cargo Handling charge</u>		
	(a). Cargo Handling Charge		
	- Revenue Requirement (₹. in lakhs)	12791.20	11575.09
	- Capacity (Lakh Tonnes per annum)	35.38	32.76
	- Per Tonne rate for handling of cargo (foreign)	361.53	353.33
	- Per Tonne rate for handling of cargo (foreign)	376.65	368.05
	- Per Tonne rate for handling of cargo (foreign)	225.99	220.83

Sr. No.	Particulars	As Per Revised Proposal dated 15.01.2019	As Per Earlier Proposal dated 11.05.2018
	(b). Storage Charge		
	- Revenue Requirement (₹. in lakhs)	130.52	118.11
	- % of Cargo to attract storage charge	35%	25%
	- Capacity of cargo to attract storage charge (tonnes)	1238328	819000
	Storage Charge (beyond the free period)	Rate Per tonne per day or part thereof	Rate Per tonne per day or part thereof
	-Free period	10 days	10 days
	-First five days (after free period)	0.78	1.59
	-6th day to 10th day (after free period)	1.17	2.38
	-11th day onwards (after free period)	1.56	3.56
	(c). Miscellaneous Charge		
	- Revenue Requirement (₹ in lakhs)	130.52	118.11
	- Capacity (Lakh Tonnes per annum)	35.38	32.76
	- Miscellaneous Charge (₹ per tonne)	3.69	3.61

5. In view of the changes in the revised proposal dated 15 January 2019 with that of earlier proposal of KOPT dated 11 May 2018, a copy of the revised proposal dated 15 January 2019 of KOPT was forwarded to the concerned users/ user organizations/ prospective bidders vide our letter dated 13 February 2019 seeking their comments. None of the users/ user organisations/ prospective bidders have furnished their comments on the revised proposal of KOPT, except Steel Authority of India Limited (SAIL). The comments of SAIL were forwarded to KOPT as feedback information. The KOPT has furnished its comments vide its e-mail dated 6 March 2019.

6. As stated earlier, we have vide our letter dated 5 June 2018 sought some additional information/ clarification from KOPT on its May 2018 proposal. The KOPT vide letter no. GM/(Engg)/1017/TAMP/264 dated 08 February 2019 has furnished additional information/ clarification as sought by us vide our letter dated 5 June 2018. The KOPT has furnished the information/ clarification keeping in view its revised proposal dated 15 January 2019. The information sought by us vide our letter dated 5 June 2018 and the reply of KOPT thereon vide its letter dated 08 February 2019 are tabulated below:

Sl No.	Information/ Clarification sought by TAMP	Reply furnished by KOPT
1	GENERAL:	
(i)	The KOPT to furnish the resolution of the Board of Trustees of KOPT, approving the proposal under reference.	The revised proposal has been submitted with the approval of Chairman, KOPT. However, the same has been ratified by Board of Trustees in their meeting dated 31.01.2019. (The KOPT has furnished a copy of the Board Resolution).
(ii)	The proposed facility is envisaged to handle coal/ coke, thermal coal, iron ore, iron ore pellets, limestone and other compatible dry bulk cargo. In this regard, the KOPT to clarify/ furnish the following: (a). The percentage share of each of the cargo item envisaged to be handled at the facility may be furnished.	a) 80% cargo will be Coking Coal / Non-Coking Coal, 10% Limestone and other Flux, balance 10% other dry bulk cargo.

SI No.	Information/ Clarification sought by TAMP	Reply furnished by KOPT
	(b). Reason for adopting the Guidelines as applicable for a coal terminal rather than adopting the guidelines prescribed for a multipurpose berth, may be explained.	b) Since this berth will handle primarily coal, guideline for coal terminal has been adopted. Further the method and rate of handling of Limestone & other dry bulk cargo is almost similar to coking coal.
(iii)	On the ground of uncertainty on import of coal cargo, the KOPT has rightly sought to propose handling of other dry bulk cargo like limestone, iron ore, iron ore pellets etc. While this is a welcome step, the KOPT to consider handling of any other compatible cargo that can be handled at the facility at the time of fixation of Reference tariff on upfront basis and before invitation of bids. The KOPT to also note that the 2008/ 2013 Guidelines do not provide for fixation of tariff for additional cargo/ service or review of reference tariff and intervention by TAMP in a post bid scenario except for the Wholesale Price Index (WPI) indexation.	Although this berth will primarily handle coal, yet provision has been made for handling other dry bulk cargo and the indicative share of the cargo to be handled has been provided above. No cargo other than those already mentioned is envisaged as compatible cargo for handling at the proposed facility due to probable contamination.
(iv)	It may be recalled that the KOPT has come up with a proposal for fixation of reference tariff for the project of "Setting up of Outer Terminal-I. The said project also envisages handling of coal/ coke, thermal coal, iron ore, iron ore pellets, limestone and other compatible dry bulk cargo. The reason for envisaging and going ahead with two identical projects with the same cargo profile and with almost the same quay capacity to be explained.	The project for OT-I has been kept in abeyance at the moment and the Berth no.3 Mechanization will be taken up first.
(v)	Further, KOPT to note that the information/ clarification furnished by KOPT under cover of its letter no. Ad/0038/PPP/OT-I/VIII/1500 dated 31 May 2018 relating to the proposal received from KOPT for fixation of reference tariff for the project of "Setting up of Outer Terminal-I", is being construed as the response of KOPT in the subject proposal of KOPT also on similar issues and hence is not being sought from KOPT again.	The information/clarifications furnished by KOPT dated 31.05.2018 are similar except the following salient points: a. Berth No 3 with its backup area and railway yard are already available. b. As such the capital investment gets limited to that extent c. OT1 is a green field project requiring construction of a berth whereas berth no 3 is an existing berth with low utilization. d. The existing railway yard has spare capacity.
2	Optimal capacity:	
(i)	Quay capacity: (a). The basis to consider the percentage share of Panamax vessels and Handymax vessels at 80:20 to be explained, considering that the KOPT in its proposal for fixation of reference tariff for the project of "Setting up of Outer Terminal-1 has considered the percentage share of Panamax vessels and Handymax vessels at 70:30, based on the ratio of past 5 years.	During 2017-18 in respect of import coal, 80% cargo was carried by Panamax vessels (320 nos.) while 20% cargo was carried by Handymax vessels (80 nos). The percentage share has been considered as per the above.

SI No.	Information/ Clarification sought by TAMP	Reply furnished by KOPT
	(b) KOPT to confirm that the operator of the proposed facility would not be allowed to deploy higher capacity Rail mounted gantry grab type unloaders at the facility other than the 2000 TPH capacity Rail mounted gantry grab type unloaders proposed to be deployed at the facility.	In the revised proposal, the capacity of the Gantry Grab Unloader has been downsized to 1500 TPH. It is confirmed that the operator of the proposed facility would not be allowed to deploy higher capacity Rail mounted gantry grab type un-loaders as the same will be installed on the existing berth where the wheel load to be restricted within 32 MT.
	(c). KOPT to also confirm that all the dry bulk cargoes viz., coal/ coke, limestone and other dry bulk cargo, (thermal coal, iron ore & iron ore pellet envisaged to be handled at the facility would have the same productivity level of 20,000 tonnes per day.	It is confirmed that the coal and its variants like coke, thermal coal, Limestone and Iron Ore Fines which are envisaged for handling through the proposed facility in berth no 3 will have the same productivity level of 20,000 TPD
	(d). The actual productivity in respect of Coking coal and non-coking coal achieved at HDC during the year 2016-17 based on which the HDC has considered the productivity at 20000 tonnes in the subject proposal under reference appears to be based on the productivity achieved by Harbour Mobile Crane (HMC) at the berths of HDC. In this backdrop, the KOPT to confirm whether the productivity of 20000 tonnes based on the deployment of HMC's will be valid when grab unloaders are proposed to be deployed at the proposed facility.	At MHCs Berth at HDC, the productivity level for dry bulk cargo has been fixed at 20,000 MT per day considering the restrictions in evacuation by conventional method (dumper, payloader combination) and the average parcel size of vessels as 26000 MT. At Berth no-3 although no problem is envisaged for transfer of cargo from hook point to stack yard, yet due to the limitations in average parcel load of vessels, which is similar to the vessels handled at MHC berth, the effective unloading capacity of grab unloader will be 50% of the rated capacity. Thus each grab unloader can effectively discharge 10,000 MT per day and with 2 grab unloader the productivity has been proposed at 20,000 MT per day which is similar to MHC Berth.
	(i). The rated capacity of the Grab unloaders are reported to be at 2000 TPH. Considering 24 working hours and a 70% utilization, the productivity of one grab unloader works out to 33600 tonnes per day. In this backdrop, considering the productivity at 20000 tonnes per day to be justified keeping in view the rated capacity of Grab unloader.	The rated capacity of the Gantry Grab Unloader has been revised downwards to 1500 TPH. 20,000 Tons per day productivity is the target set by Ministry of Shipping.
	(ii). Since the yard capacity is a constraint, even the one grab un-loader may not be fully utilized. That being so, deployment of 2 nd grab unloader to be justified.	Two nos. Gantry Grab Un-loader have been considered in the estimate and also the capacity from 2000 TPH to 1500 TPH have been revised downwards. Considering 24 working hours and 70% utilization, the productivity of one Grab unloader works out to 25200 tones per day. Haldia Dock Complex handles partially unloaded import cargo from vessel and the productivity is lower than other ports who handles full vessel cargo. It is seen that the productivity achieved by Berth no-4A of HDC with two nos. 750 TPH Gantry Grab Unloader during 2018-19 was 10301 MT. So, with revised capacity of 1500 TPH, the

SI No.	Information/ Clarification sought by TAMP	Reply furnished by KOPT
		2 nd Unloader is justified for achieving 20000 Tons per day.
(ii)	Yard Capacity (a) From the proposal furnished by KOPT, it is seen that an area of 146984 square meters of land has been proposed to be earmarked for the proposed facility. The norms for estimation of yard capacity prescribed for mechanized coal terminals provides for a cushion of around 50%, to meet the requirement of area for ancillary facilities. That being so, the balance 50% is required to be considered for stacking purpose. Against this position, the KOPT has considered only about 30% of the total area of land i.e. 45000 square metres for the purpose of stacking of cargo, in the yard capacity calculation. The KOPT to justify consideration of only 30% of the total area proposed to be allotted for the facility for stacking and balance 70% for ancillary purposes.	Out of the total land area of 1,46,984 sq.m, only an area of 1,13,000 sq.m is meant for stack yard. Balance area has been earmarked for SILO, Rail line and Loading Conveyors. The actual area considered for Stock pile as per revised plot diagram is 54,000 sq.m which is about 47% of 1,13,000 sq mt. This is on account of the fact the area earmarked for stack yard is trapezoidal in shape with a bell mouth like shape at one end
	(b) From the workings furnished by KOPT, it is seen that there is a wide gap between the yard capacity and the quay capacity. The plant capacity is almost 56% more than the yard capacity. Since yard capacity is reported to be a constraint, the KOPT to look into the profile of the equipment and the Conveyor system and explore deploying a lower capacity handling equipment and Conveyor system, if yard capacity cannot be improved so as to narrow down the gap between the yard and the quay capacity.	The limitation in terminal capacity is definitely on account of limitation in yard capacity which is on account of limitation in yard area available. However, the yard capacity has been revised considering the space available in Sothorn plot. The equipment capacities as planned are proposed to assure a guaranteed minimum unloading rate of 20,000 TPD at the minimum and any downsizing of equipment will seriously impair the speedy handling of vessel which is one of the objectives of mechanization.
3	Capital cost:	
	(i). The basis for considering contingencies @ 3%, project supervision @ 2%, GST on civil works @ 18% of the civil cost and mechanical cost in the capital cost estimates of cargo handling activity to be furnished.	It is the normal practice for estimation to consider 3% and 2% for Contingencies and Project supervision respectively to accommodate preliminary expenses, tendering, Miscellaneous works and Project Management Consultancy etc. As has been stated in the note below the estimation of Capital costs, Input Tax Credit can be availed on GST paid on Mechanical / Electrical costs. Hence not considered as Capex and consequent Fixed assets. However, GST input tax credit is not available for Civil assets and hence the same is considered as Cap-ex.
	(ii). The KOPT to furnish the basis for the quantum of each item of civil work and the document substantiating the base rate considered by it to estimate the civil capital costs.	The estimate of Civil work have been prepared based on budgetary offer from manufacturer and the existing contract rate of HDC.

