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

Tariff Authority for Major Ports

G No. 157 **New Delhi,** **10 June 2010**

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 Mormugao Port Trust for setting upfront tariff for handling Iron Ore in pursuance of the guidelines for upfront tariff setting for Public Private Participation (PPP) projects at Major Ports which was notified vide this Authority's Notification No.TAMP/52/2007-Misc. dated 26 February 2008 as in the Order appended hereto.

(Rani Jadhav)
Chairperson

Tariff Authority for Major Ports

Case No. TAMP/60/2009-MOPT

Mormugao Port Trust **- - - - -** **Applicant**

O R D E R

(Passed on this 4th day of May 2010)

This case relates to a proposal dated 7 December 2009 filed by the Mormugao Port Trust (MOPT) for fixation of the upfront tariff for handling iron ore by developing a berth at West of existing Breakwater (WOB) on Build, Own, Operate and Transfer (BOOT) basis.

2.1. The Ministry of Shipping, Road Transport and Highways (MSRTH) announced the guidelines for upfront tariff setting for Public Private Participation (PPP) projects at Major Ports vide its communication No.PR-14019/25/2007-PG dated 12 February 2008. In compliance with the directions from the MSRTH under Section 111 of the Major Port Trusts Act 1963, this Authority notified the guidelines for upfront tariff setting vide Notification No.TAMP/52/2007-Misc. in the Gazette of India on 26 February 2008.

2.2. In pursuance of the said guidelines, the MOPT has filed the subject proposal.

3. The highlights of the proposal are as follows:

(i). The port envisages the operator to handle iron ore received through railway wagons and barges from the proposed berth. The physical features are:

- The terminal is proposed to be built entirely on the reclaimed land. Out of the total reclaimed land of 140000 sq. mtrs., 70000 sq. mtrs. is stipulated as stacking area.
- Construction of breakwater of length of 620 meters and a mole of 230 meters.
- The proposed berth will be 300 meters in length, 21 meters in width and with a channel depth of 14.10 meters.

(ii). **Optimal Terminal Capacity**:

(a). Optimal Quay Capacity

- Based on inquiry with the trade and considering the current composition of the vessels calling at the port, the MOPT has concluded that the proposed terminal would get 80% panamax vessel (70000 DWT) and 20% handymax vessel (45000 DWT).
- The ship-day output norm has been considered as per the norms prescribed in the guidelines.
- Accordingly, the optimal quay capacity is assessed at 12.52 Million Tonnes Per Annum (MTPA) as per the calculation below:

Sl. No.	Type of vessel	Percentage share of capacity of each type of vessel	Ship-day output considered as per the norms prescribed
(i).	Panamax	80%	55,000 tons/day
(ii).	Handymax	20%	25,000 tons/day
Optimal quay capacity		0.7 *{(80% *55000 + 20% * 25000)} * 365 = 12519500 i.e. **12.52 MTPA**	

(b). Optimal yard Capacity

- 70,000 sq. meters of land is earmarked for development of stackyard.

- Stacking factor is considered at 15 tons per sq. meter as per the norms prescribed in the guidelines.

- The plot turnover ratio of 14 is taken into account based on the turnover achieved by the Mechanical Ore Handling Plant at the port as against the turnover norm of 12 prescribed in the guidelines.

- Accordingly, the optimal yard capacity is assessed at 7.20 MTPA as per the calculation below:

Parameter	Norm	Considered by the port
Stacking area	As provided by the port	70000 sq. meters
Percentage of stacking area that could be used	70%	70%
Quantity that could be stacked per sq. meter	15 tons per sq. meter	15 tons per sq. meter
Turnover of the plot in a year	12	14
Optimal yard capacity	0.7 * 70000 * 70/100 * 15 * 14 = 7203000 i.e. **7.20 MTPA**	

(c). The optimal capacity of the terminal is assessed at 7.20 MTPA being the lower value of the optimal quay capacity and optimal stack yard capacity.

(iii). **Capital Cost:**

The civil cost estimates are as per the Techno Feasibility Report. The cost of equipment, plant and machinery is estimated at the current market prices. The miscellaneous cost is estimated at 5% of the civil and equipment cost. Thus the capital cost as estimated by port is as follows:

(**Rs. in crores**)

Sl. No.	Particulars	Estimated Capital Cost
(i).	Civil Construction Cost	100.90
(ii).	Equipment Cost	242.00
(iii).	Miscellaneous Cost	17.15
	Total Capital Cost	**360.05**

(iv). The Return on Capital Employed (ROCE) is computed at 16% on the estimated capital cost.

(v). The annual operating cost for cargo handling activity is estimated at Rs.76.76 crores as per the norms prescribed.

(vi). The estimated Annual Revenue Requirement for handling Iron Ore is as follows:

Sl. No.	Particulars	Amount (Rs. in crores)
(i).	Annual operating cost	76.76
(ii).	Return on capital employed	54.87 *
	Annual Revenue Requirement	**131.63**

* The MOPT does not appear to have considered the Miscellaneous Capital Cost, while calculating Return on Capital Employed.

(vii). Considering the optimal capacity of the terminal of 7.20 MTPA and the annual revenue requirement of Rs.131.63 crores from the cargo handling activity, the per ton rate arrived by the port is at Rs.182.74 per ton. The MOPT has apportioned this rate to various tariff groups as per the guidelines as below:

Sl. No.	Particulars	Rate per ton
(i).	Cargo handling charges (Rs.131.64 crores x 98%)	Rs. 179.08
(ii).	Storage charges (Rs.131.64 crores x 1%)	Rs. 1.83
(iii).	Miscellaneous charges (Rs.131.64 crores x 1%)	Rs. 1.83

(viii). (a). The port envisages handling of the iron ore by wagons as well as by barges. In order to propose separate charges for handling barge borne and rail borne iron ore, the port has submitted that it has followed the principles laid down by the Authority in the Order No.TAMP/22/2008-NMPT dated 30 September 2008 setting upfront tariff cap for rail and road borne cargo separately for iron ore terminal at the New Mangalore Port Trust.

(b). From the total capital cost estimation, the port has segregated the capital cost for rail tracks and a tippler at Rs.39.50 crores and estimated operating cost thereon as per the norms prescribed at Rs.6.68 crores.

(c). Considering the optimal capacity of the terminal at 7.20 MTPA the rate for rail services is arrived at Rs.17.69 per ton. This is excluded from the composite rate per ton for arriving at the handling rate for barge borne cargo at Rs.161.39 per ton (Rs.179.09 - Rs.17.69).

(ix). **Berth hire**:

(a). The cost for construction of berth and dredging are considered as per the Techno-Feasibility Report at Rs.108.95 crores.

(b). Return is calculated at 16% of the estimated capital cost at Rs.17.43 crores.

(c). Repairs and Maintenance is calculated at 1% of the capital cost as per the norms at Rs.1.09 crores.

(d). In addition, depreciation @ 3.34% of capital cost of berth is also taken into account as considered by TAMP in its earlier Order.

(e). The Annual Revenue Requirement thus works out to Rs.22.16 crores.

(f). For arriving at the proposed berth hire charges, the port has considered the berth occupancy factor of each categories of vessels based on ship day out put and the average parcel size of the vessels. It has assumed GRT of the vessel at 60% of the DWT of the vessel.

(g). Accordingly, the port has proposed berth hire charges at Rs.1.48 per GRT per hour for foreign going vessel and Re.0.89 per GRT per hour for coastal vessel.

(x). **Port Dues**:

Citing that as per the guidelines the terminal operator has to collect tariff for the facilities provided by him, the port has furnished calculations for arriving at the rate of Rs.103.45 per GRT towards the Port Dues. However, the draft Scale of Rates (SOR) submitted by the port does not include tariff for port dues.

