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TARIFF AUTHORITY FOR MAJOR PORTS

G.No. 322 **New Delhi,** **23 August 2018**

NOTIFICATION

In exercise of the powers conferred by Sections 48 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from Kolkata Port Trust for fixation of reference tariff for the project of Setting up of Outer Terminal-I alongwith all required associated facilities on Design, Build, Finance, Operate, Transfer ("DBFOT") basis for a concession period of thirty years at Haldia Dock Complex, as in the Order appended hereto.

(T.S. Balasubramanian)
Member (Finance)

Tariff Authority for Major Ports

Case No. TAMP/76/2017-KOPT

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

QUORUM

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

O R D E R

(Passed on this 31st day of July 2018)

This case relates to the proposal received from Kolkata Port Trust (KOPT) for fixation of reference tariff for the project of Setting up of Outer Terminal-I alongwith all required associated facilities on Design, Build, Finance, Operate, Transfer ("DBFOT") basis for a concession period of thirty years at Haldia Dock Complex (HDC).

2.1. This Authority had passed an Order no. TAMP/57/2011-KOPT dated 18 June 2012 fixing upfront tariff for a Mechanized berth to handle coal and a Multipurpose berth to handle coal, iron ore and other bulk cargo to be set up at Haldia Dock-II (North) & Haldia Dock-II (South) at Shalukkhali alongwith all required back-up facilities on Design, Build, Finance, Operate & Transfer (DBFOT) basis in pursuance of the upfront tariff guidelines.

2.2. Subsequently, based on the provisions contained in the Reference Tariff Guidelines of 2013, the KOPT in July 2016 had submitted a proposal for fixation of Reference tariff for the project of "Setting up of Outer Terminal-I along with all required associated facilities on Design, Build, Finance, Operate, Transfer ("DBFOT") basis" at Haldia Dock Complex for a concession period of thirty years, by adopting the upfront tariff fixed in respect of the Mechanised berth at Shalukkhali in the year 2012. Accordingly, this Authority vide its Order no. TAMP/45/2016-KOPT dated 16 August 2016 has approved the Reference tariff for the Outer Terminal-I.

3.1. In this backdrop, the KOPT under cover of its letter dated 20 November 2017 has made the following submissions:

(i). Based on the Order passed by the Authority in August 2016, the KOPT had issued Request for Qualification (RFQ) and Request for Proposal (RFP) for the project. However, due to non-submission of Price Bids by the bidders who qualified through the RFQ process, the bidding process for the project got discharged in March 2017.

(ii). Subsequently the KOPT has decided to re-structure the Outer Terminal – I project parameters, based on the inputs received from the bidders of the earlier tender pertaining to productivity etc.

(iii). Accordingly, KOPT engaged IPA to restructure the project and submit revised Feasibility Report. IPA has submitted its revised Feasibility report alongwith the reference tariff for the subject proposal with draft Scale of Rates (SOR) and performance Standards in October 2017.

(iv). The KOPT has already invited RFQ for the said project of Outer Terminal-I based on the capital cost estimates as per the said revised Feasibility report submitted by IPA. The due date of RFQ process is 11 December 2017.

(v). Thus, a reference tariff proposal in respect of subject project alongwith draft SOR and performance Standard is being furnished.

(vi). The aforesaid reference tariff proposal will be placed in the next meeting of the Board of Trustees for ratification and will be provided in due course of time.

3.2. The other main submissions made by the KOPT vide its letter 20 November 2017 are summarized below:

(i). The HDC handled 34.14 million tonnes of cargo during the financial year 2016-17 against its assessed capacity of 38 million tonnes. During last few years, the traffic handled at HDC 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

The traffic at HDC has declined from 42.34 million tonnes in 2005-06 to the minimum of 28.08 million tonnes in 2012-13. Such decline in traffic is due to reduction in handling of iron ore (environmental/ mining issues) and POL (crude oil diversion to Paradip) coupled with the reduction of draft in the river resulting in smaller vessels/ vessel with smaller parcel size calling at Port. The reduction of traffic is also attributable to two competitive ports Paradip and Dhamra taking away HDC traffic as these two ports are having deeper drafts.

(ii). Kolkata/ Haldia have a vast hinterland, comprising of 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 4A	245	Coal	3.50	Mechanized berth for unloading Coal
Berth 4B	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
Total:			**22.95**	

(*) Capacity as re-assessed by HDC.

(iv). The Present Coal Berths Occupancy (BO) & Capacity at Port is as follows:

Berth No	Cargo	BO 2013-14	BO 2014-15	BO 2015-16	BO 2016-17	Capacity of Coal Berths as on Oct 2017
2	Coal	81.10%	85.98%	86.43%	78.11%	**19.20 MMT
8	Coal	79.88%	83.78%	88.02%	78.62%	
4A	Coking coal	73.71%	65.99%	70.71%	71.99%	

4B	Mix coal	64.82%	76.69%	83.74%	78.90%	
All	All coals	62.12%	58.80%	71.35%	66.59%	
Total	All 13 berths	*69.53%	*66.92%	73.98%	69.38%	

*Excluding Berth No. 5
** Berth No. 2, 4, 4A, 4B & 8.

(v). The projects undertaken for handling of dry bulk cargo at port are as follows:

(a). The proposal to construct OT 1 was first mooted during 2008-09. In order to handle the incremental volume of dry bulk cargo at HDC, the port authorities decided to construct a riverine multi-purpose jetty downstream of the 3rd Oil Jetty along with all required back- up facilities through PPP on DBFOT basis. The HDC authorities invited RFQ during February, 2010 for the project. However, the project was withheld due to other developments in the Port.

(b). The Port is currently constructing a floating jetty for handling barges which will bring coal from Sagar Roads handled through transloader and transhipment operations. The assessed capacity of this jetty is around 2.5 MTPA. This facility is expected to be completed and commissioned by the end of the year 2017. The floating cranes for transloading operations are also expected to be in place by the end of the year 2017.

(c). Due to growing need for handling dry bulk and other developments in the hinterland, HDC has decided to review the proposal afresh with reference to the traffic demands and to execute through PPP. Accordingly, HDC commissioned IPA to prepare a Feasibility Report. The Feasibility Report for the setting up of Reverine Jetty at Outer Terminal-1 as has been submitted by IPA.

(vi). The Salient features of the project are as follows:

(a). The berth will be located 30 m from the mooring dolphin MD 4 of the 3rd Oil Jetty and will be aligned along the line joining MD 3 and MD 4 making an angle of 63^0 east of north considering design vessel size as Panamax bulk carrier with dimensions of DWT 83,000; LOA 230 M; Beam 32 M; Loaded draft: 14.5 M; Parcel size 30,000 Te for 7.5 M draft at Haldia.

(b). The length of berth will be 270 m and the width of the berth will be 25 m. This will facilitate operation of the Harbour Mobile Cranes with hopper and conveyors. There will not be any usage of dumpers and trucks for movement of cargo.

(c). The location of the stackyard has been explored based on the availability of various yard spaces, their relative location, vis – a – vis the location of the berth, external road and rail connectivity corridors with regard to possible right of way. Finally, the location of stackyard has been identified at the open yard west of existing Tata yard beyond Navy Land.

(d). The coal unloaded is transferred to a stacking area located west of Tata Yard. The advantage of this is that the stockyard can be expanded in a linear fashion and the railway yard will be close to the stockyard. The stackyard layout will be rectangular of overall size 750 m x 240 m. There will be 3 rows of stockpiles each of size 100 m x 50 m. There will be two tracks for stackers & reclaimers each of 16 m width running in between the rows of stacks. There will be a 5 m service road running all around the yard for maintenance as well as to enable truck movement of cranes, trucks etc. The entire stackyard will be surrounded by a high compound wall for dust control.

(e). **Ship – Shore Transfer**

The Harbour Mobile Crane proposed will be a tyre mounted, travelling, slewing, luffing machine designed to operate on the berth taking into account the ship sizes and tidal conditions. Though the purpose of the proposed cranes is to unload the coal from the bulk cargo ships, it will be specified to suit for both loading/ discharging of vessel ranging from 5,000 DWT to 80,000 DWT at all load/ ballast and tide conditions. The overall parameters of the Harbour Mobile cranes shall be as follows:

Type	**Tyre mounted travelling, slewing and Luffing typeMobile Harbour cranes – 4 rope type fitted with grabs**
No of Equipment proposed	2 (Two)
Cargo to be handled	Coal & coke of various grades and densities, Limestone and other dry bulk cargo.
Hoist Capacity Four Rope Grab Operation	Safe Working Load on hook 100t up to 22 m radius 40t up to 32 m radius
Operating Ship Size	5,000 DWT to 80,000 DWT
Travel Speed (Long Travel)	4.8 km/hr
Hoisting speed with 40 t Grab Hoisting speed with 100 t hook	72 m/min 28 m/min
Load on tyres	Around 5 MT / sq. m
Load per outrigger pad	Around 2 MT / sq. m
Slewing Speed (min)	1.7 - 2.0 rpm
Slewing Range	360 deg.
Luffing Speed	Max. luffing speed – Approx. 80 m/min
Outreach Maximum	42 m
Lift height over Top of Berth	Min. 42 m
Lift height Below Top of Berth	12 m (minimum hoisting height on hook)

(f). **Berth – Stockyard Transfer**

The coal unloaded by the two Harbour Mobile cranes will be transferred to a single dock conveyor through hoppers integral with the cranes. The dock conveyor will be at an elevation on the jetty and located on the rear side. It will have a rated capacity of 2000 TPH and a designed capacity of 2400 TPH. This dock conveyor will run for the entire length of the berth. At the end of the berth, there will be a transfer tower for transferring the coal to the next conveyor. The conveyor on the berth will be closed on three sides with only opening on the front side to let the short conveyors from the mobile Harbour cranes to transfer into the dock conveyor.

The coal from the berth conveyor will be conveyed up to the stackyard area. In the yard area, the stackyard conveyors are laid to receive, stock pile the coal as per yard configuration. The capacity of yard conveyors will be in line with the preceding conveyors viz. 2000 TPH rated and 2400 TPH designed. This conveyor will run inside a closed gallery.

(g). **Stockyard Equipment**

The equipment in a coal stackyard normally consists of Stacker, Reclaimer or Stacker cum Reclaimer. The stacker cum reclaimer travels under the control of an operator, and places the coal in windrows which are ultimately formed in geometric shaped stockpiles. The Stacker cum Reclaimer being a combination machine is proposed for stacking and/ or reclaiming coal to/ from the stock piles. During the stacking mode, the coal received from the Harbour mobile cranes through the conveyors is stacked through the boom conveyor on to the stock pile. In the reclaiming mode the bucket wheel of the machine reclaims coal which puts the same through the boom conveyor and central chute of the

machine onto the yard conveyor which is directed onto to the wagon loading conveyor line for loading into the wagons.

(h). **Wagon loading system**

The coal and other dry bulk cargoes will be evacuated from the stackyard both by rail and road. The evacuation by rail is planned to the extent of 80% of the throughput i.e. about 4 MTPA. A rapid wagon station with a silo is proposed to be installed as part of the system. This system will consist of a concrete silo of about 2000 tons holding capacity and fitted with a rapid loading chute with electronic pre-weighing bins, sensors and a cascade chute. Prior to the placement of the rake below the silo, the silo will be preloaded to its capacity so that at least half a rake of material is already available and once the loading from silo starts, the conveyor system feeding the silo is started and filling carried out to be in line with the commensurate requirement. There will be a conveyor running from the stockyard up to the wagon loading silo. The rake will be in motion at a controlled speed. While, one main line of about 1400 m long will be required for in-motion wagon loading the other line is required for engine escape after placement of empty rake and for receipt of an additional empty rake kept ready for loading. All the railway operations from exchange yard to the rapid wagon loading station and within the yard proposed will be done by diesel locomotives.

(i). **Truck loading system**

As stated above 20% of the total throughput is expected to be handed by Road. It is planned to install a truck loading station which essentially consists of a truck loading silo under which the dumpers are positioned for loading. The dumpers get loaded by gravity with articulation of a loading chute which directs pre weighed quantity from the silo through a bin. The cycle time for loading a dumper of 20 tons payload will be about 7 minutes which includes time for positioning of the dumper, loading and removal and the start of next cycle for the next dumper.

(j). **Other Equipment**

During final stage of ship unloading operation when the coal leftover in each hatch is not enough for the Harbour Mobile Crane to operate, front end loaders are deployed to accumulate the material. It is proposed to plan for four Front end loaders for the purpose and during other times they may be deployed in stockyard area.

(vii). The summary of equipment planning for the proposed facilities for ensuring unloading operations uninterrupted is as follows:

Main Equipment:	**Quantity**
Mobile Harbour Cranes	2 Nos.
Stacker cum Reclaimer	2 Nos.
Rapid Wagon loading system with Silo	1 No.
Lorry loading silo	1 No.
Conveyors:	
Elevated Conveyors from Berth to Stackyard	1090 m
Ground level Conveyors in the Stackyard area	1470 m
Elevated Conveyors from Stackyard to Wagon loader silo	155 m
Elevated Conveyor to Truck Loading Silo	About 15 m
Other Equipment:	
Baby Dozers (Front end loaders)	4 Nos.
Other Equipment & Works	
In-motion Rail weigh bridge	1 No
Road Weigh Bridge	1 No

Illumination including High mast lighting	1 Lot
Workshop Facilities	1 Lot
Water supply and distribution system	1 Lot
Dust suppression and Firefighting facilities	1 Lot

(viii). Mainly Coal, Coke, Limestone and other compatible dry bulk cargoes are proposed to be handled at this facility. Based on the traffic projections, the expected future traffic of coal & coke is as follows:

(*Traffic in million tonnes*)

Year	Trend Based Projection	Customer Interaction Based Projection	Average of Both
2017-18	10.35	11.54	10.96
2018-19	10.72	12.57	11.66
2019-20	11.11	13.94	12.53
2020-21	11.52	16.20	13.86
2021-22	11.95	16.74	14.35
2022-23	12.39	17.12	14.77
2023-24	12.87	17.52	15.21
2024-25	13.37	17.91	15.64
2025-26	13.90	18.31	16.11
2026-27	14.45	18.80	16.63
2027-28	15.04	19.14	17.18

Based on the above projection and present capacity of the HDC to handle coal, projects on anvil, the KOPT proposed to develop a berth with an optimal capacity of 5.11 MTPA.

(ix). The expected traffic at the proposed Riverine Jetty at Outer terminal is as follows.

