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

TARIFF AUTHORITY FOR MAJOR PORTS

G.No. 285 **New Delhi** **2 November, 2010**

NOTIFICATION

In exercise of the powers conferred under Sections 48, 49 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal of the Kandla Port Trust for fixing upfront tariff caps for the Dry Bulk Terminal off Tekra near Tuna at Port of Kandla to be developed under PPP mode in accordance with the guidelines for upfront tariff setting for PPP projects at Major Ports vide this Authority's Notification No. TAMP/52/2007-Misc. dated 26 February 2008 as in the Order appended hereto.

(Rani Jadhav)
Chairperson

Tariff Authority for Major Ports

Case No. TAMP/42/2009-KPT

Kandla Port Trust ... Applicant

O R D E R

(Passed on this 17 day of August, 2010)

This case relates to a proposal received from Kandla Port Trust (KPT) for upfront tariff setting for the Dry Bulk Terminal off Tekra near Tuna at Port of Kandla to be developed under PPP mode in accordance with the guidelines for upfront tariff setting for PPP projects at Major Ports.

2.1. The salient points mentioned in KPT's proposal dated 7 October 2009 were as follows:

(a) TYPES OF CARGOES TO BE HANDLED

To handle all types of dry bulk cargoes like coal, fertiliser, fertiliser raw material, salt, iron ore and wheat. Since the factors like market trend, demand / supply pattern, etc are likely to change during the period of concession, KPT considered the share of various cargoes to be handled equally.

(b) HANDLING RATES

Handling rates considered were as follows:

Cargo	Handling rate tonnes / day
Coal	35,000
Fertiliser / Fertiliser raw Material	35,000
Salt	35,000
Iron Ore	40,000
Wheat	15,000

(c) OPTIMAL CAPACITY

Optimal terminal capacity was assessed at 8.3 Million Metric Tonnes (MMT) per annum.

(d) CAPITAL COST

The total capital cost was estimated at Rs.88223 lakhs consisting of Rs.67993 lakhs for cargo handling activity (i.e. Rs.34112 lakhs towards civil structures + Rs.33881 lakhs equipment cost) and Rs.20230 lakhs for construction of berth of 600 mtrs. length.

(e) OPERATING COST

Operating cost for handling activity was estimated at Rs.13383 lakhs. As ship loader / conveyors were envisaged, the norms for operating cost given for coal terminal were considered instead of the norms given for multipurpose cargo berth.

(f) PROPOSED TARIFF CAP

To meet with the estimated revenue requirement of Rs. 242.62 crores, the upfront tariff cap proposed was as under:

Sl. No.	Particulars	Proposed upfront tariff cap (in Rs.)
(i).	Cargo handling charges	263.07 per tonne
(ii).	Storage charges	14.62 per tonne
(iii).	Miscellaneous charges	14.62 per tonne
(iv).	Berth hire charges:	
	(a). For foreign vessel	0.32 per GRT per hour
	(b). For coastal vessel	0.19 per GRT per hour

2.2. Subsequently, KPT vide its letter dated 10 November 2009 forwarded a copy of the feasibility report along with a list of provisionally pre-qualified bidders to be consulted on the subject proposal.

3.1. On preliminary scrutiny certain gaps, as detailed below, were found in the proposal:-

(i) The handling rates for different cargo items considered by the port while calculating the optimal capacity of terminal was not in line with the norms prescribed in the guidelines. The port had not explained the reasons for deviation in the unloading rate for other cargo items and the basis thereof.

(ii) The list of cargo handling equipment did not match with the normative level of equipment prescribed in the guidelines. The reasons for deviation in the norms were not explained except for shiploader.

(iii) Handling rate for the commodities assumed in the capacity calculation differed viz. iron ore (40,000 tonnes / day), wheat (15,000 tonnes / day) and coal (35,000 tonnes / day). KPT however had not proposed differential handling rates for different cargo items based on the individual productivity level.

(iv) The proposal was not accompanied with a draft upfront tariff schedule.

(v) While estimating the capital cost, the port had considered cost escalation at 5%, pre-operative expenses at 2%, financial charges at 1% and interest during construction at 10% on the capital cost, which was not in line with the

norms prescribed in the upfront tariff guidelines which stipulate norm for estimating miscellaneous cost at 5% of civil and equipment cost.

3.2. In view of the above gaps and the reasons for deviations from the norms prescribed in the guidelines having not explained by the port, it was found not possible to process the proposal dated 7 October 2009 of KPT. KPT was hence advised vide our letter dated 11 November 2009 to file a comprehensive proposal duly filling the gaps observed and explaining the reasons for deviations made from the guidelines. KPT vide letter dated 7 January 2010 furnished the information / clarifications on the points raised by us. The queries raised and the clarifications furnished by the KPT are furnished below:

Sr. No.	**Queries raised by TAMP**	**Reply furnished by KPT**
1	The proposal of the Kandla Port Trust (KPT) to fix upfront tariff cap for developing a dry bulk terminal seems to have been drawn based on the project proposed for developing dry bulk terminal near Tuna in the Kandla Port. As already brought out to the notice of the KPT in the earlier upfront tariff fixing case, the tariff cap to be prescribed by this Authority would not only be applicable to the proposed project but would also be applicable to all the projects bid out subsequently for identical cargo handling facility at the Kandla Port during the next five years. The KPT may take a note of this position while furnishing its response to the points raised in this letter.	TAMP vide Gazette No. 192 dtd 12 November 08 notified the tariff for the work of development of 13th to 16th multipurpose cargo (other than liquid / container) berth on BOT basis at Kandla. These cargo berths are to be located in line with the existing 1 to 12 dry cargo berths inside Kandla Creek. Moreover this dry cargo berth complex at Kandla is already provided with all basic infrastructural facilities like road – rail connectivity, water supply, electrification etc. However, the proposed dry bulk terminal off Tekra near Tuna" is to be located outside the Kandla creek about 17 kms on west of mouth to Kandla Creek off Tekra. Moreover, the proposed location of the terminal does not have any basic infrastructure facility as such this is the first time when KPT is going to develop such facility outside the Kandla Creek. In other words the proposed terminal is a green field project.
2	The upfront tariff proposal filed by the KPT suggests many deviations made from the norms prescribed in guidelines but the reasons for the deviations are not justified or explained as required by clause 3.2. of the tariff guidelines. The port envisages dry bulk cargo viz. coal, iron ore, fertiliser, iron ore, wheat etc., are to be handled at the dry bulk terminal. The port has explained that unloading rate for coal is taken as per the norms prescribed for the coal terminal. The basis on which the handling rate for other cargo items such as fertiliser, salt, etc., are considered same at the handling rate of coal is not explained in the proposal. Separate handling rate for iron ore is	Proposed terminal will handle all type of dry bulk cargo. Hence the norms for handling multipurpose cargo as per the tariff guidelines will be applicable to the present proposal. There are varieties of cargo covers under dry bulk cargo, which may be handled by the concessionaire during the concession period of 30 years. Hence , at this juncture it is not possible to access the type of dry bulk cargo that will be handled during concession period as such the same depends upon various factors viz. market scenario, trade requirement of hinterland, demand & supply etc. Considering this, to work out the tariff, the dry bulk cargo as given as exemplary basis (i.e. Coal, Fertiliser, Fertiliser Raw Material & Food Grains) in Feasibility Report are considered. Moreover, as per the type of cargo to be handled (all type of dry bulk cargo) on the proposed terminal the norms for fixation

	prescribed in the guidelines. The port has not explained why the handling rate for iron pre prescribed in the guidelines is not considered in the calculation of capacity. The handling rate for each cargo items considered in the tariff proposal may be substantiated and justified with the detailed analysis.	of Tariff for multipurpose Berth of Tariff guidelines will be applicable. However, in the revised proposal submitted, the capacity of the terminal so worked out is totally independent of the type of cargo and their share likely to be handled on the proposed terminal over the span of the concession period of 30 years. As the types of dry cargo are to be handled through ship loaders / unloader, the handling rates are taken as per the Table no. 1 of Annex III norms meant for Coal Terminal.
3	The guidelines for coal terminal require the optimal capacity of terminal to be determined based on lower of the two capacities i.e. optimal quay capacity and optimal yard capacity. The port has, however, not assessed the optimal yard capacity of the terminal.	The present proposal is based on the norms for multipurpose berth However, due to deviation from handling equipment only the handling rates of cargo is considered from norms for coal terminal.
4	The guidelines for coal terminal prescribe two ship unloaders. As against this, the capital cost furnished in Annex - VI show that three ship unloaders and one ship loader i.e. total 4 numbers are considered as against the prescribed norm of 2 numbers. The reasons for the deviations from the norms prescribed in the guidelines may be explained. If additional equipment are proposed to be deployed for justifiable reasons, then handling norms prescribed in the guidelines may also be correspondently adjusted considering the performance of additional ship loaders / unloaders.	The compliance to points 2 and 3 above may please be perused.
5	The equipment considered in the capital cost is not found to be in line with the normative list of equipment prescribed in the guidelines. Deviation from the guidelines should be justified and explained item wise with reference to the norms prescribed	The present proposal is based on the norms for multipurpose berth. However, as stated in the compliance to point 2 above due to deviation from handling equipment only the handling rates of cargo is considered from norms for coal terminal Hence, in the present proposal , it is not required to consider the handling equipment other than ship loaders. However, a lump sum amount of Rs.83 crores is incorporated in the Block Estimate towards various equipments required to be deployed for evacuation of cargo at stacking yard.
6	The storage area of 8 lakh sq. metres proposed to be allotted and the civil cost proposed to develop the storage area may be justified with reference to the requirement of area. It may be necessary to ensure that the area	This storage area development cost covers the construction of (i) custom fencing wall together with provision of gates to meet with the requirements of custom and security. (ii) Internal network of road as well as railway for speedy and

	allotted commensurate with the capacity of the terminal.	efficient evacuation of cargo from/to stackyard. (iii) (a) reclamation of area with suitable sundry material so that the finished top of area should be well above the highest high water level and (iv) Provision of suitable sub base , base and crust to withstand the load of cargo as well as machinery to be deployed in stacking yard for evacuation of cargo. The cost of development of 80 hectors of backup area with all required basic infrastructure facilities so worked out by the Technical Advisor is justified. There is no any specific norm to workout the exact requirement of stacking the cargo in stack yard. The area admeasuring to 8,00,000 sq mtr for stacking of 14 Million tones of cargo has been calculated on the basis of past experience. Moreover, this project being green field project, the evacuation will be slow due to poor network of rail road connectivity.
7	Annex - III shows estimates of license fee for approach area and jetty head which is not explained in the proposal. The other port assets, if any, proposed to be allotted for operations of dry bulk terminal may be elucidated. .	As per the draft concession agreement, following port assets will be licensed out to the concessionaire during the concession period on "as is where is basis" Land Area comprising of (i) 80 hectares for development of back up area for stacking of cargo (800000 m^2) (ii) area 18 m wide 3700 m in length for construction of approach to the Jetty Head i.e from Land fall Point to the Jetty Head. (66600 m^2) (iii) area of 600 m x 60 m for construction of Jetty Head. (36000 m^2) Total = 9,02,600 m^2 The license fee at the rate of Rs 10.50 per Sq Mtr per month is calculated for the above said area. However apart from this, following area will be licensed out to the concessionaire, but no license fee will be charged by the Port since it is common user facilities, which can be used at free of cost by concessioning authority or any of their authorized party (iv) Area for construction of road rail connectivity from Tuna to proposed back up area (Stacking Yard) - 5000 m x 40 m = 200000 m^2
8	The KPT has made a general statement that the share of cargo items likely to be handled at the dry bulk terminal is considered equally. The basis for such	Proposed Terminal will handle all type of dry bulk cargo. Hence the norms for handling multipurpose cargo as per Annexe V of Tariff Guidelines will be

