

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

GNo.26

New Delhi,

24 February 2009

**NOTIFICATION**

In exercise of the powers conferred by 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 received from the Visakhapatnam Port Trust for setting upfront tariff for multipurpose cargo handling in pursuance of the guidelines for upfront tariff setting for Public Private Participation (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.

**(Brahm Dutt)**  
Chairman

# Tariff Authority for Major Ports

Case No. TAMP/39/2008-VPT

Visakhapatnam Port Trust

-----

Applicant

## ORDER

(Passed on this 12<sup>th</sup> day of February 2009)

This case relates to a proposal dated 10 July 2008 filed by Visakhapatnam Port Trust (VPT) for fixation of upfront tariff for multipurpose cargo handling in pursuance of the guidelines for upfront tariff setting for Public Private Participation (PPP) projects at Major Ports Trusts vide Notification No.TAMP/52/2007-Misc. dated 26 February 2008.

2. The salient points of the VPT proposal are given below:
- (i). The length of the berth for the multipurpose cargo terminal is envisaged at 255 meters. Out of this, berth length of 40 mtrs. is constructed by the port.
  - (ii). The following dry bulk/break bulk cargo are expected to be handled:
    - (a). C.P. Coke
    - (b). LAM Coke
    - (c). Steel
    - (d). Granite blocks
  - (iii). Storage Area:
    - (a). 50,000 sq. mtrs. storage area
    - (b). 10,000 sq. mtrs. back up area to the berth.
  - (iv). The following approach is followed for arriving at the upfront tariff:
    - (a). Optimal Capacity:
      - (i). The handling rate norms as per the upfront tariff guidelines and the percentage share of cargo assumed for arriving at the optimal capacity of the terminal are given below:

Cargo	Percentage share of cargo	Handling rates as per the guidelines (in tonnes / day)
C.P. Coke	36	10,000
LAM coke	36	10,000
Steel	18	4,000
Granite Blocks	10	2,500

- (ii). Optimal capacity of the terminal applying the formula prescribed in the guidelines works out to 2.08 Metric Million Tonnes Per Annum (MMTPA). As against this, the VPT has considered the optimal capacity at 1.85 million tonnes per annum for arriving at the upfront tariff since the optimal capacity (of 2.08 MMTPA) arrived based on norms when applied to derive the berth hire rates, translates into 327 berth days.

(b). Capital Cost:

The capital cost of the multipurpose berth is estimated at Rs.94.85 crores. The breakup of the capital cost is given below:

Sl. No.	Description	Total Cost (Rs. in crores)
A.	<b>Cost of the Berth</b>	
(i).	Cost of Construction of 215 mtrs. berth length at Rs.36.55 crores and Rs.10.51 crores payable upfront to VPT towards 40 mtrs. of constructed berth forming part of the proposed terminal.	47.06
(ii).	Cost of dredging	2.92
	<b>TOTAL (A)</b>	<b>49.98</b>
B.	<b>Civil structures</b>	
(i).	Berth apron & Approach	0.29
(ii).	Storage Yard	7.32
(iii).	Building, water supply, sewage etc.,	0.16
	<b>TOTAL (B)</b>	<b>7.77</b>
C.	<b>Equipment Cost</b>	
(i).	Cost of 2 Nos. 60 T cranes	33.87
(ii).	Power and Lighting	1.08
	<b>TOTAL (C)</b>	<b>34.95</b>
D.	<b>Miscellaneous Cost</b> (5% on Rs.7.77 crores + Rs.34.95 crores)	<b>2.15</b>
	<b>Total (A+B+C+D)</b>	<b>94.85</b>

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

(d). Operating Cost:

- (i). It has submitted that the operating cost for cargo handling service is estimated based on the guidelines.
- (ii). Power cost is estimated adopting consumption norm of 2.4 lakh units / annum / hectare prescribed in the guidelines for liquid cargo berth. Power cost is estimated for 5 hectares of backup area @ Rs.5.80 per unit.
- (iii). Fuel Cost is estimated assuming 40 litres of consumption of fuel by one mobile harbour crane for 4000 hours. The unit rate of Rs.37.50 per litre is considered for estimating the fuel cost.
- (iv). Repairs and Maintenance is estimated at 1% on civil cost and 5% on mechanical and electrical equipment cost.
- (v). Insurance and other expenses are estimated at 1% each on gross asset value (excluding value of miscellaneous assets).
- (vi). Depreciation is stated to be estimated based on the rates prescribed in the Companies Act 1956. The depreciation rate adopted is 10.34% on berth cost, berth apron, approach and the mobile crane, 3.34% on buildings, water, sewage and 13.91% on power and lighting.

(e). As regards berth hire service, the guidelines prescribe norm of 1% of the berth cost towards maintenance charge.

The VPT has apart from estimating maintenance cost as per the norm prescribed in the guidelines also considered 1% of the berth cost towards depreciation and 1% for insurance.

- (f). The revenue requirement is estimated as follows:

(Rs. in crores)

Sl. No.	Particulars	For handling multipurpose cargo	For berth hire	Total
(i).	Capital cost			
	(a). Civil	7.77	49.98	57.75
	(b). Cargo handling equipment	34.95	-	34.95
	(c). Miscellaneous	2.15	-	2.15
	<b>Total Capital Cost</b>	<b>44.86</b>	<b>49.98</b>	<b>94.85</b>
(ii).	ROCE @ 16%	7.18	7.99	15.17
(iii).	Operating cost	9.69	4.55	14.24
(iv).	<b>Total revenue requirement</b>	<b>16.87</b>	<b>12.54</b>	<b>29.41</b>

- (g). The handling charge is arrived by taking into consideration 93% of the revenue requirement for handling service as against the share of 90% prescribed in the guidelines. Only 2% of revenue has been apportioned to the miscellaneous charges as against the indicated share of 5%. Revenue from storage charge is considered at 5% of the total revenue as prescribed in the guidelines. 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.16.87 crores x 93%)	15.69
(ii).	Storage charge (Rs.16.87 crores x 5%)	0.84
(iii).	Miscellaneous charge (Rs.16.87 crores x 2%)	0.34
	<b>Total</b>	<b>16.87</b>

- (v). The upfront tariff proposed by the VPT to meet the estimated revenue requirement is as follows:

- (a). Berth hire charges:

DESCRIPTION	RATE PER GRT PER HOUR PART THEREOF	
	Foreign-going vessel [in US \$] *	Coastal vessel [in Rs.]
Vessels carrying CP Coke, LAM Coke, Steel and Granite Blocks	0.024	0.65

(\* Considering exchange rate of 1 US \$ = Rs.42.60)

- (b). Cargo handling charges:

Cargo handling charges is arrived based on the ratio of the handling rate and considering the share of individual cargo items to reach the optimal terminal capacity. The cargo handling charges proposed by the VPT are given below:

(Rate in Rs. per tonne)

Item No.	Nomenclature	Foreign	Coastal
1.	CP Coke	63.40	38.00
2.	LAM Coke	63.40	38.00
3.	Steel	152.15	91.30
4.	Granite Blocks	237.75	142.65

(c). Storage charges:

Sl. No.	Particulars	Import cargo	Export cargo
(i).	Free period	First week free	First two weeks free
(ii).	Storage charge after the prescribed free period	Rs.330.71 per 100 sq. mtrs. per week	Rs.337.36 per 100 sq. mtrs. per week

(d). Miscellaneous charge proposed at Rs.1.85 per tonne for environment and management related services, sweeping of cargo on wharf and safety measures.

3. Since the proposal of the VPT with reference to capacity calculation was not as per the norms prescribed in the upfront tariff guidelines, the VPT was requested to justify the same along with additional information / clarifications on some other points. The VPT has furnished clarifications vide letter dated 13 August 2008. A summary of clarifications sought and the reply furnished by the VPT are given below:

Sl. No.	Queries raised by us	Clarification furnished by VPT																		
(i).	<p>Justify the reasons for deviating from the guidelines as regards estimation of optimal quay capacity and also justify as to why the norms prescribed for assessing the terminal capacity for multipurpose bulk cargo terminal cannot be applied in its case.</p> <p>The VPT at one place has assumed the share of CP coke, lam coke, steel and granite blocks in the ratio of 36%, 36%, 18% and 10% respectively for calculation of optimal capacity as per norms. While reworking the capacity for 250 days and also for calculation of berth hire, the volume of these cargo items is considered in the ratio of 32%, 48%, 13% and 5% respectively. The reasons for adopting different percentage share of cargo may be explained. The correct cargo ratio envisaged by the port may be considered.</p>	<p>It has reiterated its submissions made in the proposal stating that applying the share of traffic of each cargo items and handling rate norms prescribed in the guidelines, the optimal capacity works out to 2.08 MTPA which translates to 327 berth days. As clarified in the proposal, it is not realistic and hence the percentage share of each cargo have slightly been adjusted to get the number of berth days as 250. The cargo profile thus considered is as follows:</p> <table border="1"> <thead> <tr> <th>Cargo</th> <th>Share in %</th> <th>Share in capacity (Lakh tonnes per annum)</th> </tr> </thead> <tbody> <tr> <td>C.P. Coke</td> <td>32%</td> <td>5.92</td> </tr> <tr> <td>LAM Coke</td> <td>49%</td> <td>9.06</td> </tr> <tr> <td>Steel</td> <td>14%</td> <td>2.50</td> </tr> <tr> <td>Granite</td> <td>5%</td> <td>1.02</td> </tr> <tr> <td><b>Total</b></td> <td><b>100%</b></td> <td><b>18.50</b></td> </tr> </tbody> </table> <p>It has submitted that if share of these cargo items are considered at 36%, 36%, 18% and 10% respectively with reference to capacity of 1.81 MTPA, then the number of berth days works out to 291 days.</p>	Cargo	Share in %	Share in capacity (Lakh tonnes per annum)	C.P. Coke	32%	5.92	LAM Coke	49%	9.06	Steel	14%	2.50	Granite	5%	1.02	<b>Total</b>	<b>100%</b>	<b>18.50</b>
Cargo	Share in %	Share in capacity (Lakh tonnes per annum)																		
C.P. Coke	32%	5.92																		
LAM Coke	49%	9.06																		
Steel	14%	2.50																		
Granite	5%	1.02																		
<b>Total</b>	<b>100%</b>	<b>18.50</b>																		
(ii).	<p>The port has considered only 2 number of 60 tonne cranes. The reasons for deviation from the normative level of equipment may be explained.</p>	<p>The equipment proposed to be installed i.e. 2 numbers of Harbour Mobile cranes is keeping in view the required handling rate of the cargo proposed to be handled, availability of backup space and other logistics at the berth.</p>																		
(iii).	<p>The estimation of civil cost do not include estimation towards construction of roads, rail tracks, transit sheds, etc., though these items are prescribed in the guidelines. The VPT may explain the reasons for not estimating the cost of civil work for items prescribed in the guidelines.</p>	<p>The estimation of the civil cost does not include roads, rail track and transit sheds for the following reasons:</p> <p>(a). Transit shed are not proposed keeping in view the nature of cargo (being bulk and break bulk)</p> <p>(b). Road connectivity to the berth already exists. Hence not proposed.</p>																		

		(c). Due to space limitation, Railway facilities at the berth are not included in the construction cost.
(iv).	Confirm that the estimates of equipment cost and civil cost are based on the prevailing market rate by obtaining budgetary quotations and furnish documentary evidence. The estimates may be modified in line with the norms prescribed in the guidelines.	The cost estimates are formulated as per the latest revised schedule of rates applicable w.e.f. June 2008. The budgetary quotations, wherever applicable are also obtained and submitted along with our letter dated 10 July 2008.
(v).	The estimation of power and fuel cost do not comply with the consumption norms prescribed in the guidelines.	<p>Since, the guidelines do not prescribe norm for consumption of fuel for operation of harbour mobile crane for multipurpose berth, the fuel consumption norm has been ascertained as 40 litres per crane. The norm of 4000 working hours per annum for equipment indicate in the guidelines has been considered for estimating the operating cost of this equipment.</p> <p>Power cost for illumination of stack yard and back up space is not prescribed for the Multipurpose berth in the guidelines. This item is essentially to be considered and hence has been worked out based on the consumption norms prescribed in the liquid terminal.</p>

4. In accordance with the consultative procedure prescribed, the proposal dated 10 July 2008 received from the VPT as well as clarification furnished by VPT vide letter dated 13 August 2008 was circulated to the concerned users / user organisations/ potential bidders forwarded by the VPT seeking their comments. The comments received from the users and potential bidders were forwarded to VPT as feedback information. The VPT has furnished its observations on the comments of the users / potential bidders.