Year	Projections in Million tonnes
2020-21	1.25 (6 Months)
2021-22	2.50
2022-23	2.75
2023-24	3.03
2024-25	3.33
2025-26	3.66
2026-27	4.03
2027-28	4.43
2028-29	4.87
2029-30	5.11
2030-31	5.11

(x). The tariff proposal is based on the Upfront Tariff Guidelines 2008 in the terms of clause 2.4 of "Revised Guidelines for Determination of Tariff at Major Port, 2013. As per the Upfront Tariff guidelines 2008, the tariff structure for the services rendered at a Coal terminal shall be on based on the Annex-III of the 2008 guidelines lines. The details are given under heads of Optimal capacity – (a) Optimal Quay capacity (b) Optimal yard capacity Capital cost, Operating Cost, Annual Revenue Requirement, Framing of Scale of Rates, as discussed hereinafter.

(xi). **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 Quay capacity

As per Guidelines, the optimal quay capacity is 70% of the maximum or possible quantity of coal that could be loaded (in the case of loading terminal)

or unloaded (in the case of unloading terminal) on to or from the ship in a period of one year expressed in tons. The formula is:

$$\text{Optimal quay capacity} = 0.7 \times \left[\left(\frac{S1\%}{100} \times P1 + \frac{S2\%}{100} \times P2\right) \times 365\right]$$

S1 - Percentage share of capacity of capesize vessels
P1 - Ship day output of capesize vessels
S2 - Percentage share of capacity of Panamax vessels
P2 - Shipday output of Panamax vessels

Since S1, S2 and S3 are to be determined taking into consideration the draft availability and type of vessel expected to be handled at a particular port, in the present proposal, the share of Panamax vessels and Handymax vessels is considered as 70% and 30% respectively based on the current trend.

Although the Guidelines fixed the norm of 40000 MT & 35000 MT for loading & unloading of coal respectively for a Panamax vessel per day and 20000 MT & 15000 MT for loading & unloading of coal respectively for a Handymax vessel per day, in view of the lock gate constraint and the draft available at Haldia, the average handling rate of 20000 MT per day only is considered in the calculations for arriving at the Optimal Quay capacity. Accordingly, the Optimum Quay Capacity works out to 5.11 MTPA as under:

S.No	Particulars		
	Optimal Quay Capacity		
(a)	Share of capacity of different Cargo items		
	%age share of capacity of Panamax vessels	S1	70%
	%age share of capacity of Handymax vessels	S2	30%
(b)	Ship day output (Tonnes)		
	Shipday output of Panamax vessels	P1	20000
	Shipday output of Handymax vessels	P2	20000
(c)	Optimal capacity of the terminal		
	[(0.70 x{(S1xP1) + (S2xP2)}x365]		51,10,000
	Say		**5.11 MTPA**

(b). Optimal Yard capacity

The optimal yard capacity is 70% of the maximum quantity of coal that could pass through the yard. The formula is:

Optimal Yard capacity = 0.7 x A x U x Q x T tons

A - Area of the yard made available by the port for development in sq.m.
U - Percentage of total yard area that could be used for stacking
Q - Quantity that could be stacked per sq.m. of area
T - Turnover ratio of the plot in a year

	Optimal Yard Capacity	
i	A= Area of the yard made available by the port as usable storage (in m2)	75000
ii	U = Percentage of total yard area that could be used for stacking	Exact area of stack yard taken as usable
iii	Q = Quantity that could be stacked per m2 of area	5.2
iv	T = Turnover ratio of the plot in an year	20
	Optimal yard capacity	
	(0.7 x (A x U% x Q x T tons)	54,60,007

	Say	**5.46 MTPA**

Hence the optimal capacity of the terminal is considered as 5.11 MTPA.

(xii). The total capital cost of the project estimated by KOPT is ₹. 481.47 Crores. The breakup of the estimation submitted by KOPT is as follows:

Civil Works	**₹. in Crores**.
Construction of berth structure 270 m x 25 m	57.40
Construction of one approach trestles	13.00
Construction of Transfer towers	0.75
Hardening of stack yard	72.20
Concrete paving of two stock piles for dry bulk cargo	5.05
Two tracks for stackers and reclaimers	7.80
Service Roads	8.33
Miscellaneous buildings	5.80
Extension of railway tracks upto wagon loading yard and provision of sidings	19.46
Compound wall	1.30
Total Civil Cost	**191.09**
Mechanical& Electrical Cost	
Mobile Harbour Cranes -2 Nos	51.00
Elevated conveyor system	20.16
Ground level conveyor system	17.64
Stacker cum Recalimer	43.06
Shunting Loco	20.00
Wagon Loading Silo	15.00
Lorry loading Silo	8.00
Baby dozers (FELs)	1.16
Other Equipment, Weigh Bridge, Work Shop facilities etc.	7.30
Dust Suppression, Water Supply etc.	12.00
Electrical Works	15.90
Total Mechanical / Electrical Cost	**211.22**
Total Capital Cost excluding GST/Contingencies/Misc costs/ Prel. Exps.	**402.31**
Detailed Designs & Project Supervision costs @2%	**8.05**
Contingencies @ 3%	**12.07**
GST on Civil works @ 18% only (GST on Mech/Elect works not considered)	**36.11**
Misc costs @ 5%	**22.93**
GRAND TOTAL – CAPITAL EXPENDITURE	**481.47**

(xiii). Calculation of Total Operating Cost

₹. Lakhs

Sl. No.	**Particulars**	**Cargo Activity**	**Berthing Activity**	**Total Amount**
1.	**Repairs & Maintenance Cost**	**1804.01**	**74.68**	**1878.69**
a)	Civil Works (1% of capital cost)	173.92	74.68	248.60
b)	Mechanical Works (7% of capital cost)	1507.38		1507.38
c)	Electrical Works (7% of capital cost)	122.71		122.71
2.	**Power and Fuel cost**	**699.70**		**699.70**
a)	Power for Operation of HMCs and illumination of terminal (1.4 units per ton x 51.1 lakh tons x ₹. 8.31 per unit)	594.50		594.50
b)	Fuel cost for operation of Front End Loaders/Baby dozers – 4 Nos	35.80		35.80

	(12 ltrsph x ₹. 58.348 per litre x 8 hrs of operation per loader x 3 loaders per vessel and idle time/mobilisation)			
c)	Fuel cost for operation of Loco – 1 No (30 litresph x ₹. 58.348 per litre x 3965 hrs of operation	69.40		69.40
3.	**Other Expenses** (@ 5% of Gross value of assets for cargo handling activity)	**2033.97**		**2033.97**
4.	**Insurance** (@ 1% of Gross value of assets)	**406.80**	**74.67**	**481.47**
5.	**Lease rentals**	**925.63**		**925.63**
a)	Land area of 265470 m2 x ₹. 27.346 per sq mtr p.m x 12 months	871.14		871.14
b)	Water front area of 33210 m2 x ₹. 13.673 per m2 x 12 months	54.49		54.49
6.	**Depreciation**	**2080.97**	**236.72**	**2317.69**
a)	Civil structures - (3.17% of capital cost)	551.34	236.72	788.06
b)	Mechanical Works (6.33% of capital cost)	1363.10		1363.10
c)	Electrical Works (9.50% of capital cost)	166.53		166.53
7	**Total Operating Cost**	**7951.08**	**386.07**	**8337.15**

(xiv). 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 lakhs)

Estimated Revenue Requirement	**Amount**
(a) Operating Cost	7951.08
(b) Return of Capital Employed @ 16%	6508.70
Total Revenue Requirement (a) + (b)	**14459.79**

(b) Revenue Requirement for Berthing Activity

(₹. in lakhs)

Revenue Requirement - Berthing Activity	**Amount**
(a) Operating Cost	386.07
(b) Return on Capital Employed @ 16%)	1194.79
Total Revenue Requirement (a) + (b)	**1580.86**

(c) 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 lakhs)

Activity		**Amount**
a) Cargo Handling Charges	98%	14170.59
b) Storage Charges	1%	144.60
c) Miscellaneous Charges	1%	144.60
Total Revenue Requirement (a) + (b) +(c)	**100%**	**14459.79**

3.3. Based on the Optimum capacity of the cargo to be handled at the proposed project facilities and the annual revenue requirement, the KOPT has sought approval for the following:

(i). Cargo Handling Charges

The share of Overseas and Coastal movements for Dry Bulk Cargo (Coal, Limestone etc.) is considered to be around 90% and 10% respectively. Accordingly, the following Cargo Handling Charges are proposed at the Terminal.

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).	288.87	173.32
2	Thermal Coal, Iron Ore & Iron Ore Pellets.	288.87	288.87

(ii). Storage Charges

The Annual Requirement towards storage charges is Rs.144.60 lakhs. It is expected that only 25% 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 (OT-1)						
S.No	Particulars	Free days	1st slab	2nd slab	3rd slab	Total
1	Optimum Capacity	51,10,000				
2	Days in each slab	10	5	5	5	
3	%age of cargo in each slab	75%	10%	10%	5%	**100%**
4	Qty in each slab	38,32,500	5,11,000	5,11,000	2,55,500	**51,10,000**
6	Weights assigned		1.00	1.50	2.00	
7	Weighted Qty in each slab (50% time taken in each slab on an average)		12,77,500	44,71,250	44,71,250	**1,02,20,000**
8	Revenue requirement					**1,44,59,789**
9	AvgTariff per ton per day					**1.41**
10	Tariff for each slab		1.41	2.12	2.83	

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	1.41
6th day to 10th day after expiry of free period	2.12
From 11th day onwards	2.83

Notes

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

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

(iii). 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.

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

(iii). Miscellaneous Charges

Composite charge for all the miscellaneous services such as sweeping, weighment of wagons/trucks, receiving/delivery of cargo is proposed to be charged for all Dry Bulk Cargo is as under:

Sr. no.	Particulars	₹. in lakhs
i.	Revenue Requirement **(a)**	144.60
ii.	Capacity of the Terminal (lakh tons per annum) **(b)**	51.10
	Misc charges per tonne **(a) / (b)**	2.83

Hence, the proposed Miscellaneous charges is ₹ 2.83 per tonne for all Dry Bulk Cargo.

(iv). Berth Hire Charges

The number of ships expected with a parcel size of 24000 MT is 213 Nos. With a shipday output of 20000 MT and the average number of days of working as 255.5, the Total GRT hrs work out 2318.58 lakhs. Based on the required ARR, the Berth hire charges are worked out as under:

Sr. no.	Particulars	Unit	Panamax	Handymax	Total
1.	Shipday output	Tonnes/day	20000	20000	
2.	Average Parcel size	Tonnes	24000	24000	
3.	Tonnage Expected to be handled	Tonnes	35,77,000	15,33,000	51,10,000
			70%	30%	100%
4.	Expected number of vessels (3./2.)	Nos	149	64	213
5.	Avg number of Berth days (3/1)	Days	178.85	76.65	255.50
	(365 days x 70%)				
6.	Total berth hours (5x24)	Hours	4,292	1840	6132
7.	Addl Berth Hrs (waiting at Berth)	4 hrs/vsl	596	256	852
8.	Total Hrs for GRT calculations		4,889	2,095	6,984
9.	Average GRT	Tonnes	38000	22000	
10.	Total GRT hours (9*8)	GRT hrs	18,57,65,533	4,60,92,200	23,18,57,733
11.	Revenue Requirement	₹.			15,80,85,980
12.	Average Berth Hire per GRT/Hr				0.6818
	Working for Foreign / Coastal Berth Hire Rate				
13.	Total GRT Hrs				23,18,57,733
14.	GRT Hrs for Foreign Vessels			90%	20,86,71,960
15.	GRT Hrs for Coastal Vessels			10%	2,31,85,773
16.	Weighted GRT hours of Coastal vessels			60%	1,39,11,464
17.	Hence Total GRT hrs for calculation of Berth hire				22,25,83,424
18.	Berth Hire for Foreign Vessel (11./17.)				0.7102
19.	Berth Hire for Coastal Vessel			60%	0.4261

Hence, the proposed Berth Hire Charges are as follows:

	Berth hire charges per GRT per hour	Amt in ₹.
	Overseas : Coastal Ratio = 90 : 10	
i)	Foreign vessels (Rs. per GRT per hour)	0.710
ii)	Coastal Cargo (Rs. per GRT per hour)	0.426

3.4. The Performance Standards proposed by the KOPT are 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 Handimax Vessels – 20,000/ Day /Berth.

4. In accordance with the consultative procedure prescribed, a copy of the KOPT proposal dated 20 November 2017 was forwarded to the concerned users/ user organisations and to the prospective bidders as suggested by the KOPT, vide our letter dated 27 November 2017, seeking their comments. Subsequently, a copy of the proposal was forwarded to the additional prospective bidders as communicated by KOPT vide its email dated 28 November 2017. Some of the users/ user organisations/ prospective bidders have furnished their comments. These comments were forwarded to the KOPT as feedback information. After reminders dated 01 January 2018, 15 January 2018, 01 February 2018 and 3 April 2018**,** the KOPT has responded vide its letter dated 31 May 2018**.**

5. Based on preliminary scrutiny of the KOPT proposal, additional information/ clarification was sought from KOPT vide our letter dated 7 December 2017. After reminders dated 01 January 2018, 15 January 2018, 01 February 2018 and 3 April 2018**,** the KOPT has responded vide its email dated 31 May 2018. The information/ clarification sought by us and the response of KOPT thereon are tabulated below:

Sl. No.	**Information/ Clarification sought by us**	**Reply of KOPT**
1.	**General**	
(i).	As already requested vide our letter of even number dated 27 November 2017, the KOPT to furnish the resolution of the Board approving the proposal under reference.	After a reminder dated 22 June 2018, the KOPT vide its letter no. Ad/0038/PPP/OT-I/VIII/2334 dated 12 July 2018 has furnished a copy of the Board Resolution approving the proposed Reference tariff already forwarded to TAMP.
(ii).	The KOPT has considered optimal capacity of the facility at 5.11 MMTPA. However, the traffic that is estimated to be achieved at the proposed facility in the commencing year of 2020-21 (for 6 months) is only 1.25 MMTPA. This is envisaged to gradually increase on a year on year basis, in such a manner that the facility would operate at its optimal capacity of 5.11 MMTPA only in the year 2030-31. In such a scenario, the KOPT has proposed to create a capacity to the tune of 5.11 MMTPA in the initial stage itself. The KOPT to offer its comments in this regard.	The traffic figures are considered on the basis of a study and interaction with the stake holders, development in the neighboring ports, etc. Going by the current growth rate of cargo at HDC at around 19%, there will be need for additional capacity at HDC for handling dry bulk cargo.

<table>
<tr><td>(iii).</td><td>The proposed facility is envisaged to handle coal/ coke, 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.

(b). Reason for adopting the Guidelines as applicable for a coal terminal rather than adopting the guidelines prescribed for a multipurpose berth.</td><td>The proposed terminal is envisaged to primarily handle all types of import Coals/ Cokes. Considering uncertainties with respect of Coal imports, for optimum utilization of the facility and providing flexibility to the terminal operator, provision has been proposed enabling handling of other dry bulk cargo as well through the terminal. As such specific cargo share of each type of other dry bulk cargo has not been envisaged.