	assumption may be explained. Also, clarify whether the port proposes to include a condition to this effect in the Concession Agreement. When the port itself admits that the share of cargo depends of various factors and is likely to change during the next 30 years period of concession, it may be appropriate apportioning the optimal capacity amongst different cargo items on a more realistic basis based on a detailed analysis.	applicable to the present proposal. Varieties of cargoes under dry bulk cargo may be handled by the concessionaire during the concession period of 30 years. Hence, at this juncture, it is not possible to access the type of dry bulk cargo and their share that will be handled during concession period as the same depends upon various factors viz. market scenario, trade requirement of hinterland, demand & supply etc. Further, there is no any berthing facilities exist within the Kandla Port where only dry bulk cargo is being handled, hence, it is also not possible and illogical to work out the share of different type of cargo even from the past experience of such terminal as was done in case of work of development of 13 to 16 Multipurpose cargo berths at Kandla. Considering this, to work out the tariff, the dry bulk cargo as given as exemplary basis in Feasibility Report are considered. However, in the revised proposal, the capacity of the terminal so worked out is totally independent of the type of cargo and their share likely to be handled on the proposed terminal over the span of the concession period of 30 years.
9	While estimating the capital cost the port has considered escalation in cost at 5%, pre-operative expenses at 2% establishment charges at 2%, financial charges at 1% on the each item viz. civil cost, equipment cost and berth cost. Interest during construction is estimated at 10% thereupon on the total Capital cost under each head. This is not in line with norms prescribed in the upfront tariff guidelines which prescribe a norm for estimating Miscellaneous Cost at 5% of civil and equipment cost which covers interest during construction period and other miscellaneous items. No justification for deviation, if any, from the norms is also furnished. The estimate for capital cost may be modified in line with the norms prescribed in the guidelines.	The estimate of capital cost has been modified in line with prescribed guidelines.
10	The estimation of capital cost is not substantiated with relevant documents. The relevant documents relied upon by the port for estimating capital cost may be furnished. Also, confirm that the estimates of capital cost are based on the current market rate.	The Estimate of Capital cost is based on prevailing market rates and approved prevailing Schedule of Rates of Kandla Port. The relevant supporting documents towards rates of various items so worked out are enclosed for ready reference. (Although stated so, the supporting documents have not been received in TAMP.)
11	Explain the basis adopted for considering a part of the berth apron	As per IS 4651 (Part V) (Clause no. 6.3.5 (d) (code practice for Planning and

	and approach under the civil cost for handling activity	Design of Ports & Harbours), the width of approach for bulk handling berths should be determined by the travelling cargo, transfer equipment, conveyor, access road and railways etc. In the subject work, the Jetty Head of 600m X 60 m, will be equipped with four ship loader / unloaders & belt conveyors on its both sides so that four vessels can be handled at a time for handling cargo to the tune of 14 Million Tones per annum. Considering the area required for installation of these equipment and area required for safe, speedy & efficient handling of cargo from / to four vessels at a time, the entire jetty head is considered as apron.
12	Confirm that the unit rate adopted for estimating the lease rental for land and back up area proposed to be allotted to the operator is based on the rate approved by this Authority. Give the appropriate reference of the lease rental considered by the KPT from the existing Scale of Rates.	The license fee (a) Rs. 10.50 / month / Sq. m is considered in the present proposal. The same rate was also considered in the tariff proposal for the work of development of 13th to 16th multipurpose cargo berths which was approved & notified by TAMP vide Gazette no. 192 on 12.11.08. The rate of license fee so considered in the present proposal is as per the para 2.5 (A) of prevailing Scales of Rates of KPT duly approved by the TAMP.
13	The concessional rate for entitled coastal cargo is prescribed at 60% of the rate for normal cargo in respect of berth hire and handling rate in the proposed Scale of Rates. The financial model considered for arriving at the upfront handling rate, however, does not factor the revenue implication	While calculating the revenue requirement for berth hire charges, to arrive the tariff for foreign going vessels 90% of weightage is given for tariff of coastal vessel. The subject analogy is absolutely based on the similar tariff proposal for the work of development of 13^{th} to 16^{th} multipurpose cargo berths at Kandla on BOT basis which was approved by the TAMP. Moreover, it is not possible to work out the exact weightage for foreign going vessels to arrive the tariff for berth hire charges from the past experience. For bifurcating the berth hire charges under foreign and coastal vessels, a ratio of 90:10 has however been adopted.
14	The proposed upfront storage charge arrived at 5% of the composite handling rate which is not found to be correct. The upfront tariff guidelines prescribe a norm of 5% of total estimated annual revenue requirement is to be recovered from the storage charge. For arriving at the upfront tariff for the storage, the apportioned revenue as per the norms is to be recovered taking into consideration (a) quantum of cargo likely to stay at the terminal beyond the proposed free period and (b) number of days the cargo will remain uncleared and attract the storage levy. The	As suggested the storage charges are worked out and submitted.

	storage charge increase may be propose slab wise as prescribed in the existing major ports as well upfront tariff cases. The storage charge proposed may be modified in the light of the above observation.	
15	The proposal is not accompanied with proposed upfront tariff schedule alongwith relevant conditions which may please forwarded	The following conditions may be incorporated in the Tariff proposal:- 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 2010 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.
16	The physical features of the standard dry bulk terminal such as berth length, width of the wharf, back up area dredged level may be indicated.	The proposed Terminal consists of an offshore berthing structure in shape of "T". The Jetty head admeasuring to 600 m x 60 m to be located at (-) 9.4 m contour and will be capable at catering to four vessels at a time – viz. two vessels each of 1,00,000 DWT on front & two vessel each of 75,000 DWT at rear of Jetty head. The dredged depth along the front & rear of jetty head will be (-) 16.2 m & (-) 15.1 m from chart datum. The jetty head will be connected to land fall point through 3.70 km long approach viz. 2 km pile approach & 1.7 km rubble mould approach. Apart from this, other ancillary infrastructure viz 80 ha. back up area for stack yard with handling equipments, rail road connectivity, water supply & fire fighting arrangement, handling equipments, electrification, and illumination are proposed to be provided.
17	The proposal envisages investment on both developments of road as well as railway lines. The proposal, however, does not mention about the evacuation of the cargo from the terminal. The proposal may be elaborated	The proposed Terminal is to be located off Tekra outside Kandla Creek. The proposed backup area of terminal will be located 5 kms from existing Tuna Port where the cargo is being handled through barges. This Tuna Port is directly connected with National Highway 8A through 2 lane wide road. A broad gauge railway line parallel to this road will be laid by KPT to provide rail connectivity upto Tuna Port. However, the road rail connectivity from Tuna Port to the proposed back up area will be provided by the concessionaire at its own cost. The cargo from vessels will be evacuated by ship unloader and be conveyed to stacking yard through belt conveyors. With the help of handling equipment at

		stacking yard, the cargo will be evacuated through rail & road leading to Gandhidham.

4. While furnishing the above clarifications, KPT vide letter dated 7 January 2010 submitted a revised proposal. The salient features of the revised proposal are as follows:

(a) TYPES OF CARGOES TO BE HANDLED

All types of dry bulk cargo viz. coal, fertiliser, fertiliser raw material, salt, iron ore and wheat will be handled at the proposed facility. The revised proposal is independent to the types of cargoes and the share of cargoes likely to be handled during the concession period.

(b) PHYSICAL FEATURES OF THE TERMINAL

(i) The physical features of the terminal are as under:

(ii) The proposed terminal is an offshore berthing structure in shape of "T". The jetty head will be 600mtrs in length x 60 mtrs wide and will be capable at catering to four vessels at a time– viz. two vessels each of 1,00,000 DWT on front & two vessels each of 75,000 DWT at rear of Jetty head.

(iii) The dredged depth along the front and rear of jetty head will be (-) 16.2m and (-)15.1m.

(iv) 80 hectares of back up area for stack yard with handling equipment, rail road connectivity, water supply and fire fighting arrangement, handling equipment, electrification, illumination are proposed to be provided.

(v) The total area considered to be allotted by the port and considered for estimation of lease rentals is as follows:

(Rs. sq. metres)

(i).	80 Hectares of land for development of back up area for stacking of cargo	8,00,000
(ii).	For construction of Approach to the Jetty 3700 meters in length x 18 meters wide	66,600
(iii).	For construction of Jetty Head	36,000
	TOTAL	**9,02,600**

(c) **OPTIMAL CAPACITY**

(i) The Optimal Capacity has been calculated following the norms prescribed for Coal Terminal.

(ii) **Optimal Quay Capacity:**

The optimal quay capacity is assessed at 21.46 million tonnes per annum adopting the following parameters and the formula prescribed in the guidelines:

(a) The share of Panamax vessels at 60% and Handymax vessels at 40%. The handling rate will be the same for any type of dry bulk cargoes to be handled at the terminal.

(b) Loading/unloading norms considered as per the guidelines for coal terminal:

Sr. No.	Type of Ship	Norms		Average	Values considered by KPT
		Loading	Unloading		
(i).	Panamax size vessel	40,000 tons/day	35,000 tons/day	37500	18750 *
(ii).	Handy Size & Handy max vessel	20,000 tons/day	15,000 tons/day	17500	8750 *

* The Port has stated that the norms prescribed in the guidelines correspond to the handling rate for deployment of two nos. of Ship loaders / unloaders. Since in the present proposal, only one ship loader / unloader is considered for each berth / vessel, the handling rate is considered @ 50% of the norms prescribed in the guidelines i.e. average of loading/ unloading rate.

(iii). **Optimal Yard Capacity**:

The optimal yard capacity is assessed at 14 million tonnes per annum as under:

(a) Out of the total area of 80 hectares, for development of backup area, 24 hectares is proposed for road, railway, custom fencing, SWD, etc. and the balance 56 hectares is considered as net area for stacking cargo.

(b) The stacking factor is considered at 3 tonnes/sq. mts and turnover at 12 times in a year as per the norms prescribed in the guidelines for coal terminal.

(c) The optimal capacity of the terminal is therefore considered at 14 million tonnes per annum being lower of the two capacities i.e. yard and quay for determining the upfront tariff.

(d) **CAPITAL COST**

The total capital cost of multipurpose cargo terminal is estimated at Rs.89997.26 lakhs of which Rs.71698.91 lakhs is for cargo handling activity and Rs.18298.35 lakhs is for berth hire. The breakup of the capital cost considered by the KPT is given below:

Sl.No.	Particulars (Rs. In lakhs)		Capital cost estimation (Rs.in lakhs)
I.	**For Berthing hire**		
	Cost of construction of berth after applying 10% annual escalation	17427.00	
	Misc cost including IDC @ 5%	871.35	
		TOTAL (I)	**18298.35**
II.	**Civil structures**		
	(i). Berth Approach	9409.09	

	(ii). Storage Yard	12721.92	
	(iii). Roads, Rail Tracks	4165.19	
	(iv). Building, water supply, sewage etc.,	796.78	
	(v). Custom Fencing Wall, F.F. arrangements, Env. Measures & Studies & Investigation	150.00	
	Subtotal	27242.98	
	(vi). Escalation @ 10%	2724.30	
	TOTAL (II)		**29967.28**
III.	**Equipment cost**		
	(i). Shore Loader, Unloader and Conveyors	32400.00	
	(ii). Power and Lighting, Communication	2434.00	
	Subtotal	**34834.00**	
	(iii). Escalation @ 10%	3483.40	
	TOTAL (III)		**38317.40**
IV.	Miscellaneous cost (5% on Rs. 29967.28 lakhs + Rs. 38317.40 lakhs)		**3414.23**
V	Total capital cost (I to IV)		**89997.26**

(e) **ROCE**

Return on capital employed is estimated at 16% on the gross block of assets.

(f) **OPERATING COST:**

(i). KPT has stated that the operating cost for cargo handling service is based on the norms prescribed in the guidelines for coal terminal.