(xi). The berth hire and handling charges as proposed by the port in the proposed draft Scale of Rates to meet the ARR are given below:

(a). Berth hire charges:

Foreign going vessel	Coastal vessel
Rs.1.48 per GRT per hour	Rs.0.89 per GRT per hour

(b). Consolidated Iron Ore handling charge:

Handling charges	Rs. per ton
(i). Rail borne cargo	Rs.179.08 per ton
(ii). Barge borne cargo	Rs.161.39 per ton

(c). Storage charges (after the prescribed 25 days of free period):

		Rs. per tonne / day
(i).	First 5 days	12.00
(ii).	6^{th} day – 10^{th} day	24.00
(iii).	Beyond 11^{th} day	48.00

4. In accordance with the consultation procedure prescribed, the MOPT proposal dated 7 December 2009 was circulated to the concerned users / user organisations, short listed applicants and prospective users (as per the list provided by the MOPT) seeking their comments. The proposal was also forwarded to list of additional bidders furnished by MOPT. The comments received from the users / user organisations, short listed applicants and prospective users have been forwarded to the MOPT as feedback information. The MOPT has furnished its observations on the comments of the users / short listed applicants / prospective users.

5. Based on a preliminary scrutiny of the proposal, the MOPT was requested to furnish additional information / clarifications vide letter dated 26 February 2010. The MOPT vide its letter dated 27 February 2010 has responded to our queries. A summary of the queries raised by us and the response of MOPT are tabulated below:

Sl. No.	Queries raised by us	Response of MOPT
(i).	The proposal of the Mormugao Port Trust (MOPT) to fix upfront tariff cap for developing a berth at West of the existing Breakwater (WOB) for handling Iron ore at Mormugao Port Trust under PPP projects seems to have been drawn up based on the upcoming proposal for setting up mechanized facilities by the private operator on BOOT basis. It is clarified that the tariff caps prescribed by the authority would not only be applicable to the proposed project but would also be applicable to all the projects bid out subsequently for identical cargo at the MOPT Trust during the next five years. The MOPT shall include the tariff caps fixed by the authority in the bid document as upfront tariff cap.	The tariff caps prescribed by the Authority would become applicable to all iron ore handling projects bid specifically at MOPT during the next 5 years. In the above regard, we request for a confirmation that the above tariff caps would apply to iron ore handling, irrespective of the manner in which the ore is to be handled in the subsequent projects to be bid out by MOPT after the present (WOB) proposal. For example, we are in the process of developing a project in which the barge borne iron ore will be handled by a Floating Crane(s) (thus, it would be mechanical handling), and loaded on to gearless / geared ships at the Mooring Dolphins. It is not clear whether the prescribed tariff caps which TAMP will now fix for the WOB project, will apply for such handling (by F/cs) also.
(ii).	The physical features of the (standard) mechanised iron ore terminal in terms of berth length, width and draft of the berth may be indicated.	The physical features of the proposed Mechanised Iron Ore Terminal are as follows: (a). Berth Length – 300 mtrs. (b). Quay width – 45 mtrs. (c). Draft – 14.4 mtrs. to begin with. With increase in depths of the MPT Navigation channel, the draft would go down to (-) 17.1 mtrs. below CD in future. However, this is completely uncertain.
(iii).	Average GRT and parcel size of iron ore vessels handled by the port during the last three years i.e. 2006-07 to 2008-09 may be indicated.	(a). Average GRT of iron ore vessels handled at Berth No.9 (MOHP)/Mechanised facility – 2006-07 … 40976 2007-08 … 38621 2008-09 … 42294 (b). Average parcel size of iron ore handled at B.No.9 2006-07 … 64587 2007-08 … 60640 2008-09 … 65393

(iv).	Optimal Capacity Estimation:	
	(a). The port in para 2.2. has stated that the proposed terminal can handle Cape size vessel (fully loaded) over next few years with expected deepening of the channel. The trade has also shared this view. In light of this position and also recognising that the tariff to be fixed is for next 30 years period, the port may examine whether share of capesize vessel need to be considered in the upfront tariff fixation.	While we have projected handling of cape size vessels in future, this is highly unattainable at the port, and is most unlikely, as MOPT does not have the money for capital dredging for deepening the channel, existing berths, turning circles, etc. to the requisite depth of atleast to (-) 17.1 mtrs. below CD for handling cape size vessels. Hence, we would request that share of cape size vessels may not be considered in the exercise of upfront tariff fixation.
	(b). Annual turnover ratio at the stackyard achieved by the port during the last three years with reference to iron ore handling may be indicated.	Annual average turnover ratio at Berth No.9 in the last 3 years. 2006-07 … 12.22 2007-08 … 10.14 2008-09 … 11.84 It may thus be seen that the turnover in 2008-09 has in fact gone below what was achieved in 2006-07. Achieving a turnover of anything more than 12 at MOPT, even in the future, is highly unlikely.
	(c). Out of total area of 1,40,000 sq. mtrs. of land to be reclaimed, the port has considered only 70,000 sq. mtrs. of area for stackyard. In this regard, the following points may be clarified: (i). Furnish the land usage plan envisaged for the remaining 70,000 sq. mtrs.	(i). Space for equipment, wagon tippling house, railway tracks, conveying system, extra tracks for escape route, sidings, administrative office, parking area, roads, drive house, service areas, landscaping, etc. will at best be – 70,000 sq. mtrs. Balance reclaimed land will be stacking area – which will, under no circumstances, exceed 70,000 sq. mtrs. This is virtually a green field terminal. All facilities, starting from access areas, gates, roads, railway lines, administrative office, parking lot, space for all mechanical equipment, wagon tippler, conveyors, extra railway tracks, etc. will take atleast 70,000 sq. mtrs. Thus, no portion of this area of 70,000 sq. mtrs. will be available for stacking of iron ore.
	(ii). When the exact stackyard area of 70,000 sq. mtrs. is considered for yard capacity calculation, again reckoning with 70% factor to determine the exact area available for stacking amounts to double counting. Incidentally, the utilisation factor of 70% is applicable on the total area of 1,40,000 sq. mtrs. The port may review and modify the optimal yard capacity in the light of the above observation.	(ii). Thus, the maximum stacking area available is only balance 70,000 sq. mtrs. May we draw kind attention to Para 3.0 – 'norms for calculation of optimal capacity of terminal' – which reads "the optimal capacity of the terminal is reckoned as 70% of the maximum capacity, and the lower value of the optimal quay capacity and optimal stack yard capacity. – "Thus, in our understanding, since maximum stack yard area which is available for this independent green field terminal is only going to be 70,000 sq. mtrs., the 70%