SI No.	Information/ Clarification sought by TAMP	Reply furnished by KOPT
	(iii). The KOPT to furnish documentary evidence in support of the cost of each of the Equipment viz., Rail mounted gantry grab unloaders, Elevated conveyor system (C1, C2 & C4), Ground level conveyor system, Stacker cum Reclaimer, Shunting Loco, Wagon Loading Silo, Front end loaders (Baby dozers) and In-motion rail weigh bridge. The workings to arrive at the cost of each of the Equipment as considered in the estimates also to be furnished.	The cost estimate of equipment has been prepared based on budgetary offer from the manufacturer. The documentary evidence is furnished by KOPT.
	(iv). The basis for the lump sum considered for Workshop facilities, dust suppression, water supply and Electrical works to be furnished justifying the cost considered in the estimates.	The cost estimate of equipment has been prepared based on budgetary offer from the manufacturer. The documentary evidence is furnished by KOPT.
	(v). The KOPT to confirm that the base rate considered by it to estimate the civil capital costs as well as cost of each of the equipment considered, reflect the prevailing/ current market rates.	The base rate considered in the revised estimate are as per the current market rate available in HDC.
	(vi). The Upfront Guidelines for the Coal terminal lists down among other things under Capital cost estimation, the cost towards conveyor gallery and marshalling yard. The reason for not considering the cost of these civil works may be explained.	The cost estimate of conveyor gallery and marshalling yard are included in the revised estimate already submitted with our revised proposal. The capital cost of conveyor system is considered in the mechanical works in Tariff proposal. Also a rapid wagon loading system with shunting loco (on hire) is considered in the mechanical works.
4	Operating Costs:	
	(i). The basis for considering cost of fuel in respect of baby dozers for 8 hours of operation per dozer per vessel to be explained.	Baby dozers shall work at an average of 6 hours per ship for pooling the cargo for Grab bite. Allowing 2 hours more for idle operations and mobilization, the actual hours of work are considered to be 8 hours per loader/ dozer.
	(ii). With regard to the calculation of fuel cost in respect of loco, the KOPT to clarify/ furnish the following:	
	(a) Basis for considering fuel consumption of 30 litres per hour.	Consumption of fuel has been considered as 40 ltr per hour as per present consumption of fuel in the hired loco at HDC. (In the proposal, KOPT has considered fuel consumption of 30 Liters per hour.
	(b) Basis to considering the carrying capacity of 1 rake at 3800 tonnes.	One standard railway rake will have 58 or 60 wagons with a carrying capacity of 64 tons per rake. Thus 58 wagon rake can carry 3712 tons and 60 wagon rake can carry 3840 tons. Due to mix of railway rakes that may come to the port, per rake capacity is considered as 3800 tons.
	(iii). The entire 100% of cargo is proposed to be evacuated through rails. The proposal states that no lorry loading will be permitted	80% cargo has been considered to be evacuated through rail and 20% through

SI No.	Information/ Clarification sought by TAMP	Reply furnished by KOPT
	to avoid pollution of environment. However, the calculation furnished by port for estimation of fuel cost for loco considers only 80% of cargo to be moved by rail. If entire 100% of cargo is to be moved by rail, the fuel cost of operating the loco needs review	road in the revised estimate. The fuel cost have been considered accordingly.
5	Annual Revenue Requirement and Handling rates:	
	As regards the proposed storage charges, free dwell time and chargeable slab period, it is brought to the notice of the KOPT that some projects whose tariff was fixed under 2008 Guidelines at Major Port Trusts are facing the issues in relation to reported high storage charges which is reported to have impact on the viability of the projects. It is reported by some operators that because of high storage charges they are not in a position to attract traffic to their terminals and the cargo gets directed to nearby non-major ports and private ports who offer more free dwell time and charge lower storage charges. As stated above, the 2008 Guidelines do not provide for modification of any tariff including free period and storage charges in a post bid scenario. The KOPT to keep in view the above position while firming up the storage charges and free dwell time.	Storage charges have been calculated as per 2008 Guideline. The storage charges as arrived ₹.0.78 /MT for 1 st slab after free time of 10 days, ₹.1.16 / MT for 2 nd slab after 15 days and ₹.1.55 / MT after 3 rd slab (20 days) is over. In the earlier proposal, the same was ₹.1.59 / MT for 1 st slab, ₹.2.38 / MT for 2 nd slab and ₹.3.57 / MT after 3 rd slab (20 days) is over. So the storage charges have been revised after considering the remarks of the TAMP in this regard.
6	Scale of Rates:	
	Considering that the berth hire charges at the proposed facility will be levied by KOPT, the relevance of prescribing "Notes relating to Berth hire" under "Notes to 1.3" in the proposed Scale of Rates to be examined.	The equipment will be installed on existing Berth constructed by HDC, KOPT. Dredging in front of Berth will be done by HDC. However, a minor repairing cost (₹. 2.54 cr Plus GST) of the existing jetty has been considered by the operator as the repairing is essential for the equipments to be installed by the operator. Dredging in front of the Berth will be done by HDC. Accordingly HDC, KOPT shall realize the Berth Hire Charge. [The reply furnished by KOPT is not relevant to the clarification sought by us.]

7.1. In view of the changes in the revised proposal dated 15 January 2019 with that of earlier proposal of KOPT dated 11 May 2018, a Joint hearing on the revised proposal dated 15 January 2019 was held on 19 February 2019 at KOPT premises. At the joint hearing, the KOPT made a brief power point presentation of its proposal. The KOPT and the concerned users/ user organizations have made their submissions at the joint hearing.

7.2. At the joint hearing, the TMILL was requested to furnish its written arguments on the revised proposal to us with a copy to KOPT, within a period of 10 days. However, inspite of a reminder dated 07 March 2019, the TMILL has not responded, till the case was finalised.

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

9. With reference to the totality of information furnished by the KOPT the following position emerges:

- (i). Owing to the industrial, commerce and trade developments in the vast hinterland of Kolkata Port Trust (KOPT) and the resultant growing need for fuel/ raw materials, the KOPT has envisaged Mechanisation of Berth 3 of Haldia Dock Complex (HDC) of KOPT, to meet the growing traffic demands. Accordingly, the KOPT has come up with a proposal for fixing Reference tariff for the Mechanization of Berth No. 3 on Design, Build, Finance, Operate, and Transfer ("DBFOT") basis" for the period of thirty years at HDC, by following the principles of the Upfront Tariff Guidelines of 2008. The proposal of the port has approval of its Board of Trustees.
- (ii). The proposed mechanized berth is envisaged to primarily handle all types of import Coal/ Coke including thermal coal. However, considering the uncertainties with respect of Coal imports and to ensure optimum utilization of the facility and to provide flexibility to the terminal operator, the KOPT has proposed handling of limestone, iron ore, iron ore pellets and other dry bulk cargo also at the facility. The KOPT has indicated that about 80% cargo envisaged to be handled at the proposed berth would be Coking Coal/ Non-Coking Coal, 10% of the cargo would be Limestone and other Flux and the balance 10% cargo would be other dry bulk cargo. The KOPT has confirmed that the method and rate of handling of Limestone and other dry bulk cargo is almost similar to coking coal.

In this regard, it is relevant to mention here that once an upfront/ reference tariff is fixed by this Authority for a set of cargo items following the Upfront Tariff Guidelines of 2008 or the Reference Tariff Guidelines of 2013, the said Guidelines do not provide for fixation of tariff for additional cargo/ service or review of reference tariff in a post bid scenario except for the annual indexation of tariff with reference to the variation in Wholesale Price Index (WPI). In such a scenario, the proposal of the port for envisaging handling of limestone, iron ore, iron ore pellets and other dry bulk cargo also in addition to the coal/ coke, on the ground of uncertainty on import of coal cargo is a welcome step. Also, precedence is available at the Paradip Port Trust (PPT), where the PPT, to bring in efficiency and to ensure optimum utilisation of its facilities, at times, handles thermal coal at its Iron Ore Handling Plant (IOHP) and also handles Iron Ore Pellets/ Iron Ore Fines/ Other Dry Bulk Cargo at its Mechanized Coal Handling Plant (MCHP).

Thus, the judgment of the KOPT to consider handling of any other compatible cargo at the proposed facility in addition to the handling of coal/ coke, at this stage itself of fixing of Reference tariff and before invitation of bids, is taken into account.

- (iii). The KOPT had initially submitted its proposal in May 2018. The said proposal was taken up on consultation with the relevant stakeholders. A Joint hearing on the proposal was held on 07 June 2018. The KOPT was requested to review its proposal with regard to proposed storage schedule in light of the feedback of bidders and other user organisations received during the joint hearing. After several reminders and for the reasons as brought out in the earlier part of the Order, the KOPT filed its revised proposal only in January 2019. The information/ clarification sought by us has been furnished by KOPT on 08 February 2019. The proposal of KOPT alongwith information/ clarification furnished by KOPT is considered in the analysis.
- (iv). As stated earlier, the proposed facility will predominantly handle coal/ coke (80%) and the other dry bulk cargo proposed to be handled at the facility would be 20%. Hence, for determination of tariff for the cargo to be handled at the proposed facility, the KOPT has adopted the Upfront tariff Guidelines as applicable for a coal terminal. A multipurpose cargo berth envisages handling of both dry bulk cargo and break bulk cargo whereas the proposed mechanized berth is envisaged to handle only dry bulk cargo. Therefore, the approach of the port in adoption of the Upfront tariff Guidelines as applicable for a coal terminal, instead of the Upfront tariff Guidelines

for a Multipurpose berth, for fixation of Reference tariff for the proposed facility, is seen to be apt.

(v). Optimal Capacity:

(a). Optimal Quay Capacity:

- (i). The KOPT proposal envisages handling of Panamax vessels and Handymax vessels at the proposed facility with the deployment of two Rail Mounted Gantry Grab Unloader. Based on the average productivity achieved during the past years with HMCs at other berths, the KOPT has considered similar productivity of 20000 tonnes per day in respect of the Panamax Vessels and Handymax Vessels.

The Upfront tariff fixation guidelines of 2008 for the Coal Terminal prescribes unloading norms of 35000 tonnes per day in respect of Panamax vessel and 15000 tonnes per day in respect of Handymax Vessels. Though the Guidelines prescribe different productivity levels for Panamax vessels and Handymax vessels, the KOPT has considered a uniform handling rate of 20000 tonnes per day for the Panamax Vessels and Handymax Vessels. In view of the lock gate and draft constraints at HDC, the HDC is mostly the second port of call with partially loaded vessels and hence the Panamax/ Handymax vessels arriving at HDC generally bring bottom cargo. In view of this position, the average actual productivity achieved at the MHC berths of HDC for coal for both Handymax and Panamax Vessels is reported to be similar.

The KOPT has also confirmed that the coal and its variants and all other dry bulk cargo envisaged for handling through the proposed facility in berth no 3 will have the same productivity level of 20000 tonnes per day.