This terminal is primarily planned to handle coal/ cokes. The other dry bulk cargo are only supplementary, which are possible to be handled by the proposed mechanized system at similar output rates. Hence the mechanized cargo handling equipment are planned to suit only dry bulk cargo for unloading, stacking and evacuation. In a Multipurpose Berth both dry bulk and break bulk cargoes are handled. Since, evacuation from berth through trucks/ dumpers is not permitted, handling of cargoes other than dry bulk is not feasible. In this case, since cargo for the project will predominantly be coal/ coke & other dry bulk cargoes, appropriate guideline for coal terminal has been considered.</td></tr>
<tr><td>(iv).</td><td>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 any other compatible cargo that can be handled at the facility at this stage itself of fixing of Reference tariff on upfront basis and before invitation of bids, particularly in the scenario that the capacity of the facility would be underutilized in the initial years. The KOPT to 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.</td><td>It is envisaged to handle Coal/ Coke, other dry bulk cargo through the same system proposed at the terminal. KOPT’s proposal already contains proposed cargo handling charges for “All types of Coal/ Coke, Limestone and other Dry Bulk Cargoes” under Item 9.2.5 (a) of the Tariff Proposal.</td></tr>
<tr><td>2.</td><td>Optimal capacity:</td><td></td></tr>
<tr><td>(i).</td><td>Quay capacity:</td><td></td></tr>
<tr><td>(a).</td><td>The actual per day productivity achieved in respect of dry bulk cargo viz., coal/ coke, limestone and other dry bulk cargo by Panamax and Handymax vessels for the past three years at HDC including at the berths handled by private terminal operators, to be furnished vessel wise.</td><td>The KOPT has attached Berthwise productivity of Coking Coal, other Coal and other dry bulk import cargo for last 3 years at HDC as follows:
<table>
<tr><th></th><th colspan="2">2014-15</th><th colspan="2">2015-16</th><th colspan="2">2016-17</th></tr>
<tr><th></th><th>Pana max</th><th>Handy max</th><th>Pana max</th><th>Handy max</th><th>Pana max</th><th>Handy max</th></tr>
<tr><td>Coking Coal</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Berth-2</td><td>7748</td><td>4765</td><td>8714</td><td>7799</td><td>21950</td><td>22625</td></tr>
<tr><td>Berth-4A</td><td>18697</td><td>15969</td><td>14808</td><td>14022</td><td>14859</td><td>14679</td></tr>
<tr><td>Berth-4B</td><td>19578</td><td>1333</td><td>21923</td><td>0</td><td>22015</td><td>0</td></tr>
<tr><td>Berth-8</td><td>8812</td><td>4371</td><td>7389</td><td>0</td><td>21820</td><td>0</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table></td></tr>
</table>

		Non Coking Coal Berth-2 9344 9575 8118 5571 23852 25601 Berth-4A 15699 0 14890 0 14856 0 Berth-4B 24308 0 24097 22435 22479 22374 Berth-8 6458 8198 7787 6949 22572 20233 **Other Dry bulk (import)** Berth-2 7115 5567 6722 5732 22324 24645 Berth-4A 0 0 0 0 0 0 Berth-4B 18446 22450 15786 20348 22413 23007 Berth-8 6265 5325 6812 4773 22544 21024 **Overall Dry (import)** Berth-2 7116 8086 10199 6580 22812 23624 Berth-4A 18632 15788 14852 14230 14853 15085 Berth-4B 20354 21581 22314 18476 22047 22886 Berth-8 5917 6541 8725 6603 22778 21896 **Overall 16927 7376 17057 7806 19478 22450**
(b).	The basis for considering the handling rate of 20,000 tonnes per day to be furnished.	The consultant engaged by KOPT for preparation of the Feasibility Report and Tariff Proposal in respect of the project of OT-I has considered this handling rate based on the average productivity achieved during past year with similar equipment as indicted under para 3.6.1 at page 39 of the Feasibility Report.
(c).	The basis to consider the percentage share of Panamax vessels and Handymax vessels at 70:30 to be explained.	The % share of vessels in last 5 years is given below: **Year** | **Panamax : Handymax** 2012-13 | 71:29 2013-14 | 77:23 2014-15 | 83:17 2015-16 | 78:22 2016-17 | 78.22 The ratio considered is based on the minimum ratio in the past 5 years i.e. the % share of Panamax to Handymax vessels in 2012-13 (71:29).
(d).	KOPT to confirm that the operator of the proposed facility would not be allowed to deploy higher capacity HMCs at the facility other than the capacity of the HMC considered for quay capacity calculation.	The port's consideration is the number of harbour mobile cranes and their minimum capacity to achieve the throughput and handling rate. A higher capacity harbor mobile crane is not objectionable and the operator has to design his berth structure accordingly as per provisions stipulated in this regard.
(e).	KOPT to also confirm that all the dry bulk cargo viz., coal/ coke, limestone and other dry bulk cargo (other than thermal coal, iron ore & iron ore pellets) envisaged to be handled at the facility would have the same productivity levels.	The facility envisaged is that of a dry bulk cargo unloading terminal. The proposed productivity level/ performance standard is 20000 MT per day. In order to achieve desired productivity levels while handling different bulk cargoes, the operator may keep requisite provisions/ make suitable modifications in grab size, conveyor speed etc. to suit the varying bulk densities.

(f).	The KOPT to confirm that the designed capacity of the dock conveyor at 2000 tonnes per hour would be ideal considering the productivity of 20000 tonnes per day through 2 no. of HMCs.	The design capacity of conveyor considered is optimal.
(ii).	Yard capacity:	
(a).	The KOPT has proposed to hand over 265470 square metres of land 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 28% of the total area of land i.e. 75000 square metres for the purpose of stacking of cargo, in the yard capacity calculation. The KOPT to justify consideration of only 28% of the total area proposed to be allotted for the facility for stacking and balance 72% for ancillary purposes.	Although the total land earmarked for the BOT operator may be 265470 m2, part of the area is required for accommodating requisite infrastructure and services. Break-up of utilization of the total area earmarked is as under: 1. Stackyard area - 180000 m2 2. Conveyor Trestle - 9550 m2 3. Approach road leading to Main road - 25000 m2 4. Railway tracks etc - 40920 m2 5. Trucks parking area, Setting tank, etc. - 10000 m2 Total - 265470 m2 Further, in the total area earmarked for stack yard viz. 180000 sq. m. (750m x 240m), 150 nos. plots of 100 m x 50 m (i.e 75000 sq. mtrs.) are considered to be developed for actual stacking of cargo with remaining area earmarked for a 20 meter wide green belt and Wind barrier, installing stackyard conveyors, stacker reclaimer tracks, transfer houses, service roads, approaches etc.
(b).	The actual stack height for coal/ coke, limestone and other dry bulk cargo achieved at HDC to be furnished for the past three years including at the berths handled by private terminal operators.	No mechanism for recording the stack height is prevalent at HDC. However, maximum stack height at the mechanized Berth No. 4A is about 10m.
(c).	The basis for considering the turnover ratio at 20 to be explained, considering that in the past, while fixing the upfront tariff for a PPP project at KOPT, a turnover ratio of 30 has been considered.	The turnover ratio is based on the rate of evacuation from the stockyard. In this case, a ratio of evacuation from the dwell time of 18 days considered based on the stock pile area of 75000 sq. mtr. The coal stack density of 5.2 tonnes per sq. mtr. and cargo evacuation rate of 15000 tonnes per day (i.e 0.7 * 75000*5.2/15000).
3.	**Capital costs:**	
(i).	The basis for considering contingencies @ 3%, project supervision @ 2%, GST on civil works @ 18% and miscellaneous cost @ 5% of the civil cost and mechanical cost in the capital cost estimates of cargo handling activity and berthing activity to be furnished.	It is a normal practice to consider 2% and 3% towards Detailed Engineering and project Supervision and Contingencies respectively. GST @ 18% as per new GST rules is applicable on Civil works and accordingly the same has been considered as cap-ex. Miscellaneous component of 5% has been considered in line with the TAMP guidelines.
(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 under each of the activity viz., Handling activity, Berthing activity and Storage activity.	The Consultant has furnished a letter dated 09.11.2017 in this regard, which has already been forwarded to TAMP along with the Tariff Proposal dated 9.11.2017 sent to TAMP. Copy of the same is furnished by KOPT.
(iii).	The KOPT to furnish documentary evidence in support of the cost of each of the Equipment viz., HMCs, Elevated conveyor system, Ground level conveyor system, Stacker cum Reclaimer, Shunting Loco, Wagon Loading Silo, Lorry loading Silo, Baby dozers (FELs) and Weigh	(The letter dated 09 November 2011 as referred by KOPT is a letter received by it from its Consultant i.e. IPA, wherein the IPA has stated that the cost estimates are prepared based on the data bank available with IPA/ its resource persons. This data is constantly updated by

	Bridge. The workings to arrive at the cost of each of the Equipment as considered in the estimates also to be furnished.	IPA's team of consultants on the basis of resent market costs as tracked from similar and most recent construction / installation. With regard to electrical and mechanical equipment, the IPA letter states that its Consultants make discreet enquiries with reputed manufacturers of such equipment and moderate the costs as most equipment involved are tailor made as per specifications.)
(iv).	The basis for the lumpsum considered for Workshop facilities, dust suppression, water supply and Electrical works to be furnished justifying the cost considered in the estimates.	The costs considered are on the basis of assessment made by the Consultant for a facility of this size and nature.
(v).	The KOPT to confirm that the base rate considered by it to estimate the civil capital costs as well as cost of the each of the equipment considered under each of the activity viz., Handling activity, Berthing activity and Storage activity, reflect the prevailing/ current market rates.	The base rates considered to estimate the civil capital costs are assessed to be at current market rates. So far as capital cost estimated for each equipment is concerned, the KOPT has referred to a letter dated 09 November 2011 received by KOPT from its Consultant i.e. IPA, wherein the IPA has stated that the cost estimates are prepared based on the data bank available with IPA/ its resource persons. This data is constantly updated by IPA's team of consultants on the basis of resent market costs as tracked from similar and most recent construction / installation. With regard to electrical and mechanical equipment, the IPA letter states that its Consultants make discreet enquiries with reputed manufacturers of such equipment and moderate the costs as most equipment involved are tailor made as per specifications.
(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 to be explained.	The costs towards conveyor gallery and railway yard are already included in the capital cost estimates.
4.	**Operating Costs:**	
(i).	The fuel consumption of 12 litres per hour in respect of baby dozers and 30 litres per hour in respect of loco to be substantiated by documentary evidence.	A Baby dozer is equated with 10T Payloader and accordingly 12 ltrs per hour as Table 3 of TAMP guidelines dated 26 Feb 2008 is considered.
(ii).	The basis for considering cost of fuel in respect of baby dozers for 8 hours of operation per dozer per vessel may be explained. If only 3 dozers shall work in 3 hatches at a given time, consideration of 4th dozer to be justified.	The assumption for considering 8 hrs. per ship for pooling the cargo has already been given at para 9.2.3. b (ii) (10 of the Tariff proposal. Fuel for 3 dozers only is considered in the proposal as explained in the above para as well as under the fuel cost. One dozer is kept as standby for any breakdown of the other dozers during vessel operation. As has been stated, no fuel is considered for the 4th Baby dozer in the proposal. Further, the KOPT vide its email dated 22 June 2018 has clarified that 80% of cargo is expected to be evaluated by rail, for which fuel consumption of loco has been considered. The balance 20% of cargo is expected to be handled by Road. However, fuel cost for movement of cargo through dumper for evacuation of cargo by road is not included in operating cost as the

<table>
<tr><td></td><td></td><td>entire cost of movement of cargo by road including fuel cost after loading through Silo Truck loader will be borne by importer concerned.</td></tr>
<tr><td>(iii).</td><td>KOPT to confirm that the rate of depreciation considered in respect of the various types of assets is as per the provisions of the Companies Act, 2013.</td><td>It is to confirm that Depreciation considered in the proposal is on Straight line method as per the Companies Act, 2013.</td></tr>
<tr><td>(iv).</td><td>(a). 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 2017, the said licence fee would have got escalated by 2% and the licence fee as applicable as on date would be ₹.26.81 per sq.m per month. However, instead of considering the licence fee as prevailing as on date, the KOPT has applied one more escalation and has calculated the licence fee by considering the rate of ₹.27.35 per sq.m. The KOPT to recalculate the licence fee by taking into account the rate of licence fee at ₹. 26.81 per sq.m per month.

(b). The rate of license fee considered for water area also to be reviewed.</td><td>The entire exercise of awarding the BOT concession and handling over Land was expected to be by April 2018. Hence the applicable first year in April 2018 is considered.