		factor is to be applied only to such 70,000 sq. mtrs., i.e. on this stacking area. Thus our calculations of stacking yard capacity are correct.
	(iii). The quay capacity is assessed at 12.52 Million Tonnes Per Annum, but the optimal capacity of terminal is pegged at 7.20 Million Tonnes Per Annum citing the yard capacity as a limiting factor. The port may consider to explore the possibilities of improving the yard capacity by providing more area for stack yard, or any other means to minimise the gap between the yard and quay capacities.	(iii). It is respectfully submitted that port has attempted its utmost for working out the possibilities of improving yard capacity, by providing more stack yard area. However, considering the severe constraints and the limits of reclaiming land in the extremely limited water area between the 'Headland – Sada Hill' on the southern side, and the MPT Navigation Channel on the northern side, the consultants could worked out at best only 70,000 sq. mtrs. of stacking area. Thus, it is respectfully submitted that there is no possibility of minimising the gap between the yard and quay capacities any further.
(v).	Capital Cost Estimation:	
	(a). The items considered under civil works do not match with the normative list stipulated in para 4.2 Annex-II of the guidelines on upfront tariff setting. The cost of berth apron and approach, conveyor galleries, transfer towers, wagon tippling station, marshalling yard, etc. have not been considered. Further, electrical requirements have been included in the civil construction cost instead of considering it under equipment cost (as per guidelines). The reasons for deviation from the normative list prescribed in the guidelines may be explained for each of the items.	The cost of berth apron is a part of the berth cost. The approach is covered under the head 'road approach' and in-fill, appearing as part of the common facilities in the project report. The conveyor galleries, transfer towers, wagon tippling station, marshalling yard, etc. are incorporated in the estimates shown under the 'common facilities' and wagon tippler, conveyor system, etc. Electric equipments appear in the project report (techno-feasibility report) under the head 'common facilities', and relate to the entire electrical supply system, electrical requirements for the port terminal, wagon tippling, barge unloaders, etc. Since this is virtually a completely new port terminal, the electrical requirements of Rs.5 crores have been shown under the common civil construction cost. Since, in our understanding, the ROCE is 16% for both civil construction and equipment cost, the categorisation may not make any difference to the upfront tariff fixation.
	(b). The port has considered 2 barge unloaders (cost Rs.40 crores) in the equipment cost which is not found as per the norms prescribed in the guidelines. The port may justify the deviation made from the guidelines.	While submitting the proposed tariff for the barge borne cargo handling, MOPT has relied upon the cost estimates given by the Consultant in the project report. Since the prescribed guidelines do not provide any information as regards barge unloaders, we have no other option, but to rely upon the Consultant's estimates.
	(c). The equipment cost estimated by the port does not include some of equipment prescribed in the guidelines such as two cranes, four pay loaders, etc. The reason therefor may be explained.	The equipment required for the proposed WOB Terminal does not include cranes, pay loaders, etc. No cranes or pay loaders are needed for conveying the iron ore tippled from railway wagons to the stacking area, neither are any cranes or pay-loaders required for unloading the barges and conveying the ore to the stacking areas. The ore is reclaimed by the stackers / reclaimers and loaded by shiploaders on to ships.

<table>
<tr><td></td><td>(d). Annex - II attached to the proposal does not furnish documentary support of unit rate adopted in the estimation of civil and equipment cost. The project Feasibility Report does not contain documents validating the estimates. Furnish copies of supporting documents / calculation / rate analysis / budgetary quotations, market rates to justify the estimates of both civil and equipment cost.</td><td>A copy of the detailed estimates and rate analysis furnished to us by our Consultants is furnished.</td></tr>
<tr><td></td><td>(e). The port has claimed indexation in the upfront tariff with reference to the rates of 1 January 2009. Please update the estimates of capital cost based on the prevailing market i.e. as of 1 January 2010.</td><td>WPI as on 1.1.2009 - 228.9
WPI as on 1.1.2010 - 248.5
(248.5/228.9 x 100)% = 108.56

Updated upfront tariff may be fixed at 108.56% of the proposed tariff. Thus, in our understanding the updated tariff should be

Proposed Tariff x 1.0856%

These are indicated below:

<table>
<tr><td>Tariff cap for handling charges (Rail borne)</td><td>194.41</td></tr>
<tr><td>Tariff cap storage charges (rail borne)</td><td>1.99</td></tr>
<tr><td>Tariff cap miscellaneous charges (rail borne)</td><td>1.99</td></tr>
<tr><td>Tariff cap handling charges (barge borne)</td><td>175.20</td></tr>
<tr><td>Tariff cap storage charges (barge borne)</td><td>1.96</td></tr>
<tr><td>Tariff cap miscellaneous charges (rail borne)</td><td>1.96</td></tr>
<tr><td>Berth hire charges per GRT per hrs.</td><td>1.61</td></tr>
<tr><td>Port dues rate per GRT</td><td>112.30</td></tr>
</table>

In our understanding, applying the indexation to the capital cost may not be very appropriate, as, if at all the proposal for upfront tariff fixation were to be submitted now, the cost estimates would be based on the prevailing actual market rates. Thus, we propose that the indexation may be applied directly for the upfront tariff itself at 100% of the WPI on 1.1.2010, and the proposed tariffs be increased proportionately.</td></tr>
<tr><td></td><td>(f). The estimation of civil cost include miscellaneous cost at Rs.5.47 crores apart from general miscellaneous capital cost estimated as per the guidelines (at 5% of the civil and equipment cost) at Rs.17.15 crores. Please give the items covered under the miscellaneous cost (Rs.5.47 crores).</td><td>In our understanding the guidelines provide for general miscellaneous cost at 5% of the overall civil and equipment cost of the project on a notional basis. Perhaps, that has to be taken into account in any case, as per guidelines. This is a notional figure to take care of unforeseen eventualities and contingencies.

Whereas, the Consultant has considered an amount of Rs.5.47 crores as cost of miscellaneous structures. These largely include the other civil structures like office, lift house, water tankages, guard house, security facilities, conference rooms, other sheds and storage rooms, parking (hard paved areas),</td></tr>
</table>

<table>
<tr><td></td><td></td><td>etc. This figure represents the estimated actual expenditure which will be incurred while implementing the project.</td></tr>
<tr><td>(vi).</td><td>The miscellaneous capital cost of Rs.17.15 crores estimated by the port is not considered for calculating 16% ROCE and also for estimating other expenses (at 5% of gross value of assets) under the operating cost. The calculations may be modified in light of the above observation.</td><td>The miscellaneous capital cost of Rs.17.15 crores has been considered while calculating ROCE.

May we invite kind attention to the last entry on page 20 of our proposal, - (vii) – “operating cost”</td></tr>
<tr><td rowspan="3">(vii).</td><td><u>Operating Cost Estimation</u>:</td><td></td></tr>
<tr><td>(a). The unit rate of power considered in the upfront tariff fixation of the coal terminal in August 2008 was Rs.4.50. The port has adopted the same unit rate for the proposed iron ore terminal. Confirm whether the unit rate of power considered is the prevailing rate and substantiate it with copy of recent electricity bill.</td><td>The unit rate of power, considered at Rs.4.50, is actually much lower than the prevailing rate being paid by MOPT. MOPT draws power for its MOHP, Berth No.9, from ‘Reliance Energy Limited’, and presently we are paying a unit rate of Rs.11.44. A copy of the latest bill is furnished. We may respectfully point out that TAMP may kindly take this rate into consideration for fixing upfront tariff.</td></tr>
<tr><td>(b). It is not clear which unit rate is adopted from the existing Scale of Rates for estimation of lease rental. Please indicate the same.</td><td>The lease rentals rate has been adopted as Rs.316 per 10 sq. mtrs. per annum. TAMP had revised the rentals at Rs.292 per 10 sq. ft. per annum in the year 2004. On this rate 2% escalation p.a. is applied on compounded basis.</td></tr>
<tr><td>(viii).</td><td>(a). An exclusive rate for barge bound cargo has been proposed by the port by excluding the capital cost of rail tracks and wagon tippler. Certain capital assets which may not be relevant to rail bound cargo like barge unloaders (costing Rs.40.00 crores) assets, if any, deployed for transferring cargo from barges to stackyard, etc. are however, not excluded while determining the composite handling rate for rail bound cargo. This inconsistency may be corrected.</td><td>(a). While calculating the proposed upfront tariff for barge borne cargo, we have adopted the procedure followed for fixation of upfront tariff in the case of NMPT.