Considering that the productivity of 20000 tonnes per day for both Handymax and Panamax Vessels as considered by KOPT is based on the past actuals, this Authority is inclined to consider a productivity of 20000 tonnes per day for both Handymax and Panamax Vessels.

It is noteworthy that recognizing the peculiarity of the situation at KOPT (of low draft), this Authority has in the past, while determining the upfront/ reference tariff at KOPT, has considered the productivity level of a MHC at 10000 MT per day. Considering the deployment of 2 no. of Rail Mounted Gantry Grab Unloader at the proposed facility, consideration of productivity of 20000 MT per day appears to be in order.

- (ii). The ratio of Panamax and Handymax Vessels has been considered by KOPT at 80:20, based on the actual ratio of Panamax and Handymax Vessels during the year 2017-18.
- (iii). Considering the ship day output at 20000 tonnes per day for both Panamax vessels and Handymax vessels at 70% utilisation, the optimal quay capacity of the proposed facility works out to 5.11 million tonnes per annum as estimated by the port.

(b). Optimal Yard Capacity:

- (i). The upfront tariff guidelines stipulate that the yard capacity is to be assessed for the area of the yard made available by the port for

development. In its proposal, the port envisages allotment of an area of 146984 sq.m of land to the proposed BOT operator. Out of the said area, 54000 sq.m of land has been earmarked for storage and the balance area has been earmarked for SILO, Rail line and Loading Conveyors. Further, the KOPT has also stated that the area earmarked for stack yard is trapezoidal in shape with a bell mouth like shape at one end.

The norm for estimation of yard capacity prescribed for mechanized coal terminals provides for a cushion of around 50%, to meet the requirement of area for ancillary facilities. That being so, the balance 50% is required to be considered for stacking purpose. Against this position, the KOPT has considered only about 38% of the total area of land i.e. 54000 square metres for the purpose of stacking of cargo, in the yard capacity calculation.

None of the users/ prospective bidders have objected to the proposed arrangement. Further, the peculiar shape of the stack yard, is presumed to impact the stacking of the cargo at the stack yard. It is also not unreasonable to assume that the port would have done due diligence on this aspect. The judgment of the port in this regard is, therefore, relied upon.

- (ii). The guidelines for upfront tariff setting prescribe the stacking factor norm at 3 tonnes per square metre for stacking coal. The KOPT has considered the stacking factor at 5.2 tonnes per square metre. The Adani Ports and Special Economic Zone Limited (APSEZL) is of view that about 4.5 tonne per sq. mtr can be stacked. However, the KOPT has not considered the view of APSEZL. Since the proposed stack height is as per the Feasibility Report, this Authority relies upon the quantity that could be stacked per sq.m of area at 5.2 tonnes, as proposed by the KOPT.
- (iii). The norm for plot turnover for a coal terminal prescribed in the guidelines is 12, based on the dwell time of 30 days. Considering an evacuation rate of 2.6 rakes per day with each rake carrying 3800 tonnes, the rate of evacuation per day has been considered at 9880 tonnes. Accordingly, the KOPT has arrived at a dwell time of 20 days ($0.7 \times 54,000 \times 5.2 / 9,880 = 20$ days), which results into the plot turnover ratio of 18.
- (iv). Based on the parameters as considered by KOPT as discussed above, the optimal yard capacity of the facility works out to 3.538 million tonnes per annum at 70% utilization, as estimated by the Port.
- (c). As per the Guidelines, the lower amongst the optimal quay capacity and yard capacity is to be considered as the optimal capacity of the facility. In the case in reference, the quay capacity has been assessed at 5.11 million tonnes per annum and the yard capacity has been assessed at 3.538 million tonnes per annum. Accordingly, the optimal capacity of the proposed facility would be 3.538 million tonnes per annum, being the lower amongst the optimal quay capacity and yard capacity.

In this connection, it is noticed that there is a wide gap between the yard capacity and the quay capacity. Thus, the KOPT was specifically requested to look into the profile of the equipment and the Conveyor system and explore deploying a lower capacity handling equipment and Conveyor system, if yard capacity cannot be improved so as to narrow down the gap between the yard and the quay capacity. In this regard, the KOPT has stated that there is limitation in the yard area available. Also, the port has

reported to have planned the equipment capacities to assure a guaranteed minimum unloading rate of 20000 tonnes per day and that any downsizing of equipment will seriously impair the speedy handling of vessel which is one of the objectives of mechanization.

Based on the justification furnished by the port, this Authority relies upon the optimal capacity of the proposed facility at 3.538 million tonnes per annum, being the lower amongst the optimal quay capacity and yard capacity.

(vi). Capital Cost:

- (a). The project envisages unloading of Coal/ Coke, limestone, iron ore, iron ore pellets and other dry bulk cargo in the import cycle, in a fully mechanized manner from the ship to the yard, without any manual intervention. Thus, the civil works and the profile of equipment has been estimated by the KOPT to enable mechanized handling of cargo.
- (b). The capital cost as estimated by the KOPT in its proposal for the handling activity is ₹331.94 crores of which ₹ 73.26 crores is towards civil capital costs, ₹ 203.81 crores is towards mechanical and equipment capital costs, ₹ 39.06 crores is towards electrical works and ₹ 15.81 crores is towards Miscellaneous capital costs.
- (c). Civil Cost:
The capital civil costs has been estimated by the KOPT to the tune of ₹ 73.26 crores. The upfront tariff guidelines broadly indicate the civil works involved for a coal terminal and require the port to estimate civil cost. The items of civil works as considered by KOPT generally adhere to normative list of civil works as stipulated in the guidelines for the coal terminal. The KOPT has confirmed that the estimate of Civil works have been prepared based on budgetary offer from manufacturer and the existing/ prevailing market/ contract rate of HDC. In view of the above said confirmation given by the KOPT, the civil cost estimates as furnished by the KOPT are relied upon.
- (d). Equipment Cost:
 - (i). The Equipment cost of ₹ 242.88 crores as estimated by the Port is towards 1500 TPH Rail Mounted Gantry Grab Unloader, Conveyor 3000 TPH capacity (Approx 2200 m), Stacker cum Reclaimer, Silo, Dust suppression system and Fire Fighting facilities, In motion Weigh Bridge, Bull Dozer, Detailed Designs & Project Supervision costs @ 2% and Contingencies @ 3%. Further, since Input Tax Credit can be availed on GST paid on Mechanical/ Electrical costs, the GST component has not been considered by the KOPT as part of capital costs.
 - (ii). In addition to the above, the KOPT has envisaged to deploy some equipment on hire basis viz., 1 no. of High Power Locomotive, 4 nos. of Baby Dozers, 1 no. of Excavator, 1 no. of Hydra and 2 nos. of 10 MT Pay Loaders for road evacuation.
 - (iii). The coal/ coking coal unloaded by 2 nos. of rail mounted gantry grab type unloaders will be discharged into a single dock elevated conveyor. The coal from the dock conveyor will be conveyed to the yard conveyor for stacking. The coal from the stack yard reclaimed by stacker cum reclaimer will be conveyed to a stationary silo. The coal from the stationary silo will be loaded into railway wagons through a rapid wagon loading system in which the wagons will be moving. 80% the cargo is envisaged to be evacuated by rail and 20% of the cargo will be evacuated through Road. The port has

stated that 1 no. of payloader will not be sufficient to evacuate 20% of the optimal capacity envisaged to be moved by rail and has, therefore, considered deployment of 2 nos. of pay loaders on hire basis. Further, during final stage of ship unloading operation, as the hatch gets emptied, the remaining coal is to be heaped at one place by baby dozers to be lowered into the hatch. The equipment proposed to be deployed by the KOPT is seen to be in sync with the methodology of handling of cargo as envisaged by KOPT.

- (iv). With regard to deploying of equipment on hire basis, it is relevant here to mention that in the initial proposal of KOPT of May 2018, the port had envisaged the capital cost of all equipment on purchase basis. At that time, it was the suggestion of some stakeholders to consider deployment of equipment on hire basis. Accordingly, the KOPT in its revised proposal of January 2019 has proposed deployment of above referred equipment of hire basis. The port is of the view that if the BOT operator owns the above equipment, the idling cost of equipment and manpower will be loaded in the estimates of the capital cost and that considering hiring of the equipment will make the estimates more realistic. The judgment of the port in this regard is relied upon.
- (v). Given that none of the prospective bidders nor the users have raised any other pointed objection to the proposed equipping plan, this Authority is inclined to consider the equipping plan as proposed by the port, which is based on the Feasibility Report.
- (e). Electrical works:
The capital cost towards Electrical Power supply and distribution System including substation, Illumination including High mast lighting, Detailed Designs & Project Supervision costs @ 2% and Contingencies @ 3%, has been considered by KOPT.
- (f). The estimates of various equipment and electrical works is generally seen to be as per the documentary evidence furnished by the KOPT. Thus, the capital cost estimates as furnished by the KOPT is relied upon.
- (g). With regard to considering contingencies @ 3% and project supervision @ 2%, the KOPT is of the view that it is the normal practice for estimation to accommodate preliminary expenses, tendering, Miscellaneous works and Project Management Consultancy etc.
- (h). The miscellaneous capital cost is estimated at 5% on civil and equipment cost which is as per the norm prescribed in the guidelines for coal terminal.
- (i). The APSEZL has stated that the proposal of KOPT specifies detailed technical specifications of the project facilities to be developed. The APSEZL is of the view that specifying so much of detailed specifications will not allow the design flexibility to the Concessionaire, given that the Model Concession Agreement which will be base for the Concession Agreement to be issued for the Project specifies that Design Risk will be borne by the Concessionaire. Thus, the APSEZL has suggested that equipment, design and rated capacity should be left to the Concessionaire to determine and achieve terminal capacity and performance standards to be specified in the Concession Agreement for the Project. In this regard, the KOPT has stated that only some basic parameters have been mentioned and that the Operator can design other aspects considering Terminal Capacity and Performance Standard.
- (vii). Return on capital employed is calculated at 16% of the estimated capital cost as per the norm prescribed in the guidelines.

(viii). Operating Cost:

(a). Hire Cost:

- (i). As stated earlier, some equipment has been proposed to be deployed on hire at the proposed facility. Accordingly, the hire cost in respect of 1 no. of Locomotive, 4 nos. of Baby dozers, 1 no. of Excavator, 1 no. of Hydra and 2 nos. of 10 MT Pay loaders has been considered by KOPT, as part of the operating cost.
- (ii). The hire cost of the locomotive has been considered by KOPT at ₹ 17.45 lakhs per month, based on the Work Order no. IM&EE/MOF/M-II/Rites/Extension/2017-19/9008 dated 29 November 2017, issued by the Visakhapatnam Port Trust (VPT) to RITES Limited. The Work Order is valid till November 2019. The hire charges is exclusive of fuel cost. Hence, the fuel cost has been estimated separately, as discussed in the following paragraph. The hire cost estimated by KOPT for a period of 12 months is relied upon.
- (iii). The hire cost of the Baby Dozers have been considered at an all-inclusive cost of ₹ 13230/- per shift. This rate is reported to be as per the hire charge worked out and considered in the proposal relating to fixing of stevedoring and shore handling charges at HDC vide Order no. TAMP/79/2016-KOPT dated 19 January 2018.

Considering the optimal capacity at 3.538 million metric tonnes per annum and the average parcel size of the vessel at 24000 tonnes, the KOPT has determined that 147 vessels will be handled at the facility. Since the baby dozers would be required to aggregate the cargo, the port has considered that 4 nos. of baby dozers would be aggregately deployed for 10 shifts per vessel. The judgment of the port in this regard, is relied upon.