The lease rent for water front is considered at 50% of the SOR as per Guidelines only. As stated above, the rate is considered for the 1st year appropriately.</td></tr>
<tr><td>5.</td><td>Annual Revenue Requirement and Handling rates:</td><td></td></tr>
<tr><td>(i).</td><td>The basis to consider the ratio of foreign and coastal cargo at 90:10 to be explained.</td><td>The ratio of foreign and coastal cargo at 90:10 has been considered 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 last 3 years, which is as given below:
<table>
<tr><th>Year</th><th>Overseas (%)</th><th>Coastal (%)</th></tr>
<tr><td>2014-15</td><td>89</td><td>11</td></tr>
<tr><td>2015-16</td><td>92</td><td>8</td></tr>
<tr><td>2016-17</td><td>94</td><td>6</td></tr>
<tr><td>Average</td><td>91</td><td>9</td></tr>
</table></td></tr>
<tr><td>(ii).</td><td>In the backdrop of the comments of the Adani Ports and Special Economic Zone Ltd (APSEZL) on the proposal of KOPT, evacuation of 75% of cargo within the free period of 10 days to be critically reviewed.</td><td>The operator is supposed to be efficient in faster turnover for effective utilization of his assets. Hence 25% cargo attracting storage charges is considered in the proposal.
The storage charges considered are less as compared to the storage charges of many coal terminal in India. Considering that the income on storage charges is only 1% of the total APR, which an operator is supposed to charge, the tariff is not considered high.
Further, as the revised Model Concession Agreement for PPP project at Major Ports now requires revenue share on ‘Per Ton” basis only, the concern of the prospective bidders about revenue sharing on the TAMP prescribed rates no longer exists.</td></tr>
</table>

<table>
<tr><td></td><td></td><td>However, TAMP may decide.</td></tr>
<tr><td>(iii).</td><td>Evacuation of 75% of cargo within the free period to be substantiated with actuals at HDC during the past three years.</td><td>There are no comparable facilities for handling dry bulk cargo through a riverine terminal existing at HDC through which substantiation may be justified with actuals.
The average overall dwell time figure for dry bulk for the current FY (upto Feb 2018) at HDC berth inside impounded dock is 33.94 days. However, such dwell times at HDC are not comparable with that proposed under the project as HDC as HDC berths do not have specified cargo storage areas dedicated for each berth as well as there is substantial variation in the cargo mix.
Therefore, to realize the capacity of the proposed terminal, the operator is expected to efficiently and effectively utilize its assets and as such evacuation rates within the free period have been considered.
Moreover this issue being related to the storage charges, it is added that as the revised Model Concession Agreement for PPP projects at Major Port now requires revenue share on ‘Per Ton’ basis only, the concern of the prospective bidders about revenue sharing on the TAMP prescribed rates no longer exists.</td></tr>
<tr><td>(iv).</td><td>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 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. 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.</td><td>The norms for plot turnover for a coal terminal prescribed in the guidelines is 12, based on the dwell time of 30 days. Since the proposed evacuation of coal from the stackyard will be through mechanized wagon loading system, the KOPT has considered a dwell time of 18 days and has adopted a plot turnover ratio of 20. Correspondingly, lesser number of free days in storage charges calculation has been considered.
Considering that the income on storage charges is only 1% of the total ARR, which an operator is supposed to charge, the tariff is not considered high.
Further, as the revised Model Concession Agreement for PPP projects at Major Ports now requires revenue share on ‘Per Ton’ basis only, the concern of the prospective bidders about revenue sharing on the TAMP prescribed rates no longer exists.
However, TAMP may decide.</td></tr>
<tr><td>(v).</td><td>The basis for considering the average parcel size of both Panamax vessels and Handymax vessels uniformly at 24000 tonnes to be explained.</td><td>Due to draft constraints in the navigable channels, full load ships cannot visit HDC and all vessel handled at HDC are mostly part loaded Panamax or Handymax size vessels lightened to Haldia draft. As such, irrespective of the vessel type (Panamax or Handymax), the average parcel loads of dry bulk cargo ships handled at HDC are more or less similar. Further, the average parcel load of dry bulk cargo vessels worked at similarly equipped berths at HDC (Berth Nos. 2,8,4A & 4B) during last three years is given below:
<table>
<tr><th>Year</th><th>Average Parcel Size (Tonnes)</th></tr>
<tr><td>2014-15</td><td>24090</td></tr>
<tr><td>2015-16</td><td>24228</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>2016-17</td><td>24286</td></tr>
</table>

It may be seen from above that the average parcel size is about 24000MT.
Hence average parcel size of both Panamax vessels and Handymax vessels have been considered uniformly at 24000 tonnes.
</td></tr>
<tr><td>(vi).</td><td>The average parcel size of vessels carrying dry bulk cargo viz., coal/ coke, limestone and other dry bulk cargo handled at HDC during the past three years may be furnished.</td><td>Average parcel size of Dry Bulk (import0 cargo for 3 years:
<table>
<tr><th></th><th>2016-17</th><th>2015-16</th><th>2014-15</th></tr>
<tr><td>C/Coal</td><td>27929</td><td>25843</td><td>25579</td></tr>
<tr><td>Non Coking Coal</td><td>24195</td><td>25843</td><td>21998</td></tr>
<tr><td>Met Coke</td><td>16655</td><td>19531</td><td>18811</td></tr>
<tr><td>Lime</td><td>23478</td><td>23627</td><td>22940</td></tr>
<tr><td>M. Ore</td><td>18081</td><td>20536</td><td>20357</td></tr>
<tr><td>Other dry (import)</td><td>19445</td><td>20015</td><td>20185</td></tr>
<tr><td>Overall Dry (import)</td><td>23658</td><td>23216</td><td>22635</td></tr>
</table>
</td></tr>
<tr><td>(vii).</td><td>Consideration of additional waiting time at the berth by the vessel at 4 hours per vessel to be justified.</td><td>HDC is a tidal port and the vessels have to invariably wait for suitable tide and other favorable navigational conditions for sailing after completion of work.
Further, service time for activities like removal of pay loaders, closing of hatches, completions of services, signing of documents, departure of personnel, boarding of pilots, lifting of gangway, readiness of engine and singling up etc. is required.
For the purpose, additional waiting time at the berth by the vessel at 4 hours per vessel has been considered.</td></tr>
<tr><td>(viii).</td><td>The average actual additional waiting time at the berth by the vessels at HDC for the past three years to be furnished.</td><td>The total time of 4 hours considered by the Consultant for Outer Terminal-I cannot be compared with any real life data. This is because dry cargo is not being handled at the riverine terminals.
However, the average waiting time of vessels at the three riverine oil terminal is given below:
<table>
<tr><th>Year</th><th>Average waiting time (HRS)</th></tr>
<tr><td>2014-15</td><td>8.28</td></tr>
<tr><td>2015-16</td><td>5.69</td></tr>
<tr><td>2016-17</td><td>8.46</td></tr>
</table>
</td></tr>
<tr><td>(ix).</td><td>The average GRT of the vessels at 38000 for Paramax and 22000 for Handymax considered by KOPT to be validated with average actual GRT of Panamax and Handymax vessels handled at HDC for the past three years.</td><td>Average GRT of Panamax and Handymax vessels of 3 years is given below:
<table>
<tr><th>Dry Bulk Vessels</th><th>2016-17</th><th>2015-16</th><th>2014-15</th></tr>
<tr><td>Panamax (Based on DWT more than 60000 MT)</td><td>38053</td><td>37074</td><td>36913</td></tr>
<tr><td>HandyMax (DWT less than 60000MT)</td><td>22493</td><td>22634</td><td>22924</td></tr>
</table>
</td></tr>
<tr><td>6.</td><td>Scale of Rates</td><td></td></tr>
</table>

(i).	The KOPT has proposed a general note no (i) to the effect of indexing the indexation Reference tariff to inflation to the extent of 60% of variation in WPI occurring between 1st January 2018 and 1st January of the relevant year. In this connection, it may be noted that the capital cost estimates and operating cost estimates have been considered by KOPT based on the rates prevailing as of the year 2017. Therefore, it may be appropriate to consider the occurring between 1st January 2017 and 1st January of the relevant year. The KOPT to suitably modify the proposed note.	The proposal is made at the end of the year i.e December 2017. Hence, the inflation is appropriately considered from the year 2018.
(ii).	The existing Scale of Rates (SOR) of KOPT prescribes charges and conditions governing levy of charges for Priority / Ousting priority berthing. The Priority Berthing / ousting priority berths charges are linked to the berth hire charges prescribed in the SOR of the KOPT. In the proposed SOR for the facility at OT-1, the KOPT has proposed a note to the effect that the rate and conditions for granting ousting priority berthing / priority berthing will be as per the provisions of SOR of KOPT. The said proposed note to be reviewed considering that the KOPT has proposed separate Berth hire charges for the OT-1 facility.	No provision may be created for levying Berthing Priority/ Ousting Berthing Priority charges. However, this being a policy issue, TAMP may decide.
(iii).	The reason for prescribing a free period of only 10 days to be explained considering that the upfront guidelines for the coal terminal prescribes a free period of 25 days.	The norms for plot turnover for a coal terminal prescribed in the guidelines is 12, based on the dwell time of 30 days. Since the proposed evacuation of coal from the stackyard will be through mechanized wagon loading system, the KOPT has considered a dwell time of 18 days and has adopted a plot turnover ratio of 20. Correspondingly, lesser number of free days in storage charges calculation has been considered.

6.1. A joint hearing on the case in reference was held on 13 December 2017 at the 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.

6.2. During the joint hearing, it was brought to the notice of the KOPT about the reported high storage charges fixed under 2008 Tariff Guidelines for some bulk cargo operators at other Major Port Trust. It was also brought to the notice of the KOPT that there are also request from some BOT operators for change in the cargo profile. Since it is difficult to intervene after the bidding process is over, the KOPT was requested vide our letter dated 20 December 2017 to review, if necessary, the proposed storage charges and cargo profile for fixing tariff upfront before initiating bids.

6.3. The KOPT while responding to the comments of the users/ prospective bidders vide its letter dated 31 May 2018**,** has, interalia, responded. With regard to storage charges, the KOPT has stated that considering that the income on storage charges is only 1% of the total ARR, which an operator is supposed to charge, the tariff is not considered high. Further, as the revised Model Concession Agreement for PPP projects at Major Ports now requires revenue share on 'Per Ton' basis only, the concern of the prospective bidders about revenue sharing on the TAMP prescribed rates no longer exists. With regard to cargo profile, the KOPT is of the view that its proposal already contains proposed cargo handling charges for "All types of Coal/ Coke, Limestone and other Dry Bulk Cargoes" under Item 9.2.5 (a) of the Tariff Proposal.

7. As decided at the joint hearing, some of the users/ user organisations/ prospective bidders have furnished their additional comments. These comments were forwarded to KOPT for its

feedback comments. After reminders dated 01 January 2018, 15 January 2018, 01 February 2018 and 3 April 2018**,** the KOPT has responded vide its email dated 31 May 2018**.**

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). This Authority had passed an Order no. TAMP/57/2011-KOPT dated 18 June 2012 fixing upfront tariff for a Mechanised berth to handle coal and a Multipurpose berth to handle coal, iron ore and other bulk cargo to be set up at Haldia Dock-II (North) & Haldia Dock-II (South) at Shalukkhali alongwith all required back-up facilities on Design, Build, Finance, Operate & Transfer (DBFOT) basis following upfront tariff fixation guidelines of 2008.

Subsequently, based on the provision contained in the Reference Tariff Guidelines of 2013, this Authority vide its Order no. TAMP/45/2016-KOPT dated 16 August 2016 has approved the adoption of upfront tariff fixed for mechanized berth to handle coal in the year 2012 as Reference tariff for Setting up of Outer Terminal-I along with all required associated facilities on DBFOT basis at Haldia Dock Complex (HDC).

Since the bidding process for the project got discharged due to non-submission of Price Bids by the bidders, the KOPT has decided to re-structure the Outer Terminal – I project parameters, based on the inputs received from the bidders of the earlier tender pertaining to productivity etc. and keeping in view the growing need for handling dry bulk cargo and other developments in the industry, commerce and trade of the vast hinterland of KOPT. It is seen that the restructuring of the project is mainly with reference to change in the main handling equipment and the resultant change in ship day productivity of equipment. Thus, the KOPT has come up with a proposal for fixing Reference tariff for the mechanized Outer Terminal-I to be set up alongwith all required associated facilities on DBFOT basis for a concession 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 terminal is envisaged to primarily handle all types of import Coal/ Coke. 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 confirmed that handling of these cargo items would only be supplementary and only those cargo which are possible to be handled by the proposed mechanized system at similar output rates, will be handled. As such, cargo share of each of the cargo proposed to be handled at the facility has not been envisaged by KOPT.

Once a 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.

One of the prospective bidders viz., Adani Ports and Special Economic Zone Limited (APSEZL) based on its experience at other ports has, interalia, stated that it will not be possible to handle all other dry bulk cargo (except coal/ coke) through conveyors designed for coal/ coke cargo. In this regard, it is relevant here to mention that the Paradip Port Trust (PPT), inorder to bring in efficiency and to ensure optimum utilization 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 relied upon.

(iii). The KOPT has submitted its proposal in November 2017. The information/ clarification sought by us has been furnished by KOPT, after several reminders, on 31 May 2018 and 12 July 2018. 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 and the other cargo proposed to be handled at the facility would only be supplementary. 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 and that at the proposed facility, the mechanized cargo handling equipment are planned to suit only unloading of dry bulk cargo. Since evacuation of substantial quantum of cargo from the berth through trucks/ dumpers is not envisaged in the proposed facility, handling of cargo other than dry bulk is reported to be not feasible by KOPT. Therefore, the port has not adopted the guidelines prescribed for fixation of Reference tariff for a Multipurpose berth. The approach of the port in adoption of the Upfront tariff Guidelines as applicable for a coal terminal for the proposed facility, is considered.

(v). <u>Optimal Capacity:</u>

(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 Harbour Mobile Cranes (HMCs). 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.

One of the prospective bidders viz., Hindustan Ports Private Limited (HPPL) is of the view that a ship day output of 20000 MT for Panamax vessels is realistic but for a Handymax vessel it should be 15000 MT, as prescribed in the Guidelines.

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 and in the absence of any sufficient justification by HPPL to consider a lower productivity of 15000 tonnes for Handymax Vessels (except that it is based on the Guidelines), 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 HMCs 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 70:30. The HPPL is of the view that the ratio of Panamax and Handymax Vessels is to be considered at 50:50. The HPPL has not furnished any explanation for suggesting the change in the ratio of Vessels. As rightly brought by KOPT, given that the productivity of both Panamax and Handymax Vessels has been commonly considered at 20000 tonnes, any change in the ratio of Panamax vessel and Handymax vessel will have no bearing on arriving at the quay capacity.

(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 265470 sq.m of land to the proposed BOT operator. Out of the said area, 180000 sq.m of land has been earmarked as Stackyard and the balance 85470 sq.m of land is envisaged to be utilized for Conveyor Trestle, Approach road leading to Main road, Railway tracks, Trucks parking area, Setting tank etc. Further, out of the total area earmarked for stack yard viz. 180000 sq. m., 75000 sq. mtrs. have been considered to be developed for actual stacking of cargo with remaining area earmarked for green belt and Wind barrier, stackyard conveyors, stacker reclaimer tracks, transfer houses, service roads, approaches etc. Thus, out of the total area of 265470 sq.m of land to be allotted, 75000 sq.m of land would be utilized for the purpose of stacking.

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 28% of the total area of land i.e. 75000 square metres for the purpose of stacking of cargo, in the yard capacity calculation. 75000 sq. meters would consists of 150 plots of 5000 sq. meters each. The remaining 105000 sq. mtr area is earmarked for 20 meter wide green belt and wind barriers, conveyor installations, stacker reclamiers tracks, service roads, transfer houses etc. The proposed allocation of land is seen to be as per the Feasibility Report. None of the users/ prospective bidders have objected to the proposed arrangement. It may not be unreasonable to assume that the port would have done due diligence on this aspect. The judgment of the port in this regard is 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. On a specific query to justify the stack height with actuals achieved at HDC and that at berths handled by other private operators, it has indicated

the stack height at the mechanized Berth No. 4A at 10 tonnes per sq.m.

Considering that a stack height of 10 tonnes per sq.m. has been achieved in one of the berths of HDC, it may not be unreasonable to consider the same stack height to determine the yard capacity. However, since the quay capacity is a constraint in the case in reference, increase in the stack height would increase the yard capacity only theoretically and the quay capacity would continue to be a constraint.

The proposed stack height is seen to be as per the Feasibility Report. None of the users/ prospective bidders have objected to the proposed stack height. It is noteworthy that even in respect of fixation of upfront tariff for handling of thermal coal and steam coal at East Quay – 1A berth of Visakhapatnam Port Trust (VPT) as well as while fixing upfront tariff for the Riverine Jetty at Outer Terminal-1 of KOPT, a stack height of 5 tonnes per sq. metre was considered. This Authority, therefore, relies upon the stack factor as considered by the port.