Consequent upon reduction of the gross fixed assets value by cost of barge handling equipment (Rs.40 crores), the composite tariff charges both, i.e. the rail borne cargo, as well as for the barge borne cargo, will also have to be reworked as follows:

(i). Rail Borne Cargo:

<table>
<tr><th></th><th>Rs. (crores)</th></tr>
<tr><td>Gross fixed asset value (-) 342.90 crores, less cost of barge unloaders (Rs.40 crores)</td><td>302.90</td></tr>
<tr><td>16% ROCE on Rs.302.90 crores as</td><td>48.46</td></tr>
<tr><td>O & M cost Rs.76.76 as (reduced by 7% of Rs.40 crores) – 73.96 crores i.e. Rs.2.80 crores as</td><td>73.96</td></tr>
<tr><td>Revenue requirements</td><td>122.42</td></tr>
<tr><td>Iron ore handled</td><td>7.2 MMT</td></tr>
<tr><td>Composite tariff cap per ton iron ore handled</td><td>170.02</td></tr>
<tr><td>Apportionment of tariff cap – 98%</td><td>166.62</td></tr>
<tr><td>Towards Cargo handling – 1%</td><td>1.70</td></tr>
<tr><td>Towards storage charges beyond free time – 1%</td><td>1.70</td></tr>
</table>
</td></tr>
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<table>
<tr><td></td><td></td><td>(ii). For Barge Borne Cargo:

However, the cost of barge unloaders (Rs.40 crores) will have to be taken into consideration for computing the composite charges for barge borne cargo. This would be as below:

<table>
<tr><th></th><th>Rs. (crores)</th></tr>
<tr><td>Cost of Barge Unloader</td><td>40.00</td></tr>
<tr><td>ROCE @ 16%</td><td>6.4</td></tr>
<tr><td>Repairs & Main. @ 7% of Rs.40.00 crores</td><td>2.80</td></tr>
<tr><td>Insurance @ 1% of Rs.40 crores</td><td>0.40</td></tr>
<tr><td>Depreciation @ 10.34% of Rs.40 crores</td><td>4.14</td></tr>
<tr><td>Other expenses @ 5% of Rs.40 crores</td><td>2.00</td></tr>
<tr><td>Total</td><td>15.74</td></tr>
<tr><td>Iron ore handled</td><td>7.20 MMT</td></tr>
<tr><td>Rate per ton</td><td>21.86</td></tr>
<tr><td>98% for handling</td><td>21.42</td></tr>
<tr><td>Handling charges (Barge Borne)
As originally proposal (161.39 + 21.42)</td><td>182.81</td></tr>
<tr><td>Storage charges (Barge Borne)</td><td>2.02</td></tr>
<tr><td>Miscellaneous charges (Barge Borne)</td><td>2.02</td></tr>
</table>
</td></tr>
<tr><td></td><td>(b). The proposal does not explain whether any jetty or berth is separately envisaged for receiving the cargo by barges, its length, width etc., any transfer system envisaged for transfer of cargo from barges to the stackyard, any other asset specifically for barge bound cargo. Please furnish these details and also indicate the capital cost estimation for each of these items and where they are factored in the upfront tariff calculation. Please list out the tariff payable by the barges.</td><td>A separate jetty is envisaged for receiving the cargo by barges. The details of its length, width, etc. are as follows:

Length - 300 mtrs.
Width - 20 mtrs.

The Barge unloaders (estimated cost Rs.40 crores) will unload the iron-ore from the barges, which will be transferred through the common conveyor system to the stacking area.</td></tr>
<tr><td></td><td>(c). A flow chart of the operations may be furnished for ease of understanding.</td><td>Broadly the handling of iron ore at the terminal will be as follows:

(i). Rail borne cargo:
Brought to WOB terminal in rail wagons – tippled – carried by conveyors – stackers – stacked – Reclaimed – conveyed to shiploader – loaded on to ships

(ii). Barge borne cargo:
Barge received at barge berth – unloaded by gantry / grabs – put into hopper – conveyed to stacker – stacked – Reclamation – conveyed to shiploader – loaded on to ship</td></tr>
<tr><td></td><td>(d). The port may if necessary, consider to segregate the capital cost directly related to rail / barge movement, allocate common assets on appropriate basis and estimate the revenue requirement for both the service</td><td>May we respectfully submit that the unit handling rates as at (viii). (a).(i). and (a).(ii)., have been worked out on the same model as NMPT.</td></tr>
</table>

	separately. The unit handling rate may be determined with reference to the share of respective cargo receivable by rail / barge.	
	(e). The share of cargo to be received by rail / barges with reference to the optimal capacity may be indicated.	The share of cargo is estimated as follows: Rail borne cargo – 5.2 to 6 MMTPA, - barge borne cargo(s) 2 MMTPA. Aggregate – 7.2 to 8 MMTPA.
(ix).	Though the port has proposed concessional tariff for coastal vessel in berth hire, the revenue impact of allowing such concession is not considered while arriving at the proposed rates. The port may, therefore, reckon this factor for arriving berth hire based on the ratio of foreign and coastal cargo expected at the iron ore terminal to ensure that the estimated revenue requirement can be achieved by the BOT operator at the proposed tariff level.	The revenue impact of possible concessional tariff for coastal vessels in berth hire charges is not factored, as the terminal will be a 100% iron ore export facility. If, in any eventuality, coastal cargo has to be handled, then only the concessional tariff will applied. Since we do not anticipate any coastal cargo, this is not considered.
(x).	(a). The port envisages an investment of Rs.269.15 crores by the selected operator towards construction of break water 620 mtrs. estimated at Rs.197.40 crores and Rs.71.75 crores for construction of Mole 230 mtrs. Please clarify whether the proposed iron ore terminal will be the sole beneficiary of this investment in the next 30 year period.	We confirm that the proposed iron ore terminal operator at WOB, will be the sole beneficiary of the investment in the breakwater and mole, for the next 30 years period.
	(b). Clarify whether the statute permits the operator to collect port dues. It is also not clear whether the port dues prescribed in the Scale of Rates of MOPT will also apply to the vessels calling at the iron ore terminal in addition to the port dues proposed to be collected by the operator?	Since the operator is investing in the Breakwater, Mole, etc., he has every right to collect port dues. However, conservancy functions like maintenance of the Navigation Channel of MOPT, maintenance of the mooring basin within the WOB facility, etc. will remain within the domain of MOPT. Hence, a portion of the revenue share by way of port dues has to come to MOPT. Further, since the prescribed port dues will be in the specific context of only the WOB terminal; upfront port dues, which will now be notified by TAMP, will apply only to the new WOB terminal, and the port dues which have been already prescribed in the general Scale of Rates of MOPT will continue to apply to the existing facilities at the port, as also for future facilities which come up on the east of the existing Breakwater of MOPT, other than the WOB terminal.
	(c). It may be noted that the Chennai Port Trust with reference to their proposal for fixation of the upfront tariff proposal for Mega Container Terminal have considered the construction cost of break water envisaged to be incurred by the operator in the berth hire calculation.	In our considered opinion, the proposed Breakwater and the Mole are certainly not part of the cost of the Berth. The return on the breakwater and mole should be considered as part of the port dues, and not for purposes of berth hire charges.
(xi).	<u>Proposed Scale of Rates</u>:	
	(a). Proposed note (ii) under 'Schedule 2 - Cargo handling charge' may be elaborated to cover the services included in the composite tariff for barge bound cargo.	Under the services for barge borne cargo, in the composite charge, we will cover receiving of the barge at barge jetty / barge, its unloading, conveying the unloaded iron ore, stacking, reclaiming, conveying, to shiploader, and then finally loading the ship. May we place on record, that at Berth No.9 (MOHP) of MOPT, this is the existing pattern of having a composite tariff.