5.1. The proposal of the VPT was to fix upfront tariff cap for multipurpose cargo terminal at berth no.WQ-6. It was clarified to the VPT that the tariff cap prescribed by this Authority would not only be applicable to multipurpose cargo terminal at berth no.WQ-6 but would also be applicable to all the projects bid out subsequently for identical cargo handling facilities at the Visakhapatnam Port during the next five years.

5.2. Subsequently based on the reply furnished, the VPT was again requested to furnish additional information / clarifications on a certain points. The VPT has responded to our queries. The queries raised by us and the response of VPT are tabulated below:

Sl. No.	Our queries	Response of VPT
(i).	The physical features of the standard multipurpose cargo terminal such as berth length, width of the wharf, back up area, dredged level.	<p>(a). For WQ6 berth, the berth length available is 255 mtrs. where a vessel of LOA upto 205 mtrs. can be allowed leaving necessary clearances of mooring lines. The width for cargo berth required would be from 15 to 18 mtrs. which can allow movement of cargo, transfer equipment, conveyor, access road etc.</p> <p>(b). The width of WQ-6 wharf is proposed as 22.5 mtrs. which is considered adequate.</p> <p>(c). The storage area required for a bulk cargo berth would be 5.0 hectares (approximately). About 10,000 sq. mtrs. is available as backup area to the berth and 5</p>

		hectares of land at a distance of 3 km is proposed for stacking of the cargo, since, there is no land available immediately near the berth. It is proposed to design the berth with dredged draft of 14 mtrs. to cater to handling of 12.5 mtrs. draft vessels.
(ii).	<p>Furnish the traffic handled during the last three years in respect of the dry bulk and break bulk cargoes considered for arriving at the optimal capacity of the multipurpose cargo terminal.</p> <p>Also, furnish details of number of vessels, average GRT of the vessels, average parcel size of vessel for the last three years i.e. 2005-06, 2006-07 and 2007-08 for each of the bulk and break bulk cargo proposed to be handled at multipurpose cargo berth.</p>	The details of the traffic handled, number of vessels, average GRT, average parcel size for the last 3 years viz., 2005-06, 2006-07 and 2007-08 for each of the bulk and break bulk cargo proposed to be handled at this berth has been furnished.
(iii).	<p><u>Optimal Terminal Capacity:</u></p> <p>(a). The terminal capacity of 1.85 million tonnes per annum considered by the VPT for arriving at the upfront tariff calculation is not in accordance with the norms prescribed in the guidelines.</p> <p>(b). The basis of considering the share of C.P. coke at 32%, 49% for LAM coke, 14% for Steel and 5% for Granite blocks for arriving at the optimal terminal capacity may be explained. Even if the share of different cargo items are considered as proposed by the VPT i.e. 32% for C.P. coke, 49% for LAM coke, 14% for Steel and 5% for Granite and the handling rate norms are applied, the optimal terminal capacity will works out to 2.24 Million Tonnes Per Annum and not 1.85 Million Tonnes Per Annum estimated by VPT.</p>	The traffic projection considered is 1.1 (Million Tonnes) with a share of 36% each for CP coke and LAM coke, 18% for Steel and 10% for Granite blocks. Based on the formula given the optimal quay capacity works out to 2.08 MT., which translates to 327 berth days which is not realistic. However, as per TAMP's guidelines, the optimal quay capacity of 2.08 MTPA is considered in the modified proposal submitted on 8 November 2008.
(iv).	<p><u>Capital Cost estimation:</u></p> <p>(a). Upfront fee of Rs.10.51 crores included under civil cost of berth is not found to be as per the norms prescribed in the guidelines. The nature of the payment of upfront fee estimated at Rs.10.51 crores may be explained.</p> <p>The capital cost for miscellaneous items estimated at 5% of civil and equipment cost estimated includes cost of upfront payment, interest during construction period, etc. The reason for deviation from the guidelines needs to be justified and approval, if any, obtained from the Government / PPPAC for levying upfront separately under the new MCA may also be communicated.</p>	<p>(a). The length of the proposed WQ-6 berth is 255 mtrs. Out of the total berth length of 255 mtrs., a berth length 40 mtrs. was already constructed along with the existing WQ-7 berth as shore protection. The remaining berth length of 215 mtrs. is to be constructed now. Therefore, the cost of Rs.10.51 crores already incurred by VPT for construction of 40 mtrs. length of berth which forms part of WQ-6 berth length of 255 mtrs. and other infrastructure already developed such as, construction of customs compound wall, development of alternative coal stacking area, soil investigations etc. is proposed as Upfront fee to be paid by the Concessionaire.</p> <p>The reason for considering upfront tariff of Rs.10.51 crores is towards expenditure already incurred for the 40 mtrs. berth length which could form part of WQ-6 berth and towards infrastructure development. This has</p>

		been shown as upfront which is in accordance with MCA as at Clause No.9.1 (a) of Article 9.
	(b). The port has furnished three alternative cost estimation for construction of berth. The base capital cost of berth considered in Chapter 2 of the VPT's proposal dated 10 July 2008 (for calculation of upfront tariff) do not match with any of three alternatives berth construction cost furnished in the proposal. The VPT may check and confirm the correct position.	(b). The capital cost of the berth considered in Chapter 2 of the VPT's proposals dated 10 July 2008 is based on Alternative 2 i.e., T-diaphragm with vertical and racker piles. The cost of civil works including dredging, area illumination etc., is estimated as Rs.43.68 crores and after adding the cost of mechanical equipment and contingencies at 3% and engineering construction and supervision at 5%, upfront fee the capital cost of the project worked out to Rs.92.70 crores. The proposal is updated including the cost of 2 numbers of Front-end loaders and 1 no. 10 Tonne capacity forklift trucks. As per the revised proposal, the revised capital cost works out to Rs.98.05 crores.
	(c). The basis of the unit rate adopted for estimating the civil cost mentions zone numbers of lands. The VPT may clearly explain the basis of rate adopted indicating the period to which the unit rate pertains to. Also, with reference the Rate Analysis furnished by the port for a few items, indicate the period to which the unit rate of labour and material pertains to and also confirm that they are based on the latest market rates.	(c). The estimates are prepared based on VPT schedule of rates applicable from 1 June 2008. The Rate Analysis is prepared based on VPT schedule of rates as on 1 June 2008 and the prevailing market rates / quotations for the items where rates are not available in the VPT schedule of rates.
	(d). VPT has considered higher capacity mobile harbour crane instead of 20T ELL cranes prescribed in the guidelines. However, no change in the handling rate for determination capacity is considered.	(d). The average output rate achieved at present for LAM coke is 6400 tonnes per day including non working time and 7400 tonnes per day excluding delays. This productivity is achieved by handling cargo with ship's gear. With the proposed installation of cargo handling equipment on WQ-6 berth handling rate of 10,000 tonnes per day is considered realistic and hence there is no inconsistency in the proposal. Moreover with the privatization, efficiency is expected to improve as observed by TAMP itself in earlier proposal for fixation for upfront tariff for EQ-10.
	(e). The cost of 60 tonne harbour mobile crane estimated at Rs.31.32 crores (for two numbers) may be substantiated with budgetary quotations obtained by the port.	(e). The budgetary offer of M/s.Liebherr India Private Limited dated 16 March 2008 for 2 numbers Harbour Mobile Cranes of 60 Ton capacity works out to Rs.31.32 crores. It has furnished a copy of the firm's offer in support of the estimated capital cost.
	(f). With reference to the reply furnished by VPT on item no. 2.(iv)., confirm that the Fork Lift Truck and Pay loaders prescribed in the guidelines are not required for handling cargo at multipurpose cargo terminal.	(f). As per TAMP's observation, the proposal has been revisited and modified duly including the cost of 1 number fork lift truck in the capital cost. Though the TAMP guidelines envisages provision of pay loaders of 10 ton capacity, as per standard technical specifications, front end loader capacity is mentioned with regard to Bucket capacity in Cum. and engine power in H.P. and hence, handling of coke with the average specific gravity of 0.45 to 0.50, the bucket size for handling 10 tons is not feasible. Hence, 2 numbers front end loaders with a Bucket capacity between 6.2

		cum to 7 cum and engine power between 500 to 525 HP are considered. Accordingly, the cost for 2 numbers 500 HP front end loaders is included in the capital cost.
	(g). Explain the basis adopted for considering a part of the berth apron and approach under the civil cost for handling activity.	(g). Berth apron and approach for 215 mtrs. berth length proposed to be constructed by the operator is considered under civil cost for handling activity.
	(h). The detailed calculation furnished for arriving at the construction of berth show that the cost is estimated for 296 berth length and then scaled down to 215 mtrs. Secondly, the berth cost is estimated for panel size of 3 mtrs, 3.6 mtrs. and 4 mtrs. length. The reasons for considering such different sizes of panel for estimating the berth construction cost may be explained. The panel size envisaged for the multipurpose cargo terminal may be explicitly indicated.	(h). The berth cost is estimated based on the panel size of the diaphragm wall proposed on the basis of design for each of the three alternatives proposals. For Alternative-2 i.e., RCC T-diaphragm wall with vertical and racker piles, 3 mtrs. panel was considered. Similarly, for Alternative 1 and 3 a panel size of 4 mtrs. and 3.6 mtrs. was considered for estimation purpose. For arriving the estimated cost, a berth length of 215 mtrs. is only followed except for estimation of two items i.e., crane track and expansion joint. The estimation for the above said two items was made for berth length of 296 mtrs. as the data was available for the said length and then scaled down to 215 mtrs. to arrive the proportionate cost of the said two items.
(v).	Operating Cost:  (a). The guidelines stipulate consumption norms for fuel in respect to Fork Lift Truck and Pay loaders (in the range of 7 litres to 12 litres per hour) based on the capacity of the respective equipment. As against this, the port has considered the fuel consumption of 40 litres per hour by 60 tonnes harbour mobile crane. The basis of adopting fuel consumption of 40 litres per hour by each mobile crane may be justified.	(a). As regard to consumption of fuel, the same has been reconsidered as 83 litres per hour for each mobile crane as against 40 litres per hour proposed earlier. This has been considered on the basis of the technical specification mentioned in the offer letter of M/s.Liebherr India Private Limited.
	(b). Confirm that the unit rate adopted for fuel and power are the prevailing rate. Furnish copy of recent electricity bill to substantiate the unit rate of power.	(b). The unit rate for power has been adopted at Rs.6.20 as against Rs.5.80 adopted in the earlier proposal. A copy of the unit rate of power communicated by the Eastern Power Distribution Company of Andhra Pradesh Limited has been enclosed to substantiate the unit rate of power. The unit rate adopted for fuel remains unchanged.
	(c). The depreciation on civil cost for construction of berth, berth apron and approach is considered at 10.34%. The depreciation rate of 10.34% prescribed in the Companies Act, 1956 pertains to Plant and Machinery (under Written Down Value Method for triple shift). The depreciation rate adopted by other major port in upfront tariff case is 3.34% for berth cost, and other civil works. The VPT may, therefore, consider modifying the depreciation rate on these categories of asset.	(c). Treating the berth where all the ship and cargo handling operations are carried out round the clock as Factory Buildings that are only used to shelter the factory operations is felt not appropriate. The general rate of depreciation of 13.91% prescribed in the same schedule XIV (Note-6) in respect of certain items of Plant and Machinery which includes quays and jetties, salt works supports the treatment given by the VPT. The justification given by TAMP to consider them as Factory Building is as per the practice followed at other ports does not appears to be logical. Depreciation should be calculated on straight line method as per the norms prescribed in the Companies Act.