(ii). Power cost is estimated adopting consumption norm of 1.4 units / tonnes and unit rate of power at Rs. 7.

(iii). Repairs and Maintenance is estimated at 1% on civil cost and 7% on mechanical and electrical equipment cost (including spares).

(iv). Insurance is estimated at 1% and other cost at 5% on gross asset value.

(v). Depreciation is stated to be estimated based on the rates prescribed in the Companies Act 1956.

(vi). Licence fee is estimate at Rs. 1137.28 lakhs for the 90.26 hectares of total area proposed to be allotted.

(g) **REVENUE REQUIREMENT**:

(**Rs. in lakhs**)

Sl. No.	Particulars	For handling multipurpose cargo	For berth hire	Total
(i).	Capital Cost	71698.91	18298.35	89997.26
(ii).	ROCE @ 16% on Capital cost	11471.83	2927.74	14399.57
(iii).	Operating cost	15416.17	3095.91	18512.08
(iv).	**Total revenue requirement (ii) + (iii)**	**26888.00**	**6023.65**	**32911.65**

90% of the total revenue requirement estimated for cargo handling activity is apportioned for handling service and 5% each towards storage charge and miscellaneous charge. (This is as per the apportionment share prescribed for multipurpose cargo berth). The break up of revenue requirement estimated from cargo handling activities is given below.

(**Rs. in crores**)

Sl. No.	Particulars	Estimated revenue requirement
(i).	Cargo handling service (i.e. Rs.26888 lakhs x 90%)	24199.20
(ii).	Storage charge (Rs.26888 lakhs x 5%)	1344.40
(iii).	Miscellaneous charge (Rs.26888 lakhs x 5%)	1344.40
	Total	**26888.00**

(h) UPFRONT TARIFF

The upfront tariff cap proposed by the KPT to meet the estimated revenue requirement is as follows:

(i) **Berth hire charges**:

Sr. No.	Vessel	RATE PER GRT PER HOUR PART THEREOF	
		Foreign going vessel (in Re.)	Coastal Vessel (in Re.)
(i)	All vessels	0.50	0.30

(ii) **Cargo handling charges** - Rs.172.85 per tonne

(iii) **Storage charges**

(a) Free period:

Import cargo - 5 days
Export cargo - 15 days

(b) Storage charge for balance cargo remaining beyond the free period:

Sl. No.	Particulars	Rate per tonne per day or part thereof (in Rs.)
(i).	1st day to 30th day	9.75
(ii).	31st day to 60 days	10.23
(iii).	61st day to 90 days	10.72

(c) Miscellaneous charges proposed at Rs.9.60 per tonne for all miscellaneous services such as sweeping of cargo on the wharf, weighment of cargo, dust suppression, etc.

5. The proposal of the KPT was registered as a tariff case on 19 January 2010. The proposal was circulated by letter dated 21 January 2010 amongst the relevant user organizations and short listed bidders, based on the details furnished by KPT.

6. Based on the preliminary scrutiny of the revised proposal, KPT was requested to furnish the following information / clarification vide our letter dated 7 April 2010. KPT has furnished its reply under letter dated 25 June 2010. The details sought and the replies received are juxtaposed below:-

Sl.No.	Queries raised by TAMP	Reply furnished by KPT
1	As per para 6.4.1 of the feasibility report, the concessionaire has to provide, among other things, a mobile harbour crane of 100 T capacity at about 27 metre reach to handle increase in cargo even beyond the handling capacity of the terminal. KPT to state the reasons why its estimate does not include provision of a mobile harbour crane.	As per para 6.4.1. of Feasibility Report, the concessionaire is required to only design the berthing structure & approach for mobile harbour crane of 100 T capacity and not to provide for the project facilities & services. IIT, Chennai being Technical Advisor has made such provision of designing the structure even for mobile handling equipments which may require by the concessionaire to deploy either for handling cargo even beyond handling capacity of terminal or during temporary break down of shore loaders / un-loaders and/or conveyor system. Considering these aspects the cost of such mobile crane is not made under the estimate.
2	In the revised proposal, a lump sum amount of Rs. 83 crores has been provided towards various equipments required to be deployed at stacking yard. The break-up of the equipments to be provided, with item wise details, needs to be furnished alongwith documentary evidence for the unit cost.	The requisite information is being collected and will be sent shortly.
3	KPT has confirmed that the estimate of capital cost is based on prevailing market rates and the prevailing SOR of Kandla Port. Though the Port has stated that for ready reference the relevant supporting documents towards rates of various items so worked out have been enclosed to its letter dated 7 January 2010, such supporting documents have not been received till date	It is confirmed that estimate of capital cost is based on prevailing market rates and the prevailing SOR of KPT. In the earlier submitted proposal, supporting documents towards the rates for item at S. No. 1 to 6(a) of Estimate was submitted. Now, the supporting documents towards rate of items at Sr. No 6(b) and 8 are enclosed for perusal.
4	KPT has stated that the cost of dredging to be incurred by the port may be considered for arriving at the port dues under vessel related charges. KPT to confirm whether this expenditure has been considered in its	The work of capital dredging along side the jetty head can be started only after completion of the work of Jetty head and its approach. Further, the scheduled construction period of the project is 24 months. Hence, the actual cost of capital dredging to be

	impending general rate revision.	incurred on the project will be considered during the general revision of Scale of rates of Kandla Port at later stage.
5	KPT has stated that panamax vessel will contribute 60 % and handimax vessels will contribute 40% of the cargo to be handled. KPT to clarify how the vessels' share has thus been determined.	It is the first occasion when Kandla port is developing the project facilities for handling vessels having draught of 14m to 15m. Moreover, on the existing facilities for dry cargo within Kandla creek, vessels up to draught of 12m are being handled. Hence, even from the past experience of existing handling of cargo, the contribution of vessels for 14m & 15m draught cannot be arrived at. The number and size of vessels that would arrive at the proposed terminal depends upon various factors which would vary from time to time. Hence to arrive at the optimum capacity of Terminal, by considering the capacity of shore loader/unloaders, the ratio of panamax & handimax vessel as 60:40 has been taken. However, the capacity of terminal of 14 MMTPA so worked out is governed by the capacity of Stacking Yard.
6	As per the norm for coal handling terminal, two numbers ship loaders / unloaders are to be provided which would achieve an output of 40000 tons per day with panamax vessels and 20000 tons per day with handimax vessels (both for loading) and 35000 tons per day for panamax vessels and 15000 tons per day for handimax vessels (both for unloading). While estimating the cost, the port has considered, in all, two shore unloaders of 15000 T capacity, one unloader of 10000 T capacity and one loader of 10000 T capacity. Considering the deployment of one ship loader / unloader per vessel, the terminal handling capacity has been arrived at by KPT at 15.0745 MMTPA. If, at a later date, two numbers ship loader / unloader per vessel are installed by the concessionaire, the cargo handling capacity of the terminal could increase exponentially leading to a financial windfall to the concessionaire if the upfront tariff now to be fixed is based on a conservative terminal handling capacity. It is to be recognized that the capital estimates of all civil works is considered in the proposal which constitute the major share of the capital expenses. It is also not established that installation of additional ship-shore cranes on the quay is technically not feasible. The port is, therefore, requested to revisit the optimum terminal handling capacity arrived at by it at 15.0745 MMTPA.	To work out the capital cost of the project, four shore loaders / unloaders viz two shore unloader, each of 15000 T/day , one shore unloader of 10,000 T /day and one shore loader of 10,000 T/day are considered together with the four belt conveyors. However, the capacity of Terminal of 14 MMTPA so worked out is least of the capacity worked out by considering the capacity by virtue of (i) shore loaders/ unloaders, (ii) conveyors & (iii) stacking yard. Further, during operation of the terminal, the Concessionaire will have to meet with the performance standards as well as minimum guaranteed cargo as laid down in the DCA (based on MCA) failing which the concessionaire will be at default and liable to pay compensation for the same. The aforesaid both parameters, performance standards & minimum guaranteed cargo are governed by the type and capacity of handling equipment to be deployed by concessionaire. As per the provision in DCA, the concessionaire is at liberty to install the handling equipments of the type and capacity to meet with the aforesaid parameters. It should be noted that the Kandla Port is already surrounded by the state-of-art Private Ports posing stiff competition. In such circumstances, the concessionaire of the terminal will also have to offer competitive rates to attract the business. Considering this, the apprehension of financial windfall to the concessionaire on is far from truth. Regarding technical feasibility of the terminal on account of installation of additional ship-shore crane on quay is concerned, it is stated that, as per the RFP the feasibility of the project is only as preliminary reference document by way of assistance to bidders and the concessionaire is required to design the Jetty head (Quay) for the mechanization to be installed by him to meet at least with the performance standard & minimum guaranteed cargo. However, the physical parameters of the jetty head & approach are restricted.
7	Although the terminal is to cater to different types of dry bulk cargoes including coal, the	It is first occasion when Kandla port is developing the project facilities for handling only dry bulk cargo from

	optimum stackyard capacity has been arrived at by the port considering the norms for calculation of optimal yard capacity at a coal terminal where three tons could be stacked per square meter area with a turnover ratio of 12 in a year. For export and import cargoes, the free period of storage of 15 days and 5 days respectively has been considered. If the turnover ratio is considered at 12 per year, the export cargo would attract demurrage for 15 days (30 days – 15 days) and the import cargo for 25 days (30 days – 5 days). At the proposed rate of Rs. 9.75 per ton per day for storage beyond the free period, the concessionaire will reap a windfall at the upfront storage rate now to be fixed. The port is, therefore, advised to consider turnover on the basis of dwell time analysis for different type of commodities.	vessels having draught of 14m to 15m. Moreover, on the existing facilities for dry cargo lying within Kandla creek all type of multi purpose cargo from vessels up to draught of 12m is being handled. Moreover, at present the Port does not have any dedicated terminal for handling only dry bulk cargo. Hence, even from the past experience from existing handling of cargo, the turnover on the basis of dwell time analysis for different type of commodities can not be arrived at. Hence, a Turnover ratio of 12 in a year is considered
8	Stacking factor of 3 T/sq.metre adopted to calculate yard capacity is prescribed in the guidelines for thermal coal. Even in case of coal, the ports like Visakhapatnam, Paradip, Tuticorin and Mormugao reported a much higher stacking factor depending on the actual already achieved, while proposing upfront tariff. It is needless to mention that stacking factor varies for different commodities. KPT may realistically assess stacking factor for each of the cargo proposed to be handled and accordingly revisit yard capacity calculation.	The land area on which the proposed stacking yard to be located is adjacent to sea shore. Further this land area gets submerged during the high tide twice a day. Considering the soil profile as well as location of terminal, IIT, Madras, being Technical Advisor, worked out the carrying capacity of stacking yard as 3 Tons per m2. From above it is clear that carrying capacity of stacking yard is dependant upon its location and soil profile and not dependant upon the type of cargo to be stacked. Considering this aspect, the capacity of stacking yard of proposed terminal can not be compared with that of other Ports. Further the considered stacking capacity of 3 T/m2 confirms to TAMP's guidelines.
9	The capital estimates take into consideration cost of a 15000T ship loader / unloader @ Rs. 45 cores and 10000 T ship loader /unloader @ Rs. 35 Crores. The basis of the estimate is not explained nor is any documentary support like budgetary quotation produced. In some of the recently decided upfront tariff cases at other ports, the cost of ship loader/unloader was found to be lower than the level assumed by KPT. The capital cost reported by other ports are – Rs. 28 crores at TPT (coal), Rs. 35 crores at MOPT (iron ore), Rs. 28.90 crores at VPT (fertilizer & coal).	The requisite information is being collected and will be sent shortly.
10	While arriving at the capital cost vide Annexure II and IV, the port has considered cost escalation of 10% i.e. Rs. 1584.27 lakhs, Rs. 2724 lakhs and Rs. 3483 lakhs. The Port is advised to rework the cost estimates strictly adhering to the norms for fixation of upfront tariff	The implementation schedule or construction period of the proposed terminal is 24 months from date of award of concession to the concessionaire. Further, as per the Ministry's guidelines (O.M. No. 1(3)/PF-II/2001 dtd 18.02.2002) completion cost should be worked out by taking into account the average rate of inflation (escalation). At the same time, the miscellaneous cost as per TAMP Guidelines does not cover the aspect of escalation. Moreover, in the Tariff Proposal for the work of "Development of 13^{th} to 16^{th} cargo berths", such provision for escalation was also considered.