- (iv). The hire cost of the Excavator has been considered by KOPT at ₹ 1156/- per hour, based on the Work Order no. I&CF/SDM/DOCK/T/847/1248 dated 04 January 2018 as issued by the KOPT to T.R Logistics Private Limited. The hire charges is an all-inclusive cost. The number of hours of deployment of Excavator has been considered for 8 hours per day for 360 days. The judgment of the port in this regard, is relied upon.
- (v). The hire cost of the Hydra has been considered by KOPT at ₹ 1156/- per hour, based on the Work Order no. I&CF/SDM/DOCK/T/847/1247 dated 04 January 2018 as issued by the KOPT to Anil Infracom. The hire charges is an all-inclusive cost. The number of hours of deployment of Hydra has been considered for 8 hours per day for 360 days. The judgment of the port in this regard, is relied upon.
- (vi). The hire cost of the 10 MT Pay loaders to be deployed for road evacuation have been considered at an all-inclusive cost of ₹ 24696/- per shift per loader. This rate is reported to be as per the hire charge worked out and considered in the proposal relating to fixing of stevedoring and shore handling charges at HDC vide Order no. TAMP/79/2016-KOPT dated 19 January 2018.

The hire cost has been worked out by the port by considering deployment of 2 number of pay loaders for 2 shifts per day (road evacuation is not envisaged at night) for 300 days per annum. The judgment of the port in this regard, is relied upon.

- (b). Power Cost.
The consumption of power to the tune of 1.4 units per tonne is seen to be as per the norm prescribed in the Upfront Guidelines. The per unit cost of power at ₹ 11.91 per unit as considered by KOPT is supported by documentary evidence.
- (c). Fuel Cost:
- (i). Locomotive:
- The KOPT has considered the fuel consumption in respect of Locomotive at 32 litres per hour. This is reported to be as per the Work Order dated 29 November 2017, issued by the VPT to RITES Limited, as brought out above.
- Given that each rake has a capacity of carrying 3800 tonnes of cargo and with the time of 2 hours taken for handling each rake and an additional time of 20% for positioning, the KOPT has calculated the fuel consumption for 1788 hours per annum to handle 80% of the optimal capacity, which is estimated to be handled by rail. The workings furnished by KOPT in this regard is considered.
- (ii). Bull Dozers:
- The KOPT has considered the fuel consumption in respect of Bull dozer at 12 litres per hour. No documentary evidence has been furnished in support of the fuel consumption of Bull Dozer. Considering that the fuel consumption is as per the Feasibility Report, the same is relied upon in the analysis. Incidentally, the upfront guidelines prescribe a fuel consumption norm of 12 litres per hour in respect of a 10T Payloader.
- The cost of fuel in respect of Bull dozers has been considered for 16 hours of operation per dozer on the ground that Dozer shall work at an average of two shifts per day for dozing of cargo.
- (iii). The cost of fuel of ₹ 66 per litre as considered by KOPT has been updated with reference to the prevailing cost of fuel at ₹ 69.16 per litre.
- (iv). With regard to evacuation of the remaining 20% of cargo, the KOPT has stated that the said cargo would be evacuated by the front end loaders which would be deployed on hire, the cost of which has already been taken into account, as discussed earlier.
- (c). As per the norms prescribed in the guidelines for a coal terminal, the repairs and maintenance cost on civil work is estimated by KOPT at 1% on the civil cost and 7% on mechanical equipment and electrical equipment cost. The said estimation is also considered at 1% on the component of civil assets and 7% on the component of equipment cost forming part of the miscellaneous assets.
- (d). Insurance cost is estimated at 1% of the gross fixed assets and other expenses are estimated at 5% of the gross value of fixed assets by KOPT, which is in line with the norms prescribed in the guidelines.
- (e). Depreciation has been computed by KOPT @ 3.17% on civil assets, 6.33% on Mechanical assets and 9.5% on Electrical assets. The KOPT has confirmed that the depreciation rates are as per the Straight line method as per the Companies Act, 2013.

- (f). The guidelines for upfront tariff fixation stipulate that lease rent for port land is to be estimated based on the rates prescribed in the Scale of Rates of the respective Major Port Trusts. Lease rental has been estimated by the port for a land area of 146984 square metres. The licence fee for the Dock Interior (inside Custom bounded area) (Bare Land) has been fixed at ₹ 26.28 per sq.m per month vide the Order no. TAMP/62/2016-KOPT dated 29 March 2017. As per the said Order, the said licence fee has come into effect from 07 April 2016. Therefore, in April 2018, the said licence fee would have got escalated twice by 2% and the licence fee as applicable as on date would be ₹ 27.346 per sq.m per month, which has been considered by KOPT in its workings.
- (ix). The statement for fixing upfront tariff submitted by the KOPT has been modified in line with the above analysis. A copy of the modified statement is attached as **Annex - I**.
- (x). (a). The Annual Revenue Requirement (ARR) for the Cargo handling activity which is the sum of the operating cost and return on capital employed is estimated at ₹130.56 crores as against ₹130.52 crores estimated by the port.
- (b). As prescribed in the guidelines for a coal terminal, the KOPT has apportioned 98% of the total revenue requirement towards handling charges and 1% each towards storage charge and miscellaneous charge.
- (xi). (a). The tariff caps are determined so as to meet the estimated revenue requirement to operate the terminal at the optimal capacity. Since the handling rate for all the three cargo groups proposed to be handled at the envisaged facility is reported to be the same, the KOPT has sought to prescribe uniform rate for all the cargo items, by considering the ratio of foreign and coastal cargo at 90:10 on the basis of the average of the actual ratio of foreign and coastal cargo (dry bulk [excluding thermal coal shipment]) handled at HDC in the last 3 years. The ratio of foreign and coastal cargo was given by the KOPT based on the past actual data, during the proceedings relating to the proposal received from KOPT for fixation of Reference tariff for the project of Setting up of Outer Terminal-I at HDC vide Order no. TAMP/76/2017-KOPT dated 31 July 2018.
- (b). As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets). Accordingly, concessional tariff has not been prescribed for coastal thermal coal, iron ore and iron ore pellets
- (xii). (a). In the proposed Scale of Rates, the KOPT has proposed a free period of 10 days for coal/ coke and all the other dry bulk cargo envisaged to be handled at the facility, as against the free period of 25 days prescribed in the upfront guidelines.
- (b). In the calculation of storage charges, the KOPT has considered that 40% of the cargo will be evacuated within the free period of 10 days and the balance 60% of the cargo is assumed to be evacuated in a gradual manner over 3 slab periods each comprising of 5 days. Thereafter, the KOPT has assigned weight to each of the slab and has thus worked out the storage charges to be applicable in each of the slabs to meet the ARR pertaining to the Storage activity. The rate for the 2nd slab and 3rd slab is prescribed at 1.5 times and 2 times the rate of the 1st slab. The working for storage charges as furnished by KOPT is attached as **Annex – II**.
- (c). The APSEZL has stated that such fast evacuation of cargo is not a current trade practice and that importers of the cargo at most of the ports get a free storage period of at least one month. Thus, the APSEZL has requested the port to review the calculation of storage charges by considering a free

period of 25 days as prescribed in the Guidelines. Request for increase in the free days has been made by other stakeholders also.

- (d). Some projects whose tariff was fixed under 2008 Guidelines at Major Port Trusts are facing the issues in relation to reported high storage charges which appear to have impact on the viability of the projects. It is reported by some operators that because of high storage charges they are not in a position to attract traffic to their terminals and the cargo gets diverted to nearby non-major ports and private ports who offer more free dwell time and charge lower storage charges. The 2013 Reference tariff Guidelines do not provide for modification of any tariff including free period and storage charges in a post bid scenario. Even the APSEZL has highlighted this aspect. Based on this position, the KOPT was requested to firm up the storage charges and free dwell time.
- (e). The KOPT has stated that the plot turnover ratio for a coal terminal prescribed in the guidelines is 12 based on the dwell time of 30 days. However, considering that the cargo at the proposed facility would be evacuated from the stackyard through mechanized wagon loading system, it has adopted a plot turnover ratio of 18 based on a dwell time of 20 days. In view of this position, the KOPT has reported to have considered a free period of 10 days.
- (f). The KOPT has analysed the request made by the prospective bidders to increase the free days by stating that if the free period is increased, there will be a tendency to store the cargo for a longer period of time, thereby impacting the utilization of the berth and the other parameters. The port has also stated that latest machineries with SILO loading will result in faster evacuation of cargo and reduction of dwell time. Thus, the KOPT is of the view that 10 days free time is enough.
- (g). Based on the detailed justification furnished by the Port, this Authority is inclined to approve the storage charges based on the methodology adopted by the Port, with free storage period of 10 days.
- (xiii). Based on the annual revenue requirement, the upfront tariff cap for miscellaneous charge is prescribed at ₹ 3.69 per tonne. The miscellaneous charge covers miscellaneous services such as sweeping, weighment of wagons, trucks, receiving/ delivery of cargo etc.
- (xiv). In the proposed Reference tariff schedule, the KOPT has proposed definitions for common terms like coastal vessel, foreign vessel, day, free period and per day. The definitions are found to be in line with the definitions prescribed for the respective terms in the various Upfront/ Reference tariff Schedules for the various project at various Major Port Trusts.
- (xv). In the proposed Reference tariff schedule, the KOPT has proposed some general conditionalities like conditionalities governing classification of vessels into foreign and coastal, levy of interest on delayed payments/ refunds, rounding off bills, non-levy of charges for delay beyond a reasonable level attributable to the terminal operator, conditionalities governing the flexibility provided to the terminal operator to levy charges lower than ceiling rates/ rationalize the conditionalities, which are found to be in line with the general conditionalities prescribed in the Upfront/ Reference tariff schedule of various major port trusts.
- (xvi). In the proposed Scale of Rates, the KOPT has proposed "Notes relating to Berth hire". Considering that the berth hire charges at the proposed facility will be levied by KOPT, the levy of berth hire by the KOPT would be governed by the KOPT Scale of Rates. Hence, prescription of the notes in the Scale of BOT operator is not essential and hence, it is deleted.

- (xvii). The KOPT has proposed a provision to state that the Cargo handling charges is a composite charge for unloading of the coal/ coke, Limestone and other Dry Bulk Cargo from the vessel and transfer of the same up to the point of storage, storage at stack yard upto a free period of 10 days after completion of unloading, reclaiming from stack yard and loading on the wagons/ trucks and is inclusive of wharfage and supply of labour and/ or equipment wherever necessary and all other charges not specifically prescribed in the Scale of Rates.
- (xviii). Under the schedule of storage charges, the KOPT has proposed conditionalities stating that commencement of free period from the day following the day of complete discharge of cargo, non-exclusion of terminal's non-working days and custom notified holidays for the purpose of free period, storage charges to be payable for all days including terminal's non-working days and custom notified holidays for stay of cargo beyond free days and storage charge on cargo are not accrue for the period when the terminal operator is not in a position to deliver/ ship the cargo when requested by the user due to reasons attributable to the operator, are seen to be in line with the prescription at the other major ports/ private terminals.
- (xix). As per clause 2.8 of the upfront tariff Guidelines of 2008, the tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2008 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year. In the instant case, since the estimation of capital cost and unit rate of operating cost considered in the upfront tariff calculation are as of the year 2018, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as on 1 January 2018, as proposed by KOPT.
- (xx). Clause 2.2 of the revised tariff guidelines of 2013 requires this Authority to prescribe the Reference Tariff along with the Performance Standards. Though the revised guidelines of 2013 do not require this Authority to go into the Performance Standards proposed by the port it is not unreasonable to assume that the ports would propose reasonable and achievable Performance Standard.

The KOPT has proposed the Performance Standards in respect of Gross Berth Output for Coal/ Coke, Limestone and other Dry Bulk Cargoes to be handled by the Panamax Vessels and Handymax Vessels each at 20000 tonnes per Day per Berth, as considered in the optimal quay capacity calculation.