	(b). The norms in the guidelines prescribe turnover factor of 12 with 25 days free period. Since the port has proposed to increase the turnover to 14, the free period may be suitably reduced to enable the operator to earn the earmarked revenue from storage charges.	Regarding the free period of 25 days, the same has been adopted as per guidelines. However, since we do not expect to achieve a turnover in excess of 14, the free storage period may be reduced proportionately, hence we propose the storage period of 20 days (25 x 12/14). This point has also been raised by M/s.ESSAR Shipping, who have suggested reduction in free storage period.
	(c). The upfront tariff calculation (page 17) shows a cap of Rs.1.83 per tonne in the storage charge. The rate proposed in the Scale of Rates is, however, Rs.12 per tonne for the first slab and thereafter it is doubled for the subsequent slabs. The rate proposed is not supported by any calculation. The share of capacity which is likely to avail storage beyond the proposed free period and the stay of cargo in each slabs is not reckoned with for determining the unit rate. The MOPT may review and modify the unit rate of storage charge.	The cap of Rs.1.83 per tonne in the storage charge is as per guidelines (one percent of total revenue requirement). However, in actual practice, this is very low and not at all detrimental for shippers. With a low penal storage rate of Rs.1.83 per tonne, shippers, particularly the trade exporters, will use the port stacking areas for speculation. There have been instances of iron ore exporters at berth no.9 (MOHP) at MOPT, taking more than 40 days for aggregating cargo. At the rate of Rs.1.83 per tonne, there will be no deterrent for shippers. Hence, as a reasonable rate, after the free storage period of 20 days, we have proposed a rate of Rs.12 per tonne for the first 5 days, as in our view, approximately 6 to 8% of the composite tariff should be charged as storage charges for overstay. After the first 5 days, this rate should be doubled, and so on.
	(d). In view of our advise to update the capital cost estimates with reference to the prevailing rate, the indexation in the upfront tariff will be with reference to 1 January 2010.	As requested in reply to query (e) of para (v) (capital cost escalation), in respect of indexation of the capital cost, we may straightaway apply 100% of the indexation to the upfront tariff, - specifically, escalation should not be at the rate of 60% increase in WPI as per TAMP norms / guidelines, as this escalation rate can be applied only after the upfront tariff cap is notified. Right now we are in the process of fixing the tariff caps, and hence 100% of the increase in WPI should be taken into account. Accordingly, as proposed in (e) above, the various upfront tariff may be fixed by applying a percentage of 108.56%.

6.1. A joint hearing in this case was held on 8 March 2010 at the Mormugao Port Trust premises. The MOPT made a power point presentation explaining the salient features of the proposal. At the joint hearing, MOPT and the concerned users/ user organisations, short listed applicants and prospective users have made their submissions.

6.2. At the joint hearing, the MOPT was advised to take action on the following points:

(i). A detailed note on removing the quay and yard capacity mismatch after examining the possibilities of improving the yard capacity.

(ii). M/s.MSPL Limited has been advised to file its written comments within 2 days on the subject proposal to MOPT. The MOPT should within a week of receipt of such comments forward them to TAMP alongwith its remarks.

6.3. As decided at the joint hearing, the MOPT vide its letter dated 28 March 2010 has furnished its response which are summarised below:

(i). Calculation of quay capacity and yard capacity was discussed at length during the joint hearing. As stated in the proposal and as reiterated during the joint hearing,

quay capacity and yard capacity have been calculated in accordance with the norms laid down in the government guidelines, which have been duly notified by the TAMP. Quay capacity and yard capacities are calculated on two different parameters as per the notification. Quay capacity is calculated on the share of type of vessels, and their ship day output, as per the norms for fixation of upfront tariff. Thus, wherever the proportion of Cape-size and Panamax-size vessels is more, the optimal quay capacity will be high, irrespective of yard capacity, as the marine operations and capacity are completely independent of the land side operations. Thus, quay capacity is independent of yard capacity. In our case, since 80% of the ships are expected to be panamax and post-panamax (camsar max), the quay capacity is bound to be high whereas yard capacity is based on the quantity that can be stacked per square meter, and most importantly on the turnover ratio of the storage plot in a year.

(ii). These are not relatable at all to the types of ships or berth day output. Turnover of plot in any port depends on the evacuation facilities available in the respective port, as well as capacity of shippers to aggregate the cargo. As has been explained during the joint hearing, MOPT has a constraint of the actual area available for storing the cargo. Besides, there are severe constraints in aggregation of cargo due to poor rail connectivity. At the moment, MOPT sometimes receives only 2 railway rakes per day, on an average 4 rakes per day in any year. In the last 2 years, MOPT has never received more than 5-6 rakes per day. 6 rakes a day is a rarity. Since the proposed WOB terminal is largely dependent upon receipt of iron ore by rakes, it is not expected to receive more than 7 to 8 rakes per day, in future with improved rail connectivity over a long period of time, which itself restricts the yard capacity to a maximum of 6 to 7 million tonnes p.a.

(iii). Even the area which is being considered for storage yard is available after reclamation of water front only. Within the limited available area, port has to calculate the yard capacity. As stated in the proposal, port has been able to get the yard capacity of 7.2 million MTs p.a, only after considering turnover of 14, as against 12 as per the guidelines and norms. If the prescribed norm of 12 is strictly considered, the yard capacity would be much lower, at 6.17 million MTs. If port has to match the yard capacity with quay capacity, then port has to necessarily have an area of approximately 1,23,000 square meters only for storage, which is next to impossible. Besides, port should be able to receive that much (12 MT) of cargo (iron-ore), which is going to be impossible. As explained during the joint hearing, total area available for the project including storage is only 1,40,000 square meters, out of which at best 70,000 square meters can be earmarked for storage yard, and balance for other facilities like construction of berths, conveyor galleries, transfer towers, wagon tippling station, marshalling yard, laying of railway tracks (at least 6 sets), buildings, roads, water supply and drainage system, etc.,

(iv). In view of the above, removal of mismatch between quay capacity and yard capacity just does not seem to be possible in this project. Even in the coal terminal project of Berth No.7 at MOPT (for which the concession has already been signed), TAMP has accepted yard capacity of 4.61 MMTPA and fixed upfront tariff, whereas quay capacity in that case was in excess of 8.8 MMTPA. The upfront tariff has been fixed after taking only the lower of the two i.e., only 4.61 MMTPA. Further, as per the norms for determination of optimal yard capacity, “Area” means area of the yard made available by the port for stackyard development and not the total area available for the project. Therefore, the area to be considered for determination of yard capacity is only 70,000 square meters.

(v). In conclusion, it is pointed out that there are bound to be differences between yard capacity and quay capacity in PPP projects at major ports in India, due to the uncoordinated development of facilities till now. In some projects, differences could be fairly pronounced, as in the present case, because while on the one side we are able to receive panamax and post panamax vessels due to the available drafts of (-)14.1 meters below CD, we are unable to match the yard capacity, simply due to acute shortage of land for storage of cargo.

(vi). As observed by the TAMP, MSPL was required to forward its written comments on the subject proposal of the MOPT within 2 days from the date of joint-hearing which was held on 8th March 2010. Infact, MSPL had itself offered to send comments. However, we have not received any communication from MSPL till date and therefore, TAMP may kindly process our proposal for upfront tariff fixation in the absence of comments from MSPL. It appears that MSPL may not be interested in sending any comments. Hence, TAMP may kindly not hold up our proposal due to irresponsible actions of MSPL.

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

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

(i). The proposal of Mormugao Port Trust (MOPT) in reference is to fix upfront tariff for handling Iron Ore at a facility to be developed at West of existing Breakwater (WOB) on Build, Own, Operate and Transfer (BOOT) basis.