		However, as advised by the TAMP, the proposal has been revised considering the rate of depreciation at 3.34%.
	(d). 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 the Authority. Give the appropriate reference of the lease rental considered by the VPT from the existing Scale of Rates. As already held earlier by the Authority, the valuation done by the DRA cannot be considered by the port for collecting lease rental without seeking specific approval of the lease rental by the Authority.	(d). The unit rate adopted for estimation of lease rentals is fixed based on valuation of land done by District Revenue Authorities (DRA). The proposal seeking approval of the Authority for the lease rentals for Zone VIIIA has been submitted to TAMP vide letter No.LR/LV/SA/700 dated 15 July 2008.
(vi).	The prevailing practice of prescribing the berth hire charges in US dollar terms by converting the dollar value to rupee terms may not be appropriate in the upfront tariff cases which will have a validity of 30 years. The VPT is therefore advised to propose berth hire in Indian Rupee only. This approach has been followed while fixing upfront tariff cases in other major ports as well.	As advised, the berth hire is proposed in Indian rupees only.
(vii).	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 tariff, however, does not reckon this factor. The port may, therefore, reckon this factor for arriving at the handling rate and berth hire based on the ratio of foreign and coastal cargo expected at the cargo terminal to ensure that the estimated revenue requirement can be achieved by the BOT operator at the proposed tariff level.  The ratio of foreign and coastal cargo considered in the calculation of upfront tariff may be furnished explaining the basis of the ratio adopted.	Out of the four cargoes proposed, except steel cargo, the other cargoes are not expected to move coastally. In case of steel exports, only 7% is coastal cargo. Accordingly, the rate for foreign and coastal cargoes has been arrived at to meet the expected revenue requirement from handling activity. Detail calculation has been furnished in this regard.
(viii).	The guidelines stipulate 90% of revenue requirement to be apportioned to handling charge, 5% each to storage charge and miscellaneous charge. The apportionment ratio followed by VPT i.e. 93% to total revenue requirement from handling activity, 2% from miscellaneous charge and 5% from storage charge is not in line with the norms prescribed in the guidelines. The reasons for this deviation from the guidelines may be explained.	The percentage considered for miscellaneous charge i.e. 2% is considered adequate to meet the expenditure on Environmental Management, sweeping of cargo on the wharf and for safety measures are considered to be adequate.
	<b>SCALE OF RATES:</b>	
(i).	The definition of day may be modified and proposed as per calendar day instead of 6 a.m. of a day to 6 a.m. of the next day.	The definition adopted for day is in line with the relevant definition for day in existing General Scale of Rates of VPT.
(ii).	As already mentioned earlier, the rate for berth hire charge for foreign vessel may be proposed in rupee term for reason explained in point (vi). above.	It has filed revised draft Scale of Rates incorporating the suggestion made by TAMP.

(iii).	The provisions proposed in (3) and (4) under General Terms and Conditions about converting dollar denominated rate into rupee terms may not be relevant if berth hire is proposed in rupee terms. Hence these provisions may be deleted.	Deleted in the revised draft Scale of Rates.
(iv).	The provisions proposed at Sl. No.12 and 13 of General Terms and Conditions may be deleted from the proposed Scale of Rates.	The reasons for proposing deletion of Sr. No.12 and 13 is not clear.
(v).	The note under Section 3 may be elaborated to show the services included in the composite handling rate.	Incorporated in the revised draft Scale of Rates.
(vi).	(a). As regards the storage charge, the free days prescribed in the guidelines is five days for import and 15 days for export as against 1 week and two week considered by the VPT in the proposal. Specific reasons, if any, for this deviation may be explained.	(a). The reason for considering one week for import and 15 days for export is in view of the relatively limited backup space available behind the berth.
	(b). While arriving at the upfront storage fee, the factor of dwell time of import / export cargo at the storage area does not seem to have been considered. The VPT may review and rework the storage charge taking into consideration the stay of cargo beyond the free period to meet the expected revenue requirement from this tariff item.	(b) and (c). An analysis of dwell time from April to June 2008 reveals that the dwell time of all the vessels which handled C.P. Coke (Exp) is less than 10 days where as allowable period in case of exports is 15 days. In case of LAM coke, dwell time of some of the vessels is about 6 days as against the proposed norm of 7 days. Since the facility is proposed on BOT basis, it is considered that the operator will ensure faster clearance so as to increase the optimal capacity of the berth. As such the dwell time is not factored in storage area.
	(c). Expected average dwell time of each of the cargo items may be indicated. Please furnish a calculation to show that at the proposed storage rate (beyond the free period), the expected revenue requirement from the storage charge will be realised by the operator.	

5.3. To summarise, the salient points of the first revised proposal is given below:

(i). Capital Cost:

The revised capital cost of the multipurpose berth after updating the earlier estimates with the cost of front end loaders and fork lift truck is Rs.100.45 crores. The breakup of the capital cost is given below:

Sl. No.	Description	Total Cost (Rs. in crores)
<b>A.</b>	<b>Cost of the Berth</b>	
(i).	Cost of Construction of Berth plus cost of 40 mtrs. of berth length already constructed by VPT	47.06
(ii).	Cost of dredging	2.92
	<b>TOTAL (A)</b>	<b>49.98</b>
<b>B.</b>	<b>Civil structures</b>	
(i).	Berth apron & Approach	0.29
(ii).	Storage Yard	7.32
(iii).	Building, water supply, sewage etc.,	0.16
	<b>TOTAL (B)</b>	<b>7.77</b>
<b>C.</b>	<b>Equipment Cost</b>	
(i).	Cost of 2 Nos. 60 T mobile harbour cranes	33.87
(ii).	Cost of 2 Front end loader of 500 HP	5.00
(iii).	Cost of 1 no 10 T Fork lift truck	0.35
(ii).	Power and Lighting	1.08
	<b>TOTAL (C)</b>	<b>40.30</b>
<b>D.</b>	<b>Miscellaneous Cost (5% of Rs.7.77 crores + Rs.40.3 crores)</b>	<b>2.40</b>
	<b>Total (A+B+C+D)</b>	<b>100.45</b>

- (ii). The revised revenue requirement is estimated as follows:

(Rs. in crores)				
Sl. No.	Particulars	For handling multipurpose cargo	For berth hire	Total
(i).	Capital cost			
	(a). Civil	7.77	49.98	57.75
	(b). Cargo handling equipment	40.30	-	40.30
	(c). Miscellaneous Cost	2.40	-	2.40
	<b>Total Capital Cost</b>	<b>50.47</b>	<b>49.98</b>	<b>100.45</b>
(ii).	ROCE @ 16%	8.08	7.99	16.07
(iii).	Operating cost	12.55	2.61	15.16
(iv).	<b>Total revenue requirement</b>	<b>20.63</b>	<b>10.60</b>	<b>31.23</b>

- (iii). The revised break up of revenue requirement estimation from cargo handling service is given below:

(Rs. in crores)		
Sl. No.	Particulars	Estimated revenue requirement
(i).	Cargo handling service (i.e. Rs.20.63 crores x 93%)	19.19
(ii).	Storage charge (Rs.20.63 crores x 5%)	1.03
(iii).	Miscellaneous charge (Rs.20.63 crores x 2%)	0.41
	<b>Total</b>	<b>20.63</b>

- (iv). The revised upfront tariff proposed by the VPT is as follows:

- (a). Berth hire charges:

DESCRIPTION	RATE PER GRT PER HOUR PART THEREOF	
	Foreign-going vessel [in Rs.]	Coastal vessel [in Rs.]
Vessels carrying CP Coke, LAM Coke, Steel and Granite Blocks	0.75	0.45

- (b). Cargo handling charges:

Revised cargo handling charges proposed by the VPT are given below:

(Rate in Rs. per tonne)			
Item No.	Nomenclature	Foreign	Coastal
(i).	CP Coke	77.65	46.60
(ii).	LAM Coke	77.65	46.60
(iii).	Steel	127.80	76.70
(iv).	Granite Blocks	139.80	83.90

- (c). The revised storage charges proposed is Rs.404.57 per 100 sq. mtrs. per week for import cargo and Rs.412.58 per 100 sq. mtrs. per week for export after the free period.

- (d). Miscellaneous charge is proposed at Rs.1.98 per tonne.

6.1. A joint hearing in this case was held on 19 December 2008 at the VPT premises. The VPT made a power point presentation of its proposal bringing out the salient points with reference to the tariff guidelines. The port has updated the power cost component with reference to the prevailing rate in its revised proposal presented during the joint hearing. The VPT has also modified the estimation of lease rental fee from Rs.0.82 crores to Rs.0.92 crores. In view of this modification, the revenue requirement from cargo handling charge is revised from Rs.20.63 crores

estimated earlier to Rs.20.73 crores in the revised proposal presented during the joint hearing. The upfront tariff for handling charge, storage charge and miscellaneous charge has also been suitably modified by the VPT.

6.2. The users present during the joint hearing generally did not express any objections to the proposal of the port. M/s.Visakhapatnam Steamship Agents Association (VSAA), however, pleaded that the proposed berth hire charges are very high and suggested for gradual increase in the tariff. In response, the VPT submitted that its proposal is fully in line with the tariff guidelines and the tariff fixed shall remain unchanged, except to the extent of annual escalation and unforeseen circumstances throughout the license period.

7.1. As decided in the joint hearing, the VPT was advised to furnish additional information / clarification on the following points:

- (i). The reasons and advantages of considering 60 tonnes Mobile Harbour Crane as against 20 tonnes Electrical Cranes prescribed in the guidelines.
- (ii). Daily handling rate of different commodities with the deployment of the proposed Harbour Mobile Cranes.
- (iii). Justification with documentary evidence for the handling rate and fuel consumption of the Harbour Mobile Crane.

7.2. The VPT has in response furnished the additional information / clarification vide letter dated 26 December 2008 as summarised below:

- (i). Though as per guidelines, 3 nos. of 20 Tonne level luffing wharf cranes are stipulated for multi commodity berths, VPT proposes deployment of 2 nos. of 60 Tonne Harbour Mobile Cranes in view of the limitation in back up area for the berth which may restrict the mobility of the cargo handling equipment. Further, 60 Tonne Harbour Mobile Cranes has added advantage that they can be stationed at a convenient place to facilitate free mobility of handling equipment.
- (ii).
  - (a). The handling rate of mobile crane is considered at 10000 tonnes / day based on the maximum output rate of 8000 tonnes per day achieved by the BOT operator with similar equipment for CP Coke and LAM Coke. The output rate in respect of LAM Coke achieved by VPT with ship's gear is 6400 tonnes per day including non working time and 7400 tonnes excluding delays. Thus the output rate of 10000 tonnes per day against maximum achievement of 8000 tonnes per day handled by BOT operator is reasonable in view of the efficiency levels to be achieved through privatisation considering the enhancement of productivity level by the BOT operator.
  - (b). As regards handling of granite blocks or steel, it has clarified that these cargo are handled only by the ship's crane. In view of this, the handling rates for steel and granite blocks are considered in accordance with the norms for cargo handling rates prescribed in guidelines. This norm is considered also keeping in view the higher productivity levels to be achieved by the BOT operator.
- (iii). It has reiterated that consumption of 83 litres of fuel per hour for each 60 tonne Harbour Mobile Crane has been arrived based on the technical specification for drive system as per detailed calculation already furnished with reference to query raised by TAMP.
- (iv). The free period is also modified and proposed as 5 days for import cargo and 15 days for export cargo in line with the upfront tariff guidelines. In the earlier proposal, storage charge was proposed on area basis and did not factor the number of days cargo would remain beyond the free period. The VPT has furnished revised upfront tariff for storage charge taking into consideration the free period of import / export cargo, cargo expected to remain beyond the prescribed

free period so as to meet the expected revenue requirement from storage charges.