Recognizing that clause 2.2. of the revised guidelines of 2013 requires this Authority to notify the Performance Standards, the Performance Standards as proposed by the KOPT, are notified along with the Reference Tariff Schedule.

10.1. Subject to above, the Reference Tariff Schedule along with conditionalities governing the Reference Tariff has been modified.

10.2. The Reference Tariff Schedule is attached as **Annex - III** and the Performance Standards for the Mechanisation of Berth no. 3 at HDC of KOPT is attached as **Annex - IV**.

10.3. In the result, and for the reasons given above and based on collective application of mind, this Authority approves the Reference Tariff Schedule for the Mechanisation of Berth no. 3 at HDC and notify alongwith the Performance Standards.

10.4. If there is any error apparent on the face of records considered or for any other justifiable reasons, the port may approach this Authority for review of the reference tariff fixed, prior to completion of bidding process of the project giving adequate justification/ reasoning within 30 days from the date of notification of the Order in the Gazette of India.

10.5. As per clause 2.5 of the Revised Tariff Guidelines 2013, the Reference Tariff and Performance Standards notified by this Authority shall be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. Accordingly, the KOPT is

advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Projects.

11.1. From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff is automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire concession period.

However, the PPP operator would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

11.2. The proposal shall be submitted to this Authority along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Concession Agreement or for the actual number of months of operation, in the first year of operation as the case may be.

11.3. On receipt of the proposal, this Authority will seek the views of the KOPT on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

11.4. In the event of Operator not achieving the Performance Standards as incorporated in the Concession Agreement in previous 12 months, this Authority will not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Operator shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.

11.5. After considering the views of the KOPT, if this Authority is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.

11.6. While considering the proposal for Performance Linked Tariff, this Authority will look into the Performance Standards and its adherence by the Operator. This Authority will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the operator. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013.

11.7. From the third year of operation, the Performance Linked Tariff proposal from the PPP operator shall be automatically notified by this Authority subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The PPP operator, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and this Authority shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

11.8. In the event any user has any grievance regarding non-achievement by the PPP operator of the Performance Standards as notified by this Authority, he may prefer a representation to this Authority which, thereafter, shall conduct an inquiry into the representation and give its finding KOPT. The KOPT will be bound to take necessary action on the findings as per the provisions of the respective Concession Agreement.

11.9. Within 15 (fifteen) days of the signing of the Concession Agreement, the concerned operator will forward the Concession Agreement to this Authority which will host it on its website.

11.10. The PPP operator shall furnish to this Authority quarterly reports on cargo traffic, ship berth day output, average turnaround time of ships, average pre-berthing waiting time as well as the tariff realized for each berth. The quarterly reports shall be submitted by the PPP operator within a month following the end of each quarter. Any other information which is required by this Authority shall also be furnished to them from time to time.

11.11. This Authority shall publish on its website all such information received from PPP operator. However, this Authority shall consider a request from any PPP operator about not publishing certain data/ information furnished which is commercially sensitive. Such requests should be accompanied by detailed justification regarding the commercial sensitiveness of the data/information in question and the likely adverse impact on their revenue/ operation of upon publication. This Authority's decision in this regard would be final.

(T.S. Balasubramanian)
Member (Finance)

				ANNEX - I
REFERENCE TARIFF CALCULATION FOR THE MECHANISATION OF BERTH NO. 3 AT HALDIA DOCK COMPLEX OF KOLKATA PORT TRUST.				
			₹ in crores	
Sr. No.	Particulars		Estimates furnished by KOPT	Estimates modified by TAMP
I	Optimal capacity			
(a)	Optimal Quay Capacity			
	Percentage Share of capacity of Vessels			
	- Panamax Vessels (S1)		80%	80%
	- Handymax Vessels (S2)		20%	20%
	Shipday Output			
	- Panamax vessels (P1)		20000	20000
	- Handymax vessels (P2)		20000	20000
	Optimal Quay Capacity = $0.7*((S1*P1)+(S2*P2))*365$ (in tonnes)		5110000	5110000
(b)	Optimal Yard Capacity			
	- Area of the yard made available by the port as usable storage (in m2) (A)		54000	54000
	- Percentage of total yard area that could be used for stacking (U)		100%	100%
	- Quantity that could be stacked per m2 of area (Q)		5.2	5.2
	- Turnover ratio of the plot in an year (T)		18	18
	Optimal yard capacity $(0.7 \times (A \times U\% \times Q \times T \text{ tons}))$ (in tonnes)		3538080	3538080
	Optimal Capacity of the terminal (lower of (a) and (b)) (in tonnes)		3538080	3538080
	Optimal Capacity of the terminal (in million metric tonnes per annum)		3.53808	3.53808
II	Capital Cost			
A.	Cargo Handling Activity		₹ in crores	
	(i). Civil Cost			
	Revamping of the Existing Berth to accommodate the Loaders and Other Machineries		2.54	2.54
	Civil Foundation for Conveyor Structure		5.00	5.00
	Civil works for Silo System		5.00	5.00
	Construction of New Railway Lines for Rapid Wagon Loading System		24.25	24.25
	Extension of railway tracks upto wagon loading yard & provision of sidings		3.28	3.28
	Service Roads		4.65	4.65
	RCC Drain		2.66	2.66
	Compound wall		3.65	3.65
	Laterite Hard Stading of the Yard		8.10	8.10
	Detailed Designs & Project Supervision costs @ 2%		1.18	1.18
	Contingencies @ 3%		1.77	1.77
	GST on Civil works @ 18%		11.18	11.18
			73.26	73.26
	(ii). Equipment Cost			
	1500 TPH Rail Mounted Gantry Grab Unloader including 25 CBM Grab with rail span of 13.687 M		90.00	90.00
	Conveyor 3000 TPH capacity (Approx 2200 m) including transfer points		38.00	38.00
	Stacker cum Reclaimer- Stacking-3000 TPH, Reclaiming - 2000 TPH, with Boom Length-30 m, Long travel rail gauge- 6m		35.10	35.10
	SILLO- for rapid Wagon Loading site 2000 MT		19.25	19.25
	Dust suppression system and Fire Fighting facilities including water supply and distribution.		6.90	6.90
	In motion Weigh Bridge		0.86	0.86
	Bull Dozer		4.00	4.00
	Detailed Designs & Project Supervision costs @ 2%		3.88	3.88
	Contingencies @ 3%		5.82	5.82
			203.81	203.81
	(iii). Electrical Works			
	Electrical Power supply and distribution System including substation		36.20	36.20
	Illumination including High mast lighting		1.00	1.00
	Detailed Designs & Project Supervision costs @ 2%		0.74	0.74
	Contingencies @ 3%		1.12	1.12
			39.06	39.06
	(iv). Miscellaneous			
	5% on Civil Cost, Equipment & Electrical Cost		15.81	15.81
	Total Capital Cost for Handling Activity (i + ii + iii)		331.94	331.94

Sr. No.	Particulars		Estimates furnished by KOPT	Estimates modified by TAMP
III	<u>Operating Cost for Cargo Handling Activity</u>		₹ in crores	
	(a). Hire Cost			
	- Locomotive		2.09	2.09
	(KOPT - Rs.17.45 lakhs per month * 12 months) (TAMP - Rs.17.45 lakhs per month * 12 months)			
	- Baby Dozers		1.94	1.94
	(KOPT - Rs.13230/- per shift * 10 shifts per vessel * 147 vessels) (TAMP - Rs.13230/- per shift * 10 shifts per vessel * 147 vessels)			
	- Excavator		0.33	0.33
	(KOPT - Rs.1156/- per hour * 8 hours * 360 days per annum) (TAMP - Rs.1156/- per hour * 8 hours * 360 days per annum)			
	- Hydra		0.18	0.18
	(KOPT - Rs.620/- per hour * 8 hours * 360 days per annum) (TAMP - Rs.620/- per hour * 8 hours * 360 days per annum)			
	- 10 MT Pay loaders		2.96	2.96
	(KOPT - Rs.24696/- per shift * 2 shifts * 2 payloaders * 300 days) (TAMP - Rs.24696/- per shift * 2 shifts * 2 payloaders * 300 days)			
	(b). Power Cost		5.90	5.90
	(KOPT - 1.4 units/ tonne * Rs. 11.91 per unit * 3.538 MMTPA) (TAMP - 1.4 units/ tonne * Rs. 11.91 per unit * 3.538 MMTPA)			
	(b). Fuel Cost			
	- Bull Dozers		0.38	0.40
	(KOPT - 12 ltrs/ hour * Rs.66 per litre * 16 hours per day * 300 days) (TAMP - 12 ltrs/ hour * Rs.69.16 per litre * 16 hours per day * 300 days)			
	- Locomotive		0.38	0.40
	(KOPT - 32 ltrs per hour * Rs.66 per litre * 1788 hours p.a) (TAMP - 32 ltrs per hour * Rs.69.16 per litre * 1788 hours p.a)			
	(c). Repair & Maintenance			
	- Civil Assets (1% on civil work)		0.77	0.77
	- Mechanical & Electrical Equipment including spares (7% on equipment cost)		17.85	17.85
	(d). Insurance (1% on Gross fixed assets)		3.32	3.32
	(e). Depreciation			
	- Civil Work @ 3.17%		2.44	2.44
	- Mechanical Work @ 6.33%		13.55	13.55
	- Electrical Assets @ 9.5%		3.90	3.90
	(f). License Fee (146984 sq.m * Rs.27.346 per month * 12 months)		4.82	4.82
	(g). Other Expenses towards salaries and overheads (5% on gross value of assets)		16.60	16.60
	Total Operating Cost		77.41	77.45
IV	<u>Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity</u>			
A.				
(i).	<u>Estimated Revenue Requirement</u>			
	(a). Total Operating Cost		77.41	77.45
	(b). Return on capital Employed @ 16%		53.11	53.11
	(c). Total Revenue requirement from cargo handling activity		130.52	130.56
(ii).	<u>Apportionment of Revenue Requirement</u>			
	(a). Cargo Handling Charges (98% of ARR)		127.91	127.95
	(b). Storage Charges (1% of ARR)		1.31	1.31
	(c). Miscellaneous Charge (1% of ARR)		1.31	1.31
	(d). Total Revenue requirement from cargo handling activity		130.52	130.56
(iii).	<u>Cargo Handling charge</u>			
	(a). Cargo Handling Charge			
	- Revenue Requirement (₹ in lakhs)		127.91	127.95
	- Capacity (Lakh Tonnes per annum)		35.38	35.38
	- Per Tonne rate for handling of cargo (foreign)		376.65	376.69
	(b). Storage Charge			
	- Revenue Requirement (₹ in lakhs)		130.52	130.56
	- % of Cargo to attract storage charge		60%	60%
	- Capacity of cargo to attract storage charge (tonnes)		2122848	2122848
	Storage Charge (beyond the free period)		Rate Per tonne per day or part thereof	Rate Per tonne per day or part thereof
	-Free period		10 days	10 days
	-First five days (after free period)		0.78	0.78
	-6th day to 10th day (after free period)		1.17	1.17
	-11th day onwards (after free period)		1.56	1.56
	(c). Miscellaneous Charge			
	- Revenue Requirement (₹ in lakhs)		130.52	130.56
	- Capacity (Lakh Tonnes per annum)		35.38	35.38
	- Miscellaneous Charge (₹ per tonne)		3.69	3.69

Annex - II

Working for calculation of Storage Charges						
S.No	Particulars	Free days	1st slab	2nd slab	3rd slab	Total
1	Optimum Capacity	35,38,080				
2	Days in each slab	10	5	5	0	
3	%age of cargo in each slab	40%	40%	20%	0%	100%
4	Qty in each slab	1415232	1415232	707616	0	3838080
5	Weights assigned		1.00	1.50	2.00	
6	50% time taken in each slab on an average)		3538080	8845200	0	12383280
7	Weighted Qty in each slab		3538080	13267800	0	16805880
8	Revenue requirement					13051143.83
9	AvgTariff per ton per day					0.78
10	Tariff for each slab		0.78	1.17	1.56	

KOLKATA PORT TRUST

**REFERENCE TARIFF SCHEDULE FOR MECHANISATION OF BERTH NO 3 AT HALDIA
DOCK COMPLEX, KOLKATA PORT TRUST****1. Definitions:**

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

- (i). 'Coastal Vessel' means any vessel exclusively employed in trading between any Port or place in India to any other Port or place in India having a valid coastal license issued by the Director General of Shipping / Competent Authority.
- (ii). 'Foreign Vessel' means any vessel other than Coastal vessel.
- (iii). 'Day' shall mean the period starting from 6 am of a day and ending at 6 am on the next day.
- (iv). 'Free period' shall mean the period during which cargo is allowed storage free of demurrage and this period shall exclude Customs notified holidays and Terminal's non-operating days.
- (v). 'Per Day' shall mean a calendar day or part thereof.