(iii). The norm for plot turnover for a coal terminal prescribed in the guidelines is 12, based on the dwell time of 30 days. Since the proposed evacuation of cargo from the stackyard will be through mechanised wagon loading system, the KOPT has considered a dwell time of 18 days and has adopted a plot turnover ratio of 20. This position is relied upon.

(iv). Based on the parameters as considered by KOPT as discussed above, the optimal yard capacity of the facility works out to 5.46 million tonnes per annum at 70% utilization, as estimated by the Port.

(c). The optimal capacity for the proposed facility is accordingly considered at 5.11 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 using Harbour Mobile Cranes, Hopper and conveyor system and to the rakes/ trucks, 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 is ₹481.47 crores of which ₹ 74.67 crores is for berthing activity and ₹406.79 crores is estimated for cargo handling services.

(c). Civil Cost:

(i). Berth Activity:

(a). The guidelines require to consider the cost as estimated by the port. The capital cost for berth hire services as considered by the Port includes cost of construction of berth, Detailed Designs & Project Supervision costs @ 2%, Contingencies @ 3%, GST on Civil works @ 18% and Miscellaneous costs @ 5%.

(b). The capital cost for construction of berth measuring 270 m x 25 m, is estimated at ₹57.40 Crores. The Consultant engaged by KOPT to prepare the Feasibility Study for the project under

reference i.e. Indian Ports Association (IPA) has confirmed that the civil cost estimates have been prepared on the basis of present market costs as tracked from similar and most recent construction. In view of the above said confirmation of IPA as endorsed by the KOPT, the civil cost estimates as furnished by the KOPT are relied upon.

(c). The KOPT has considered cost towards Detailed Designs & Project Supervision costs @ 2%, Contingencies @ 3% and GST on Civil works @ 18%. The APSEZPL is of the view that Supervision costs and Contingencies cost should not be taken separately since it would form part of main civil costs. The HPPL is of the view that percentage of contingency costs and supervision costs should be considered at higher rate of 5% each instead of the 3% and 2% considered by KOPT. In this regard, the KOPT has clarified that it is the normal practice to consider 2% and 3% towards Detailed Engineering and Project Supervision and Contingencies respectively. The judgment of the port in this regard is relied upon.

(d). The port has also estimated miscellaneous capital cost at 5% of the total berth construction cost. The upfront tariff guidelines do not specifically provide for estimation of miscellaneous capital cost under berthing service. However, while dealing with proposals of major port trust for fixation of upfront tariff, this Authority has considered the miscellaneous capital cost at 5% under the Berthing Service. Based on the same analogy, it is not inappropriate to allow 5% of the berth cost towards miscellaneous capital cost.

(ii). Cargo handling activity:

(a). The capital civil costs has been estimated by the KOPT to the tune of ₹ 165.64 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 Consultant engaged by KOPT to prepare the Feasibility Study for the project under reference i.e. Indian Ports Association (IPA) has confirmed that the civil cost estimates has been prepared on the basis of present market costs as tracked from similar and most recent construction. In view of the above said confirmation of IPA as endorsed by the KOPT, the civil cost estimates as furnished by the KOPT are relied upon.

(d). Equipment Cost:

(i) The Equipment cost of ₹ 221.78 crores as estimated by the Port is towards 2 Nos. of Mobile Harbour Cranes (MHCs), 2 Nos. of Stacker cum Reclaimer, Rapid Wagon loading system with Silo, Lorry loading silo, 1090 m Elevated Conveyors from Berth to Stack yard, 1470 m Ground level Conveyors in the Stack yard area, 155 m Elevated Conveyors from Stack yard to Wagon loader silo, 15 m Elevated Conveyor to Truck Loading Silo, 4 Nos. of Baby Dozers (Front end loaders), Shunting Loco, In-motion Rail weigh bridge, Road Weigh Bridge, Illumination including High mast lighting, Workshop Facilities, Water supply and distribution system and Dust suppression and Firefighting facilities.

(ii). The coal unloaded by the two Harbour Mobile cranes is envisaged to be transferred to a single dock conveyor through hoppers integral with

the cranes. At the end of the berth, a transfer tower is envisaged for transferring the coal to the next conveyor. The coal from the berth conveyor will be conveyed up to the stackyard area, where the conveyors would receive and stock pile the coal. Through the boom conveyor and central chute of the machine, the cargo is directed onto to the wagon loading conveyor line for loading into the wagons for evacuation. Some cargo is also envisaged to be evacuated by trucks. Further, during final stage of ship unloading operation when the coal leftover in each hatch is not enough for the Harbour Mobile Crane to operate, front end loaders (Baby Dozers) are proposed to be deployed to accumulate the material. 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.

(iii). The APSEZL has requested that the concessionaire be allowed to use the Loco on hire basis instead of acquiring it as it would lead to reduction in the Capital cost, thereby leading to overall reduction in tariff of the project – Loco. The APSEZL has also stated that the hire charges of Loco can be considered as a part of the operating cost of the cargo handling activities. Since Locos are generally not available on hire as and when needed and considering that the project aims at a faster evacuation of the cargo by evacuating 80% of the cargo by rakes, the port has felt it essential to consider the capital cost of loco, instead of hiring the loco. The judgment of the port in this regard is relied upon.

(iv). With regard to Baby Dozers, as brought out above, the KOPT has considered the capital cost of 4 no. of Dozers. However, in the calculation of the Operating cost, the KOPT has considered the operating cost of only 3 dozers on the ground that at a given time only 3 dozers may work in hatches and that 1 no. of dozer will be kept as standby for any breakdown of the other dozers during vessel operation.

(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.

(vi). The Consultant engaged by KOPT to prepare the Feasibility Study for the project under reference has confirmed that with regard to electrical and mechanical equipment, its Consultants make discreet enquiries with reputed manufacturers of such equipment and moderate the costs as most equipment involved are tailor made as per specifications. In view of the above said confirmation of IPA as endorsed by the KOPT, the equipment cost estimates as furnished by the KOPT is relied upon.

(vii). The estimates of lumpsum amount considered towards Work Shop facilities, Dust Suppression, Water Supply etc., are reported to be based on the assessment made by the Consultant for a facility of this size and nature, which are taken into account in this analysis.

(e). 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.

(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). 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 ₹ 8.31 per unit as considered by KOPT is supported by documentary evidence.

(b). Fuel Cost:

(i). Baby Dozers (Front end Loaders)

The KOPT has considered the fuel consumption in respect of Baby dozer at 12 litres per hour. In this connection, the KOPT has equated Baby Dozer with a 10T Payloader and for which the upfront guidelines prescribe a fuel consumption norm of 12 litres per hour. The judgment of the port to equate Baby Dozer with a 10T Payloader is relied upon. The cost of fuel in respect of baby dozers has been considered for 8 hours of operation per dozer per vessel for pooling the cargo for grab bite, including the time involved in mobilization of dozers. This is seen to be as per the Feasibility Report.

Considering the average parcel size of the vessels at 24000 MT (as discussed subsequently), and based on the optimal capacity of the terminal at 5.11 MMTPA, the number of vessels has been considered at 213.

(ii). Locomotive:

The KOPT has considered the fuel consumption in respect of Locomotive at 30 litres per hour. Inspite of a specific request, the KOPT has not explained the basis for considering the fuel consumption in respect of Locomotive at 30 litres per hour. Considering that the Feasibility Report of the Project prescribes the fuel consumption in respect of Locomotive at 30 litres per hour, the same has been considered.

Given that each rake has a capacity of carrying 3712 tonnes of cargo and since it takes 3 hours to handle each rake and an additional time of 20% for positioning, the KOPT has calculated the fuel consumption for 3965 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.

(iii). The cost of fuel of ₹ 58.348 per litre as considered by KOPT has been updated with reference to the prevailing cost of fuel at ₹ 70.33 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 trucks deployed by the importers and hence it has not considered the cost of fuel of dumpers.

(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 265470 square metres and water front area of 33210 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.

For the waterfront area, the KOPT has considered a rate of ₹13.673 per square metre, which is 50% of ₹27.346 per square metres, as prescribed in the Land Policy Guidelines.

(ix). The guidelines require the operating cost for berthing service to be estimated at 1% of the berth cost. The KOPT has considered insurance @ 1% and depreciation @ 3.17% on the capital cost relating to berth while estimating the annual revenue requirement of berthing service apart from the prescribed norm of 1% towards maintenance.

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

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

(x). 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**.

(xi). (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 ₹144.80 crores as against ₹144.59 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.

(xii). (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 as given by the KOPT based on the past actual data is relied upon.

(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) and coastal vessels not exceeding 60% of the normal cargo/ vessel related charges. Accordingly, concessional tariff has not been prescribed for coastal thermal coal, iron ore and iron ore pellets.

(xiii). (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 75% of the cargo will be evacuated within the free period of 10 days and the balance 25% 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 APSEZPL 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. Even HPPL has made a request to the port to review the storage charges by considering a free period of 25 days.

(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 20 based on a dwell time of 18 days. In view of this position, the KOPT has reported to have considered a free period of 10 days.

(f). Further, though the actual dwell time at HDC is reported to be about 34 days by KOPT, the KOPT has countered the request made by the prospective bidders to increase the free days by stating that dwell time at HDC are not comparable to the proposed facility, as HDC does not have specified cargo storage areas dedicated for each berth as well as there is substantial variation in the cargo mix. Thus, the port is of the view that to realize the capacity of the proposed terminal, the operator is expected to efficiently and effectively utilize its assets for a faster turnover of the cargo. The port has also stated that the storage charges as proposed by it are less as compared to the storage charges prevailing at other coal terminals. Further, the port has stated that considering that the income on storage charges is only 1% of the total ARR, which an operator is supposed to charge, the tariff is not high.

(g). Also, as the revised Model Concession Agreement for PPP projects at Major Ports now requires revenue share to be quoted on ‘Per Ton’ basis only, the KOPT is of the view that the concern of the prospective bidders about revenue sharing on the TAMP prescribed rates no longer exists.

(h). Based on the detailed justification furnished by the Port and based on the provisions contained in the revised MCA, which would be the basis for the KOPT to enter into agreement with the successful bidder, this Authority is

inclined to approve the storage charges based on the methodology adopted by the Port.

(xiv). Based on the annual revenue requirement, the upfront tariff cap for miscellaneous charge is prescribed at ₹2.83 per tonne. The miscellaneous charge covers miscellaneous services such as sweeping, weighment of wagons, trucks, receiving/ delivery of cargo etc.

(xv). (a). The revenue requirement from berthing service is estimated at ₹15.81 crores by the port. The KOPT has proposed berth hire in rupee terms for foreign going vessel at ₹ 0.71 per GRT per hour or part thereof and for coastal vessel at ₹ 0.426 per GRT per hour.

(b). The berth hire calculation of KOPT is with reference to the shipday output of 20000 tonnes for both Panamax vessel and Handymax vessel, as has been considered in the optimal capacity calculation. As brought out earlier, out of the total cargo proposed to be handled at the facility, the KOPT has considered that 90% of the cargo would be handled by Foreign going Vessels and the balance 10% of the cargo would be handled by Coastal vessels.

The KOPT has also considered an average parcel size of 24000 tonnes for both Panamax vessel and Handymax vessel. With regard to a specific query on considering uniform parcel size of 24000 tonnes for both Panamax and Hnadymax Vessels, the KOPT has stated that due to draft constraints at HDC, full load ships do not visit HDC and that all the vessels (Panamax or Handymax) handled at HDC are mostly partly loaded vessels. Thus, the KOPT has stated that the average parcel size of vessels handled at HDC are more or less similar, irrespective of whether they are Panamax vessel or Handymax Vessel. This position has been substantiated by KOPT based on the actuals at HDC for the past three years.

With the average parcel size of 24000 tonnes and the cargo handling rate of 20000 tonnes in 24 hours, a vessel will require 28.80 hours to complete its cargo operations. However, the vessel is reported to continue to stay for additional 4 hours for favorable tidal conditions and other operational aspects and favorable navigational conditions for sailing, after completion of work, to sail out.

Since the berth hire would be leviable on a vessel for the entire stay of the vessel, the additional time of 4 hours also needs to be captured in the berth hire calculation, to arrive at the total GRT hours. Such approach has been adopted by the KOPT in the past while determining upfront/ reference tariff for the various projects at KOPT, which has been acceded by this Authority.

Thus, based on the revenue requirement from berthing service at ₹15.81 crores and considering the ratio of the GRT hours of the coastal vessels and GRT hours of foreign going vessels, the upfront berth hire rate works out to ₹0.71 per GRT per hour or part thereof for foreign going vessels and ₹0.426 per GRT per hour or part thereof for the coastal vessels.

It has already been decided by this Authority while finalising the upfront berth hire at the other Major Port Trusts to approve the upfront berth hire charge in Rupee term only. The proposal of the KOPT for rupee denominated berth hire is in line with the decision taken by this Authority in the other upfront tariff cases.

(xvi). 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.

(xvii). 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 condiitonalities, which are found to be in line with the general conditionalities prescribed in the Upfront/ Reference tariff schedule of various major port trusts.

(xviii).(a). In the Berth hire Schedule, the common conditionalities like the period of berth hire to be calculated from the time vessel occupies the berth, Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc., and no berth hire to be levied for the period when the vessel idles at the berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator, berth hire to stop 4 hours after the time of vessel signaling its readiness to sail and conditionalities governing levy of penal berth hire charges, which are seen to be in line with the conditionalities prescribed at the Scale of Rates of the port and also in other upfront/ reference tariff Schedule.

(b). Though the project envisages levy of berth hire charges by the BOT Operator, the KOPT has requested to not prescribe provision for levying Priority Berthing/ Ousting Priority Berthing charges. At the same time, the KOPT has requested this Authority to take a decision on the matter. Based on the request made by KOPT, the provision for levying Priority Berthing/ Ousting Priority Berthing charges is not prescribed. However, a note proposed by the KOPT that the rate and conditions for granting ousting priority berthing / priority berthing will be governed by extant Government guidelines/ orders in the matter and the provisions prescribed in the Scale of Rates of Kolkata Port Trust, is approved.

(xix). 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.

(xx). 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 is 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.

(xxi). 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.

(xxii). 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 Berth, as considered in the optimal quay capacity calculation. Subsequently, based on the request made by one of the users viz., Steel Authority of India (SAIL) the KOPT has proposed a Performance Standard prescribing Turn Around Time for delivery operations.

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 modified Reference Tariff Schedule is attached as **Annex - III** and the Performance Standards for the Outer Terminal – I at HDC of KOPT is attached as **Annex - IV**.

10.3. (i). If there is any error apparent on the face of record considered, the KOPT 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.

(ii). The KOPT may also, for any other justifiable reasons, 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.