7.3. With regard to revised estimation of lease rentals, the VPT has submitted that the existing lease rentals for VPT lands approved by TAMP is valid for quinquennium 2003-08. The valuation of land by the District Revenue Authorities (DRA) for quinquennium 2008-13 in respect of VPT lands is yet to be received from the DRA which is expected to take considerable time. Hence, the land valuation for 2008-13 has been provisionally recalculated at Rs.121.15 per square yard per annum by giving proportionate increase of 59% for zone VIII over the lease rental approved by TAMP for the previous quinquennium for 2003-08. The provisional lease rentals for Zone VIII-A is arrived giving 20% increase over the lease rental arrived based on the valuation of land given by the DRA for the quinquennium 2003-08. The VPT has in this regard referred to the proposal submitted by it in July 2008 wherein it has proposed to demarcate the land categorised under Zone VIII into two i.e. Zone VIII and Zone VIII A. The percentage increase is stated to be based on the increase in the value of land for the quinquennium 2003-08 over the previous quinquennium. The VPT has stated that the adhoc increase considered for estimation of the revised lease rental is based on approval obtained from the VPT Board.

8. The VPT has subsequently vide letter dated 31 December 2008 further modified the proposal as explained hereunder:

- (i). The cost of harbour mobile crane has been modified applying the exchange rate of 1 Euro = Rs.64.30/- as against conversion factor of Rs.55/- for Euro adopted in the earlier proposal. The VPT has submitted that the base cost furnished earlier did not factor taxes and duties on the base cost. The VPT has considered excise duty and VAT at around 15% and revised the cost of two harbour mobile cranes to Rs.47.12 crores as against Rs.33.87 crores considered earlier. Accordingly, the total capital cost is estimated at Rs.114.37 crores.
- (ii). The revised revenue requirement is estimated as follows:

(Rs. in crores)				
Sl. No.	Particulars	For handling multipurpose cargo	For berth hire	Total
(i).	Capital cost			
	(a). Civil	7.77	49.98	57.75
	(b). Cargo handling equipment	53.55	-	53.55
	(c). Miscellaneous	3.07	-	3.07
	<b>Total Capital Cost</b>	<b>64.39</b>	<b>49.98</b>	<b>114.37</b>
(ii).	ROCE @ 16%	10.30	7.99	18.29
(iii).	Operating cost	15.02	2.61	17.63
(iv).	<b>Total revenue requirement</b>	<b>25.32</b>	<b>10.60</b>	<b>35.92</b>

- (iii). As per the upfront tariff guidelines, the 5% of total revenue requirement is to be apportioned towards storage charge while arriving at the upfront tariff. The port has modified the apportionment of revenue requirement towards storage charge to 2% for reasons explained hereunder:
  - (a). On examining the actual time utilised by the importer/exporter to evacuate/aggregate the import and export cargoes during the free periods, it is understood that in case of Granite and CP coke, cargo is aggregated within the free period. In case of steel export also, the exporters are aggregating majority of the cargo during the free period and incurrence of demurrage is rare.
  - (b). Given this situation, fixation of storage charges, which is infact a demurrage charge as per the convention followed at Major ports, will only become a notional income and operator may not be able to realise the revenue out of storage charges. In other words the operator is not assured of 16% ROCE stipulated in the guidelines on his investment which will act as a disincentive to the bidder for participation in the PPP projects.



- (vi). The VPT has proposed to incorporate the following provisions as regards free period:
  - (a). Free period for export cargo shall commence from the actual date of the receipt of goods in the operator's premises.
  - (b). Free period for import cargo shall be reckoned from the day following the day of completion of final discharge from the vessel.
  - (c). Free period prescribed above excludes customs notified holidays.

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

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

- (i). The proposal is to fix upfront tariff cap for multipurpose cargo handling berth to be developed at Visakhapatnam Port Trust (VPT) under Public Private Participation (PPP). The proposal is based on the guidelines for upfront tariff fixation issued by the Ministry of Shipping, Road Transport and Highways (MSRTH) in February 2008.

It has already been 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 proposed project at berth no.WQ-6 but would also be applicable to all projects to be bid out subsequently for identical multipurpose cargo handling berth at Visakhapatnam Port during the next five years.

- (ii). Cargo like CP coke, LAM coke, Steel and Granite blocks are expected to be handled at the proposed multipurpose cargo berth. The percentage share of cargo is estimated at 36%, 36% 18% and 10% respectively. In the initial proposal, the port scaled down the optimal capacity of 2.08 Million Tonnes Per Annum (MTPA) to 1.85 MTPA on the grounds that if optimal capacity of 2.08 MTPA is reckoned, it translates into 327 berth days which is not realistic as the formula prescribed in the guidelines for estimation of berth hire for 255 working days.

The upfront tariff guidelines stipulates a specific formula for assessment of optimal capacity of the multipurpose cargo berth. Adhering to our advice, the VPT has subsequently in its letter of 8 November 2008 considered the optimal terminal capacity at 2.08 MTPA.

- (iii). The VPT has modified its proposal several times. The last revised proposal filed by the VPT on 31 December 2008 along with the information / clarification furnished during the processing of the case is considered in this analysis.
- (iv). The VPT has proposed deviation from the guidelines issued for upfront tariff setting vide Notification No.TAMP/52/2007-Misc. dated 26 February 2008 in some of the parameters and estimates which are, inter alia, discussed in the subsequent paragraphs.
- (v). Optimal Terminal Capacity:
  - (a). The share of cargo viz. CP coke, LAM coke, Steel and Granite Blocks is taken at 36%, 36%, 18% and 10% based on the cargo mix likely to be handled at the multipurpose cargo terminal. The share of cargo estimated by the VPT is relied upon.

- (b). The handling rates for CP coke, LAM coke is considered at 10,000 tonnes per day, Steel at 4,000 tonnes per day and Granite Blocks at 2,500 tonnes per day which are in line with the handling norms prescribed in the guidelines.
  - (c). The optimal capacity of the multipurpose berth assessed following the formula prescribed in the guidelines works out to 2087435 tonnes. The VPT has rounded off to 2.08 Million Tonnes Per Annum (MTPA). We have considered the optimal capacity of terminal at 2087435 tonnes per annum in our calculation.
- (vi). Capital Cost:

The revised estimate of capital cost of the multipurpose cargo terminal is reported at Rs.114.37 crores of which Rs.49.98 crores is allocable to berthing activity and Rs.64.39 crores is estimated for cargo handling services as explained hereunder:

- (a). Berthing activity:

As per the upfront tariff guidelines, the capital cost for berth hire services include cost of construction of berth and cost of dredging, if any, carried out alongside the berth. The cost to be considered are as per the estimates by the Port Trust.

The berth length of the multipurpose cargo terminal is envisaged to be 255 metres of which 40 metres of the constructed berth would be made available to the operator. The estimated capital cost of berth includes Rs.36.55 crores towards cost of constructing 215 metres of berth length by the operator and Rs.10.51 crores payable by the operator to the VPT towards the cost of the already constructed portion of the berth and the other infrastructure facilities developed by the VPT.

Though the port has referred this payment as upfront fee, it has to be recognized that it is the part of the constructed berth made available to the operator which otherwise the operator would have incurred for construction. In the instant case since the berth hire would be collected by the operator, it is logical to consider the total cost of the berth which includes Rs.10.51 crores payable to the VPT as part of the berth cost. The VPT has estimated Rs.2.92 crores towards dredging alongside the berth.

- (b). Cargo handling activity:

- (i). Civil construction cost:

Estimated civil cost generally adheres to norms stipulated in the guidelines except for three items viz. roads, rail tracks and transit sheds. Capital cost does not include estimate for these civil works. The VPT has clarified that since adequate road connectivity to berth already exists, the port does not envisage construction of roads by the operator and hence cost for this item is not included. Owing to space limitation, railway facilities at berth are reportedly not included in the capital cost. The port does not envisage construction of transit shed in view of the nature of cargo i.e. bulk / break bulk expected to be handled at the berth. Based on the clarification furnished by the VPT and also recognising that none of the users / bidders have raised any pointed objection with reference to this deviation, the civil construction cost as estimated by the VPT is relied upon.

(ii). Equipment cost:

As per the guidelines, the equipment cost is to be estimated for the list of equipment prescribed therein. The list of equipment suggested in the guidelines includes 3 nos. of level luffing wharf crane of 20 Tonne Capacity with grab / hook attachments of the other items. The VPT has, however, considered 2 nos. of 60 tonnes mobile harbour crane. Whilst the VPT has considered higher capacity mobile harbour crane instead of 20T level luffing cranes prescribed in the guidelines, it has not reported any consequent increase in the handling rate while assessing the optimal capacity.

In this context, the port has clarified that the output rate achieved by the port for LAM Coke using ship's gear is 6400 tonnes per day and the maximum output rate achieved by a private operator with similar equipment for these commodities is reported to be 8000 tonnes per day. Hence keeping in view the prescribed handling norm of 10000 tonnes per day to be achieved by the operator to reach the optimal terminal capacity and also recognising the limitation in back up area which may restrict the mobility of the cargo handling equipment, it proposes deployment of two numbers of 60 tonnes mobile harbour crane instead of three 20 Tonne level luffing crane prescribed in the guidelines. Free mobility of harbour mobile crane and its convenience of parking which enables free movement of other cargo handling equipment are also cited as reasons for the proposing deployment of mobile harbour crane.

It has submitted that output rate of 10000 tonnes per day considered in the upfront tariff calculation as per the guidelines is reasonable recognising the output level of 8000 tonnes per day achieved by another BOT operator for similar cargo and considering the efficiency levels to be achieved by the operator through privatization.

As regards to the granite block and steel, the port has clarified that owing to the nature of cargo, they are handled by ship gear and not by mobile harbour crane. Hence, the handling rate for these cargo items is considered at the handling rate norms prescribed in the guidelines.

Relying on the submissions made by the VPT, the proposal of the port to recognise deployment of two 60 tonnes harbour mobile crane is accepted. The handling rate considered by the VPT in line with the tariff guidelines is considered for assessment of the optimal terminal capacity.

The list of equipment for estimation of capital cost also include 4 Nos. of fork lift truck of 5 tonne capacity, 2 fork lift truck of 10 tonne capacity and 3 payloaders of 10 tonne capacity. The initial proposal of the port did not consider the cost of these items. Subsequently, the port has revisited the proposal and included cost of 1 number of 10 tonne capacity fork lift truck in the capital cost. As regards, payloaders, the port has clarified that though the guidelines envisages provision of pay loaders of 10 ton capacity, as per standard technical specifications of such equipment, it may not be suitable to handle coke. It, therefore, proposes to deploy 2 numbers of front end loaders. Based on the clarification furnished by the VPT, the handling equipment considered by the VPT for estimation of capital cost are accepted.