2. General Principles of Assessment:**(i). Criteria for levy of Cargo Related Charges (CRC) at Concessional Coastal rate**

- (a) Foreign going Indian Vessel having General Trading License issued for 'worldwide and coastal' operation should be accorded applicable coastal rates with respect to Handling Charges (HC) i.e. ship to shore transfer and transfer from/ to quay to/ from storage yard including wharfage in the following scenario:
 - (i) Converted to coastal run and carrying coastal cargo from any Indian Port and destined for any other Indian Port.
 - (ii) Not converted* to coastal run but carrying coastal cargo from any Indian Port and destined for any other Indian Port.

* The Central Board of Excise and Customs Circular no.15/2002-Cus. dated 25 February 2002 allows carriage of coastal cargo from one Indian port to another port in India, in Indian flag foreign going vessels without any custom conversion.

- (b) In case of a Foreign flag vessel converted to coastal run on the basis of a license for specified period or voyage issued by the Director General of Shipping, and a Custom Conversion Order, the coastal cargo/container loaded from any Indian Port and destined for any other Indian Port should be levied at the rate applicable for coastal cargo / container.

The charges for coastal cargo/containers/vessels shall be denominated and collected in Indian Rupee.

(ii). System of classification of vessel for levy of Vessel Related Charges (VRC)

- (a). A foreign going vessel of Indian flag having a General Trading Licence can convert to coastal run on the basis of a Customs Conversion Order. Such vessel that converts into coastal run based on the Customs Conversion Order at her first port of call in Indian Port, no further custom conversion is required, so long as it moves on the Indian Coast.

(b). Foreign going vessel of foreign flag can convert to coastal run on the basis of a license for specified period or voyage issued by the Director General of Shipping and a custom conversion order.

(c). Criteria for levy of Vessel Related Charges (VRC) at Concessional Coastal rate and foreign rate

- In cases of such conversion, coastal rates shall be chargeable by the load port from the time the vessel starts loading coastal goods.
- In cases of such conversion coastal rates shall be chargeable till the vessel completes discharging operations at the last call of Indian Port; immediately thereafter, foreign going rates shall be chargeable by the discharge ports.
- For dedicated Indian coastal vessels having a Coastal licence from the Director General of Shipping, no other document will be required to be entitled to coastal rates.

(iii) Interest on delayed payments / refunds:

- a) The user shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the Terminal Operator shall pay penal interest on delayed refunds.
- b) The rate of penal interest will be 2 % above the Base Rate declared by the State Bank of India. The penal interest rate will apply to both the Terminal Operator and the user equally.
- c) The delay in refunds will be counted only 20 days from the date of completion of services or on production of all the documents required from the users, whichever is later.
- d) The delay in payments by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. The provision shall, however, not apply to the cases where payment is to be made before availing the services as stipulated in the Major Port Trusts Act, 1963 and/or where payment of charges in advance is prescribed in this Scale of Rates.

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

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

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

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

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

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

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

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

3. Cargo Handling Charges:

Sl. No.	Commodity	Unit Rate in ₹ per Metric Tonne	
		Foreign	Coastal
1.	All Types of Coal & Coke, Limestone and other Dry Bulk Cargoes (Other than Thermal Coal, Iron Ore & Iron Ore Pellets)	376.69	226.01
2.	Thermal Coal, Iron Ore & Iron Ore Pellets	376.69	376.69

Note:

The Cargo handling charges prescribed above is a composite charge for unloading of the coal/ coke, Limestone and other Dry Bulk Cargo from the vessel and transfer of the same up to the point of storage, storage at stack yard upto a free period of 10 days after completion of unloading, reclaiming from stack yard and loading on the wagons / trucks. This composite charge includes wharfage and supply of labour and/ or equipment wherever necessary and all other charges not specifically prescribed in the Scale of Rates.

4. Storage Charges

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

Description	Rate in ₹ per MT per Day or part thereof
Free period	10 days
First five days after expiry of free period	0.78
6 th day to 10 th day after expiry of free period	1.17
From 11 th day onwards	1.56

Notes :

- Free period shall commence from the day following the day of complete discharge of cargo.
- For the purpose of free time, terminal's non-working days and Custom's notified holidays shall be excluded.
- Storage charge shall be payable for all days including terminal's non-working days and Custom's notified holidays for stay of cargo beyond the prescribed free days.
- Storage charge on cargo shall not accrue for the period when the terminal operator is not in a position to deliver/ ship the cargo when requested by the user due to reasons attributable to the operator.

5. Miscellaneous Charges:

Composite charge for all the miscellaneous services such as sweeping, weighment of wagons/ trucks, receiving/ delivery of cargo etc., shall be levied at ₹ 3.69 per metric tonne.

6. General Note to Section-3 to Section-6 Above:

- The Reference Tariffs will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1st January 2018 and 1st January of the relevant year. Such automatic adjustment of Reference Tariffs will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year.

- ii. From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire licence period. However, the Licensee would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.
- iii. The proposal shall be submitted to TAMP along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Licence Agreement or for the actual number of months of operation in the first year of operation as the case may be.
- iv. On receipt of the proposal, TAMP will seek the views of the Major Port Trust on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.
- v. In the event of Licensee not achieving the Performance Standards as incorporated in the Licence Agreement in previous 12 months, TAMP will not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Licensee shall be entitled to only the indexed Reference Tariff applicable or the ensuing financial year.
- vi. After considering the views of the Major Port Trust, if TAMP is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.
- vii. While considering the proposal for Performance Linked Tariff, TAMP will look into the Performance Standards and its adherence by the Licensee. TAMP will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the Licensee. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013.
- viii. From the third year of operation, the Performance Linked Tariff proposal from the Licensee shall be automatically notified by TAMP subject to the achievement of Performance Standards in the previous 12 months' period as certified by the Independent Engineer. The Licensee, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and TAMP shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

PERFORMANCE STANDARDS

Schedule of Performance Standards for “Mechanisation of Berth no. 3” at Haldia Dock Complex, Kolkata Port Trust”

Gross Berth Output:

The parameter deals with the productivity of the terminal (Gross Berth Output) for different types of cargo. In case of coal/ coke/ limestone/ other dry bulk cargo, the capability of the terminal (mechanization, method of handling) and parcel size will determine the Gross Berth Output. Higher terminal capability and greater parcel size will lead to high productivity. The Gross Berth Output shall be calculated by taking the total cargo unloaded from the ships during a month in the terminal divided by the total number of working days of ships in that month at that terminal. The number of working days of the ships shall be determined by subtracting 4 hours per ship from the total hours spent by all the ships at that terminal in the month in question and dividing it by 24.

The norms of Gross Berth Output for Coal/ Coke, Limestone and other Dry Bulk Cargoes are as follows;

- Gross Berth Output for the Panamax Vessels – 20,000/ Day /Berth.
- Gross Berth Output for the Handymax Vessels – 20,000/ Day /Berth.

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/41/2018-KOPT	Proposal received from Kolkata Port Trust (KOPT) for fixation of reference tariff for the project “Mechanization of Berth No. 3 on Design, Build, Finance, Operate, and Transfer (“DBFOT”) basis” for the period of thirty years at Haldia Dock complex (HDC).
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A summary of the comments received from SAIL on the revised proposal of KOPT dated 15 January 2019 and reply of KOPT thereon is tabulated below:

Sr. no.	Comments received from Users / Prospective bidders	Reply of KOPT
I.	Steel Authority of India Ltd (SAIL)	
(a).	In the revised proposal, Cargo Handling Charges has been revised upwards from ₹.368.05/-pmt to ₹.376.65 /-pmt. Further, new proposal indicates higher terminal handling capacity up from 3.276 MTPA to 3.53 MTPA. Accordingly, the handling rate should be lower considering higher throughput. We would request for lowering of tariff due to increase in handling capacity.	The revised cost estimate is prepared based on the budgetary offer. The same has increased due to market escalation. Further the Terminal handling capacity increased to 3.5 MTPA due to increase in storage area around 54000 sq.m. Accordingly handling rate is prepared as per TAMP 2008 guidelines.
(b).	The proposal indicates storage area of around 54000 sq.m which appears to be less in comparison with overall handling capacity of 3.5 MMTPA. This aspect may be reviewed.	Average unloading is around 20,000 MT per day and evacuation shall be carried out through wagon loading SILO system approximately per rake per 2 hrs ie. around 20,000 MT per day. Hence 54000 sq.m is sufficient for handling 3.5 MMTPA
(c).	HDC finalized other handling schemes at different berths wherein they are charging a composite rate from the users against a set of work of handling dry bulk cargo. It has been observed that the scope of work indicated by HDC for undertaking such handling jobs of dry bulk cargo in a comprehensive manner does not cover certain essential elements of dry bulk handling which is narrated here under:	
	i) Stock accounting of receipt and despatch of cargo and compensation towards loss of cargo beyond permissible handling loss as per industry norms.	One Mechanized dry bulk cargo handling berth is already operational under PPP mode at Berth no-4A where ISPHL is the PPP operator and the cargo of SAIL is being handled. Similarly, the scope applicable in the instant project for basic parameter like unloading from vessel, stacking and conveying, reclaiming and loading into the wagons through SILO based loading system have been considered under this tariff proposal.
	ii) Loading of wagons as per carrying capacity of wagons in line with railway guidelines.	As the loading of Wagons will be through SILO system, then the loading will be upto the carrying capacity of wagons.
	iii) Covering of wagons by tarpaulin as per railway/RPF guideline.	Covering of wagons by tarpaulin is under the scope of the importer.
	iv) Storage of cargo grade wise to avoid contamination at the stacks.	The stock piles has been designed in a Segregated manner and giving sufficient gap between the cargo heaps to avoid contamination.

	v) Although the cargo is stored in the license plot of the user, the actual work of shore clearance, stacking and wagon loading including despatch related services are within the ambit of HDC which are executed by the contractor appointed by HDC. Accordingly, the stockyard management services, stock accounting, protection towards loss of cargo due to either handling loss or security related matter should be logically within the scope of HDC. However, these are not specifically incorporated in the scope of HDC and are not being carried out by the HDC contractor. In turn, the users are advised to make alternative arrangement for getting these jobs done as part of bulk cargo handling requirement at an additional cost.	Dust suppression system has been considered in the estimate and it will be under the scope of Concessionaire.
	vi) There are certain minor but common requirement like placing of railway indents on port railways, pasting labels on wagons indicating description of cargo loaded and other associated jobs which are essential for dry bulk cargo handling but are not being carried out by HDC under their comprehensive arrangement. These jobs are necessarily carried out by the importers like SAIL through HDC appointed contractor at an additional cost.	The existing system will prevail.
(d).	In view of general requirements of any user to handle dry bulk cargo at the Ports and for onward despatch, HDC may be advised to frame schemes covering all elements of operation and not restricting their offer to a truncated service. In other words, the users have to any way make arrangement with HDC appointed contractor through a negotiation process by incurring additional expenses. It is, therefore, requested that TAMP may direct HDC to design a comprehensive scheme taking care of general requirement of dry bulk cargo handling at the Port.	The tariff has been proposed considering the composite rate of Unloading from vessel, conveying & stacking at the stackyard, reclaiming from yard/direct shipment from unloader, conveying and loading into wagons through SILO loading system. Therefore, all the basic elements of dry bulk cargo handling have been considered under the scope of work.
(e).	In the instant case of fixing tariff, the scope of work covers despatch of cargo, shore clearance and despatch related services without taking care of the associated jobs as mentioned above. HDC may be requested to work out there tariff to include all the associated jobs as enumerated above. If required, a consultation process can also be initiated by HDC to get feedback from importers of dry bulk cargo through Haldia Port. Since, the charges in Haldia Port is higher compared to neighbouring major Ports, TAMP may consider more competitive rates for comprehensive service at all locations of HDC.	The rate has been proposed based on the tariff guidelines of 2008. Considering the composite work from unloading from vessel and loading into wagons through the faster loading than other mode of operation at Haldia Port, the proposed rate is competitive and justified.