11	For 902600 square meters of land area, the port has considered under operating expenses the license fee at Rs. 10.5 per square meter. The relevant section of the SOR of KPT in this respect may please be indicated.	The Rate of Licensee Fee so considered for the land area in present proposal is as per para 2.5 (A) of Prevailing scale of Rates of KPT duly approved by TAMP
12	While calculating the cargo handling charges, port has included Rs. 265 lakhs towards maintenance dredging in the approach channel. As per the norms, for calculation of cargo handling charges dredging expenses are to be excluded. Further, it is not clear why maintenance expenditure is to be borne by the BOT operator on an asset not created by him.	The proposal seeking approval of PPPAC for subject work was discussed with Secretary (Shipping) on 20.11.09, where it was decided that the maintenance dredging alongside Jetty & approach channel should be carried out by the concessionaire. (Hence, as per the DCA, the maintenance of draught alongside the jetty head as well as in its approach is the obligation of the concessionaire for the entire period of concession. Hence, the cost of maintenance dredging is considered in the Tariff Proposal. This has further been incorporated into the DCA in view of the experience of KPT where dispute has arisen with the Terminal Operator in regard to the depth of the approach channel and the depth alongside the berth.
13	Port has proposed a single rate as composite tariff cap per ton for all types of cargoes to be handled. Since different types of cargoes are to be handled at the multipurpose berth, it is necessary to provide separate rates for different types of cargoes to be handled based on their productivity.	It is first occasion when Kandla port is developing the project facilities for handling only dry bulk cargo from vessels having draught of 14m to 15m. Moreover, on the existing facilities for dry cargo lying within Kandla creek all type of Multi purpose cargo from vessels up to draught of 12m is being handled. At present the Port does not have any dedicated terminal for handling only dr bulk cargo. Moreover, the terminal predominantly will handle dry bulk cargo such as foodgrains, fertilizer & Coal. For all these cargoes, the norms for cargo handling rates as per TAMP Guidelines are same. Hence, there is not need to have separate rates for different cargo. Hence, the proposal for single rate may be considered.
14	The port has considered the cargo handling rate of Rs. 172.85 tonne. It is necessary to provide concessional coastal rate while fixing the upfront tariff	The concessional coastal rates for handling charges are furnished.
15	In the block estimate, an aggregate of Rs. 1571.5 lakhs have been included for creation of 5 kilometre railway line from Tuna Port to back up area and 1 kilometre siding within back up area. Its not clear whether all the commodities that will be handled at the dry-bulk terminal would use the rail facility. It may be necessary to prescribe separate rates for rail borne and road bound cargo. Also it is not clear whether the concessionaire will be entitled to the railway terminal charges payable by the Indian Railways.	As per the proposal, the concessionaire will levy following charges to user to use project facility: a. Cargo handling charges b. Berth hire charges c. Storage charges d. Miscellaneous charges The above charges are calculated as per TAMP Guidelines and the calculation of these charges is no way related to the mode of transportation of cargo into / from stacking yard. Hence, it is not necessary to prescribe separate rates for rail-borne and road-bound cargo. Further, the movement of cargo either by rail or road depends upon various factors viz. availability of road – rail link upto destination of cargo within the hinterland, cost effectiveness, quantity of cargo, and resources of consignor/consignee. Hence, at this stage, the total quantum of cargo can not be bifurcated in terms of its transportation by way of Road or Railway.

		It is proposed that only KPT will be entitled to railway terminal charges payable by Indian Railway.
16	KPT has proposed the berth hire charges of Re. 0.50 per GRT per hour for foreign going vessel and Re. 0.30 per GRT per hour for coastal vessels. The methodology adopted by KPT in arriving at the berth hire charges vide Annexure II has to be modified. The berth hire charges may please be re-worked out as per the illustration given.	The berth hire charges are worked out as per the methodology so suggested.
17	Please check the calculation of storage income at the proposed storage charges duly considering the proposed free period and yard turn over of 12 considered in determining capacity. It may be necessary to recalculate the unit storage charges to adhere to the share of revenue requirement from storage.	Please refer response to query no. 7 above.

7.1. A joint hearing was held on 8 April 2010 at the KPT premises and the users/short listed bidders were present and made their submissions. Based on some of the observations made at the joint hearing, KPT agreed to have a re-look at its proposal and furnish a revised proposal, if necessary. Since the users and prospective bidders had not furnished their written comments on the proposal of the port, they were allowed one more opportunity to file their written submissions.

7.2. Gammon Infrastructure Projects Limited vide letter dated 16 April 2010 furnished its comments on the port's proposal. A copy of it was forwarded to KPT for comments. The port by letter dated 14 July 2010 offered its remarks thereon.

8. By letter dated 2 July 2010 some additional clarifications as detailed below were sought from the port. KPT has replied thereto vide its letter dated 14 July 2010. The queries raised by this Authority and the replies furnished by KPT are juxtaposed below.

Sl.No.	**Queries raised by TAMP**	**Reply furnished by KPT**
1	As per KPT's proposal dated 7 January 2010, the cost of handling equipments towards shore loader, unloader and conveyors aggregates to Rs. 325 crore which includes Rs. 83 crores towards handling equipments at the stacking yard. The cost of handling equipments at the stack yard constitutes over 25 % of the entire handling equipments. In our letter dated 7 April 2010, KPT was requested to furnish the break-up of the equipments to be provided at the stacking yard with item wise details alongwith documentary evidence. KPT has reported that the requisite information is being collected and it will be furnished in due course. Kindly note that the upfront tariff to be approved has to be arrived at after estimating all the elements of costs and hence the port's proposal cannot be finalized till the details called for are received.	The cost breakup of various handling equipments amounting to Rs. 83 Crores is furnished below:- (a) Two reclaimers Rs. 25.12 crores (b) Two wagon tippers Rs. 8 crores (c) 2 stackers Rs. 36 crores (d) 3 cranes Rs. 1.70 crores (e) 4 payloaders Rs. 1.36 crores (f) Workshop equipment Rs. 1.13 cr (g) Switchgears Rs. 10.28 cr.
2	KPT has stated that the basis of estimation of the capital cost of the ship loader and	Despite vigorous efforts made by the port to collect the budgetary offers from the

	unloader is being collected and it will be submitted to this Authority shortly. In this respect, please refer to Sr. No. (i) above.	manufactures, KPT is unable to get any details.
3	KPT has been requested to furnish relevant supporting documents towards rates of various items included in the cost estimates. KPT has only furnished the item-wise rate analysis. The basis on which such rate analysis has been carried out has not been furnished. KPT is once again requested to furnish the relevant supporting documents considered for arriving at the rates of various items included in the cost estimate.	The rate analysis details are furnished.
4	Presuming that the concessionaire could increase the cargo handling capacity by installation of additional ship loader / unloader per vessel, the port was requested to revisit the optimum terminal handling capacity arrived by it at 15.0745 MMTPA. KPT has not addressed the issue raised. In this context the port is informed that the upfront tariff now to be fixed would apply in all terminals that are bid out subsequently during the next five years for handling identical commodities. While fixing the upfront tariff, this Authority has to follow a normative cost based approach, recognizing the capital and operating costs estimated based on the norms set by the guidelines adopted. Since it has not been established that installation of more than one loader / unloader at the 4 berth configuration is technically not feasible, the response given by KPT about minimum guarantee conditions / performance standards to be set through Concession Agreement cannot only be the ground for accepting the optimal capacity assessed by the Port.	The Kandla Port, located in the creek, is not capable of handling vessels of draught more than 13m and hence it is proposed to develop the port at Tekra to handle vessels of draught 15m. The front face of the berth is designed for 15m draught. The berth width 60m is required considering the soil condition and earthquake zone V. Since 60m width of the berth is available, the port has proposed to use the rear side of the berth also for handling vessels. Considering the stable slope below the berth the rear side is designed for handling 14m draught vessels. However the rear berths are proposed to handle fertilizer, salt, wheat etc and these cargoes are generally transported in handy/handymax vessels. Hence the two rear berths capacity is estimated as 4 MMTPA and considering the present cargo potential the two front berths capacity estimated as 10 MMTPA, totaling the terminal capacity at 14 MMTPA. It is feasible to increase the capacity by providing additional equipments at a later stage when the traffic increases and hence it is proposed that when there is an increase in the traffic beyond 14 MMTPA, the KPT may come to TAMP for revision of the rate.
5	The port was advised to re-consider the turnover ratio of 12 per year after carrying out a dwell time analysis of different commodities. KPT has replied that the turnover on the basis of dwell time analysis for different type of commodities cannot be arrived at since the port does not have presently any dedicated terminal for handling only dry bulk cargo. KPT has further stated that Table 2 of Annexure III to the TAMP guidelines considers a turnover ratio of 12 in a year. KPT is informed in this context that Table 2 ibid pertains to a coal terminal whereas the terminal under consideration is to cater to different types of dry bulk cargo including coal. In our letter dated 7 April 2010, it was pointed out that if the turnover ratio was taken at 12 per year the export / import	The proposed dry bulk terminal is envisaged to handle all type of dry bulk cargo including coal. However, there is no specific guidelines of TAMP to arrive the tariff for such dry bulk terminal. Coal being a dry bulk cargo, as per the guidelines of TAMP the turnover ratio for coal terminal is considered. To carry out a dwell time analysis of different commodities, the relevant data of past experience from a dedicated dry bulk terminal is necessary. It is the first occasion when Kandla Port is developing a project for handling only dry bulk cargo from vessels having draught of 14m to 15m. It is now considered that 60% of the cargo will be evacuated from the stack yard within the free period and remaining 40% cargo will stay beyond free period, the majority of which will be cleared within the period of 10 days from free

	cargoes would attract demurrage for 15 / 25 days and at the proposed rate of Rs. 9.75 per tonne per day for storage beyond the free period, the concessionaire will reap a windfall. KPT was hence requested to check the calculation of storage income at the proposed storage charges duly considering the proposed free period and yard turnover of 12 considered in determining the capacity. The Port was also requested to recalculate the unit storage charges to adhere to the share of revenue requirement from storage. In its reply dated 25 June 2010, KPT has not furnished any clarification on these points. Port is requested to comply.	period.
6	Pointing out the higher stacking factor of coal achieved at Visakhapatnam, Paradip, Tuticorin and Mormugao, KPT was requested to realistically assess the stacking factor for each of the cargoes proposed to be handled and to revisit the yard capacity calculations. It is noted that KPT has not made any attempt to reassess the yard capacity stating that the proposed stacking yard being adjacent to the seashore would submerge twice in a day during the high tides. It is not understood how an area which is certain to submerge in the sea water twice per day can function as a stack yard for all types of dry bulk cargoes including fertilizers and foodgrains.	Carrying capacity of stacking yard is dependant upon its location & soil profile as well as its development irrespective of cargo to be stacked thereon. The proposed land area for stacking yard, which is adjacent to sea shore will be reclaimed to increase its level well above the highest high sea water level so that all types of cargoes can safely be stacked at all the times. The 80 hectares stack yard area provided is designed for 3T/m2 considering the site specific soil conditions. After such reclamation, the stacking yard will be provided with suitable ground improvements by way of construction of sub-base, base and crust to enhance carrying capacity of the yard. The considered stacking capacity of 3 T/m2 confirms to the TAMP's guidelines. IIT Chennai, the consultant, has informed that without substantial further investment it may not be possible to increase the stacking capacity and the stacking capacity 3t/m2 is for all cargoes irrespective of the weight or specific gravity of the cargo and the stacking capacity is only the load bearing capacity of the yard.
7	The Port was advised to rework the cost estimates without considering a cost escalation of 10%. KPT has stated that the miscellaneous cost as per the TAMP guidelines does not cover the aspect of escalation. The port is once again requested to update the capital cost to the prevailing rate strictly adhering to the norms for fixation of upfront tariff.	The implementation schedule period of the proposed terminal is 24 months from date of award of concession to the concessionaire. As per the Ministry's guidelines (O.M.No. 1(3)/PF-II/2001 dtd 18.02.2002) completion cost should be worked out by taking into account the average rate of inflation (escalation). At the same time, the miscellaneous cost as per TAMP guidelines does not cover the aspect of escalation.
8	It is reiterated that since different types of cargoes are to be handled at the multipurpose berth, it is necessary to provide separate rates for the different types of cargoes to be handled based on their productivity.	The proposed terminal predominantly will handle dry bulk cargo such as food grains, salt, fertilizer, fertilizer raw material & coal. For all these cargoes, the norms for cargo handling rates as per TAMP Guidelines are same. Hence, there is no need to have separate rates for different cargo. Hence, the proposal for single rate may be considered. As per feasibility report apart from the cargos mentioned above iron ore is to be handled at the terminal. Since

		KPT is not expecting to handle any substantial ore in the near feature, the rate for handling of iron ore may not be considered.