- (c). The estimated cost of two mobile crane was initially reported at Rs.33.87 crores. The basic cost of equipment is supported by a budgetary quotation obtained by the port in March 2008. The VPT has subsequently modified this estimate. It is found that while arriving at the revised cost of harbour mobile crane, the VPT has considered the excise duty and sales tax on the basic cost of the equipment which is quoted in Euro terms which is a mismatch. The cost of harbour mobile crane reported in some other recent proposals by other major ports like Paradip Port and New Mangalore Port Trust is in the range of Rs.16 to 18 crores per crane. If these estimates are updated to the foreign exchange variation, the estimated cost of the mobile crane furnished by the VPT is comparable. Like for the other items, the port has also provided for contingency and supervision charge for estimating the cost of the mobile crane.

The VPT has confirmed that the estimates for other items are based on the Schedule of Rates (SR) of the Engineering Department of the VPT applicable from June 2008. For those items for which rates are not available in the Schedule of Rates of the Engineering Department, the estimates are reportedly the based on Rate Analysis obtaining prevailing market rates.

Based on the clarification furnished by the VPT, the revised capital cost estimated by the VPT is relied upon for arriving at the pre-determined tariff.

- (d). One of the bidders has pointed out that the VPT has not considered miscellaneous cost at 5% of the civil and equipment cost prescribed in the guidelines. The cost towards miscellaneous items is considered by the VPT in the estimation of the capital cost and also for the estimation of Return on capital employed. The port has, however, not recognised this cost for estimating few expenses like insurance, other expenses which has been corrected in our calculation.
- (e). M/s.Vadinar Oil Terminal Limited have suggested to take into account atleast 25% escalation on account of inflation and price escalation as the project would be implemented over a period of 2-3 years. It may be relevant to mention that the capital cost estimations are based on the prevailing rate of June 2008. The upfront tariff guidelines already provide for annual escalation in the upfront tariff cap approved by this Authority @ 60% of the WPI with reference to the WPI of January 2008.
- (f). The return on capital employed is estimated at 16% of the estimated capital cost. M/s.Vadinar Oil Limited stressed the need to review the rate of return of 16% on capital employed in view of change in the present scenario. As the current PLR rates have already increased, it has suggested considering ROCE @ 20%. It is relevant here to mention that the rate of ROCE was reviewed recently by this Authority and it was decided to adopt ROCE of 16% for the year 2008-09 to determine tariff for major ports and private terminals. Hence the return on capital employed is computed at 16% on the estimated capital cost. This works out to Rs.8.00 crores for berth hire service and Rs.10.30 crores for cargo handling services.

(vii). Operating Cost:

- (a). The guidelines stipulate consumption norm of power at 100 units/hour/crane for estimating power cost. Since the port proposes deployment of mobile harbour crane instead of electrical luffing level wharf crane, the norm prescribed in the guidelines for estimation of power consumed by crane is not relevant in this case.

The port has, however, estimated power cost for general illumination of stack yard and back up space stating that this is an essential item which

has to be reckoned. The point made by the VPT to consider power cost for general lighting is logical. Since there is no consumption norm for general lighting prescribed in the guidelines for multipurpose cargo berth, the consumption norm of 2.4 lakh units / annum / hectare prescribed in the guidelines for liquid cargo berth adopted by the VPT is accepted. In this context, it is noteworthy that clause 3.6. of the guidelines for upfront tariff setting gives flexibility to this Authority to decide on a particular item of expenditure, which it considers for incorporation while computing the upfront tariff cap for which norms are not explicit in the guidelines.

The unit rate of power considered earlier at Rs.5.80 in the initial proposal has been updated to Rs.6.20 per unit in the revised calculation based on the prevailing unit rate which is substantiated with documentary support. Power cost is estimated for 5 hectares of backup area.

- (b). Since the VPT envisages deployment of two Mobile Harbour Cranes (MHCs), it has estimated fuel cost for the cranes. M/s.ABG Infralogistics Limited have observed that consumption of 40 litres/hour/crane considered in the initial proposal is underestimated. It has stated that the consumption of fuel could be around 50 to 55 litres / hour / crane.

The VPT has examined this point and based on the technical specifications for drive system mentioned in the budgetary offer for crane, it has modified the fuel consumption to 83 litres per hour per crane.

The unit cost of fuel is considered at Rs.37.50 per litre. The fuel cost is estimated for 4000 working hours as prescribed in the guidelines for estimation of fuel cost. The estimate of fuel cost is modified updating the unit rate of fuel to Rs.36.08 prevailing at the time of the analysis of this case.

M/s.ABG Infralogistics Limited has suggested to provide for separate price escalation for oil price as the Wholesale Price Index (WPI) would not adequately reflect changes in fuel prices. It has to be recognised that all the commodities in the basket need not escalate at the same level. Further, as rightly stated by the VPT there is no separate provision for fuel escalation in the upfront tariff guidelines. The tariff cap fixed by this Authority will be subject to annual indexation as stipulated in the guidelines.

- (c). The estimation of repairs and maintenance cost at 1% on the civil assets and 2% on the mechanical and electrical equipment are found to be as per the norms prescribed in the guidelines.

The guidelines stipulate estimation of insurance cost and other expenses at 1% each on the gross fixed assets. The VPT in its calculation has excluded miscellaneous assets from the gross value of assets while estimating these two cost elements. The insurance cost and other expenses are estimated at 1% each on the gross value of fixed assets as per the norms stipulated in the guidelines.

- (d). Depreciation is reportedly estimated based on Straight Line Method as per the Companies Act 1956 for triple shift working. The depreciation rate for buildings prescribed in the Companies Act 1956 is 3.34%. As against this, the depreciation rate on the berth cost, berth apron and approach is considered at 10.34%. The VPT has argued that categorizing the berth as factory building under schedule XIV of the Companies Act is not appropriate. The port has considered berth under the category of 'plant and machinery' instead of building and applied the depreciation rate of 10.34% prescribed in the Companies Act.

Examination of this position with reference to other existing private terminals shows that the depreciation rate on berth cost adopted at such companies varies in the range of 3.6% to 4.17% as against 3.34% prescribed in the Companies Act. The marginal variation in the rate is due to spreading over of the cost of berth on the remaining concession period after capitalisation of the asset. The depreciation rate adopted for fixation of upfront tariff at other major ports like the Paradip Port Trust, Mormugao Port Trust, Kandla Port Trust is 3.34% for all kinds of civil works including construction of berth, berth apron, approach, etc.

The VPT has subsequently, in the revised proposal computed depreciation on berth cost and berth apron and approach @ 3.34% at par with other civil works in line with our suggestion.

Depreciation on equipment is computed @ 10.34% and for power and lighting @ 13.91% which is found to be as per the rates prescribed in the Companies Act for the relevant group of assets and hence are accepted.

In the initial proposal, VPT has taken prorata depreciation for 255 days. It has subsequently corrected and computed the depreciation for the full year only in respect of civil works. In our calculation, the depreciation is considered for full year for all assets in line with the provisions prescribed in the Companies Act.

- (e). Lease rentals is calculated for 50000 sq. metres of storage area and 10000 sq. mtrs. of back up area to be allotted for the terminal's operation.

The VPT had initially calculated lease rental based on a proposal filed by it in July 2008 for fixation of lease rental for Zone VIII-A i.e. applying 6% on the basic valuation of land recommended earlier by the District Revenue Authority for Zone VIII at Rs.2,400/- per sq. yard for the quinquennium 2003-08.

Subsequently, the VPT has revised the calculation of lease rental on the grounds that the lease rentals for VPT lands approved by this Authority is valid for quinquennium 2003-08 and is already due for revision. The VPT has submitted that since the valuation of the land for the quinquennium 2008-13 is yet to be received from the District Revenue Authorities (DRA) which is expected to take considerable time, the valuation of land for 2008-13 has been provisionally recalculated at Rs.121.15 per square yard per annum for Zone VIII giving proportionate increase of 59% over the valuation of land reported for the quinquennium 2003-08 over the previous quinquennium. Likewise, the provisional lease rentals for Zone VIII-A is arrived giving 20% increase in the valuation of land over the previous quinquennium. The adhoc increase in lease rental is reportedly based on approval of the Board of the VPT.

The guidelines for upfront tariff guidelines stipulate that the lease rent for the port land is to be estimated based on the rate prescribed in Scale of Rates of the respective Major Port Trusts. The lease rent of the land belonging to the VPT was last approved by this Authority vide Order No.TAMP/41/2005- VPT on 22 April 2008 for the quinquennium 1998-2003 and 2003-2008 following the Government guidelines on land policy issued in March 2004. The lease rent approved by this Authority is due for revision but the port has not yet filed any proposal for revision of lease rental in line with the guidelines of the Government on land policy of major ports. Till such time any revision takes place, the existing Scale of Rates continues.

It has to be recognised that the guidelines on land management of Major Port Trust issued by the Government in February / March 2004 prescribe various options for determining the market valuation of land for fixation of lease rental. During the last revision of lease rental, this Authority has

already held that market value of land may be assessed by the port under all the options given in the Government guidelines on land policy of Major ports and recommend the lease rentals based on the best value of land so obtained.

The method adopted by the VPT considering adhoc increase in the market value of land in the two zones based on the proportionate increase in the land valuation obtained during the past quinquennium is not found to be in accordance with the methodology prescribed by the Government for valuation of land for fixation of lease rental. Further, the port has proposed different lease rent for zone VIII and Zone VIII A whereas the lease rent approved by this Authority does not consider such segregation of land.

In the light of the above position and also recognising the specific provision in the guidelines require estimation of this item based on the existing lease rental prescribed in the Scale of Rates of the Major Port Trusts, the estimate of lease rent is taken at the base lease rent of Rs.76.20 per sq. metre per annum prescribed for Zone VIII in the existing Scale of Rates with the approved annual escalation of 2%.

In case the revised lease rental for the quinquennium 2008-13 comes into force before issue of the RFP for the proposed multipurpose cargo terminal, then the port may approach this Authority to review the upfront tariff with reference to this item.

- (f). The guidelines requires the operating cost for berthing service to be estimated at 1% of the berth cost.

In its revised proposal, the VPT has considered insurance @ 1% and depreciation @ 3.34% on the aggregate capital cost relating to construction of berth and dredging while estimating the annual revenue requirement of berthing service apart from the prescribed norm of 1% towards maintenance.

Although the guidelines restrict the operating cost at 1% of the berth cost, the asset requires adequate insurance coverage and the fact that the value of the asset will depreciate due to wear and tear can also not be denied. While fixing upfront berth hire for the coal and iron ore terminals at Paradip Port Trust, coal terminal at Mormugao port Trust and multipurpose cargo terminal at Kandla Port Trust, this position was recognised 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 are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service. In this context, it is noteworthy that clause 3.6. of the guidelines for upfront tariff setting gives flexibility to this Authority to decide on a particular item of expenditure, which it considers for incorporation while computing the upfront tariff cap for which norms are not explicit in the guidelines.

- (viii). The statement for fixing upfront tariff submitted by the VPT has been modified in line with the above analysis. A copy of the statement is attached as **Annex-I**.

- (a). As per the statement, the total revenue requirement from cargo handling service works out to Rs.26.78 crores which is an aggregate of Return on a capital cost of Rs.10.30 crores and modified operating cost of Rs.16.48 crores.

- (b). The guidelines require 90% of the total revenue requirement to be apportioned to handling charge, 5% towards storage charge and 5% each towards miscellaneous charge.