1.2. The comments received from users/ prospective bidders on the earlier proposal of KOPT dated 11 May 2018 and the response of KOPT thereon are tabulated below:

Sr. no.	Comments received from Users / Prospective bidders	Reply of KOPT
I.	Steel Authority of India Ltd (SAIL)	
(i).	The proposed Tariff is divided into three parts i.e. cargo related charges, storage charges and Miscellaneous charges. The tariff is working out to be ₹.375.18 (max) depending on time of storage. This is higher in comparison to all other mechanised berths (B2&8).	The storage charges have been revised downwards in the instant proposal as requested.
(ii).	As per proposal, cargo storage charges are free for first 10 and thereafter, incremental charges have been proposed for storage beyond free period. Since the stock turnover ratio is estimated as 20 days in the proposal, the free period may also be increased commensurately, particularly considering railway rake availability constraints in mind which is beyond control of importers.	In the revised estimate, it has been considered that 40% cargo will be evacuated during free period of 10 days and 40% within 15 days and 20 % within 20 days. This is possible considering the capacity of the machineries selected for the instant project. In case of SILO loading and 20% option for road evacuation, the free period of 10 days is justified. Increasing the free time to 25 days and three slab each of 5 days will tantamount to dwell time to 40 days which is not at all the intention of this huge project. Latest machineries with SILO loading will result in faster evacuation of cargo and reduction of dwell time
(iii).	The proposal indicates performance parameter like guaranteed gross berth output upto 20000 tonne per day. As regards terms for wagon loading, no such indicator has been mentioned. KOPT should be in a position to guarantee minimum loadability of wagons (the carrying capacity/chargeable weight of the wagons) so that the users are not penalized for not achieving the full loading potential of the wagons. Similarly, the railway rakes also have to be loaded within the permissible time of railways to avoid any demurrage liability on the users.	The wagon loading time has been considered as 2 hrs. with high loading rate through SILO based loading system. Also the Capacity of each rake has been considered as 3800 MT i.e. 64.4 MT per wagon in a 59 box rake.
(iv).	Since, the charges in Haldia Port is higher compared to neighbouring major Ports, KOPT may consider offering reduction in rate with quantity linked incentive. This will encourage large importers like SAIL to handle more volume through Haldia Dock Complex. Since Steel industry is mainly located in eastern region and heavily dependent on Haldia Port, TAMP may consider more competitive operational rates at HDC.	Considering Capital Cost and O&M cost, the rate of unloading from vessel and loading into the wagons with fully mechanized system, the rate seems to be reasonable with respect to other berths of HDC.
2.	Chettinad Builders Private Ltd.	
	Storage Charges as per 10.2.5 in Tariff Proposal: It is observed that the free period for storage of cargo is taken as 10 days and followed by a rate per ton per day basis.	

	(i). It is suggested that there should not be a head of tariff on storage charges since the port i.e. HDC is collecting lease rental for the entire land provided from the concessionaire. The option should be on the concessionaire whether and how to charge the storage charges from different clients in order to have flexibility and attracting cargo to the terminal. In the case any revenue is collected by the concessionaire then the agreed revenue share should be payable to the concessioning authority. (ii). The free days of 10 days is very less for accumulating any export cargo as the current trend is a minimum of 30days of free period for any export cargo.	As the importers are liable to pay the license fee, free storage of 10 days has been considered in the proposal. However, it has been considered that the storage charges will apply after free period of 10 days for faster evacuation. Storage charges have been calculated as per 2008 Guideline. The storage charges as arrived ₹.0.78 /MT for 1st slab after free time of 10 days, ₹.1.16 / MT for 2nd slab after 15 days and ₹.1.55 / MT after 3rd slab (20 days) is over.
3.	Adani Ports and Special Economic Zone Limited	
(i).	General	
	Reference to the Detailed Technical Parameters of Project Facilities The proposal specifies detailed technical specifications of the project facilities to be developed like detailed tech specs of Mobile Harbour Cranes, design and rated capacity of conveyors at jetty and stockyard, design and rated capacity of wagon loading system and truck loading system. Specifying so much of detailed specs will not allow the design flexibility of the Concessionaire which is and would be given to the Concessionaire in the proposed kind of PPP project i.e. on Design, Build, Finance, Operate and Transfer (DBFOT). Model Concession Agreement which will be base for the Concession Agreement to be issued for the Project also specifies that Design Risk will borne by the Concessionaire. APSEZL fully adhere to the obligation of creating a specified terminal capacity, obligation of meeting the specified performance standards and numbers of equipment's to be installed that are specified in the Concession Agreement. Hence, APSEZL suggests that detailed specs of equipment, design and rated capacity should be left to the Concessionaire to determine and achieve terminal capacity and performance standards to be specified in the Concession Agreement for the Project.	The instant project has been revised consisting of Gantry Grab Unloader, Stacker cum Reclaimer (SCR), Conveyor system and SILO loading system. Basic parameters like rated capacity and long travel rail gauge of Unloader & SCR have been mentioned in DPR as the Unloader will be installed on existing berth and SCR will be installed on existing Concrete track foundation. Other aspect specified in DPR will be designed by the operator considering Terminal Capacity and Performance Standard.
(ii).	10.2.1 (a)	
	Project Capacity	
	The optimal capacity of the stockyard is about 3.276 MTPA. After considering the yard plan, the remaining length after deducting the yard machine end positing and yard conveyor head end inclination about 8	Three rows of stockpiles have been considered in revised plan and stockpile area have been considered as 54000 sqm instead of 45000 sq m. earlier. Additional area has been added in plot no 3 as per layout plan [The

	number of stockpile of 100m x 50m are possible. This will result in the reduction of the storage capacity of stockyard and annual yard capacity. The stockyard capacity calculation has considered about 5.2 Ton per sqm of coal can be stacked. But as per our understanding about 4.5 Ton per sqm can be stacked. Based on the above, it is requested to provide additional area of 100m x 50m in continuity with the existing stockyard to achieve 3.2 MTPA of capacity with 10 numbers of stock piles of 100m x 50m.	HDC of KOPT has attached the layout plan for reference].
(iii).	10.2.2 (B)	
	Capital Cost – Gantry Grab Unloader	
	The mechanised system of the project consists of 2 nos of Gantry Grab Unloader with an estimated cost of ₹. 40 Crore for one unloader. As per industry estimate, the cost of one unloader is in the range of ₹. 45-50 Crore which is about 10-20% higher than the current estimated cost of unloader. We request TAMP/KOPT to reconsider the cost of unloader in the project CAPEX. Therefore, it is requested to consider 20m rail for GSU which is the industry standard for berth design since span less than 20m is not considered as an efficient design of unloader.	In the revised estimate, the cost of all equipment considered as per present market rate obtained from equipment manufacturer. The rail span of long travel of 13.687 m has been considered as the unloader will be installed on the existing berth. Equipment manufacturers have submitted the rate considering the same parameter.
(iv).	10.2.2 (B)	
	Capital Cost Mechanical Works	
	4 no. of front end loaders are proposed to be used for shifting of the scattered coal into a heap sufficient for the grab of crane to bite into and lift from the hatch of the vessel. These equipment are being proposed to be procured by the Concessionaire. However, as a widely observed market practice and also from the viability point of view, these types of equipment's are not generally procured but they are used on hire basis. This will reduce the project cost as well as improve the viability of the project and also rationalize the tariffs to be paid by the users. As far as the tariff calculation is concerned, capital cost of the baby dozers may be removed and appropriate hire charges for such dozers may be considered under the operating cost of the project considered at Para 10.2.2. Thus, it is suggested to allow the concessionaire to hire these equipment instead of purchasing the same.	The front end loaders for hatch operation as well as road evacuations have been considered on hiring basis in the revised estimate.
(v).	10.2.2 (B)	
	Capital Cost of project	
	The Project Cost considered for Tariff Fixation is on higher side. On reviewing the cost break up given in the proposal, it considers Detailed Engineering and Project Supervision @ 2% and Contingencies @ 3% of block estimates of Civil, Mechanical and	The revised estimate of ₹. 331.94 Cr prepared based on market rate and 2% supervision & 3% contingency as per norm. 5% miscellaneous charge added as per 2008 guideline.

	Electrical assets. However, APSEZL feel that both these components may get covered in the block estimates mentioned. Further, as per TAMP Guidelines 2008 also, these items are not considered in the capital cost for tariff fixation. Only Miscellaneous component of 5% specified in the Guidelines can be added to the block cost estimated which is already factored in. Hence, in line with TAMP Guideline 2008, APSEZL has suggested that to remove Detailed Engineering and Project Supervision @ 2% and Contingencies @ 3% from the block cost estimates. This will help to reduce the Project Cost as well as the tariffs to be paid by the users. Since the capital cost estimates will impact the fixation of tariffs, APSEZL would like to review and provide its suggestion on the same also. Hence, it is requested to share the detailed cost estimates prepared for the Project.	
(vi).	Para 10.2.2 (B)	
	Capital Cost of the Project - Loco	
	It is requested to allow the Concessionaire to use the Loco on hire basis. This will help to reduce the capex of the Project. As far as tariff fixation is concerned, the hire charges of Loco can be considered as a part of the operating cost of the cargo handling activities.	The locomotive has been considered on hired basis as per the rate of other ports in the revised proposal.
(vii).	Para 10.2.3 (e)	
	License Fee	
	Proposed license fee for land area is ₹.26.81 per sqm per month as per the Scale of Rate of HDC as on 7/4/2017. The license fees will be escalated @ 2% per annum. The license fees for land will be about ₹. 29.02 per sqm per month when the terminal will commence operation in 2021. It is suggested that the proposed rate of License fee is very high and it should be reduced appropriately so that it does not become undue burden over the tariffs to be paid by the users.	The license fee has been considered in the revised estimate as per the prevailing rate at KOPT.
(viii).	Para 10.2.5	
	Proposed Tariff on a higher Side	
	The mechanization of the terminal brings in many benefits including operational and cost efficiency. The mechanization will lead to overall reduction in the overall handling cost of the cargo which will benefit the cargo owner. The existing handling tariff of imported coal at many neighboring competing ports is in the range of ₹ 270 per ton to ₹ 290 per ton. The proposed tariff for the Project is ₹ 368.05 per ton which is very high as per the existing handling tariff. The high tariff is mainly attributed to the high project CAPEX of	The revised estimate of ₹. 331.94 Cr is as per the present market rate. However, the proposed tariff is for unloading from the vessel, conveying to yard, reclaiming and loading to the rake through SILO loading system. The loading rate of each rake is proposed as 2 hrs. Hence, the evacuation of rake will be much faster. So, the instant project is not comparable and the rate is justified as the proposed system will add much more benefit to the user.