10.4. 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 Outer Terminal – I at HDC of KOPT and notify alongwith the Performance Standards.

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 OUTER TERMINAL – I 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)	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)	**Optimal Yard Capacity**		
	- Area of the yard made available by the port as usable storage (in m2) (A)	75000	75000
	- 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)	20	20
	Optimal yard capacity (0.7 x (A x U% x Q x T tons) (in tonnes)	**5460000**	**5460000**
	Optimal Capacity of the terminal (lower of (a) and (b)) (in tonnes)	**5110000**	**5110000**
	Optimal Capacity of the terminal (in million metric tonnes per annum)	**5.11**	**5.11**
II	**Capital Cost**		
A.	**Cargo Handling Activity**	**₹ in crores**	
	(i). Civil Cost		
	Construction of one approach trestles	13.00	13.00
	Construction of Transfer towers	0.75	0.75
	Hardening of stack yard	72.20	72.20
	Concrete paving of two stock piles for dry bulk cargo	5.05	5.05
	Two tracks for stackers and reclaimers	7.80	7.80
	Service Roads	8.33	8.33
	Miscellaneous buildings	5.80	5.80
	Extension of railway tracks upto wagon loading yard and provision of sidings	19.46	19.46
	Compound wall	1.30	1.30
	Detailed Designs & Project Supervision costs @ 2%	2.67	2.67
	Contingencies @ 3%	4.01	4.01
	GST on Civil works @ 18%	25.27	25.27
		165.64	**165.64**
	(ii). Equipment Cost		
	Mobile Harbour Cranes - 2 Nos	51.00	51.00
	Elevated conveyor system	20.16	20.16
	Ground level conveyor system	17.64	17.64
	Stacker cum Reclaimer	43.06	43.06
	Shunting Loco	20.00	20.00
	Wagon Loading Silo	15.00	15.00
	Lorry loading Silo	8.00	8.00
	Baby dozers (FELs)	1.16	1.16
	Other Equipment, Weigh Bridge, Work Shop facilities etc.	7.30	7.30
	Dust Suppression, Water Supply etc.	12.00	12.00
	Electrical Works	15.90	15.90
	Detailed Designs & Project Supervision costs @ 2%	4.22	4.22
	Contingencies @ 3%	6.34	6.34
	Total	**221.78**	**221.78**
	(iii). Miscellaneous		
	5% on Civil Cost and Equipment Cost	19.37	19.37
	Total Capital Cost for Handling Activity (i + ii + iii)	**406.79**	**406.79**
B.	**Berth Hire Activity**		
	Construction of berth structure 270 m x 25 m	57.40	57.40
	Detailed Designs & Project Supervision costs @ 2%	1.15	1.15
	Contingencies @ 3%	1.72	1.72
	GST on Civil works @ 18%	10.85	10.85
	Miscellaneous @ 5%	3.56	3.56
	Total capital cost for Berth hire Activity	**74.67**	**74.67**
	Total Capital Cost (A + B)	**481.47**	**481.47**

Sr. No.	Particulars	Estimates furnished by KOPT	Estimates modified by TAMP
III	**Operating Cost for Cargo Handling Activity**		₹ in crores
	(a). Power Cost	5.94	5.94
	(KOPT - 1.4 units/ tonne * Rs. 8.31 per unit * 5.11 MMTPA) (TAMP - 1.4 units/ tonne * Rs. 8.31 per unit * 5.11 MMTPA)		
	(b). Fuel Cost		
	- Baby Dozers (Front End Loaders)	0.36	0.43
	(KOPT - 12 ltrs/ hour * Rs.58.348 per litre * 8 hours per loader * 3 loaders per vessel * 213 vessels) (TAMP - 12 ltrs/ hour * Rs.70.33 per litre * 8 hours per loader * 3 loaders per vessel * 213 vessels)		
	- Locomotive	0.69	0.84
	(KOPT - 30 ltrs per hour * Rs.58.348 per litre * 3965 hours p.a) (TAMP - 30 ltrs per hour * Rs.70.33 per litre * 3965 hours p.a)		
	(c). Repair & Maintenance		
	- Civil Assets (1% on civil work)	1.74	1.74
	- Mechanical & Electrical Equipment including spares (7% on equipment cost)	16.30	16.30
	(d). Insurance (1% on Gross fixed assets)	4.07	4.07
	(e). Depreciation		
	- Civil Work @ 3.17%	5.51	5.51
	- Mechanical Work @ 6.33%	13.63	13.63
	- Electrical Assets @ 9.5%	1.67	1.67
	(f). License Fee	9.26	9.26
	(g). Other Expenses towards salaries and overheads (5% on gross value of assets)	20.34	20.34
	Total Operating Cost	**79.51**	**79.73**
IV	**Estimated Revenue Requirement & upfront tariff for Cargo Handling Activity**		
A.			
(i).	**Estimated Revenue Requirement**		
	(a). Total Operating Cost	79.51	79.73
	(b). Return on capital Employed @ 16%	65.08	65.08
	(c). Total Revenue requirement from cargo handling activity	**144.59**	**144.80**
(ii).	**Apportionment of Revenue Requirement**		
	(a). Cargo Handling Charges (98% of ARR)	141.70	141.91
	(b). Storage Charges (1% of ARR)	1.45	1.45
	(c). Miscelleneous Charge (1% of ARR)	1.45	1.45
	(d).Total Revenue requirement from cargo handling activity	**144.59**	**144.80**
(iii).	**Cargo Handling charge**		
	(a). Cargo Handling Charge		
	- Revenue Requirement (₹ in lakhs)	141.70	141.91
	- Capacity (Lakh Tonnes per annum)	51.10	51.10
	- Per Tonne rate for handling of cargo (foreign)	**288.85**	**289.28**
	(b). Storage Charge		
	- Revenue Requirement (₹ in lakhs)	144.59	144.80
	- % of Cargo to attract storage charge	25%	25%
	- Capacity of cargo to attract storage charge (tonnes)	1277500	1277500
	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)	**1.41**	**1.41**
	-6th day to 10th day (after free period)	**2.12**	**2.12**
	-11th day onwards (after free period)	**2.82**	**2.82**
	(c). Miscelleneous Charge		
	- Revenue Requirement (₹ in lakhs)	144.59	144.80
	- Capacity (Lakh Tonnes per annum)	51.10	51.10
	- Miscellenous Charge (₹ per tonne)	**2.83**	**2.83**
B.	**BERTH HIRE CHARGES**		
(i).	**Revenue Requirement**		₹ in crores
	(a). Repairs & Maintenance Charge (1% on captial cost for berth)	0.75	0.75
	(b). Depreciation @ 3.17%	2.37	2.37
	(c). Insurance (1% on total cost for berth hire service)	0.75	0.75
	Subtotal (i)	**3.86**	**3.86**
(ii).	Return on capital Employed @ 16%	**11.95**	**11.95**
	Total Revenue requirement from Berthing services (i + ii)	**15.81**	**15.81**
	Berth hire Charge		
	Foreign going vessel (Rate per GRT per hour) in ₹	**0.710**	**0.710**
	Coastal vessel (Rate per GRT per hour) in ₹	**0.426**	**0.426**

Berth Hire Calculation as furnished by KOPT

Sr. No.	Particulars	Unit	Panamax Foreign Vessel	Handimax Foreign Vessel	Total
i	Ship day output	Tonnes/day	20000	20000	
ii.	Average parcel size	Tonnes	24000	24000	
iii.	Tonnage expected to be handled	Tonnes	3577000	1533000	5110000
iv.	No. of Vessels (iii / ii)	Nos.	149	64	213
v.	Average no. of berth days (iv / i)	Days	179	77	256
vi.	No. of berth hours {24 hours x (v)}	Hours	4292	1840	6132
vii	Additional hours towards waiting time {4 hrs x (iv)}	Hours	596	256	852
viii	Total Hours	Hours	4889	2095	6984
ix.	Average GRT	GRT	38000	22000	
x.	Total GRT hours (ix * viii)	Hours	185765533	46092200	231857733
xi.	Revenue Requirement	Rupees			**158085980**
	Working for foreign vessel 90% and coastal vessel 10%)				
	231857733 * 90% * x + 231857733 * 10% * 0.6x =				158085980
	208671960 x + 23185773 * 0.6x =				158085980
	x = Foreign going vessel rate				**0.71**
	Coastal vessel Rate = 0.6 x foreign going vessel rate				**0.43**

Berth Hire Calculation as per TAMP Estimates

Sr. No.	Particulars	Unit	Panamax Foreign Vessel	Handimax Foreign Vessel	Total
i	Ship day output	Tonnes/day	20000	20000	
ii.	Average parcel size	Tonnes	24000	24000	
iii.	Tonnage expected to be handled	Tonnes	3577000	1533000	5110000
iv.	No. of Vessels (iii / ii)	Nos.	149	64	213
v.	Average no. of berth days (iv / i)	Days	179	77	256
vi.	No. of berth hours {24 hours x (v)}	Hours	4292	1840	6132
vii	Additional hours towards waiting time {4 hrs x (iv)}	Hours	596	256	852
viii	Total Hours	Hours	4889	2095	6984
ix.	Average GRT	GRT	38000	22000	
x.	Total GRT hours (ix * viii)	Hours	185765533	46092200	231857733
xi.	Revenue Requirement	Rupees			**158085980**
	Working for foreign vessel 90% and coastal vessel 10%)				
	231857733 * 90% * x + 231857733 * 10% * 0.6x =				158085980
	208671960 x + 23185773 * 0.6x =				158085980
	x = Foreign going vessel rate				**0.710**
	Coastal vessel Rate = 0.6 x foreign going vessel rate				**0.426**

Annex - II

Working for calculation of Storage Charges (OT-1)						
S.No	**Particulars**	**Free days**	**1st slab**	**2nd slab**	**3rd slab**	**Total**
1	Optimum Capacity	51,10,000				
2	Days in each slab	10	5	5	5	
3	%age of cargo in each slab	75%	10%	10%	5%	**100%**
4	Qty in each slab	38,32,500	5,11,000	5,11,000	2,55,500	**51,10,000**
6	Weights assigned		1.00	1.50	2.00	
7	Weighted Qty in each slab (50% time taken in each slab on an average)		12,77,500	44,71,250	44,71,250	**1,02,20,000**
8	Revenue requirement					**1,44,59,789**
9	AvgTariff per ton per day					**1.41**
10	Tariff for each slab		1.41	2.12	2.83	
11	Revenue for each slab		72,29,895	54,22,421	18,07,474	1,44,59,789
			(511000x2.5xSOR+ 511000x5xSOR+ 255000x5xSOR)	(511000x2.5xSOR+ 255000x5xSOR	(255000x2.5xSOR)	

Annex-III

KOLKATA PORT TRUST

REFERENCE TARIFF SCHEDULE FOR SETTING UP OF RIVERINE JETTY FOR HANDLING ALL TYPES OF COAL/COKE/LIMESTONE/OTHER DRY BULK CARGOES AT OUTER TERMINAL-1, 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.

v. demurrage and this period shall exclude Customs notified holidays and Terminal's non-operating days.

vi. '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 Rs.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. Berth Hire

The berth hire charge shall be payable by masters/ owners/ agents of the barge and other floating craft approaching or lying alongside the berth at the following rates:

Sl. No.	Description of vessel	Rate in ₹ per hour per GRT or part thereof
1	Foreign going vessels	0.710
2	Coastal vessels	0.426

Notes:

(i). The time for the purpose of levy of the berth hire shall be reckoned from the time the vessel occupies the berth till she vacates the berth.

(ii). Berth hire includes charges for services rendered at the berth, such as occupation of berth, rubbish removal, cleaning of berths, fire watch, etc.

(iii). No berth hire shall be levied for the period when the vessel idles at its berth for continuous one hour or more due to breakdown of terminal operator's equipment or power or for any other reasons attributable to the terminal operator,

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

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

(v). The penal berth hire shall be equal to one day's (24 hours) berth hire charge for a false signal. 'False signal' would be when the vessel signals readiness even when she is not ready for un-berthing due to engine not being ready or cargo operation not being completed or such other reasons attributable to the vessel.

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

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

4. 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)	289.28	173.57
2.	Thermal Coal, Iron Ore & Iron Ore Pellets	289.28	289.28

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 10days 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.

5. Storage Charges

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

Description	Rate in ₹ per MT per Day or part thereof
Free period	10 days
First five days after expiry of free period	1.41
6th day to 10th day after expiry of free period	2.12
From 11th day onwards	2.82

Notes :

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

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

(iii). 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.

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

6. Miscellaneous Charges:

Composite charge for all the miscellaneous services such as sweeping, weighment of wagons, trucks, receiving/ delivery of cargo etc., shall be levied at ₹ 2.83 per metric tonne.

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

i. 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.

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Annex-IV

PERFORMANCE STANDARDS

Schedule of Performance Standards "Setting up of Riverine Jetty for handling Coal/Coke, Limestone and other Dry Bulk Cargo at Outer Terminal-1, 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.

Weightage in case of a shortfall in meeting the prescribed performance standard: 0.70.

Turn Around Time for Delivery Operation:

The Turn around Time for delivery operations shall be the sum of time taken for loading of cargo divided by the number of rakes deployed, in a month.

Rake time for dry bulk cargo (Single operation) is maximum 3 hours including peripheral activities required for pre and post loaded viz. placement of empty rake and marshalling of loaded rakes from and the exchange point nominated of Outer Terminal-I.

Weightage in case of a shortfall in meeting the prescribed performance standard: 0.30.