As per clause 2.2. of the upfront tariff guidelines of 2008, the tariff caps to be prescribed now shall apply to all the projects to be bid out for Iron Ore handling projects at MOPT during the next 5 years. The MOPT has acknowledged this position.

MOPT has, however, stated that it is in the process of developing another project, in which the barge borne iron ore will be mechanically handled by Floating Crane(s) and loaded on to gearless / geared ships at Mooring Dolphins and raised a doubt as to whether the tariff caps to be prescribed now will also apply for the said future project. As brought out at clause 2.2. of the upfront tariff guidelines, the tariff caps can be applied to projects bid out subsequently in the same port, provided it is for handling identical commodity or for providing similar services. We do not have the details of the future project referred by MOPT. The methodology of tariff setting envisaged by the guidelines clearly indicates the same tariff cap can apply to future project only if the capacity, order of investment, productivity parameters and handling methods are same.

(ii). The proposal of MOPT generally complies with the guidelines issued for upfront tariff setting vide Notification No.TAMP/52/2007-Misc dated 26 February 2008. Deviations from the guidelines proposed by MOPT, are, inter alia, discussed in the subsequent paragraphs.

(iii). Optimal Terminal Capacity:

(a). Optimal Quay Capacity:

(i). The MOPT has computed the optimal quay capacity by considering the share of Panamax Vessels (80%) and Handymax Vessels (20%) only. It has not considered the share of Capesize Vessels in the quay capacity computation. Initially, the MOPT in its proposal has stated that the proposed terminal can handle Capesize Vessels over next few years with expected deepening of the channel. Subsequently, the MOPT has maintained handling of capesize vessels in future may not be possible as it does not have funds for dredging and deepening the channel. M/s.MSPL, one of the bidders, during the joint hearing proceedings have requested to consider atleast 10% of the vessels as Capesize vessels. Nevertheless, the judgment of MOPT in this regard is relied upon. However, it should be clearly understood that the tariff caps to be fixed now will be reviewed and adjusted, if capesize vessels are handled due to improvement in draft in future.

(ii). Considering the share of Panamax and Handymax vessels and based on the ship day output of the respective vessels as prescribed in the upfront guidelines, the optimal quay capacity works out to 12.52 Million Tonnes.

(b). Optimal Yard Capacity :

(i). The major issue in this case is determination of yard capacity. A total land area of 140,000 sq. mtrs. is envisaged to be reclaimed for the project of which only 70,000 sq. mtrs. is proposed to be utilised for cargo storage purpose. Even in the cargo storage area so earmarked only 70% will be used for effective storage after providing space for movement of equipment, transit way inside the yard, etc. This means, only about 35% of the total land area to be allotted to the private operator will be utilised for cargo storage. The port has adopted a normative stacking factor of 15 and considered a plot turnover of 14, as against the normative level of 12, to determine at the yard capacity. Applying the 70% scale down factor, the optimal yard capacity is worked out to 7.2 million tonnes which is only about 57% of the quay capacity.

(ii). As can be seen from the factual position narrated in the earlier part of this Order, several attempts were made by this Authority to require the MOPT to re-examine the relevant parameters in order to remove the wide mismatch between the quay and yard capacity. The feasibility report, on the basis of which the port has formulated its proposal, has not estimated the area proposed to be allocated for cargo storage based on any detailed calculation and lay out drawings but relied more on judgement. Though, we do not question the technical competence of consultant of MOPT in correctly judging the requirement, this aspect is pointed out to show that there could be a scope for change in the area allocated for storage of cargo, if a detailed analysis is made by actual calculation of the area requirement for different utility and facility to be developed. Even after our advice, the MOPT has maintained that there would be no scope for any improvement in the yard area because of the constraints imposed on the physical features of the location. No plans in this regard have been submitted by MOPT. It has also emphatically maintained that the turnover ratio cannot be improved further due to connectivity issues and customer mix.

(c). Optimal Terminal Capacity:

(i). The quayside capacity is determined for a berth with minimum equipment support as envisaged in the guidelines. There will be no scope for this Authority to reduce quay capacity and consequently capital cost, to match the yard capacity of 7.2 million tonnes.

(ii). In view of the provisions in the guidelines and the categoric assertion of MOPT about the inability to make any further improvement in the yard capacity, this Authority is constrained to consider the optimal capacity of the terminal as 7.20 milllion tonnes, being a lower of the optimal quay and yard capacity.

(iii). The MOPT has observed that differences are bound to exist between the yard and quay capacities in PPP projects due to uncoordinated development of facility till now. The concern of this Authority is such a mismatch results in idle investment and higher tariff. The major portion of the capital cost is civil cost and it fully captures development of 140,000 sq. mtrs of area. If at a later stage the storage yard area or any other parameters considered for determining yard capacity undergoes a change, it will result in significant increase in Terminal capacity assessed now and at the

upfront tariff determined may result in unindented financial gain to the operator. It may be significant here to point out that such gain, if it accrues, will not be a result of his efficiency but may be due to the parameters assumed at the planning stage. This Authority is only mandated to fix the tariff and cannot go into the merits and demerits of the particular project. Nonetheless, in view of the wide gap between quay capacity and yard capacity, this Authority requests the concerned Authorities in the Government who would be granting project clearance to carefully consider the issue of mismatch of the capacity in this regard. The MOPT is requested to bring the observations of this Authority to the Government at the time of seeking clearance of the project.

(iv). Capital Cost:

(a). M/s.ESPL is of the view that overall capital cost pertaining to the project is underestimated. M/s.ESPL has requested to re-evaluate the capital cost and to arrive at a more realistic capital cost considered by MOPT. The MOPT has stated that it has relied upon the capital cost estimates given by the Consultant in the Project Report. MOPT has also initially confirmed that the cost of equipment, plant and machinery are at the current market prices.

(b). When asked to update the capital cost estimates to reflect the current market rate of 2010, the Port has casually suggested to increase the tariff to be set by 10%. This position is not at all acceptable to this Authority. The Port should have carried out an exercise to update the cost estimate as the port itself has maintained in one place that applying inflation indexation to the capital cost may not be appropriate. It is noteworthy that the estimates provided by the port trust are not backed by any budgetary quotations but has mainly relied upon the estimates given by its consultants. In any case, the port has confirmed that necessary contingency provisions are also made while drawing up the estimates by its consultants. This Authority relies upon the capital estimate as initially furnished by the port in its proposal. If the port can review its capital estimate before the RFP stage, it can seek a review of the tariff to be fixed now based on the revised capital cost.

(c). Iron Ore handling activity:

(i). Civil Construction cost:

The upfront tariff guidelines broadly indicate the civil works involved for iron ore terminal and require the port to estimate the civil cost. The items considered under civil works generally do not adhere to the normative list of items stipulated in the guidelines. On being pointed out, the MOPT has clarified that the items have been considered under different heads in the capital cost estimates. As clarified by MOPT, civil construction costs are derived from similar construction projects in Goa and elsewhere. The guidelines stipulate that the civil cost will be as estimated by the concerned port trust. The estimates of civil cost as estimated by MOPT are considered in this analysis. The civil cost of Rs.100.90 crores as furnished by MOPT is considered in the analysis.

(ii). Equipment Cost:

The equipment cost estimated by the port does not include equipments like cranes, pay loaders as prescribed in the guidelines. The port has clarified that neither cranes or pay loaders are needed for conveying iron ore tippled from railway wagons to stacking area nor for unloading barges and conveying ore to the stack area. The iron ore is to be reclaimed by stackers / reclaimers and loaded by ship loaders on to the ship. However, MOPT has considered the cost of 2 barge unloaders in the equipment cost, which is not as per the

norms given in the guidelines. Nevertheless, considering the fact that such barge operation is already in vogue at MOPT, the cost of 2 barge unloaders amounting to Rs.40 crores is included in the equipment cost estimates. The equipment cost of Rs.242 crores as given by MOPT is considered in the analysis.