	₹.323.44 Crore for a capacity of 3.276 MTPA. The lower project CAPEX will lead to lower tariff which will increase the commercial attractiveness of the project and ultimately benefiting to the port users / cargo owners. It is requested to reconsider the project CAPEX and bring down the project CAPEX so that the tariff of the Project become competitive with the existing competing terminals.	
(ix).	Annexure I	
	Working for calculation of storage charges	
	While fixing the tariffs for storage charges, HDC has considered that 65% of the cargo will get evacuated in first 10 days and the rest of the cargo will be evacuated in the next 6 days. However, such a fast evacuation is not a current practice as per the trade prevailing in the market. Importers of the cargo at most of the ports including Haldia Dock Complex get the free storage period of at least one month. Among these, direct users generally evacuate the cargo within a month period while traders evacuate the cargo by 40-50 days. The Upfront Tariff Guidelines, 2008 allows 25 days of free storage in case of Coal Import terminal. Thus, in line with Upfront Tariff Guidelines 2008 as well as the prevailing dwell time of coal importers, free period for storage of cargo should be allowed for 25 days. This will help in fixation of competitive storage tariffs which will be beneficial to the terminal users. Calculation of Storage Tariffs in the Proposal a) HDC has proposed that all the cargo including direct users and traders will be evacuated in total 16 days only. However, we, based on our experience at HDC as well as other ports, suggest that direct user itself will be able to evacuate the cargo within minimum 30 days while traders' cargo may get evacuated by around 40-50 days. Hence, we suggest that calculation of storage tariff should consider the three slabs of 5 days each after the free period of 25 days. b) As far as the percentages of cargo evacuation is concerned, as per our suggestion in previous point above, 60% of cargo can be considered to be evacuated in 25 days of free period while next 10% of cargo may get evacuated in next 5 days. Remaining 30% cargo can be	In the revised estimate, it has been considered that 40% cargo will be evacuated during free period of 10 days and 40% within 15 days and 20 % within 20 days. This is possible considering the capacity of the machineries selected for the instant project. In case of SILO loading and 20% option for road evacuation, the free period of 10 days is justified. a) Increasing the free time to 25 days and three slab each of 5 days will tantamount to dwell time to 40 days which is not at all the intention of this huge project. Latest machineries with SILO loading will result in faster evacuation of cargo and reduction of dwell time. b) & c) In the revised estimate, it has been considered that 40% cargo will be evacuated during free period of 10 days and 40% within 15 days and 20 % within 20 days. This is possible considering the capacity of the machineries selected for the instant project. In case of SILO loading and 20% option for road

	considered to be evacuated during the next 10 days i.e. 15% in each of the slabs of 5 days. c) The storage tariff calculation in Page 25 assumes that 65% cargo is evacuated in first 10 days and the remaining 35% cargo be stored in the yard for next 5 days and all the cargo be evacuated in the 16th days. This assumption is not in confirmation with 18 days of dwell time assumed for calculation of turnover ratio. Also it is difficult to evacuate such a large quantity in a single day i.e. 16th day. It is requested to revise the storage tariff calculation as suggested in above points (a) and (b). Criticality of Storage Tariffs TAMP and Port Authority will be aware that presently a number of projects at Major Ports are facing the issues in relation to high storage charges which are hampering the viability of the various cargo terminals. The issue of high storage charges has become so much critical to the concessionaires that in many of the cases terminal operators are not able to attract traffic to their terminals and bleeding with heavy losses and the same is also resulting in revenue loss to the Port Authorities. However, Port Authorities are helpless and are not in position to do anything about it in a post bid scenario. Storage charges proposed by HDC in the present proposal are quite high and may jeopardize the commercial viability of this project which could otherwise be a good proposal from all other aspects. In view of this, it is requested to fix a competitive storage tariff for long term viability and success of the project. The storage charges should be fixed at a level which is reasonable, competitive and comparable to the charges which are prevailing for the storage facilities available at HDC and other competing ports/terminals. This will help in setting up a level playing field for the concessionaire and users will also be happy to pay comparable charges.	evacuation, the free period of 10 days is justified The storage charges have been revised downwards in the instant proposal as requested. In the revised estimate, it has been considered that 40% cargo will be evacuated during free period of 10 days and 40% within 15 days and 20 % within 20 days. This is possible considering the capacity of the machineries selected for the instant project. In case of SILO loading and 20% option for road evacuation, the free period of 10 days is justified
4.	Gopalpur Ports	
(i).	The project throughput should be based on 3 mmt or less which predominantly shall be coal.	In the revised proposal, the throughput of proposed project has been computed as 3.53 MMTPA.

(ii).	Kindly clarify on 'Foreign' tariff of ₹.368.05/mt and 'Coastal' tariff of ₹.220.83 - These should be ₹.392.58/mt and ₹. 235.53/mt. (i) Revenue requirement ₹.11575.06 lakhs, (ii) Terminal capacity 32.76 lakhs <u>Handling charges -</u> - Foreign cargo 90% of Terminal Capacity => 29.484 MT 98% ARR => ₹.11,575.06 lakhs ∴ Dry bulk handling charges per ton => ₹.392.58 Similarly, for coastal cargo proportionately => ₹.235.53	The tariff for imported cargo has been proposed as ₹.376.65 per MT and that for coastal cargo as ₹. 225.99 per MT in the current proposal. i) Revenue requirement has been calculated as 130.52 Cr. ii) Optimum Terminal capacity of the project has been computed as 35.38 lakh MT as per the revised estimate.
5.	TM International Logistics Ltd (TMILL)	
(i).	Clause no. 10.2.2 Capital Costs A 3 In the detailed capital expenditure of the project, cost of stacker cum reclaimer tracks (2 no) is mentioned as ₹. 3.76 Cr. However, as per calculation basis, it should be 7.52 Cr.	The stacker cum reclaimer will be installed on the existing concrete base foundation. The bidder will be required to replace the rails only and about 150 m track are required to be extended for the project. Accordingly, an estimated cost of ₹. 3.277 Cr. considered in the Block cost estimate for the project.
(ii).	Clause no. 10.2.2. Capital costs B 7 In the detailed capital expenditure of the project, cost Front end loaders of 4 No. is considered as ₹. 1.20 Cr. TMILL proposes to consider 7 No. of front end loaders (6 MT capacity), 2 No. of excavator (2 MT capacity) 2 No. of dumper (20-25 MT capacity). These additional equipment's are required to not only to take care of the vessel hatch finishing operations but to handle, shift and store residual cargo at stackyard and rake loading area, reclaim and stoppage in mechanized system due to breakdown and other factors. Total Capital cost for these proposed equipment's is approx. ₹. 12-13 Cr and it may be considered in the tariff calculation suitably. Further, the associated operating costs for this increased number in equipment's should be recalculated.	The front end loaders for hatch operation as well as road evacuations have been considered on hiring basis in the revised estimate.
(iii).	Clause no. 10.2.5 Proposed Tariff Tariff Calculation is done considering 90% imported cargo and 10% coastal cargo and accordingly two different rates have been derived for import and coastal cargo. However, due to Govt. of India's drive towards inland waterway transport movement of goods, there are growth possibilities for coastal cargo. Hence, TAMILL has urged to relook the volume proportion of import vs. coastal cargo and propose that tariff calculation to be redone based on 80:20 proportion for import vs. coastal cargo.	The ratio of Imported to Coastal cargo has been considered as 90% to 10% as most of the cargo will be imported. The proportion of cargo have been considered as 80% Coking Coal / Non-Coking Coal, 10% Limestone and other Flux, balance 10% other dry bulk cargo.

2. A Joint hearing on the revised proposal dated 15 January 2019 was held on 19 February 2019 at KOPT premises. At the joint hearing, the KOPT made a brief power point presentation of its proposal. At the joint hearing, the KOPT and the concerned users/ user organizations have made the following submissions:

HDC of KOPT

- (i). A Berth no. 3 mechanisation proposal under PPP mode was filed by HDC with TAMP in May 2018. TAMP held a joint hearing also. Subsequently, at the behest of MOS, it was decided to take up the project with the KOPT's resources. Thereafter, again at the behest of MOS, it has been decided to take up the project on PPP mode. Hence, a revised proposal is submitted.
- (ii). Highlights the physical features, layout of the project.
- (iii). The key changes in the revised proposal vis-à-vis the earlier proposal submitted to TAMP in May 2018 is that cost of jetty revamping and yard development is being considered now, some equipment are proposed to be considered on hire rather than owning etc.
- (iv). Due to draft restriction, vessels come with bottom cargo in all hatches. We could consider productivity at 20,000 tonne per day. We have also frozen equipment. We are also proposing 2 nos. of unloaders, 2 nos. of stacker cum reclaimers and laying of rail lines.
- (v). Total Capital Cost of the project is ₹. 331.94 crores.
- (vi). We have proposed handling charge at ₹. 376.65 per tonne, storage charge at ₹. 1.41 per tonne and Miscellaneous charge at ₹. 3.69 per tonne for approval.
- (vii). The point made by Ripley is a basic question on the need for the project. This is not additional berth. The project is for mechanization of existing berth. The hearing of TAMP is to discuss on the tariff issue. The point made by Ripley has no relevance to tariff proposed for the project.
- (viii). In the proposed berth no. 3, the proposed rate is a composite rate for unloading of the cargo from vessel till loading onto the rakes. The operations at berth no. 3 is fully mechanized, while at berth no. 2 & 8, the cargo is handled through conventional means. The facility at berth no. 2 & 8 vis-à-vis berth no. 3 are very different. Therefore, the rates are different. The proposed rates for berth no. 3 are very much attractive.
- (ix). The proposed facility is envisaged to be used by dedicated users viz., TATA, SAIL etc. In such an event, the cargo can be aggregated and more cargo can be staked due to mechanization. The Turnover time will also be lower. When there are many users, the cargo cannot be aggregated.
- (x). For 2-3 user facility, the proposed area should be sufficient.
- (xi). Further, considering that it takes 1.5 hours to load a rake, 6-7 rakes can be handled per day. The project is viable.
- (xii). If the storage period is increased, there will be a tendency to store the cargo for a longer period of time. This will impact the utilization of the berth and impact the other parameters. 10 days free time is enough.

Ripley

- (i). Considering that there are restrictions in the number of vessels visiting HDC owing to draft constraints and lock gate, why is a new berth conceptualized, which is only going to add to the congestion at the HDC?

Five Star Logistics

- (i). Berth no. 2 & 8 at HDC, which are operated by the port carry out the same operation as is envisaged at proposed Berth no. 3. However, the rates proposed for the Berth no. 3 are higher than the rates of berth no. 2 & 8. In such a scenario, why would anyone come to Berth no. 3.

TMILL

- (i). In the proposed facility with an area of 54000 sq.m, about 3.5 MMTPA is envisaged to be handled. This works out to handling of about 64 tonnes per sq.m. However, in the port, the handling is 22 tonnes per sq.m.

ISHPL

- (i). A precedence is available to state that with the same area, even we are handling 3.5 MMTPA. The proposal of KOPT is not way off.

SAIL

- (i). For a facility with single user, this will work. It is only when you have many users, this cannot be achieved. There will be issue of turnaround of cargo.
- (ii). The port can consider giving a storage period of 20 days.