9. (a) An officer level meeting was held on 16 July 2010 when KPT was asked to clarify why L shape of berthing structure is not viable and why the number of shore loaders and unloaders is restricted to four. KPT under letter dated 21 July 2010 forwarded the opinion of IIT Chennai as regards to the necessity to have a T shaped berthing structure. IIT Chennai in its letter dated 21 July 2010 addressed to KPT has stated that T shaped jetty with two front berths are essential in a tidal port like Kandla to handle 10 million tonnes where the rear portion of the jetty will handle only 4 million tonnes of cargo. According to the technical advice rendered by the IIT Chennai, construction of L – shape jetty in the 1st phase and converting to T – shape jetty in the next phase would be very expensive and L – shape jetty is not viable as the rear berth of such jetty cannot be used for handling bigger size vessels at all tides. In the opinion of IIT Chennai, any shape other than T – shape will not only be expensive but also will not be environment friendly.

(b) The letter dated 21 July 2010 did not answer to the query as to why the number of shore loaders and unloaders are restricted to four. The port was reminded to furnish its comments in the matter. In reply, KPT under letter dated 5 August 2010 has forwarded the opinion of IIT Chennai in this respect. IIT Chennai in its letter dated 4 August 2010 to KPT has stated that as per the Feasibility Report for the subject work, it is envisaged to handle dry bulk cargo to the tune of 14 MMTPA. When there is no traffic potential, assessing the capacity strictly as per the normative level will only make the proposed investment unattractive. Further, the MGT to be claimed from the concessionaire is to be linked to capacity. Normative level of capacity calculated without the adequate cargo support may only pushup the MGT level, achievements of which again would be unrealistic if cargo support does not materialize. The considered four numbers of shore loaders / unloaders in the Tariff proposal are sufficient and in line with the proposed envisaged handling capacity of 14 MMTPA of the terminal. Hence, at present only four shore loaders / unloaders are considered in the tariff proposal. However, it is feasible to increase the capacity of providing additional equipment at later stage when the traffic increases beyond 14 MMTPA and at that time the KPT may come to TAMP for revision of rates.

10. 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 are also available at our website http://tariffauthority.gov.in

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

(i) Although the KPT has requested this Authority to fix upfront tariffs for a dry bulk terminal near Tuna at port of Kandla, it was clarified to the port that as per clause 2.2 of the guidelines for upfront tariff setting for PPP Projects at Major Port Trusts of February 2008 the tariff caps to be prescribed now would not only be applicable to the dry bulk terminal but would also be applicable to all the projects bid out subsequently for identical cargoes at the Kandla Port during the next five years. In fact, this Authority in its Order No. TAMP/35/2008-KPT dated 30 September 2008 had accorded approval to the upfront tariff schedule for handling of foodgrains and fertilizers, thermal coal, coal (other than thermal coal), limestone, minerals, sugar, salt and other break-bulk cargoes like steel and bagged cargo and timber logs at the multipurpose cargo berths proposed to be developed under PPP mode at the KPT. KPT now envisages handling foodgrains, salt, fertilizer, fertilizer raw

material and coal at the proposed terminal at Tuna for which upfront rates are already available vide Order dated 30 September 2008. In this respect KPT has clarified that the four multipurpose cargo berths for which upfront tariff has already been fixed under Order dated 30 September 2008 are to be located at the Kandla Port (i.e. within the existing Kandla port complex) whereas the dry bulk terminal proposed to be created near Tuna is a green field project as it will be located outside the Kandla creek about 17 kms on west of mouth to Kandla Creek off Tekra and no basic infrastructure whatsoever is presently available thereat. The multipurpose cargo berths to be developed inside the Kandla port complex can straight away benefit from the existing rail connectivity available within the Kandla port, whereas the dry bulk terminal at Tuna has to create about five kilometres rail line from the terminal to the backup area and one kilometre rail sidings within the backup area. Moreover, according to Kandla Port trust, the cargo handling methods at the proposed two terminals would differ as the equipment proposed to be deployed at the multipurpose cargo berths within the Kandla complex are level luffing wharf cranes with grab / hook attachments, forklift trucks and payloaders, whereas the equipment proposed to be installed at the dry bulk terminal at Tuna are shore loader, shore unloader, conveyors, reclaimer, wagon tippler, stacker, cranes, payloaders and dozers. Considering the fact that the dry bulk terminal near Tuna is a green field project and the cargo handling methodology of the two terminals differs, this Authority is inclined to accede to the request of KPT to accord approval to separate upfront rates applicable for the proposed dry bulk terminal at Tuna.

(ii). The port initially envisaged handling of dry bulk cargoes viz. coal, iron ore, fertiliser, wheat etc., at the dry bulk terminal. KPT subsequently vide letter dated 14 July 2010 has informed that it does not expect iron ore traffic at the terminal. Handling rates for dry bulk cargoes are prescribed in the guidelines for a multipurpose terminal. But, the port has considered the handling rates prescribed in the guidelines for coal since these cargoes are to be handled through ship loaders / unloaders. In this regards, it is noteworthy that the guidelines do not specify any separate norms for mechansied handling commodities like fertiliser, foodgrain, etc. Since the handling methodology would be akin to coal terminal for which norms are set out in the guidelines, it is found appropriate to adopt them in case also. It may be relevant here to point out that certain deviations made by the port, as listed below, from the norms applicable for coal terminal:

(a) The guidelines for coal terminal require the optimal capacity of terminal to be determined based on lower of the two capacities i.e. optimal quay capacity and optimal yard capacity. While arriving at the optimal terminal capacity, the port has also factored the capacity of the conveyors to be installed, which is not envisaged by the guidelines.

(b) The norms for coal terminal prescribe two ship unloaders per berth. As against this, the port has considered three ship unloaders and one ship loader i.e. total 4 numbers for four berths.

(c) KPT has not proposed differential handling rates for different cargo items based on the individual productivity level.

(d) KPT has considered the yearly maintenance dredging expenditure in the operating costs.

(iii) <u>Optimal Quay Capacity</u>

(a) Although different types of dry bulk cargoes will be handled at the proposed terminal, the port has considered the normative handling

rate prescribed for coal in the guidelines for quay capacity calculation since all these cargoes are to be handled through ship loaders / unloaders. According to KPT at the proposed terminal 60% of the cargo would be handled by panamax vessels and 40% by the handysize and handimax vessels. As per the norm for coal handling terminal, two numbers ship loaders / unloaders are to be provided which would achieve an output of 40000 tons per day with panamax vessels and 20000 tons per day with handimax vessels (both for loading) and 35000 tons per day for panamax vessels and 15000 tons per day for handimax vessels (both for unloading). The proposal envisages installation, in all, of two shore unloaders of 15000 T capacity, one unloader of 10000 T capacity and one loader of 10000 T capacity. Considering this composition of deployment of one ship loader / unloader per vessel, the terminal handling capacity has been arrived at by KPT at 15.0745 MMTPA as shown in **Annex I.**

(b) It is significant here to point out that the deviation proposed by the KPT in the number of loader / unloader will have a major impact on the optimal capacity of the terminal. The major portion of the capital expenditure relates to the civil works which are captured in the estimates submitted by the port. Thus, by adding few more handling equipments, an operator can significantly improve upon the capacity of the terminal, which may provide an undue advantage to the operator. This point was repeatedly stressed by this Authority and the port was advised to revisit the equipment configuration and the terminal capacity assessed by them.

KPT has stated that the proposed dry bulk terminal will handle vessels of 15 m draught in the front. As a berth width of 60m is required due to the soil condition and earthquake parameters, the port has proposed to use the rear side of the terminal also for handling vessels. The rear side is designed for handling 14m draught vessels, mainly handysize / handymax vessels carrying fertilizer, salt, wheat etc. The two front berths capacity is estimated at 10 MMTPA and the two rear berths' capacity at 4 MMTPA totaling the terminal capacity to 14 MMTPA. According to the port, it is feasible to increase the capacity by providing additional equipments at a later stage when the traffic potential increases. For this reason KPT has proposed that when there is an increase in the traffic beyond 14 MMTPA, it would come to this Authority for review of the rates.

The port has admitted that the operator is at liberty to install the handling equipment of any type and capacity of his choice but has not revised the optimal capacity calculation which is based on the feasibility report prepared by IIT Chennai. The port was also advised by us to revisit its proposal to have four berths for the proposed terminal. Based on a technical advise rendered by IIT Chennai, the port has informed that T-Shape jetty with two front berths are essential in a tidal port like Kandla to handle 10 million tonnes. The rear portion of the jetty will only handle 4 million tonnes of cargo. According to the technical advise rendered by the IIT Chennai, construction of L – Shape jetty in the 1st phase and converting to T-shape jetty in the next phase would be very expensive and L – shape jetty is not viable as the rear berth of such jetty cannot be used for handling bigger size vessels at all tides. In the opinion of IIT Chennai, as brought out by KPT, any shape other than T-shape will not only be expensive but also will not be environment friendly.

IIT Chennai has also confirmed the traffic potential assessed by it would only be around 14 MMTPA. When there is no traffic potential,

assessing the capacity strictly as per the normative lever and incurring capital expenditure to meet such level will only make the proposed investment unattractive. Further, the MGT to be claimed form the concessionaire is to be linked to capacity. Normative level of capacity calculated without the adequate cargo support may only pushup the MGT level, achievements of which again would be unrealistic if cargo support does not materialise. Four numbers of shore loaders / unloaders as considered in the Tariff proposal are sufficient and in line with the proposed envisaged handling capacity of 14 MMTPA of the terminal. However, it is feasible to increase the capacity of providing additional equipment at later stage when the traffic increases beyond 14 MMTPA and at that time the KPT could come to TAMP for revision of rates.

(iv) Conveyors Optimal Capacity

While determining the optimal capacity of the dry bulk terminal, the Port has also considered the handling capacity of the conveyors to be installed – 2 Nos each of 1000T per hour in front and 2 Nos each of 750 tonnes per hour on rear of jetty head - at 21.46 MMPT per annum, though no norm has been prescribed in the guidelines for considering the capacity of the conveyors while fixing the upfront tariff.

The port has clarified that due to the different types of cargoes to be handled, the present capacity of the conveyor system of 2 x 1000 TPH is estimated at 10 MMTPA and that of the conveyor system of 2 x 750 TPH at 4 MMTPA. According to IIT Chennai, capacity can be increased only by construction of a new conveyor system supported by additional approach jetty.