(iii). Miscellaneous Cost:

The guidelines prescribe a norm of 5% of civil and equipment cost as miscellaneous capital cost. The suggestion made by M/s.ESPL to consider miscellaneous cost at atleast 30% of the civil and equipment cost is not as per the norms prescribed in the guidelines. The miscellaneous capital cost is considered at Rs.17.15 crores calculated at 5% of the aggregate of the civil and equipment cost.

(iv). The total capital cost estimate for the iron ore handling activity works out to Rs.360.05 crores.

(v). M/s. ESPL 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. As per the Upfront guidelines, annual indexation of the base upfront tariff cap will be allowed @ 60% of the WPI.

(d). Berthing activity:

The berthing activity considers the cost of construction of the berth and cost of dredging alongside the berth which is estimated at Rs.108.95 crores. The guidelines require considering the cost as estimated by the port trust. The estimates furnished by port are considered in this analysis.

(e). Port Dues:

Prescription of upfront port dues is not covered by the guidelines, as the eventuality of requiring a private operator to construct break water might perhaps not been thought about. Earlier in the case of CHPT-Mega Container Terminal Project, this issue arose and the capital and operating costs of break water construction were duly factored in determining berth hire charges. In the instant case, the port has argued for prescription of a separate tariff item of port dues to cover the cost of break water to be constructed by the private operator and confirmed that it would not levy any separate port dues on the vessel calling at the proposed terminal. In view of the assurance given by the port, this Authority is inclined to approve a separate tariff item of port dues instead of recognising the relevant cost under the berthing activity.

The port has confirmed that the proposed terminal would be the sole beneficiary of the break water facility to be created. It has to be recognised that if any facility by another private operator or by the port trust come up within the break water, it would call for review of the port dues fixed now by apportioning the cost on such new facility to come up in future. Such revision of port dues will, however, be done without altering the annual revenue requirement determined now but by altering the unit rate over the larger charging base. The MOPT should also make a provision in this regard in the concession agreement to permit the investor who would be constructing the break water to charge port dues at the revised rate from the users / beneficiaries of the new facility which may come up in future. Subject to the above, the cost of construction of breakwater and mole estimated at Rs.269.15 crores by MOPT is considered in this analysis.

(v). Return on Capital Employed:

Return Capital Employed is calculated at 16% of the total capital cost for the respective activity. It works out to Rs.57.61 crores for Iron Ore handling activity, Rs.17.43 crores for berthing activity and Rs.43.06 crores for port dues activity.

M/s. ESPL has requested to enhance the return to 20% to make the project attractive and viable. It is relevant here to mention that the rate of ROCE is reviewed by this Authority from time to time and the ROCE of 16% is applicable as of now.

(vi). Operating Cost:

(a). Iron Ore handling activity:

(i). The port has considered the power cost at rate of Rs.4.50 per unit. Though the port is presently procuring power from a private operator at a higher rate, it is confirmed that power from the State Electricity Board would be available for this project and accordingly considered in the estimate.

(ii). Repairs and Maintenance cost is considered at 1% on civil cost and 7% of equipment cost as stipulated in the guidelines, which works out to Rs.1.01 crores and Rs.16.94 crores respectively.

(iii). The upfront guidelines prescribe a norm of 1% of gross fixed assets for Insurance and 5% of gross fixed assets for Other Expenses while estimating operating cost. The MOPT appears to have excluded miscellaneous cost component of capital estimates for working out insurance cost and other expenses. The estimates of MOPT are revised to consider Insurance cost at 1% of gross fixed assets amounting to Rs.3.60 crores and other expenses at 5% of gross fixed assets amounting to Rs.18 crores.

(iv). Depreciation is calculated as per the guidelines following the depreciation rates for Straight Line Method (SLM) prescribed in the Companies Act, 1956. Depreciation is computed at 3.34% on civil cost and 10.34% on equipment cost for the relevant group of assets. The MOPT appears to have not considered miscellaneous assets for purpose of depreciation. Since miscellaneous assets are the outcome of the civil and equipment cost, depreciation on these assets have also been considered at the respective rates. The revised depreciation works out to Rs.29.81 crores.

(v). Lease rental is estimated for the total area of 1,40,000 sq. mtrs. as per the prevailing Scale of Rates of MOPT. This works out to Rs.5.31 crores.

(vi). The total operating cost for the Iron Ore handling activity works out to Rs.79.21 crores.

(b). Berthing activity:

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

In view of this position, depreciation @ 3.34% on the capital cost of berth and insurance @1% on capital cost of berth alongwith 1% repairs and maintenance cost is considered in this analysis. The MOPT has, however, not considered insurance cost while estimating operating cost for berthing

activity. The operating cost furnished by MOPT for the berthing activity is moderated to Rs.5.82 crores.

(c). Port Dues activity:

The guidelines do not prescribe any norms for calculation of operating cost for port dues activity. However, in line with the principle adopted for berthing activity, 1%, 3.34% and 1% of the capital cost of breakwater and mole are considered as repairs and maintenance, depreciation and insurance cost respectively. The MOPT has also adopted the same approach, except that it has not considered the insurance cost while estimating operating cost for the said activity. The operating cost furnished by MOPT for the port dues activity is revised to Rs.14.37 crores.

(vii). The statement submitted by MOPT for fixing upfront tariff cap for iron ore terminal has been modified in line with the above analysis. The copy of the statement is attached as **Annex - I**.

(viii). (a). As per the statement, the total revenue requirement from the iron ore handling service is estimated at Rs.136.82 crores, which is an aggregate of operating cost to the tune of Rs.79.21 crores and return to the tune of Rs.57.61 crores.

(b). As per the guidelines, 98% of the total revenue requirement is apportioned to handling charge and 1% each towards storage charge and miscellaneous charge for arriving at the pre-determined tariff.

Accordingly, Rs.134.08 crores is to be recovered from iron ore handling charge and Rs.1.37 crores each from storage charge and miscellaneous charge to meet the total revenue requirement of Rs.136.35 crores.

(c). Since the MOPT proposes to unload and handle iron ore from barges as well as rail, the MOPT has proposed separate handling charge for rail bound iron ore cargo and barge bound iron ore cargo. The segregation of cost items relevant for rail and barge operations is not done correctly by the MOPT. Further the cost so segregated by MOPT was spread over the entire capacity in each of the scenario instead of considering only apportioned capacity of individual operation. Based on the information available, the differential rates for rail and barge operations are worked out by us and attached as **Annex - II**.

(ix). (a). As per the guidelines, 1% revenue requirement is to be met from storage after allowing 25 days free period. In view of a higher turnover ratio of 14 considered by MOPT for determining optimal yard capacity as compared to the norm of 12, the port has reduced the free days to 20 days. M/s.ESPL has made a suggestion to reduce the free days to 10 days to have a turnover ratio of 14. The free days and turnover ratio are directly related to each other and as such to have a turnover ratio of 14, the free days should be around 20 days, as proposed by MOPT.

(b). Considering the revenue earning days available after allowing 20 free days period, if the storage income is calculated considering the rate of Rs.12 per tonne per day as proposed by the port, the income that would be generated from the proposed tariff item is around 81% more as compared to the normative revenue requirement from storage charges. As such, the proposed storage levy of Rs.12 per tonne per day may be reduced to the extent of 81% to arrive at the rate of Rs.2.28 per tonne per day to be made applicable to the first slab. The rates for the subsequent slabs are reset accordingly.