As against this, the VPT has considered 96% of the revenue requirement from handling charge, 2% from storage charge and 2% from miscellaneous charge while arriving at the upfront tariff.

The upfront tariff guidelines stipulates free period of 5 days for import cargo and 15 days of export cargo. The port has clarified that Granite and CP coke cargo are aggregated within the free period and most of the steel cargo is also aggregated within the free period based on the position obtained at its port. The port is, therefore, of the opinion that with the prescribed free period, the operator will not be in a position to realize the estimated revenue from storage charge and this may only remain a notional income. The port has therefore in the revised proposal proposed to reduce the apportionment of revenue from storage charge from the prescribed level of 5% to 2%.

As regards miscellaneous charge, the port has clarified that it is adequate to apportion 2% of the total revenue requirement from miscellaneous charge and the differential percentage is merged with the revenue requirement from handling charge.

Clause 3.8.2. of the guidelines states that the tariff cap for different individual services is to be set appropriately in such a way as to achieve the annual revenue requirement.

In view of the position explained by the VPT, this Authority accepts the apportionment of the total revenue requirement between the three tariff heads as proposed by the port. Based on the revised requirement estimated by this Authority, the revenue requirement apportioned to handling charge is Rs.2571 lakhs, Rs.54 lakhs from storage charge and Rs.54 lakhs from miscellaneous charge.

- (c). The VPT has computed the commodity wise tariff caps based on the ratio of the handling rate of each cargo. While computing the ratio of handling rate, the VPT has not factored the tonnage and number of days of utilisation of the facilities with reference to each commodities. The commodity wise tariff cap has been revised taking into consideration the percentage share of cargo expected to be handled, the expected cargo working days with reference to the handling rate as per the norm under each cargo group. Accordingly, the unit cargo handling charges has been worked out considering the different handling rates of the various commodities as per the norm to meet the revenue requirement of Rs.2571 lakhs.

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 are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) and coastal vessels which should not exceed 60% of the normal cargo / vessel related charges. Out of the optimal capacity of 2087435 tones per annum assessed, the VPT has envisaged coastal movement in respect of steel to the tune of 26000 tonnes per annum. The upfront tariff cap has been arrived after considering the impact of concession applicable for coastal cargo i.e. expected to be handled at the multipurpose berth. A statement detailing the calculations has been attached as **Annex-II**.

The VPT has proposed a provision to state that the handling charges prescribed is a composite charge for (ii). 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 and all other miscellaneous charges not specifically prescribed in the Scale of Rates.

- (d). As per the upfront tariff guidelines, storage charge for multipurpose terminal 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 revised proposal of the port reflects this position.

The unit rate of storage charge was earlier proposed based on the area i.e. on 'per 100 square metre' basis. This tariff did not factor the cargo which will stay in the yard beyond the prescribed free period and contribute towards revenue from this tariff item. The VPT has subsequently revisited its calculation. It has assumed 30% of the total cargo will attract demurrage and accordingly, proposed the storage charge at Rs.8 per tonne for the first week, Rs.12 per tonne for the second week and Rs.16 per week thereafter so as to meet the revenue requirement.

Based on the revised revenue requirement, the storage charge estimated by the VPT is modified following the approach adopted by the VPT and prescribed at Rs.8.60 per tonne per day or part thereof for the first week, Rs.12.90 per tonne per day or part thereof for the second week and Rs.17.20 per day or part thereof thereafter maintaining the differential rate for the slabs adopting the approach followed by the VPT.

- (e). The revised revenue requirement towards miscellaneous charges works out to Rs.54 lakhs as against Rs.51 lakhs estimated by the VPT. The miscellaneous charge is stated to cover the expenses towards environment and management, safety measures and sweeping of cargo on the wharf.

Based on the modified revenue requirement, tariff cap for miscellaneous charge is prescribed at Rs.2.60 per tonne as against Rs.2.50 per tonne proposed by the port.

- (f). The revenue requirement from berthing service is estimated at Rs.10.61 crores (i.e. Rs.8.00 crores being 16% return on a capital cost of Rs.49.98 crores and operating cost of Rs.2.61 crores) at the level estimated by the port.

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 exchange rate prevailing at the time of notification of the relevant tariff order. This Authority while finalising the upfront berth hire for the iron ore and coal berths of the Paradip Port Trust, coal terminal in Mormugao Port Trust and multipurpose cargo in Kandla Port Trust has held that prescribing dollar denominated berth hire is not appropriate in the upfront tariff cases which will have a validity of 30 years. It was 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. Therefore, it has been decided by this Authority to approve the upfront berth hire charge in Rupee term only.

The VPT in the revised proposal has proposed berth hire in rupee terms for foreign going vessel at Re.0.75 per GRT per hour or part thereof. The methodology followed by the VPT for arriving at the berth hire is in general

found to be in line with the approach followed by this Authority in other upfront tariff cases. The VPT has, however, not considered the impact of concession applicable to the coastal vessels as per the 2005 tariff guidelines while arriving at the pre-determined berth hire.

Based on the coastal cargo volume of 26000 tonnes per annum assessed by the VPT for the said multipurpose cargo handling terminal, the percentage of coastal vessel works out at 3% and foreign vessel at 97% of the total terminal capacity. Taking into consideration the ratio of foreign / coastal vessel and concessional tariff applicable for coastal vessel, the pre-determined upfront berth hire for foreign vessel works out to Re.0.76 per GRT per hour and Re.0.46 per GRT per hour for coastal vessel. The detailed computation of berth hire of coal terminal is furnished in the **Annex-III** attached.

- (ix). Definitions of some of the common terms like foreign going vessel, coastal vessel, day and week are included in upfront schedule in line with the definitions prescribed in the Scale of Rates of VPT and other private terminals operating in VPT. The definitions of the term "month" proposed by the VPT is not found to be relevant and hence deleted. Some of the conditions which are not in line with the general prescription in other Major Ports / Terminals have been modified.
- (x). The VPT has proposed to include the provisions prescribed in its Scale of Rates for levy of penal berth hire equivalent to normal berth hire for the period of overstayal of vessel beyond the stipulated period provided there is a demand for the berth and notice is served in 10 hours advance by the terminal operator to vacate the berth after completion of discharge / shipment operations. This is an existing provision prescribed in the Scale of Rates of VPT. Similar provision for levy of penal berth hire are also prescribed in the Scale of Rates of the another BOT operator Vizag Seaport Limited operating in the VPT. Recognising that berth is a scarce resource of the port / operator and need to be utilised optimally, the proposed provision for levy of penal berth is included in the upfront tariff schedule of the multipurpose cargo terminal.

The rate and conditions for granting ousting priority berthing / priority berthing will be governed by extant Government guidelines in this regard and provisions approved in the Scale of Rates of VPT.

- (xi). The VPT has proposed to prescribe a few conditions regarding the commencement of free period for import and export cargo. Free period for export cargo is proposed to commence from the actual date of the receipt of goods in the operator's premises and for import cargo from the day following the day of completion of final discharge from the vessel. This is in line with the conditions prescribed in the Scale of Rates of the Visakhapatnam port and other ports as well and hence is accepted.

The condition stating that free period shall exclude Custom notified holidays is modified to state that it will exclude Custom notified holidays and terminal's non operating days in line with the condition prescribed in the 2005 tariff guidelines.

- (xii). Some of the common conditions stipulated in the guidelines of 2005 and uniformly prescribed in the Scale of Rates of other major ports / private terminals such as users should not be required to pay charges for delays beyond reasonable level attributable to the private terminal operator, berth hire shall stop 4 hours after the vessel signaling readiness to sail, penal berth hire for a false signal , non accrual of storage charge for the period when the operator is not in a position to effect deliver/ship the cargo when requested by user for the reasons attributable to the operator are included in the upfront tariff schedule.
- (xiii). Recognising that conditionalities fixed now would applicable for a time frame of 30 years, the provision relating to penal rate of interest for delayed payment by users and delayed refund by the operator, is prescribed at 2% above the Prime Lending

Rate of the State Bank of India in line with the provision prescribed in other upfront tariff cases decided by this Authority.

- (xiv). Some of the proposed provisions which are not in line with the common prescription at other major ports / private terminals and the provisions of the revised tariff guidelines have been either been deleted or modified.

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 2008 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year.

11.2. As specified in clauses 2.9.1. and 2.9.2. of the guidelines, before commencement of commercial operations, the private operator shall approach this Authority for notification of 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 operator.

11.4. The performance norms for the projects should be clearly brought out in the bid documents. The private operator is 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 Visakhapatnam Port Trust. If any action is to be taken against the private operators, the Visakhapatnam 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 Visakhapatnam Port Trust a report containing the terminal's physical and financial performance during the preceding three months.

12. In the result, and for the reasons given above and based on a collective application of mind, this Authority approves the tariff caps for the liquid cargo terminal at Visakhapatnam Port Trust attached as **Annex-IV**.