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

F. No. TAMP/76/2017-KOPT		**Proposal received from Kolkata Port Trust for fixation of reference tariff for the project of Setting up of Outer Terminal-I alongwith all required associated facilities on Design, Build, Finance, Operate, Transfer ("DBFOT") basis for a concession period of thirty years at Haldia Dock Complex (HDC).**

A summary of comments received from the users / Prospective bidders and the response of KOPT thereon are tabulated below:

Sr. no.	Comments of users/ user organisations/ prospective bidders	Reply of KOPT
1.	**Adani Ports and Special Economic Zone Limited (APSEZL)**	
(i).	**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 specifications of Mobile Harbour Crane, 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 specifications 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. APSEZ fully adheres to the obligation of creating a specified terminal capacity, obligation of meeting the specified performance standers and numbers of equipment's to be installed that are specified in the Concession Agreement. Hence, it is suggested that detailed specifications of equipment's, design and rated capacity should be left to the Concessionaire to determine and achieve terminal capacity and performance standers to be specified in the Concession Agreement for the Project.	The key components of the proposed project facilities and services are based on the specification considered under the Feasibility Report and Tariff proposal and constitute the minimum requirement for handling the stipulated type and quantum of cargo envisaged under the project.
(ii).	**Para 6(ii)** **Movement of Cargo between Jetty to Stack yard** The proposal states that there will not be any usage of dumpers and trucks for movement of cargo. The project aims to handle limestone and other dry bulk cargoes also at the proposed terminal. However, based on APSEZ experience at other ports, it is suggested that it will not be possible to handle all other dry bulk	The contention to keep provision for handling cargo through dumpers is not considered acceptable. The proposed project envisages mechanized handling of dry bulk cargo. The cargo unloaded from the ship will be moved through close conveyors to the dedicated stack yard from where the cargo will be reclaimed and evacuated

	cargo (except coal/ coke) through conveyors designed for coal/ coke cargo. In view of the above, APSEZ agree that handling of coal / coke should be fully mechanized but for handling commodities like limestone and other dry bulk, flexibility should be provided to the concessionaire to handle the cargo through dumpers if the commodity cannot be handled in coal conveyors.	through rail / road loading silos. As such, any cargo unloaded through this berth is envisaged to be handled through mechanized facilities. KOPT's proposal for Environmental Clearance for the project is also in line with the above.
(iii).	**Para 6(xi)** **Other Equipment's** 4 nos. of baby dozers/ front end loaders are proposed to handle the left over cargo which is not possible to handle by the Mobile Harbour Cranes and also to work in cargo handling within the stock yard. 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 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 tariff 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 9.2.3. Thus, it is suggested to allow the concessionaire to hire these equipment instead of purchasing the same.	The Cap-ex of 4 Baby dozers is only ₹ 1.16 cr in the Total capex of ₹402.31 cr (excluding taxes etc.) which is 0.29% and is very meager. The Op-ex considered for Baby dozers in the proposal is only ₹ 35.80 lakhs as against the total op-ex of ₹ 7951.08 lakhs. Even if the said equipment is hired, the op-ex is more or less same and hence there will not be much impact on the tariff. Hence there is no necessity to remove the cap-ex of the said equipment.
(iv).	**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 is seen that port has considered Detailed Engineering & Project Supervision @ 2% and Contingencies @ 3% of block estimates of Civil, Mechanical and Electrical assets. However, both these components may get covered in the block estimates mentioned.	It is a common practice in the port sector to consider 2% towards to Detailed engineering and Project supervision and 3% towards contingencies on the block estimates of Civil, Mechanical / Electrical assets. Miscellaneous components of 5% specified in the TAMP guidelines clearly states that it includes the cost of all other facilities required such as pollution control, firefighting equipment, upfront payment, IDC, working capital margin, miscellaneous equipment, power supply, lighting etc. The proposal has adhered to TAMP guidelines.
(v).	**Capital cost of the project – Loco** It is requested that the concessionaire be allowed to use the Loco on hire basis. This will help to reduce the capex of the Project and in turn will lead to slight reduction in tariff. 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.	Locos are generally not available on hire as and when needed. This project essentially aims at clearing 80% of the cargo by rakes. Faster evacuation of the cargo is the objective and hence investment of ₹ 20 crore in the total cap-ex of ₹ 402.31 cr (excluding taxes etc.) is considered essential in the project. However, TAMP may decide.
(vi).	**9.2.3. (e)** Proposed licence fee for land area is ₹. 26.81 per month as per the Scale of Rate of HDC which is escalated up to 7/4/2017. However,	So far as the rate of license fees is concerned, rate considered is as per the SOR of KOPT land at HDC notified by TAMP.

	the calculation applies further escalation of 2% on this rate and operating cost is calculated for license fee at ₹. 27.34 per sqm per month. There is an error and the rate should be rectified back to ₹. 26.81 per sqm per month. 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 tariff to be paid by the users.	
(vii).	**9.2.5. (b)** While fixing the tariff for storage charges, HDC has considered that 75% of the cargo will get evacuated in 10 days and the rest of the cargo will move in the next 15 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 HDC get the free storage period of at least one month. Among these, direct users generally evacuate the cargo within a month's 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 of storage of cargo should be allowed for 25 days. This will help in fixation of competitive storage tariff which will be beneficial to the terminal users. Calculation of Storage Tariffs in the Proposal - Thus, the calculation of storage tariff should consider the three slabs of 5 days each after the free period of 25 days. - As far as the percentage of cargo that can be evacuated is concerned, 75% of cargo can be considered to be evacuated in 25 days of free period while 5% of the users cargo may get evacuated in next 5 days. Remaining 20% cargo can be considered to be evacuated during the next 10 days i.e. 10% in each of the slabs of 5 days. - There are difficulties in ascertaining the working of Weighted Quantity for 2rd and 3rd slab shown in the proposal. Hence, it is requested to revise the storage charges calculation as suggested above and share the same in spreadsheet. 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 of 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	The operator is supposed to be efficient in faster turnover for effective utilisation of his assets. Hence 25% cargo attracting storage charges and the slab rates appropriately considered in the proposal. The storage charges as per the TAMP guidelines is only 1% of the Annual Revenue Requirement. Majority of the amount (98%) is for cargo handling. Any terminal operator would know easily the calculation of the storage charges. However, the calculation are clarified here under: Slab -1 511000 x 2.5d x SOR+ 511000 x 5d x SOR+ 255000 x 5d x SOR+ Slab -2 511000 x 2.5d x SOR+ 255000x 5d x SOR Slab -3 255000 x 2.5d x SOR (first 1-5 days avg is considered) The storage charges are very less as compared to the storage charges of may coal terminal in India. The income on storage charges is only 1% of the total ARR, which an operator is supposed to charge, the tariff is not at all high. Further, as the revised Model Concession Agreement for PPP projects at Major Ports now requires revenue share on 'Per Ton' basis only, the concern of the prospective bidders revenue sharing on the TAMP prescribed rates no longer exists.

	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 tariff at this stage for long term viability and success of the project. It is also requested that 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.	
2.	**Hindustan Ports Private Limited (HPPL)**	
(i).	**Optimal Quay Capacity**	
	In clause 9.2.1 (a) of the application, the Quay Capacity has been worked out as 5.11 MTPA which has been arrived at by considering the ship day output of Panamax vessels and Handymax vessel at 20000 MT each. The above assumption of ship day output is in deviation from clause 3.1 of the TAMP Guidelines (No. TAMP/52/2007 dated 26 February 2008) which specifies that the unloading norms of a capsize vessel is 35000 tons/ day and a handymax vessel is 15000 tons/day. As per the restructured feasibility report (October 2017) the average vessel productivity in Tonnes/ day for FY16 was 16981 for coking coal and 17116 for non-coking coal, further the average vessel productivity in Tonnes/ day for FY 17 was 19126 for coking coal and 22829 for non-coking coal. It is assumed that KOPT wishes to use more realistic norms for Panamax vessels by virtue of their present day experience at the port and hence a ship day output of 20000 MT seems realistic. Keeping this concept in mind, it is then imperative that KOPT should take into account lower productivity of Handymax vessel vis-à-vis Panamax vessel. As per the TAMP guidelines and in our capacity as a global terminal operator, it is felt that the productivity of a Handymax vessel should be 15000 MT. Further the feasibility report does not assess the percentage share of capacity of Panamax vessel and Handymax vessel. In this situation it may be better to use a 50:50 ratio for Panamax vessel and Handymax vessel instead of the existing 70:30. Using the parameters as stated above the revised **Quay**	So far as the productivity levels are considered, Panamax/ Handymax vessels arriving at HDC are only partially loaded as HDC is mostly the second port of call and thus handles bottom cargo, which considerably reduces the average productivity. This is irrespective of whether the vessel is Panamax or Handymax type. Resultantly, average actual productivity achieved through MHC berths at HDC for coking coal/ non coking coal for both Handymax and Panamax is similar. The productivity norms in respect of the proposed terminal has accordingly been taken as 20000 tonnes per day based on the average productivity of coking coal/ non-coking coal FY 16 and FY 17 as indicated by the Consultant (under para 3.6.1 at page 39 of the Feasibility Report) Considering productivity of 20000 for both Panamax as well as Handymax vessels, the ratio of Panamax vessel and Handymax vessel will have no bearing on arriving at the quay capacity. As such, upon considering of the above, the optimum capacity of terminal stands at 5.11 MTPA.

	Capacity would be 4.47 MTPA and not 5.11 MTPA as stated in clause 9.2.1(a).	
(ii).	**Optimal Yard Capacity**	
	KOPT has advised that 75000 sq.m. of land will be provided for storage and back up area. Within this area, KOPT has assumed 100% space utilization, a coal stacking density of 5.2 Tons per sqm and a turnover ratio of 20 in calculating the Optimum Yard Capacity of 5.46 MTPA. It is noted that the above assumptions of utilization stacking density and turnover ratio is in distinct deviation from clause 3.2 of the TAMP Guidelines (No. TAMP/52/2007 dated 26 February 2008) which specifies utilization of yard area at 70%, coal density at 3 tons/ sqm and turnover ratio at 12. It is assumed that KOPT has based their yard capacity on the designed stack capacity of the yard and HPPL is of the opinion that the yard capacity may be overstated, which may be looked into.	KOPT has considered total stack yard area of 180000 sq. mtr. Out of which 75000 sq. mtr. Area for actual cargo stock piles (15 nos. stock piles of 100 mtrs. Length x 50 mtr. Width of each stock pile). Further, coal stacking density has been taken as 5.2 tonnes per sq. mtr. In this regard, TAMP has earlier considered similar coal stack density in earlier instance like in the cases of mechanized berth at Haldia Dcok-II, East Quay-1A Berth of VPT. With regard to the turnover ratio of 20 considered in the instant proposal, this is derived based on the dwell time of 18 days considered which is based in the stock pile area of 75000 sq. mtr. The coal stack density of. 5.2 tonnes per sq.mtr. and cargo evacuation rate of 15000 tonnes per day (i.e 0.7 x 75000 x 5.2/15000).
(iii).	**Optimal Terminal Capacity**	
	In determining the Optimal Terminal Capacity as per clause 3.0 of TAMP Guidelines the lower of the Optimal Quay Capacity and the Optimal Yard Capacity must be considered.	This has been complied.
(iv).	**Capital cost of Civil Works**	
(a).	HPPL has not conducted any separate examination of the bill of quantities that have been considered by KOPT for the purpose of arriving at various costs related to civil works etc. HPPL has relied solely on what has been laid out by KOPT in its application. Hence, any changes in the bill of quantities at a later stage will necessitate a re-working of the various costs related to civil works, thereby impacting the overall result for calculation of the Annual Revenue Requirement.	No specific comments furnished by KOPT.
	The following changes need to be made in the capital cost:	
(b).	**Cost for Detailed Designs and Project supervision** These have been considered in the application at 2% of the total cost (excluding GST/ Contingencies/ Misc. costs/ Prel. Exps.) as detailed in Clause 8 of the application. Consultants who are engaged for such jobs generally charge a rate of 5% of the total capital costs. Hence, a rate of 5% should be considered for the purpose of calculating this cost item.	It is normal practice to consider 2% and 3% towards Detailed Engineering and Project Supervision and Contingencies respectively. GST @ 18% as per new GST rules is applicable on Civil works and accordingly the same has been considered as cap-ex. Considering the above, the capital cost proposed by KOPT remains unchanged.
(c).	**Contingency costs** The contingency cost has been considered in the application at 3% of the total capital cost (excluding GST/ Contingencies/ Misc costs/ Prel. Exps.) as detailed in Clause 8 of the application. The KOPT has excluded detailed	

	designs and project supervision costs from the total cost when calculating the contingency cost. Any increase in the total cost of civil works also impacts/ increases the detailed design and construction costs; hence, it is recommended that detailed design and project supervision cost should not be excluded from the total cost when calculating the estimate of Contingency costs in a project. Further, the percentage of contingency costs should be considered at rate of 5% instead of the 3% that has been assumed in the calculation in the application. The Capital cost of the Project post the above changes stands revised at ₹. 505.54 crores as against ₹. 481.47 crores as calculated by KOPT on clause 8 of their application.	
(v).	**Annual Revenue Requirement (ARR) cargo Handling Activity** The ARR for cargo handling activity of ₹. 144.59 crores mentioned in clause 9.2.4 will now stand revised based on the revised capital costs of civil works. Therefore a revised ARR has been worked in the table using the norms prescribed in the TAMP guidelines:	Considering the replies of KOPT as given above, the annual Revenue Requirement for cargo handling activity as proposed by KOPT remains unchanged.
(a).	**Capital Cost**	

Civil Works	**₹. in Crores**.
Construction of one approach trestles	13.00
Construction of Transfer towers	0.75
Hardening of stack yard	72.20
Concrete paving of two stock piles for dry bulk cargo	5.05
Two tracks for stackers and reclaimers	7.80
Service Roads	8.33
Miscellaneous buildings	5.80
Extension of railway tracks upto wagon loading yard and provision of sidings	19.46
Compound wall	1.30
Total Civil Cost	**133.69**
Mechanical& Electrical Cost	
Mobile Harbour Cranes -2 Nos	51.00
Elevated conveyor system	20.16
Ground level conveyor system	17.64
Stacker cum Recalimer	43.06
Shunting Loco	20.00
Wagon Loading Silo	15.00
Lorry loading Silo	8.00
Baby dozers (FELs)	1.16
Other Equipment, Weigh Bridge, Work Shop facilities etc.	7.30
Dust Suppression, Water Supply etc.	12.00
Electrical Works	15.9
Total Mechanical / Electrical Cost	**211.22**
Total Capital Cost excluding GST/Contingencies/Misc costs/ Prel. Exps.	**344.91**
Detailed Designs & Project Supervision costs @5%	**17.25**
Contingencies @ 5%	**18.11**

GST on Civil works @ 18% only (GST on Mech/Elect works not considered)	**26.53**
Misc costs @ 5%	**20.34**
GRAND TOTAL – CAPITAL EXPENDITURE	**427.13**

(b). **Annual Operating Cost**

Sl. No.	Particulars	Cargo Activity (₹. in lakhs)
1.	**Repairs & Maintenance Cost**	**1894**
a)	Civil Works (1% of capital cost)	183
b)	Mechanical Works (7% of capital cost)	1583
c)	Electrical Works (7% of capital cost)	129
2.	**Power and Fuel cost**	**181**
a)	Power for Operation of HMCs and illumination of terminal (1.4 units per ton x 51.1 lakh tons x Rs. 8.31 per unit)	154
b)	Fuel cost for operation of Front End Loaders/Baby dozers – 4 Nos (12 ltrsph x Rs. 58.348 per litre x 8 hrs of operation per loader x 3 loaders per vessel and idle time/mobilisation)	9
c)	Fuel cost for operation of Loco – 1 No (30 litresph x Rs. 58.348 per litre x 3965 hrs of operation	18
3.	**Other Expenses** (@ 5% of Gross value of assets for cargo handling activity)	**2136**
4.	**Insurance** (@ 1% of Gross value of assets)	**427**
5.	**Lease rentals**	**926**
a)	Land area of 265470 m2 x Rs. 27.346 per sq mtr p.m x 12 months	871
b)	Water front area of 33210 m2 x Rs. 13.673 per m2 x 12 months	54
6.	**Depreciation**	**2185**
a)	Civil structures - (3.17% of capital cost)	579
b)	Mechanical Works (6.33% of capital cost)	1431
c)	Electrical Works (9.50% of capital cost)	175
7	**Total Operating Cost**	**7749**