(v) Optimal Yard Capacity

(a) Of the 800000 sq. meter of the backup area 240000 sq. meter has been provided for construction of roads, rails, custom fencing etc leaving 5,60,000 sq. meter area for stacking of cargo. Although the terminal is to cater to different types of dry bulk cargoes including coal, the optimum stackyard capacity has been arrived at by the port considering the norms for calculation of optimal yard capacity of a coal terminal where 3 tons of cargo could be stacked per square meter area with a turnover ratio of 12 in a year. KPT has arrived at the optimal capacity of the stacking yard at 14000000 tonnes as under:-

560000 sq feet x 70% x 12 x 3 = 14112000 tonnes rounded of to 14000000 tons per annum.

(b) Stacking factor of 3 tons per sq. metre adopted to calculate yard capacity is prescribed in the guidelines for thermal coal. Even in case of coal, the ports like Visakhapatnam, Paradip, Tuticorin and Mormugao are reported to have achieved much higher stacking factor vis-à-vis the factor considered while proposing their upfront tariff. Since stacking factor varies for different commodities, KPT was advised to realistically re-assess the stacking factor for each of the cargo proposed to be handled and revisit the yard capacity calculation. In reply, KPT has pointed out to the soil condition and informed that the yard could be designed only with a load factor of $3T/m^2$. KPT, based on the analysis of IIT Chennai, has stated that without substantial further investment it may not be possible to increase the stacking capacity and the stacking capacity $3T/m^2$ is for all cargoes irrespective of the nature of the cargo.

(vi) Optimal Capacity of the Terminal

The optimal capacity of the terminal has been estimated by KPT at 14000000 tons per annum being the lower value of the optimal quay capacity (15074500 tons) and optimal stacking yard capacity (14112000 tons rounded of to 14000000 tons). For the reasons advanced by KPT as detailed in sub-paras (iii) to (v) above, this Authority accepts the capacity of the terminal as 14112000 tons for the purpose of setting upfront tariff caps with a specific stipulation that the tariff caps approved will be subject to review when actual traffic handled exceeds the optimal capacity considered in this exercise. The port has undertaken to file a proposal for review of tariff at that time. The port is advised to incorporate an appropriate clause to this effect in the RFP documents to be issued and in the BOT agreement to be signed with the successful bidder.

(vii) Capital Cost

KPT in its initial proposal dated 7 October 2009 had estimated a capital cost of Rs. 882.23 crores consisting of Rs.679.93 crores for cargo handling activity (i.e. Rs.341.12 crores towards civil structures plus Rs.338.81 crores as equipment cost) and Rs.202.30 cores for construction of berth. The port subsequently revised the construction cost to Rs. 899.97 crores as detailed below:-

Rs. In Crores

1.	**Civil Structure** (consisting of berth approach, storage yard, roads, railtracks, building, water supply, sewage, custom fencing wall, firefighting arrangements, environmental measures and cost escalation of 10%)	314.66
2.	**Equipment Costs** (consisting of Shore loader, Unloader, Conveyors, equipments at Stacking yard, Power and Lighting, Communication and cost escalation of 10%)	402.33
3.	**Berth Construction cost** (including cost escalation of 10%)	182.98
	Total	899.97

The port has not substantiated the capital estimates with necessary documentary support. The port has informed that despite vigorous efforts it could not get budgetary quotations from the manufacturers. Based on the confirmation given by the port that capital estimates reflect the prevailing market rates, the estimates are relied upon subject to the modification discussed below :

(a) The port has considered an element of cost escalation at 10% in the capital estimates. KPT has sought to justify its estimates on the ground of the possible escalation in cost during construction period

and cited a Government instruction requiring to work out completion cost duly taking into account the average rate of inflation. The Government instruction quoted by the port was issued in 2002, whereas the upfront tariff guidelines issued by the Government is of 2008. Since tariff caps to be approved by this Authority will be indexed to inflation as per clause 2.8 of the tariff guidelines dated 26 February 2008, the capital cost of the terminal estimated at Rs.899.97 crores by the port has been reckoned at Rs. 818.16 crores (Rs.651.81 crores for cargo handling activity and Rs.166.35 for construction of berth) without considering the 10% provision for possible cost escalation in future.

(b) The capital estimates include Rs.911 lakhs towards creation of 5 kilometre railway line and Rs.660.50 lakhs for creation of 1 kilometre siding within the back up area. It was not clear whether all the commodities that will be handled at the dry-bulk terminal would use the rail facility. KPT is of the view that the concessionaire will levy cargo handling charges, berth hire charge, storage charges and miscellaneous charges which are in no way related to the mode of transportation of cargo into / from stacking yard and hence it is not necessary to prescribe separate rates for rail-borne and road-bound cargo. The upfront tariff guidelines do not explicitly envisage recognisation of capital cost on railway infrastructure, though cost wagon tippling system is providing for. Considering the fact that the estimated expenditure on Railway infrastructure is around 2% of the total capital cost and the proposed facility is to be developed in a green field site where full fledged evacuation facilities are not already available. The proposed expenditure is considered as a part of capital estimate.

(viii) Operating Costs

(a) KPT has calculated the operating costs as under:-

(i) Power costs is estimated adopting the consumption norms prescribed for coal handling terminal i.e. 1.4 units per ton and the unit rate of power at Rs. 7/-.

(ii) Repairs and maintenance of civil construction at 1% of capital cost.

(iii) Repairs and maintenance on equipments at 7 % of capital cost.

(iv) Expenditure on insurance at 1% of the capital cost.

(v) The depreciation on civil structure has been provided taking the life as 30 years.

(vi) The depreciation on equipment has been provided at 10.34% p.a. considering that the terminal will be working round the clock.

(vii) License fees for the land area at Rs. 10.50 per square meter per month as per the prevailing SOR of KPT.

(viii) Other expenses at 5% gross fixed assets value.

(ix) Maintenance dredging expenditure alongside the jetty and approach channel at Rs.265 per cubic metre based on the

decision taken by the Central Government that the maintenance dredging would be carried out by the concessionaire.

(b) While calculating the operating cost relevant for cargo handling and berthing, the port has included Rs.265 lakhs and Rs.2120 lakhs respectively per annum towards maintenance dredging in the approach channel. The estimated maintenance dredging cost has been arrived at the rate of Rs.265 per cubic meters based on a recent maintenance dredging contract awarded by the port. KPT was requested to clarify why maintenance expenditure is to be borne by the concessionaire on an asset not created by him. The port informed that while granting approval of PPPAC for the subject work it has been decided by the Central Government that the maintenance dredging alongside jetty & approach channel should be carried out by the concessionaire for the entire period of concession. It is to be noted that no expenditure on dredging, whether capital or revenue, can be considered while determining the cargo handling charges as the dredging expenditure is one related to vessels. In the stated circumstances, the annual cost of maintenance dredging has been considered as a part of the operating cost while arriving at the upfront berth hire charges for the reasons elaborated in para (xiii) (a) below and not for arriving at the cargo handling charges as proposed by the port.

(c) License fee for the 902600 sq. meters land area is estimated by KPT at Rs.10.50 per square meter per month based on the rate of storage fees on general cargo prescribed in the existing SOR of Kandla Port Trust (Rs.105 per 10 square meter for occupation beyond 180 days). The guidelines require License fee for lands to be calculated as per the Scale of Rates of the Port Trusts. It is needless to mention that rate as applicable for the relevant land should be considered. The present proposal of the port is for fixing the upfront tariff applicable to a dry bulk terminal off Tekra near Tuna which will be about 17 Kilometres on west of mouth to Kandla creek. The existing Scale of Rates of KPT prescribes separate rates for Tuna under chapter-V. Sl. No. (1) of Schedule V specificies rental for open space at Rs.7.50 per 10 sq. mt. per month. The estimated License fee calculated by KPT by adopting Licence Fee prescribed for Kandla lands is modified accordingly with reference to the specific rate prescribed in the Scale of Rates for Tuna.

(ix). A statement, attached as **Annex-I** gives the computation of upfront tariff in respect of the dry bulk terminals as furnished by KPT and considered in this analysis. The statement reveals that after providing ROCE of Rs. 10429 lakhs at 16% on a capital base of Rs. 65181 lakhs and taking the operating cost at Rs.12945 lakhs, the annual revenue requirement for cargo handling operation as Rs.23374 lakhs. Though operational norms applicable for a coal terminal is considered for calculation of capacity in view of deployment of loaders / unloaders, the port has adopted revenue apportionment formula prescribed for multipurpose berths and accordingly apportioned the annual revenue requirement among cargo handling, storage and miscellaneous charges in the ratio of 90:5:5. To meet the revenue requirement of Rs.21036.60 lakhs (90% of Rs.23374 lakhs stated above) the per tonne handling charges works out to Rs.155.27 for foreign cargo and the corresponding concessional coastal rate per tonne works out to Rs. 93.16.

(x). The port has proposed a single rate as composite tariff cap per ton for all types of cargoes to be handled. The argument of the port is that handling norms prescribed for a multi purpose berth club different types of dry bulk

cargo together and set the same output norm for such cargoes. In this case also, the same output norm is followed for all dry bulk cargo, albeit at a higher level due to the proposed deployment of higher capacity loaders / unloaders. Since output norms for different commodities would be the same, the handling charges need not be different. Accordingly, a common handling rate for the commodities viz. foodgrains, salt, fertilizer, fertilizer raw material and coal to be handled at the dry bulk terminal off Tekra is approved.

(xi). As per the norms for a multipurpose berth, Storage charge is leviable for storage of cargoes at the transit area beyond the allowable free period of 5 days for import cargo and 15 days for export cargo. The revenue requirement of Rs.1168.70 lakhs (5% of Rs.23374 lakhs) towards storage charges has to be met from the cargo that may remain after the permitted free period of 5 days for import cargo and 15 days for export cargo. The port had initially proposed storage charges at the rate of Rs.9.75 per ton per day or part thereof for the first 30 days on the cargo that may remain in the transit area after the admissible free period with escalated rates for the subsequent slabs. As it was found that the demurrage rate proposed by the port would far exceed the revenue requirement, KPT was advised to carry out a dwell time analysis. The port, though expressed its inability to carry out such an exercise, has furnished a revised calculation vide letter dated 14 July 2010 based on the presumption that 60% of the cargo will be evacuated within the free period and balance 40 % will stay beyond the free period, of which the majority will be cleared within ten days after the free period. As per the revised calculation, of the 14112000 tons of cargo proposed to be handled at the terminal, only 5644800 tons (40% of 14112000 tons) will be subjected to the payment of demurrage charges. The revenue requirement of Rs.1168.70 lakhs will be met if these 5644800 tons of cargo gives on an average revenue of Rs.20.70 per ton. Presuming that the balance cargo remains in the transit area on an average for 10 days, the revenue requirements can be met by levying a storage charge of Rs. 2.07 per ton per day on the cargoes lying at the transit area for the first 10 days after the free period. Some cargo may overstay even beyond the said period of ten days. As a deterrent to such over stayal, it is necessary to prescribe demurrage charges at higher rates. This Authority, therefore, approves a levy of Rs. 2.07/-, Rs. 4.14/- and Rs. 6.21/- per tonne respectively for storage between 11^{th} day to 20^{th} day, 21^{st} day to 30^{th} day and beyond 31^{st} day in respect of cargoes remaining in the transit yard after the prescribed free period.

(xii). The revenue requirement towards miscellaneous charges also works out to Rs. 1168.70 lakhs (5% of Rs. 23374 lakhs). For meeting the expenses not covered under cargo handling and storage charges, this Authority accords approval to a tariff cap of Rs. 8.28 per tonne as miscellaneous charges.