**(Brahm Dutt)**  
Chairman

## FORMULATION OF UPFRONT TARIFF FOR MULTIPURPOSE CARGO BERTH AT VISAKHAPATNAM PORT

Sr. No.	Particulars	Estimates furnished by VPT				Estimates modified by TAMP
		Initial proposal dated 10 July 2008	Revised estimates dated 8 November 2008	Revised estimates dated 26 December 2008	Final revised estimates dated 31 December 2008	
<b>I</b>	<b>Optimal capacity</b>					
<b>(a)</b>	Percentage share of capacity of cargo to be handled	% share of cargo	% share of cargo	% share of cargo	% share of cargo	% share of cargo
	Percentage share of Capacity of C.P. coke (S1)	36%	36%	36%	36%	36%
	Percentage share of Capacity of Lam coke (S2)	36%	36%	36%	36%	36%
	Percentage share of Capacity of Steel (S3)	18%	18%	18%	18%	18%
	Percentage share of Capacity of Granite block (S4)	10%	10%	10%	10%	10%
<b>(b)</b>	Handling Rate of cargo vessel carrying ( in tonnes per day)					
	- C. P. Coke (P1)	10000	10000	10000	10000	10000
	- Lam coke (P2)	10000	10000	10000	10000	10000
	- Steel (P3)	4000	4000	4000	4000	4000
	- Granite block (P4)	2500	2500	2500	2500	2500
<b>(c)</b>	Optimal Capacity in tonnes = $0.7*((S1*P1)+(S2*P2)+(S3*P3)+(S4*P4))*365$	<b>2087435</b>	<b>2087435</b>	<b>2087435</b>	<b>2087435</b>	<b>2087435</b>
<b>II</b>	<b>Capital Cost</b>					
<b>(i).</b>	<b>Cargo Handling Activity</b>	<b>Rs. in crores</b>	<b>Rs. in crores</b>	<b>Rs. in crores</b>	<b>Rs. in crores</b>	<b>Rs. in crores</b>
	<b>(a). Civil Cost</b>					
	- Berth apron and approach	0.29	0.29	0.29	0.29	0.29
	- Storage Yard	7.32	7.32	7.32	7.32	7.32
	- Transit sheds	0.00	0.00	0.00	0.00	0.00
	- Roads, Rail tracks	0.00	0.00	0.00	0.00	0.00
	- Building, water supply, sewage etc.,	0.16	0.16	0.16	0.16	0.16
	<b>Subtotal (a)</b>	<b>7.77</b>	<b>7.77</b>	<b>7.77</b>	<b>7.77</b>	<b>7.77</b>
	<b>(b). Equipment Cost</b>					
	-60 Tonne Harbour Mobile Crane - 2 nos	33.87	33.87	33.87	47.12	47.12
	- Fork lift truck 10 tonnes - 1 no.	0.00	0.35	0.35	0.35	0.35
	- 2 Front end loader of 500 HP	0.00	5.00	5.00	5.00	5.00
	- Power and Lighting, Communications	1.08	1.08	1.08	1.08	1.08
	<b>Subtotal (b)</b>	<b>34.95</b>	<b>40.30</b>	<b>40.30</b>	<b>53.55</b>	<b>53.55</b>
	<b>(c).Miscellaneous [95% on (a) and (b)]</b>	2.15	2.40	2.40	3.07	3.07
	<b>(d). Total Capital Cost for Handling Activity (a +b + c)</b>	<b>44.87</b>	<b>50.47</b>	<b>50.47</b>	<b>64.39</b>	<b>64.39</b>
<b>(ii).</b>	<b>Capital Cost For Berthing Services</b>					
	(a). Cost of construction of Berth plus Rs. 10.51 crores towards the cost of constructed berth of 40 mtrs. length	47.06	47.06	47.06	47.06	47.06
	(b). Cost of dredging alongside berth	2.92	2.92	2.92	2.92	2.92
	<b>Total Capital cost for berthing services</b>	<b>49.98</b>	<b>49.98</b>	<b>49.98</b>	<b>49.98</b>	<b>49.98</b>
<b>(iii).</b>	<b>Total Capital Cost of the Project (i+ii)</b>	<b>94.85</b>	<b>100.45</b>	<b>100.45</b>	<b>114.37</b>	<b>114.37</b>
<b>III</b>	<b>Operating Cost</b>					
<b>(i).</b>	<b>Cargo Handling Activity</b>					
	(a). Power	0.70	0.74	0.74	0.74	0.74
	(b) Fuel Cost					
	-Harbour Mobile Crane	1.20	2.49	2.49	2.49	2.40
	-Fork lift truck	0.00	0.15	0.15	0.15	0.14
	-Front End Loader	0.00	0.36	0.36	0.36	0.35
	<b>Subtotal fuel cost estimate</b>	<b>1.20</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>2.89</b>
	(c). Repair & Maintenance					
	- Civil Assets (1% on gross civil assets)	0.08	0.08	0.08	0.08	0.08
	- Mechanical & Electrical Equipment including spares (5% on cost of mechanical and electrical equipments)	1.75	2.02	2.02	2.68	2.68
	(d). Insurance (1% on gross value of assets)	0.43	0.48	0.48	0.61	0.64
	(e). Depreciation	2.57	3.01	3.01	3.92	5.60
	(f). License fee (rentals for land and other port assets)	0.82	0.82	0.92	0.92	0.62
	(g). Other Expenses (5% of Gross fixed assets)	2.14	2.40	2.40	3.07	3.22
	<b>Total Operating Cost</b>	<b>9.69</b>	<b>12.55</b>	<b>12.65</b>	<b>15.02</b>	<b>16.48</b>

Sr. No.	Particulars	Estimates furnished by VPT				Estimates modified by TAMP
		Initial proposal dated 10 July 2008	Revised estimates dated 8 November 2008	Revised estimates dated 26 December 2008	Final revised estimates dated 31 December 2008	
IV	<b>Revenue Requirement &amp; proposed tariff</b>					
(i).	<b>Cargo Handling charge</b>	(Rs.in crores)	(Rs.in crores)	(Rs.in crores)	(Rs.in crores)	(Rs.in crores)
	<b>Revenue Requirement</b>					
	(a). Total Operating Cost	9.69	12.55	12.65	15.02	16.48
	(b). Return on capital Employed @ 16%	7.18	8.08	8.08	10.30	10.30
	<b>(c). Total Revenue requirement from cargo handling activity</b>	<b>16.87</b>	<b>20.63</b>	<b>20.73</b>	<b>25.32</b>	<b>26.78</b>
	<b>Apportionment of Revenue Requirement</b>					
	(a) Handling Charges	15.69	19.19	19.28	24.31	25.71
	(b) Storage Charges	0.84	1.03	1.04	0.51	0.54
	(c) Miscellaneous Charges	0.34	0.41	0.41	0.51	0.54
	<b>(d). Total Revenue requirement from cargo handling activity</b>	<b>16.87</b>	<b>20.63</b>	<b>20.73</b>	<b>25.32</b>	<b>26.78</b>
	<b>UPFRONT TARIFF</b>					
	<b>(a). Composite handling charge (foreign cargo)</b>	Rate per tonne (in Rs.)		Rate per tonne (in Rs.)		
	-CP coke and Lam Coke	63.40	77.65	78.00	98.35	#REF!
	- Steel	152.15	127.80	128.56	162.00	#REF!
	-Granite	237.75	139.80	140.45	177.08	#REF!
	<b>(b). Storage Charge</b>	Rate per 100 sq. mtr (in Rs.)	Rate per 100 sq. mtr (in Rs.)	Rate per tonne/ per day or part thereof (in Rs.)	Rate per tonne/ per day or part thereof (in Rs.)	
	-Free period	1 week - Import 2 weeks - export	1 week - Import 2 weeks - export	5 days - Import 15 days - export	5 days - Import 15 days - export	5 days - Import 15 days - export
	- First week after free period	Import- 330.71 from 2nd week	Import- 404.57 from 2nd week	Import 6-12th day - 9.00 13-19th day - 13.50 Thereafter - 18.00	8.00	8.60
	-Second week	Export -337.36 from 3rd week	Export -412.58 from 3rd week	Export 16-22th day - 12.00 23-29th day - 18.00 Thereafter - 24.00	12.00	12.90
	-Thereafter				16.00	17.20
	<b>(c). Miscellaneous Charge ( Rate per tonne in Rs.)</b>	1.85	1.98	1.99	2.50	2.60
(ii).	<b>BERTH HIRE CHARGES</b>					
	<b>Revenue Requirement</b>					
(a)	<b>Operating Cost</b>					
	(i). Maintenance Charge (1% on cost of construction of	0.47	0.47	0.47	0.47	0.47
	(ii). Depreciation	3.61	1.67	1.67	1.67	1.67
	(iii). Insurance ( 1% on berth cost)	0.47	0.47	0.47	0.47	0.47
	<b>Subtotal (a)</b>	<b>4.55</b>	<b>2.61</b>	<b>2.61</b>	<b>2.61</b>	<b>2.61</b>
(b)	Return on capital Employed @ 16%	7.99	7.99	7.99	7.99	8.00
	<b>Total Revenue requirement from Berthing services (a + b)</b>	<b>12.54</b>	<b>10.60</b>	<b>10.60</b>	<b>10.60</b>	<b>10.61</b>
	Berth hire Charge per GRT per hour					
	Foreing going vessel (Rate per GRT per hour) in Re.	US \$ 0.024	Re. 0.75	Re. 0.75	Re. 0.75	Re. 0.76
	Coastal vessel (Rate per GRT per hour) in Re.	Re. 0.65	Re. 0.45	Re. 0.45	Re. 0.45	Re. 0.46



## STATEMENT SHOWING THE CALCULATIONS OF BERTH HIRE CHARGE

A As furnished by the VPT							
Sr. No	Particulars	Unit	CP coke	LAM coke	Steel	Granite	Total
i	Ratio	%	36%	36%	18%	10%	100%
ii	Handling Rate	Tonnes per day	10000	10000	4000	2500	
iii	Average GRT per vessel	tonnes	18550	29000	11300	15000	
iv	Average parcel size	tonnes	24000	28000	10000	10000	
v	Tonnage expected to be handled	Tonnes	749000	749000	374000	208000	2080000
vi	No of berth days	days	75	75	93	83	
vii	No of berth hours {24 x (vi)}	hours	1800	1800	2232	1992	
viii	Expected number of vessels	No of vessels	31	27	37	21	116
ix	Total GRT hours	Tonne hours	33390000	52200000	25221600	29880000	140691600
x	Revenue Requirement	Rs. in crores					10.60
xi	Berth hire proposed by the VPT (xi / x)	per GRT per hour or part thereof					0.75
B As considered by TAMP							
Sr. No	Particulars	Unit	CP coke	LAM coke	Steel	Granite	Total
i	Ratio	%	36%	36%	18%	10%	100%
ii	Handling Rate	Tonnes per day	10000	10000	4000	2500	16500
iii	Average GRT	tonnes	18550	29000	11300	15000	
iv	Average parcel size	tonnes	24000	28000	10000	10000	
v	Tonnage expected to be handled	Tonnes	751477	751477	375738	208744	2087435
vi	No of berth days ( v/ii)	days	75.00	75.00	94.00	83.00	
vii	No of berth hours {24 x (vi)}	hours	1800	1800	2256	1992	
viii.	Expected number of vessels	No of vessels	31	27	38	21	117
ix	Total GRT hours (vii x viii)	Tonne hours	33390000	52200000	25492800	29880000	140962800
x	Revenue Requirement	Rs. in crores					10.61
xi	Modified Berth hire						
(a)	Foreign Going vessel	per GRT per hour or part thereof					0.76
(b)	Coastal vessel						0.46

Ratio of foreign / coastal arrived based on volume of coastal caustic soda estimated to be handled by the operator

	in lakh tonnes	no of vessels	after rounding off	%
Foreign cargo	20.54	114.4	113	97.4%
Coastal cargo	0.26	2.6	3	2.6%
	20.80	117	116	

Workings:		With reference to revenue requirement as per norms
i.	Revenue requirement for 97% foreign going vessels + 3% coastal vessels (Rs)	106073320
ii.	GRT hours of foreign going vessels (140962800 * 97%)	136733916
iii.	GRT hours of coastal vessels (140962800 * 3%)	4228884
iv.	Total GRT hours =	140962800
v.	136733916x + 0.6 * 4228884 x =	106073320
vi.	136733916 x + 2537330x =	139271246
vii.	139271246x =	106073320
viii.	X (foreign going) (Rs.) =	0.76
ix.	0.6 * 0.76 (coastal) (Re.) =	0.46

**VISAKHAPATNAM PORT TRUST**

**UPFRONT TARIFF SCHEDULE FOR MULTIPURPOSE CARGO BERTH**

**1.1. DEFINITIONS**

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

- (i). **"Coastal vessel"** shall mean 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 licence issued by the competent authority.
- (ii). **"Day"** shall mean the period starting from 6.00 A.M. of a day and ending at 6.00 A.M. on the next day.
- (iii). **"Foreign-going vessel"** shall mean any vessel other than Coastal vessel.
- (iv). **"Week"** shall mean a period of 7 days.

**1.2. GENERAL TERMS & CONDITIONS**

- (i). The status of the vessel, as borne out by its certification by the Customs or Director General of Shipping is the relevant factor to decide whether vessel is "coastal" or "foreign-going" for the purpose of levy of Berth hire, and the nature of cargo or its origin will not be of any relevance for this purpose.
- (ii).
  - (a). A foreign going vessel of Indian Flag having a General Trading Licence can convert to Coastal run on the basis of a Customs Conversion Order.
  - (b). A foreign going vessel of Foreign Flag can convert to coastal run on the basis of a Coastal Voyage Licence issued by the Director General of Shipping.
  - (c). In cases of such conversion, coastal rates shall be chargeable by the load port from the time the vessel starts loading coastal goods.
  - (d). In cases of such conversion, coastal rates shall be chargeable only till the vessel completes coastal cargo discharging operations, immediately thereafter foreign going rates shall be chargeable by the discharge ports.
  - (e). For dedicated Indian coastal vessels having a Coastal Licence from the Director General of Shipping, no other document will be required to be entitled to Coastal rates.
- (iii).
  - (a). The berth hire 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 crude including POL, iron ore and iron ore pellets and 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 transshipment to Indian Port "B" will be levied the concession charges

relevant for its coastal voyage. In other words, cargo from/to Indian Ports carried by vessels permitted to undertake coastal voyage will qualify for the concession.