(c). **Return on Capital Employed (ROCE)**

16% of revised Total Capital Cost (₹. In lakhs)	**6834**

(d). **Annual Revenue Requirement (ARR) (ii)+(iii)**

Annual Operating Cost + ROCE (in lakhs)	**14583**

(vi). **Apportionment (refer section 9.2.4 (c) of the application**

Based on the norms prescribed by the TAMP Guidelines the apportionment of the ARR will be as follows:

Activity		Amt in ₹.
a) Coal Handling Charges	98%	14291
b) Storage Charges	1%	146

	c) Miscellaneous Charges | 1% | 146 **Total Revenue Requirement (a) + (b) +(c)** | **100%** | **14583**	
(vii).	**Storage Free Days** It is essential to note that as per clause 9.2.5.(b) of the application, it is mentioned that the free period for storage is 10 days. As per clause 2.0 of the TAMP Guidelines (No. TAMP/52/2007 dated 26 February 2008) the allowable free days is mentioned at 25 days. International Seaport (Haldia) Pvt Ltd has free storage days of 21 days. It is clear that the trade demands higher free days and only 10 free days may not be feasible. In light of this, it is requested to rework the storage charges considering a free day of 25 days.	The norms for plot turnover for a coal terminal prescribed in the guidelines is 12, based on the dwell time of 30 days. Since majority of the proposed evacuation of cargo from the stackyard will be through mechanized wagon loading system, the KOPT has considered a dwell time of 18 days and has adopted a plot turnover ratio of 20. Correspondingly, lesser number of free days in storage charges calculation has been considered.
(viii).	**Revised Annual Revenue Requirement – Berth Hire Charges** In line with Section 9.2.4 (b) of KOPT's application, the recovery of costs incurred by the terminal operator towards building the superstructure (berth) is recoverable through the levy and collection of Berth Hire Charges by the terminal operator. The ARR for Berth Hire on the basis of the revised Capex discussed earlier is given below: **Particulars** | **₹. In lakhs** Civil Works | 5740 Detailed Designs & Project supervision cost @ 5% | 287 Contingency @5% | 301 GST @ 18% | 1139 Sub Total – Capital cost | 7467 Miscellaneous @ 5% | 373 **(i) Total Capital Cost for Berth** | **7841** **(ii) Operating Cost** | Maintenance charges (1% of berth construction cost) | **78** Insurance (1% of cost of civil assets) | **75** **Depreciation** | **249** **A. Total Operating Cost** | **402** **B. Return Requirement (16% of the total Capital Cost for Berth)** | **1255** **Annual Revenue Requirement from Beth Hire (A+B)** | **1656** Therefore, on the basis of the revised ARR of ₹. 1656 lakhs in respect of Berth Hire Charges the tariff for Berth Hire Charges as given in Annexure I of the KOPT application will have to be revised.	Considering the replies given by KOPT above, the Annual Revenue Requirement for berth hire charges as proposed by KOPT remains unchanged.
(ix).	Further, Berth Hire Charges as given in Annexure I of the KOPT application are at least four times of what KOPT is levying for the existing berths. Therefore, it is requested to reconsider the allocation as prescribed in clause 4 of the TAMP Guidelines (No. TAMP/52/2007 dated 26 February 2008) as to whether the full cost of berth construction can be assigned to berth hire.	So far as the contention that the proposed berth hire charges are high in comparison to what KOPT is levying for existing berths, it is mentioned that the proposed rates are strictly based on the 2008 Tariff Guidelines of TAMP.
3.	**Steel Authority of India Limited (SAIL)**	
	KOPT has indicated the performance parameter for various operations like ship – Shore transfer, berth stockyard transfer etc. They have also indicated the guaranteed gross berth output upto 20000 tonne per day per	The matter is reviewed and a suitable Performance standard relating to Turnover Time for delivery operations through rakes (single operation) may be

	berth. As regards terms for wagon loading, no such indicator has been mentioned. It is suggested that the KOPT should be in 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 rate indicated by HDC for a composite operation for ₹. 288.87/- per MT. In addition they have also proposed storage charges of ₹. 2.83 per MT and other miscellaneous charges of ₹. 2.83 per tonne. Since, the charges in Haldia Port is higher as compared to neighboring major ports, KOPT should be offering reduction in rate with quantity linked incentive. This will encourage large importers like SAIL to handle more volume through HDC. Since Steel industry is mainly located in eastern region and heavily dependent on Haldia Port, TAMP may consider more competitive operational rates at HDC.	incorporated in the Tariff proposal as under: "**Turn Around Time for Delivery Operation:** The Turn Around Time for delivery operations shall be the sum of time taken for loading of cargo divided by the number of rakes deployed, in a month. Rake for dry bulk cargo (Single operation) is maximum 3 hours including peripheral activities required for pre and post loaded viz. placement of empty rake and marshalling of loaded rakes from and the exchange point nominated of Outer Terminal-I. Weightage in case of a shortfall in meeting the prescribed performance standard: 0.30". Resultantly, weightage incase of shortfall in meeting the prescribed performance standard with respect to Gross Berth Output is to be considered at 0.70. This has been confirmed by KOPT vide its email dated 22 June 2018. The rates to be indicated by TAMP are ceiling rates. The terminal Operator will be at liberty to charge lower rates.

2.1. A joint hearing on the case in reference was held on 13 December 2017 at the KOPT premises. At the joint hearing, the KOPT made a brief power point presentation of its proposal. At the joint hearing, the KOPT and the concerned users/ user organizations have made the following submissions:

KOPT

(i). In the past, we came up with a proposal to handle all dry bulk cargo at OT -1. High ship day output of 28000 Tonnes per day was the concern of stakeholders.

(ii). We have addressed the concern of the stakeholders. There is encouraging response from the bidders for the project under reference.

(iii). The project is proposed to envisage unloading of all dry bulk cargo in the import cycle, in a fully mechanized manner from the ship to the yard using conveyor system and to the rakes/ trucks, without any manual intervention.

(v). The capacity of the terminal is envisaged at 5.1 MMTPA, to handle all types of coal/ coke, other dry bulk cargo.

(vi). The handling rate is considered at 20000 tonnes per day. It is reasonable, considering the riverine port of Kolkata.

(vii). There is adequate transit storage and 80% of cargo is envisaged to be evacuated by rail and 20% by road, as compared to the earlier proposal, where the entire cargo was proposed to be evacuated by only rail.

(viii). Considering the capital costs and the operating costs, the rates have been arrived towards handling, storage, miscellaneous and berth hire charges.

TMILL

We have no query.

Adani

(i). We have given our written submissions. We want to discuss it.

(ii). The proposal specifies detailed technical specifications of Mobile Harbour Crane, conveyors at jetty and stackyard, wagon/ truck loading system. Though specifying equipment type and number is ok, specifying so much detailed specifications will not give design flexibility to the Concessionaire. The concessionaire should be given flexibility to design the project in such a manner that he will achieve the capacity as well as the performance norms. We will adhere to the specification. We are okay with the type of equipment and conveyor.

(iii). Movement from jetty to yard is envisaged through conveyors. Incase of exigency/ breakdown of conveyor, use of dumpers as an alternative should be allowed.

(iv). Baby dozers which are envisaged to be used in the holds of the vessel need not be procured but can be hired. 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. Similarly, loco should also be hired instead of being procured. Evacuation of cargo by trucks may be allowed.

(v). There is an error in the calculation of license fee, as in the rate of licence fee, effect of two indexation has been considered instead of one indexation. Area of land to be allotted may be kept as upper limit. Concessionaire should have flexibility to take less area depending on requirement.

(vi). Storage charges proposed are quite high and may jeopardize the commercial viability of this project. Considering that there are issues pertaining to storage charges in other projects, it is requested that a competitive tariff for storage may be fixed.

(vii). In line with Upfront Tariff Guidelines of 2008 as well as the prevailing dwell time of coal importers, free period of storage of cargo should be allowed for 25 days.

(viii). The project envisages handling of thermal coal. Thermal coal does not enjoy coastal concession. What is covered in the ambit of thermal coal?

(KOPT: It may be domestically mined steam coal. Clarification on thermal coal can be sought independent of this proposal.]

(ix). Assuming that coal comes from foreign country, gets partially unloaded at Paradip, then comes to KOPT, how will the cargo be treated?

(KOPT: It will be treated as foreign cargo.)

(x). The project cost considers Detailed Engineering and Project Supervision @ 2% and Contingencies @3% of block estimates of Civil, Mechanical and Electrical assets. Overall capital cost is high because of these components.

(xi). Storage calculation of 2nd and 3rd slab is not clear. We have sought clarification from KOPT.

(xii). Since the tariff is being fixed for a period of 30 years and will also be subject to annual WPI indexation, it is suggested that the proposed tariff rates should be reduced.

Hindustan Ports

We have given our written submissions.

SAIL

(i). The KOPT has indicated performance parameters for various operations like ship-shore transfer, gross berth output etc. However, in terms of wagon loading, no indicator has been mentioned. It is suggested that minimum loadability of wagons, may be guaranteed so that users are not penalized for not achieving full loading potential.

[KOPT: Cargo evacuation by rakes is covered by Model Concession Agreement. We will include performance norms for cargo evacuation by rakes in the Concession Agreement.

(ii). Also, railways are coming with new types of wagons. Since the project is for a longer period, there should be a commitment from the service providers that they will adhere to Railway norms.

[Adani: This concern can be taken care of. There may not be problem for evacuation by Rail.]

(iii). The stacking area of 75000 sq.m. considered for a capacity of 5.1 MMTPA is very low. Even with a stack area of 1 lakh sq.m., practically only about 3 MMTPA is stacked.

(Adani: Considering the mechanization and efficiency of the equipment, it is felt that the stack yard considered by KOPT is sufficient. More area may not be required.)

(iv). The rates proposed are high.

2.2. As decided at the joint hearing, some of the users/ user organisations/ prospective bidders have furnished their additional comments. The summary of the comments of the users/ user organisations/ prospective bidders and the comments of KOPT thereon are tabulated below:

Sl. No.	Comments of users/ user organisations/ prospective bidders	Comments of KOPT
1.	**APSEZL**	**Reply of KOPT**
(i).	**Tariffs for Thermal coal and consideration of cargo as coastal** Tariff proposal states the Tariffs for handling Thermal Coal, Iron Ore and Iron Ore Pellets. The tariff has been proposed without any concession for coastal handling of Thermal coal. It has been practice for proposing the rates without concession for these commodities. However, APSEZL wants to understand definition of Thermal Coal for this purpose because there is no clarity in the TAMP Guidelines also regarding this. Thermal Coal is domestically mined steam coal (which is loaded from one Indian Port and unloaded at another Indian port.) APSEZL also wants to understand how the status of cargo will be considered foreign and coastal in view of Haldia Port being mostly the second port of call. For example: If a vessel comes from foreign port to Paradip and unloads the whole cargo there and then the same cargo is again moved by another vessel to Haldia. What will be the status of cargo unloaded at Haldia i.e Foreign or Coastal? For Example: If a vessel comes from foreign port to Paradip and unloads cargo directly to another vessel which unloads it to Haldia Port. What will the status of cargo unloaded at Haldia i.e. Foreign or Coastal? Please also clarify the status of cargo if the vessel moving cargo are small time barge. As discussed during the meeting that custom clearance of the cargo may also be the factor which has implication on this. If it is the case, then clarify the above points with reference to scenarios wherein cargo is moved from PPT to HDC with custom clearance at PPT or without the same.	There is no HS code in the name of "Thermal Coal" in the Customs classification. Neither the term is defined in any guidelines issued by TAMP. At HDC, domestically mined coal shipped through coastal vessel for use of Tamilnadu Generation and Distribution Corporation Ltd (erstwhile TNEB) is the only cargo which has so far been classified as Thermal Coal. However, in case any other type of coal used by Thermal Power Plants becomes eligible for coastal concession as per extant guidelines, then there may be a confusion as to whether the said cargo should be classified as "Thermal Coal" or not. TAMP may therefore consider issuing a proper definition of the term "Thermal Coal" to avoid confusion in levy of tariffs in all Ports and Private terminals (ii). The clause relating to levy of coastal concession has been included in the Tariff Proposal as per Order of TAMP. As per the latest Guidelines of TAMP vide notification no. G.N. 400 dated 11 December 2015 (in respect of VO Chidambaranar Port Trust) coastal concession in cargo related charges can be accorded against handling of coastal cargo only. The term coastal goods is defined in the Customs Act as below: "Coastal Goods" means goods other that imported goods, transported in a vessel from one port in India to another. Therefore, any cargo, which is classified as imported goods by Customs Authority, is not eligible for Coastal Concession as per above said notification of TAMP.
(ii).	**Overall Rationalization of Tariff** Concessionaire should be allowed to optimize the facilities of the terminal to meet with the performance parameters and specified capacity of the terminal. Port Trust is requested not to insist on several facilities as mandatory illustrated in the form of project definition or in the dorm of project cost. It is requested to reduce the cost of the project at this stage of TAMP notification. APSEZL has suggested following four suggestions to reduce the cost for specific components: **Civil Works**	The base rates considered to estimate the civil capital costs are assessed to be a current market rates. So far as capital cost estimates for each equipment is concerned, the KOPT has produced the Indian Ports Association's (IPA) letter dated 9.11.2017 addressed to HDC wherein IPA has informed that the cost estimates are prepared based on data bank available with IPA/ its resource persons. This data is constantly updated

	Cost of Hardening of Stack Yard has been estimated on higher side. The same can be reduced by approximately ₹. 30 crores. The cost of extension of railway tracks can also be reduced by 3 crores. **Mechanical and Electrical Cost** Other equipment, weigh bridge, work shop facilities etc. also seem to be estimated on higher side. Cost can be reduced here also by ₹. 3 crores. Thus, total estimate of the capital cost of project can be reduced by ₹. 36 Crores. Above reduction of carried out, will help to fix the rationalized tariffs for the Project. If tariffs are not rationalized from the level currently proposed, it may not remain competitive going forward due to addition of WPI based escalation on the one hand and also due to competitive tariffs at deep draft ports like PPT or probably upcoming Tajpur port in the nearby region.	by IPA's team of consultants on the basis of resent market costs as tracked from similar and most recent construction / installation.
2.	**SAIL**	
	The proposal should incorporate performance standards for railway related operations which shall include loading within free time, loading of quantity as per carrying capacity/ applicable guidelines in line with railway rules time to time, failing which users should be compensated for any financial loss.	No comments furnished by KOPT.