(xiii). (a) The estimated cost of capital dredging alongside the berth amounts to Rs.187.82 crores and at the approach channel Rs. 30.33 crores. In this project, the capital dredging aggregating Rs. 218.15 crores has to be carried out by the port. As mentioned earlier, the Central Government has reportedly taken a decision that maintenance dredging alongside the berth and approach channel be carried out by the concessionaire. According to the norm, the operating cost to be considered while calculating the berth hire is at 1% of the cost of construction of the berth and cost of capital dredging. Accordingly, the normative cost of maintenance dredging works out to Rs.2.18 crores (1% of Rs.218.15 crores) whereas KPT has estimated the maintenance cost at Rs. 23.85 crores. KPT vide its letter dated 15 July 2010 has clarified that since the terminal to be constructed is in the open sea, both IIT Madras and CWPRS, Khadakwasla, have estimated that 9 lakh cubic metres per year have to be dredged towards maintenance. In view of the technical justification furnished

by the port. Rs. 23.85 crores towards maintenance dredging is considered under operating expenditure relevant for fixing berth hire charges.

(b) The guidelines require the operating cost for berthing service to be estimated at 1% of the berth cost. In its revised proposal, the KPT has considered insurance @1% and depreciation @3.34% on the aggregate capital cost relating to construction of berth while estimating the annual revenue requirement of berthing service apart from the prescribed norm of 1% towards maintenance and dredging.

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 for the coal, iron ore & multipurpose cargo berth terminals at various ports, this position was recognised by this Authority 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 at 1% and depreciation @3.34% of the capital cost may be considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service.

(c) The capital cost of the berth is estimated at Rs.16635 lakhs. Considering the (i) repairs and maintenance cost, (ii) insurance and (iii) depreciation at 1%, 1% and 3.34% respectively of the capital cost and the annual maintenance dredging at Rs. 2385 lakhs, the operating cost of the berth works out to Rs. 3273 lakhs. After providing ROCE of Rs. 2662 lakhs at 16% on the capital cost of Rs. 16635 lakhs and taking the operating cost at Rs.3273 lakhs, the revenue requirement for the berth operation works out to Rs.5935 lakhs.

(xiv) As per clauses 4.3 and 6.1.2 of the tariff guidelines notified in the Gazette of India on 31 March 2005, concessional tariff has to be prescribed for coastal cargoes (other than thermal coal and POL including crude oil, iron ore and iron ore pallets) and coastal vessels which should not exceed 60% of the normal cargo / vessel related charges. KPT initially had not proposed any coastal rates. As the terminal will handle both foreign and coastal vessels it is necessary to provide concessional coastal rates both for cargo and vessel related charges.

(xv). (a) Normally vessel related charges for foreign going vessels are denominated in US dollar terms by converting the rupee value to dollar terms by applying the Re-Dollar exchange rate prevailing at the time of notification of the relevant tariff order. This Authority while finalising the upfront berth hire rates in the past has, however, taken the view that this approach is not appropriate in the upfront tariff cases which will have a validity of 30 years. It has been then decided that applying a WPI based escalation on a foreign currency is not correct as the foreign exchange variation over the next 30 years cannot be predicted and in case of any abnormal variations, either the users or the operator will have to bear the incidence, depending on which side the appreciation takes place. The upfront berth hire charges in respect of the the dry bulk terminal at Tuna are, therefore, denominated in Rupee term only.

(b) The port in its letter dated 15 July 2010 has informed that the ship-day output of the terminal with four vessels working would be 55000 tons. KPT has estimated that 10% of the vessels calling at the terminal would fall under coastal category. The computation of upfront berth hire of the dry bulk terminal is attached as **Annex – II** as per which, to meet the revenue requirement of Rs. 5935 lakhs per annum, the rate on foreign going vessel will be Re. 0.49 per GRT per hour and the corresponding concessional coastal rate will be Re. 0.29 per GRT per hour.

11.1. As per clause 2.8 of the Guidelines, the tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2010 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.

11.2. As specified in clauses 2.9.1. and 2.9.2. of the guidelines, before commencement of commercial operations, the private operators shall approach this Authority for notification of the Scale of Rates containing the approved ceiling rates and the statement of conditions, as required under Section 48 of the Major Port Trusts Act, 1963.

11.3. As per clause 3.8.5 of the guidelines, if any question arises requiring clarifications or interpretation of the Scale of Rates and the statement of conditionalities, the matter shall be referred to this Authority and its decision in this regard will be binding on the operators.

11.4. The performance norms for the projects should be clearly brought out in the bid documents. The private operators are expected to perform at least at the performance norms brought out in the bid document/concession agreement.

11.5. The actual performance of the private operators will be monitored by this Authority. If any complaint regarding quality of service is received, this Authority will enquire into such allegation and forward its findings to the Kandla Port Trust. If any action is to be taken against the private operators, the Kandla Port Trust shall initiate appropriate action in accordance with the provisions of the relevant Concession Agreement.

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

11.7. The upfront tariff fixation has been carried out with the assumption that the optimal capacity of the terminal as 14112000 tons due to lower level of equipment deployment proposed by the Port for the reasons explained earlier. This Authority makes it clear once again that the upfront tariff caps fixed now will be subject to review any time during the concession period, if it is found that the actual traffic handled exceeds the optimal capacity determined in this exercise and accordingly advises KPT to monitor the position and file a suitable proposal for resetting the tariff at the appropriate time.

12. In the result, and based on the discussion above, and based on a collective application of mind, this Authority approves the schedule of tariff caps for Dry Bulk Terminal off Tekra near Tuna at port of Kandla attached as **Annex – III**.

(Rani Jadhav)
Chairperson

ANNEX - I

FORMULATION OF UPFRONT TARIFF FOR THE DRY BULK TERMINAL OFF TEKHRA NEAR TUNA AT KANDLA PORT

Sr.No.	Particulars		As estimated by KPT	As considered by TAMP
A.	**Capacity**			
	(a). Panamax vessels to be handled at the terminal	60%		
	(b). Handysize and Handimax vessels to be handled at the terminal	40%		
	(c). Handing (loading) rate for panamax size vessel (tonnes per day)	40000		
	(d). Handing (unloading) rate for panamax size vessel (tonnes per day)	35000		
	(e). Average handing (loading/unloading) rate for panamax size vessel (tonnes per day)	37500		
	(f). Handling rate for panamax size vessel per ship loader / unloader per berth / vessel (tonnes per day)	18750		
	(g). Handing (loading) rate for handysize and handimax size vessel (tonnes per day)	20000		
	(h). Handing (unloading) rate for handysize and handimax size vessel (tonnes per day)	15000		
	(i). Average handing (loading/unloading) rate for handysize and handimax vessel (tonnes per day)	17500		
	(j). Handling rate for handysize and handimax size vessel per ship loader / unloader per berth / vessel (tonnes per day)	8750		
	(k). Optimal capacity of terminal as worked out by KPT (tonnes per annum) [(60% x 18750) + (40% x 8750)] x 365 days x 70% x 4 vessels	15074500		
	(l) Optimal capacity of stacking yard as estimated by KPT (Tonnes per annum) 70 % x 560000 m2 (net area for stacking cargo) x 12 months x 3 tonnes (quantity that can be stacked per square meter.)	14112000		
	(m) The optimal capacity of the terminal as considered by KPT, being the lower value of the optimal quay capacity and optimal stacking yard capacity. (tonnes per annum)	14112000 Say 14000000		
	(n). Optimal capacity considered for fixing the upfront tariff (tonnes per annum.)		14,000,000	14112000
B.	**Capital Cost of the terminal** (Rs. in lakhs)			
(i).	Civil Structure		31466	28605
(ii).	Equipment Cost		40233	36576
	Total Cost		71699	65181
C.	**Operating Cost of the terminal** (Rs. in lakhs)			
	(a). Power		1372	1372
	(b). Repairs and Maintenance - Civil		315	286
	(c). Repairs and Maintenance - Mechanical		2816	2560

	(d). Insurance	717	652
	(e). Depreciation	5209	4735
	(f). License fee	1137	81
	(g). Other expenses at 5% of capital cost	3585	3259
	(h). Maintenance Dredging in approach channel	265	
	Total [(a)+(b)+(c)+(d)+(e)+(f)+(g) + (h)]	**15416**	**12945**
D.	**Revenue Requirement for cargo handling** (Rs. in lakhs)		
(i).	Operating Cost	15416	12945
(ii).	ROCE @ 16% of capital cost	11472	10429
	Total Revenue Requirement	26888	23374
E.	**Tariff** (Rs. per ton)		
(i).	Handling Charges	172.85	
	Foreign		155.27
	Coastal		93.16
(ii).	Storage Charges	9.60	2.07
(iii).	Miscellaneous Charges	9.60	8.28
F.	**Capital Cost of Berth (Rs. In lakhs)**		
(i).	Berth construction cost	17427	15843
(ii).	5% Miscellaneous cost	871	792
	Total of (i) + (ii)	18298	16635
G.	**Operating Cost of Berth** (Rs. in lakhs)		
(i).	Repairs and Maintenance (1% of capital cost)	183	166
(ii).	Insurance (1% of capital cost)	183	166
(iii).	Depreciation (3.34% of capital cost)	610	556
(iv).	Maintenance dredging	2120	2385
	Total (Rs. in lakhs)	3096	3273
H.	**Revenue Requirement for berth operation** (Rs. in lakhs)		
(i).	Operating Cost	3096	3273
(ii).	ROCE @ 16% on capital cost	2928	2662
	Total Revenue Requirement	6024	5935
I.	**Tariff**		
(i).	Berth Hire per GRT per hour		
	(a) Foreign going vessels (Re)	0.46	0.49
	(b) Coastal vessels (Re)	0.28	0.29

Annex II

COMPUTATION OF UPFRONT TARIFF BERTH HIRE OF A DRY BULK TERMINAL OF TEKRA NEAR TUNA AT PORT OF KANDLA

Sl.No.	Particulars	Unit	
(i)	Tonnage to be handled	Tonnes	14112000
(ii)	Ship day output	TPD	55000
(iii)	No of berth days (i/ ii)	Berth days	256.58
(iv)	Number of berth hours (iii * 24)	Hours	6158
(v)	Average GRT per vessel	Tonnes	51000
(vi)	Average GRT for four vessels	Tonnes	204000
(vii)	Total GRT (vi) x (iv)	Tonnes	1256232000
(viii)	Revenue Requirement	Rs.	593500000
(ix)	Berth hire per GRT per hour (viii /vii)	Re.	0.45

Workings

i.	Revenue requirement for 90% foreign going vessels + 10% coastal vessels (Rs)	593500000
ii.	GRT of foreign going vessels	1130608800
iii.	GRT of coastal vessels	125623200
iv.	Total GRT	1256232000
v.	1130608800x + 0.6 * 125623200x	1205982720x
vi.	1205982720x	5935900000
vii.	x (foreign going vessels) Re	0.49
viii	Coastal (0.6 * 0.50) Re	0.29

Annex III

KANDLA PORT TRUST

TARIFF SCHEDULE OF DRY BULK TERMINAL OFF TEKRA NEAR TUNA

1.1. 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 competent authority.

(ii). "**Foreign Vessel**" means any vessel other than a coastal vessel.

(iii). "**Per day**" means per calendar day unless other wise stated.

1.2. GENERAL TERMS AND CONDITIONS

(i). The status of the vessel, as borne out by its certification by the Customs or the Director General of Shipping, is the relevant factor to decide whether vessel is 'coastal' or 'foreign-going' for the purpose of levy of vessel related charges; and, the nature of cargo or its origin will not be of any relevance for this purpose.

(ii). (a). The vessel related charges for all coastal vessels should not exceed 60% of the corresponding charges for other vessels.

(b). the cargo related charges for all coastal cargo other than thermal coal should not exceed 60% of the normal cargo related charges.

(c). In case of cargo related charges, the concessional rates should be levied on all the relevant handling charges for ship-shore transfer and transfer from / to quay to / from storage yard including wharfage.