- (e). The charges for coastal cargo / containers / vessels shall be denominated and collected in Indian rupee.
- (iv). Interest on delayed payments / refunds:
  - (a). The user shall pay penal interest on delayed payments for any charge 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 declared by the State Bank of India from time to time.
  - (c). The delay in refunds by the terminal operator will be counted beyond 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 beyond 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.
- (v). In calculating the gross weight or measurement by volume or capacity of any individual item, fractions upto and inclusive 0.5 shall be taken as 0.5 unit and fractions of above 0.5 shall be treated as one unit, except where otherwise specified.
- (vi). All charges worked out shall be rounded off to the next higher rupee on the grand total of each bill.
- (vii). The rates prescribed in the Scale of Rates are ceiling levels: likewise, rebates and discounts are floor levels. The terminal operator may, if it so desires, charge lower rates and / or allow higher rebates and discounts.

The terminal operator may also, if it so desires rationalise the prescribed conditionalities governing the application of rates prescribed in the Scale of Rates if such rationalisation gives relief to the user in rate per unit and the unit rates prescribed in the Scale of Rates do not exceed the ceiling levels.

The terminal operator should, however, notify the public such lower rates and / or rationalisation of the conditionalities governing the application of such rates and continue to notify the public any further changes in such lower rates and / or in the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rates notified by the TAMP.
- (viii). The users shall not be required to pay charges for delays beyond a reasonable level attributable to the terminal operator.

2. **BERTH HIRE CHARGES:**

2.1. **Schedule of Berth hire:**

Sl. No.	Vessels	Rate per GRT per hour or part thereof	
		Foreign Going Vessel (in Rs.)	Coastal Vessel (in Rs.)
1.	Vessels carrying CP Coke, LAM Coke, Steel and G. Blocks	0.76	0.46

**2.2. Penal Berth hire for overstayal of vessel:**

- (i). Penal berth hire equivalent to normal applicable berth hire shall be levied in addition to the berth hire charge for the period of overstayal of vessel for occupancy of the berth beyond the stipulated periods mentioned at (ii) below, provided there is a demand for the berth and a notice is served by the BOT operator or its authorised officials 10 hrs in advance of completion of discharge / shipment operations.
- (ii). Vessel shall be permitted to occupy the berth after completion of cargo operation without attracting penalty for period mentioned below: -
  - (a). Vessels taking bunkers through barges. 08 hrs
  - (b). Vessels taking water through barges. 12 hrs [From the time of placement of barges alongside vessel].
  - (c). Vessels taking Water / Bunkers through source other than barges. 08 hrs
  - (d). In all other cases 07 hrs

**General Notes relating to berth hire:**

- (i). The time for the purpose of levy of berth hire shall be reckoned from the time the vessel occupies the berth till she vacates the berth.
- (ii). (a). Berth hire shall stop 4 hrs after the time of vessel signalling its readiness to sail.
  - (b). The time limit of 4 hrs prescribed for cessation of berth hire shall exclude the ship's waiting time for want of favourable tidal condition or on account of inclement weather or due to absence of night navigation facilities.
  - (c). The Master/Agent of the vessel shall signal readiness to sail only in accordance with favourable tidal and weather condition.
- (iii). 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."
- (iv). No Berth hire shall be levied for the period the vessel is compelled to idle at berth for continuously for one hour or more due to non-availability/ break down of equipment and any other reasons including power failure attributable to the terminal operator.
- (v). Ousting Priority/Priority berth Hire:

The rate and conditions for granting ousting priority berthing / priority berthing will be governed by extant Government guidelines in this regard and provisions prescribed in the Scale of Rates of Visakhapatnam Port Trust.



**SUMMARY OF THE COMMENTS RECEIVED FROM THE PORT USERS / DIFFERENT USER ORGANISATIONS / POTENTIAL BIDDERS**

**F. No.TAMP/39/2008 - VPT - Proposal from Visakhapatnam Port Trust for fixation of upfront tariff for handling multipurpose cargo at WQ-6 berth in the inner harbour of port of Visakhapatnam on BOT basis.**

1. A summary of comments received from users / user organisations / potential bidders and the comments of Visakhapatnam Port Trust (VPT) thereon are tabulated below:

<b>Sl. No.</b>	<b>Comments of users / organisation bodies and potential bidders</b>	<b>Comments of VPT</b>
1.	<b>M/s.Larsen and Toubro Limited</b>	
(i).	The capital cost in Chapter II caters to Contingencies and Supervision charges and does not include Miscellaneous cost, which is required to be considered as per TAMP norms.	In the capital cost, 5% of civil and equipment cost towards miscellaneous has been taken in to account as per TAMP norms.
(ii).	Is the cost for formation of rail tracks included in the rail track estimate.	No railway track has been envisaged for this project.
(iii).	Unit rates for buildings, roads, etc. is grossly below the market rates. Also, the quantity assumptions made for roads and buildings look inadequate. This needs to be reviewed.	Unit rates have been considered based on the existing Schedule of Rates of June 2008. No roads/buildings are envisaged in this project. Hence review may not be required.
(iv).	Estimate for electrical switchgear and control panels is inadequate which may be reviewed.	Port considers provision for electrical switchgears and control panels as adequate.
(v).	The cost of construction of berth is assumed as Rs.36.55 crores. The estimate assumed is far below the prevailing market rates.  As the construction / development is proposed to be done by the concessionaire at their cost, relevant escalation for costs may be considered for the civil and equipment till the completion of the project, which shall include validity period for the bid proposal, period for achieving financial closure and the construction period.	The rates adopted for estimation of capital cost for construction of berth are prepared based on VPT schedule of rates - June 2008/prevailing market rates.
(vi).	It needs to be confirmed whether strengthening is required to be done for the existing berth structure. The cost estimate do not provide any provision for the same.	The existing berth (40 mtrs. Length of berth constructed as part of WQ-7 berth) was designed for a dredged depth of 12 mtrs., for handling 11 mtrs. draft vessels. For handling 12.5 mtrs. draft vessels with a dredged depth of 14 mtrs., strengthening of the existing berth for accommodating 12.5 mtrs. draft vessels is required. No provision for strengthening of existing berth is made in the cost estimate as the berth is proposed to handle 195 mtrs. LOA vessels.
(vii).	The cost of two numbers of 60T cranes has been assumed as Rs.33.87 crores. The above estimate needs to be revisited, since the same is below the market price.	The cost estimate for 2 nos. harbour mobile cranes is as per budgetary quotation obtained.
2.	<b>M/s.Vadinar Oil Terminal Limited,</b>	
(i).	<b>Capital Cost and Operating Cost:</b>	
(a).	It is presumed that the capital cost and operating cost estimates given in the proposal are only indicative, and therefore, the tariff workings are also indicative. As the cost estimates are not based on detailed engineering, the capital cost cannot be accurately estimated at this stage. Therefore, it is believed that the actual cost of completion	The tariff caps fixed are final. However, the tariff caps will be reviewed once in 5 years for any extraordinary events that could not have been foreseen by a prudent person as per TAMP's guidelines clause 2.7.1. As per clause 2.8., the tariff caps will be indexed to inflation but only to an extent of 60% of the variation in WPI occurring between calendar year.

	and actual operating costs will be taken into account while fixing the final tariff.	
(b).	The capital cost shall also take into account provision for escalation on account of inflation and price escalation of atleast 25% (as the project would be implemented over a period of 2-3 years).	TAMP guidelines do not provide any provision for escalation of capital cost during implementation period.
(c).	The capital cost is based on estimates and is not backed by detailed engineering. Therefore, provision for Contingency should be made in the capital cost at the rate of atleast 15% to provide for unforeseen situations and as margin for error in estimation.	The provision for contingencies at port of Visakhapatnam is adopted at 3% for all the projects.
(d).	The provision of 5% under the head "Miscellaneous" is quite low considering the fact that this includes costs such as pollution control, fire fighting equipment, upfront payments, Interest during Construction (IDC), working capital margin, miscellaneous equipment, power supply, lighting, etc. For example, considering a three year construction schedule, the IDC alone works out to over 20%. Therefore, in our view the provision under the head "Miscellaneous" shall be atleast 30%.	Provision of 5% towards miscellaneous charges is as per guidelines for upfront tariff fixation.
(e).	The return on capital employed at 16% is quite low in the present context of high inflation, tight liquidity condition, difficult credit outlook and hardening interest rates. It may be noted that the return on capital employed of 16% was finalised at a time when the Prime Lending Rate (PLR) were close to 10-11%. As the current PLR rates have already increased by 300-400 bps, the return on capital employed shall also be commensurately increased to 20% p.a.	ROCE at 16% is as per TAMP guidelines.
(ii).	<p><b>Capacity utilisation:</b> Cargo handling charges are worked out based on 70% capacity utilisation which applies to all the years. However, it is pertinent to note that the capacity utilisation cannot be ramped upto 70% from the very first year itself. Past experience shows that the capacity utilisation ramp up happens over a period of time. Moreover, the operations face teething problems, and take time to stabilize.</p> <p>Therefore, in our view, the capacity utilisation shall be kept at lower levels in the initial years (say 30% in the first year ramping upto 40% in second year, 50% in third year, 60% in fourth year and thereafter at 70%).</p>	Optimal capacity has been considered only as 70% of maximum capacity as per upfront tariff guidelines.
(iii).	<p><b>Coastal vessels rebate:</b> A rebate of 40% is provided in the Scale of Rates for coastal vessels, whereas the tariff calculations are worked out based on composition of 100% foreign vessels, and 0% coastal vessels. It is suggested that the factor of 40% rebate for coastal vessels is taken into account while fixing the charges, and therefore, the charges worked may be enhanced accordingly.</p>	Out of the four cargoes proposed except steel cargo, other do not move coastally. In case of steel exports, only 7% is coastal cargo. Accordingly, rate for foreign and coastal cargoes has been revisited and arrived keeping in view revenue requirement for the steel cargo.
3.	<b>M/s.ABG Infrologistics Limited</b>	
(i).	In the instant case, the project involves the deployment of two Mobile Harbour Cranes	The consumption per hour for harbour mobile cranes has been revisited and considered as 83

	<p>(MHCs) where the main component of the operating cost is fuel cost. The VPT has assumed fuel consumption of 40 litres per hour, which is not realistic. From our experience in operating MHCs in other Ports, we feel that fuel consumption per hour should be at least in the range of 50-55 litres per hour and based on this, the operational cost needs to be re-worked and also the tariff.</p>	<p>ltrs. per hour based on the technical specifications for drive system given in budgetary offer obtained from the firm for 2 nos. harbour mobile cranes.</p>
(ii).	<p>Considering the frequent increase in fuel cost there should be a provision to provide for separate price escalation for oil price apart from the present system of revising the cost periodically on general price escalation, as this would not adequately reflect changes in fuel prices.</p>	<p>There is no separate provision for fuel escalation in the upfront tariff guidelines. In this connection, Clause 2.8. of the guidelines may be referred.</p>
(iii).	<p>In para 3.5 of Chapter III, VPT has assumed a share of revenue requirement for handling charges at Rs.15.69 crores, which is 93% of the total revenue requirement. The reason for taking 93% is not clear. Besides, coal and coke being the major commodities handled at WQ-6, the handling cost to be incurred for environment management cannot be reduced to 2% as against the norm of 5%.</p>	<p>Miscellaneous charges of 2% towards environment and management, sweeping of cargo on wharf and safety measures is considered to be adequate.</p>
4.	<p><b>M/s.Viking Shipping (Chennai) Private Limited</b></p>	
	<p>It has no comment to offer on the upcoming Berth.</p>	

\*\*\*\*\*