(d). Cargo from a foreign port, which reaches an Indian Port 'A' for subsequent transhipment to Indian Port 'B' will be, levied the concessional charges relevant for its coastal voyage. In other words, cargo from / to Indian ports carried by vessel permitted to undertake coastal voyage will qualify for the concession.

(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 Prime Lending Rate of the State Bank of India.

(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. This provision shall, however, not apply to the cases where payment is to be made before availing the services where payment of charges in advance is prescribed as a condition in this Scale of Rates.

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

(v). Users will not be required to pay charges for delays beyond reasonable level attributable to the terminal operator.

2. BERTH HIRE CHARGES:

The berth hire charge payable by masters / owners / agents of the vessel and other floating craft approaching or lying alongside the berth shall be as per the rates given below:

Vessels	Rate per GRT per hour or part thereof	
	Foreign Going Vessel (in Re.)	Coastal Vessel (in Re.)
All vessels	0.49	0.29

Notes:

(i). The period of berth hire shall be calculated from the time vessel occupies 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 vessel signaling its readiness to sail.

(b). The time limit of 4 hours prescribed for the cessation of berth hire shall exclude the ship's waiting time for want of favorable tide conditions, inclement weather, and due to lack of night navigation.

(c). 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 and asks for a pilot in anticipation even when she is not ready for un-berthing due to engine not being ready or cargo operation not completed or such other reasons attributable to the vessels. This excludes the signaling readiness when a vessel is not able to sail due to unfavorable tide, lack of night navigation or adverse weather conditions."

3. CARGO HANDLING CHARGES:

The cargo handling charges shall be payable on the manifested cargo directly by the importer of cargo at the rates specified below:

Sl. No.	Commodity	Rate in Rupees (Per Tonne)	
		Foreign	Coastal
i	Foodgrains	155.27	93.16

ii	Salt	155.27	93.16
iii	Fertilizer	155.27	93.16
iv	Fertilizer raw materials	155.27	93.16
v	Coal	155.27	93.16

Note:

The handling charges prescribed above is a composite charge for (i) unloading of the cargo from the vessel including stevedoring and transfer of the same upto the point of storage, storage at the stackyard upto a free period of 5 days and loading on to trucks in respect of import cargo and (ii) unloading of the cargo from the trucks at the stackyard, storage at the stackyard upto a period of 15 days, transfer the cargo to the loading point and loading onto the ship including stevedoring. This composite charge includes wharfage and supply of labour, wherever necessary.

4. STORAGE CHARGES:

The storage charges for the cargo stored in the stackyard beyond the free period allowed shall be as below:

(A). For Import & Export

(Rate in Rs. Per MT per day)

Commodity	Rate for 1st day to 10th day	Rate for 11th day to 20th day	Rate for 21st onwards
All types of cargo	2.07	4.14	6.21

Note for Section 4

(i). Five free days for import cargo and fifteen free days for export cargo shall be allowed. For the purpose of calculation of free period, Customs notified holidays and Terminal's non- working days shall be excluded.

(ii). Storage charges shall be payable for all days including Terminal's non-working days and Customs notified holidays for stay of cargo beyond the prescribed free days.

(iii). 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 terminal operator.

5. MISCELLANEOUS CHARGES

Sl. No.	Commodity	Rate in Rupees (per tonne)
(a).	All types of cargo	8.28

The miscellaneous charges prescribed above is a composite charge for provision of all miscellaneous services such as sweeping of cargo on the wharf, weighment of cargo, dust suppression etc.

6. GENERAL NOTE TO SECTION 2 TO 5 ABOVE

The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2010 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.

SUMMARY OF THE ARGUMENTS MADE BY THE PORT USERS / DIFFERENT USER ORGANISATIONS / SHORT LISTED BIDDERS IN THIS CASE DURING THE JOINT HEARING BEFORE THE AUTHORITY.

TAMP/42/2009-KPT	Proposal from the Kandla Port Trust (KPT) for upfront tariff setting for developing a Dry Bulk Terminal off Tekra near Tuna at Port of Kandla on Design, Engineering, Build, Finance, Operate, Maintain and Transfer (BOT) basis.

1. A joint hearing in this case was held on 8 April 2010 at the KPT premises. At the joint hearing the following submissions were made:

KPT

(1). Power point presentation. Hard copy is given.

(2). Public Private Participation Appraisal Committee has already cleared the project on 15 March 2010.

(3). Conveyor specifications and capacity cannot be technically altered.

M/s. Gammon Infrastructure Project Limited.

(4). The proposal is a mixture of norms for coal and general cargo.

(5). Without detailed engineering report, we cannot comment on capital estimate.

(6). Pile cost will be more as the construction is in water. The estimate considers cost for land construction.

(7). Mismatch in capacity causes us to invest in idle facilities. Stackyard area is to be increased.

(8). Road and rail will be used by everyone. Port should develop.

Tapoji

(9). Capital cost is unrealistic.

M/s. ABG Infralogistics Limited

(10). We will give written comments.

2. Gammon Infrastructure Projects Limited vide letter dated 16 April 2010 furnished its comments on the port's proposal. A copy of it was forwarded to KPT for comments. The port by letter dated 14 July 2010 offered its remarks thereon. A summary of the comments received from the Gammon Infrastructure Projects Limited and the remarks of the KPT thereon are summarized below:

Sl.No.	Comments of Gammon Infrastructure Projects Limited	Remarks of KPT
1.	A. **PROJECT CAPACITY**:- 1. Storage per sqr. mtr. 3 tons per sqr. mtr has been assumed in the proposal which needs to be re-looked in the light of the below: 3 tons is the TAMP norm specified for Coal. In this case there are multiple cargoes besides Coal such as FRM, Food Grains etc. When there are multiple cargoes the stacking has to be made such that there is cargo compatibility. Coal cannot be allowed to mix with FRM or food grains. This means that storage space will be lost to maintain this compatibility as also for adequate dust suppression systems. Further, some cargoes such as food grains and FRM cannot be stored in open storage throughout to protect against rains. Provision will need to be made for enclosed storage spaces also. Neither the cost has been considered in the Project Cost nor the provision for space for such construction. The stacking area will be ultimately affected. With FRM please note that specifically in the case of UREA and DAP cargo is granular and circular form. Hence beyond 6 meters it is very difficult to stack cargo as also that even within this 6 meters lot of space is wasted due to the circular shape of the cargo. The cargo is also very light and stowage factor is very high. Same issue with Food grains, particularly with wheat and sugar. Further in both FRM and food grains please note that cargo has to be bagged for ultimate evacuation. Bagging whether done mechanized or manual required free flow of machines and labour as a result of which the open areas increase considerably resulting in reduced storage area. When such cargo is bagged the storage per sqr mtr further reduced as bags can be high heaped only up to such height which is accessible through labour (bags cannot be handled	The 80 hectors stack yard area provided is designed for 3T/m2 considering the site specific soil conditions. Further, the proposal dry bulk terminal is envisaged to handle all type of dry bulk cargo. For example coal, wheat, fertilizer, fertilizer raw material , salt, iron ore etc. There is no specific guidelines of TAMP to arrive the tariff for such dry bulk terminal. Hence, coal being a dry bulk cargo , the guidelines of TAMP for coal terminal is considered to arrive the tariff for proposed terminal. The considered stacking capacity of 3 T/m2 in the tariff proposal is as per TAMP's guidelines. As per TAMP guidelines, only 70 % of area of 80 hectares of stacking yard is considered to arrive at the yard capacity. Hence, even the dry bulk cargo (like FRM, Urea, DAP, food grains after its bagging as envisages by M/s GIPL) can easily be stacked in the yard alongwith coal. The concessionaire can stack both the dirty cargo, clean cargo and agri cargo at a time in the yard having the stacking capacity of 14 Million Tonne. In the tariff proposal the cost of reclamation of stacking yard and ground improvement by way of subsequent construction of sub-base, base and crust is considered. As per TAMP guidelines for dry bulk cargo, whether coal or iron ore, the cost of covered storage area need not to be envisaged in the Tariff.

	otherwise). There is no Iron Ore moving through Kandla or for that matter any north west ports. Last but importantly please note that the Stackyard Area which is on Marshy Land and has to be reclaimed with suitable ground improvement also. The Project Cost considered is based on certain assumptions of weight per sqr mtr and the costs have been included. Beyond this if one has to theoretically increase the storage per sqr mtr then the corresponding costs (additional) of further ground strengthening has to be also considered.	
2	**Handling/ Productivity Rates :** Loading and Unloading rates of Coal have been considered at for arriving at the Optimal Quay capacity. Please also note the following: Please note that cargoes such as Food grains and FRM are not compatible with Coal and as such the same Ship Unloaders cannot be used. The handling of FRM, foodgrains will have to be through MHC's and through Manual Transportation (Not through Conveyors). In this scenario it is not possible to achieve the same handling rates as with Coal.	The proposed terminal is envisaged to handle all types of dry bulk cargo, but in the absence of any specific guidelines for dry bulk terminal, the TAMP guidelines for coal (one of the dry bulk cargoes) are considered to arrive at the tariff. Hence, as per the guidelines the ship loaders / unloaders together with conveyors and other equipments applicable to a coal terminal are considered towards handling equipments to arrive at the tariff. As per the draft concession agreement the concessionaire will be at liberty to install the handling equipments of the type and capacity of his choice to handle the dry bulk cargo to meet with the relevant performance standard as well as minimum guaranteed cargo.
3	**PROJECT COST** Berthing Aids cost has not been considered for Berth 3 and 4 whereas in the Optimum capacity calculations the volumes from Berths 3 & 4 have been considered. Shore Equipments assumed at only 2 ship unloaders and 1 ship loader. No provision for MHC (Mobile Harbor cranes). Since Coal/ FRM and Food grains are not compatible the same cannot be handled through the Ship Unloader or with the same Conveyor Belts. They will either have to be handled through MHC's and then transported through Dumpers or separate Ship Unloaders and a separate conveyor stream will have to be installed. The capital costs will increase. Cost of Marine Construction considered in the Project Report is very low. For example the current market rate for super structure is Rs. 17,000 per square meter, whereas the rate assumed is only Rs. 13,880/- per square meter	In the project cost of the terminal, berthing aids are considered for all four berthing faces of jetty head. Towards handling equipments, cost of four ship loaders / unloaders together with conveyor system and equipments is considered. All these equipments so considered are minimum requirements and the operator is at liberty to provide further handling equipment as per his choice and requirement. Out of four berths, the concessionaire may install ship loaders / unloaders at certain no. of berth (s) to handle dirty cargo, clean cargo and agri products separately to avoid their contamination. The concessionaire may also install mobile harbour cranes at other berth(s) to handle dry cargo. IIT, Madras, technical advisor to the proposed terminal, has arrived at the cost of marine construction by considering prevailing market rates. Comprehensive and detailed analysis of rates of all items

	which gives a difference in costs on one item alone at Rs. 11.20 crores. Only on this item we can comment at this stage as for others like Pile Foundation a detailed Borehole Data is required to ascertain what will be the founding levels and thereafter only costs can be arrived at.	pertaining to the marine structure are submitted. IIT, Madras has framed the feasibility report based on various preliminary studies viz. geo-technical investigation by way of bore holes, numerical model studies, physical model studies, land survey and collection of bathymetry data etc. Cost of marine construction including piles arrived at by IIT, Madras is based on the results of actual preliminary studies undertaken.
4	**OPERATING COST** Maintenance dredging rates at Rs. 265 per cmb are extremely low as there are considerable mobilization and de-mobilization costs involved. For a volume as low as 1 lakh cbm per annum the per cmb cost on account of mob/de-mob will be significantly high. In our estimate the rates would not be less than Rs. 650 per cbm.	The rate of maintenance dredging considered in the proposal is worked out from the actual maintenance dredging carried out at KPT recently.