(x). In line with the guidelines, 1% of the revenue requirement is to be met from the miscellaneous charges. Accordingly, this rate works out to Rs.1.90 per tonne.

(xi). Normally the 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 at other Major Port Trusts has already decided to approve the upfront berth hire charge in rupee form only for the stated reasons.

The revenue requirement from berthing service works out to Rs.23.25 crores. The methodology followed by MOPT 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 berth hire charge as calculated by MOPT stands modified to the extent of change in the revenue requirement for the reasons stated in the earlier paragraph. The berth hire is calculated at Rs.1.54 per GRT per hour.

(xii). The levy of port dues is based on the total GRT of the vessels. The revenue requirement from port dues has been worked out at Rs.57.44 crores. The port dues as calculated by MOPT is revised to the extent of charge in the revenue requirement for the reasons stated in the earlier paragraph. The port dues is calculated at Rs.108.53 per GRT.

The working in respect of port dues and berth hire is attached as **Annex - III**.

(xiii). Though the upfront tariff schedule proposed by MOPT specifies concessional berth hire charges applicable for coastal vessels, the port has not considered the revenue impact of allowing such concession. Replying to a query raised in this regard, MOPT has stated that as the proposed terminal will be a 100% iron ore export facility, it does not anticipate any coastal cargo.

Though there may not be any coastal vessel unloading iron ore at the proposed terminal, the concessional rate for coastal category is prescribed to comply with the Government guidelines incase of any such eventuality. Accordingly, concessional berth hire and port dues for coastal vessels is prescribed at 60% of the rate prescribed for foreign going vessel. Concession in composite handling rate is prescribed for coastal movement at 60% of the rate prescribed for normal iron ore cargo.

(xiv). Definition of some of the common terms like foreign going vessel, coastal vessels are included in the upfront schedule in line with the definitions prescribed in Scale of Rates of other major ports / private terminals.

(xv). Some general terms and conditions prescribed in the Scale of Rates of other major ports and private terminals and as stipulated in 2005 guidelines such as status of vessel, classification of vessels into coastal or foreign, coastal concessional conditionalities, berth hire to stop 4 hours after vessel signaling readiness to sail, penal berth hire for false signal, non accrual of storage for the period when the operator is not in a position to effect / deliver / ship the cargo when requested by user for reasons attributable to operator, free days, free days to exclude custom holidays and port non-working days are incorporated in the upfront tariff schedule.

(xvi). The conditionalities proposed by the port regarding interest on delayed payments / refunds, rounding off of the grand total of bill, rates prescribed in Scale of Rates are at ceiling levels and rebates at floor levels, enabling port to rationalise Scale of Rates so as to give relief to users, notifying the lower rates and rationalisation of conditions, users to not pay charges for delays beyond reasonable level attributable to operator, rebate in berth hire in case vessel idles due to breakdown or non availability of shore based facilities, and are also approved by this Authority in the other upfront cases and hence is approved.

(xvii). The note 2(ii) is modified to list down the services included in the composite tariff for barge bound cargo, as listed down by MOPT.

9.1. 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. In the instant case, since the estimation of capital cost and unit rate of operating cost considered in the upfront tariff calculation are as of 1 January 2010 as reported by the MOPT, it be appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2010.

9.2. 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.

9.3. 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.

9.4. 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.

9.5. 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 Mormugao Port Trust. If any action is to be taken against the private operators, the Mormugao Port Trust shall initiate appropriate action in accordance with the provisions of the relevant Concession Agreement.

9.6. 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 Mormugao Port Trust a report containing the terminal's physical and financial performance during the preceding three months.

10. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves the tariff caps for handing iron ore at Mormugao Port Trust attached as **Annex - IV**.

(Rani Jadhav)
Chairperson

ANNEX - I

FORMULATION OF UPFRONT TARIFF FOR IRON ORE TERMINAL AT MORMUGAO PORT TRUST.

Sr. No.	Particulars	Estimates given by MOPT	Estimates moderated by TAMP
I	**Optimal capacity**		
(i)	**Optimal Quay Capacity**		
(a)	Ratio of Vessel Size to be handled	% of vessels	% of vessels
	Number of Panamax vessels (S2)	80%	80%
	Number of Handy size/ max vessels (S3)	20%	20%
(b)	Ship day Output (in tonnes per day)		
	- Panamax vessels (P2)	55000	55000
	- Handy size/ max vessels (P3)	25000	25000
(c)	Quay Capacity = 0.7*((S1*P1)+(S2*P2)+(S3*P3))*365	**12519500**	**12519500**
	Quay Capacity in million tonnes	**12.52**	**12.52**
(ii)	**Optimal Yard Capacity**		
	Area of the yard made available by port for stack yard development (in square metres) (A)	70000	70000
	Area available for stacking (%) (U)	70%	70%
	Stacking Quantity per square metre (tons) (Q)	15	15
	Annual Turnover Ratio of the plot (T)	14	14
	Yard Capacity (in tonnes) = 0.7 * A * U * Q * T	**7203000**	**7203000**
	Yard Capacity (in million tonnes)	**7.20**	**7.20**
(iii)	**Optimal capacity of the Terminal - lower value of the optimal quay capacity and optimal stack yard capacity (in Million tonnes).**	**7.20**	**7.20**
II	**Capital Cost**		
(i).	**Iron Ore Handling Activity**	**Rs. in crores**	**Rs. in crores**
	(a). Civil Cost		
	- Infill	37.00	37.00
	- Railway sidings	19.50	19.50
	- Retaining Structure	4.93	4.93
	- Road Approach	22.50	22.50
	- Water supply requirements	0.50	0.50
	- Electrical, Environment and Security requirements	11.00	11.00
	- Miscellaneous cost	5.47	5.47
	Sub total (a)	**100.90**	**100.90**
	(b). Equipment Cost		
	- Barge unloader (2 nos.)	40.00	40.00
	- Stackers (2 nos.)	35.00	35.00
	- Reclaimers (2 nos.)	35.00	35.00
	- Wagon Tippler (2 nos.)	20.00	20.00
	- Shiploader (2 nos.)	70.00	70.00
	- Conveyor system	40.00	40.00
	- Spares	2.00	2.00
	Subtotal (b)	**242.00**	**242.00**
	(c). Miscelleneous (5% of civil and equipment cost)	**17.15**	**17.15**
	Total capital cost for handling activity (a+b+c)	**360.05**	**360.05**

Sr. No.	Particulars	Estimates given by MOPT	Estimates moderated by TAMP
(ii).	**For Berthing Services**		
	(a). Cost of construction of Berth	91.64	91.64
	(b). Cost of dredging alongside berth	17.31	17.31
	Total Capital cost for berthing services	**108.95**	**108.95**
(iii).	**For Port Dues**		
	(a). Breakwater - 620 meters	197.40	197.40
	(b). Mole - 230 meters	71.75	71.75
	Total Capital cost for Port Dues	**269.15**	**269.15**
(iv).	**Total Capital Cost of the Project (i+ii+iii)**	**738.15**	**738.15**
III	**Operating Cost for Cargo Handling Activity**		
(i).	**Iron Ore handling Activity**	**Rs. in crores**	**Rs. in crores**
	(a). Power Cost (1.4 units per tonne @ Rs.4.04 per unit)	4.54	4.54
	(b). Repair & Maintenance		
	- Civil Assets (1% on Civil cost)	1.01	1.01
	- Mechanical & Electrical Equipment including spares (7% on mechanical and electrical asset cost)	16.94	16.94
	(c). Insurance (1% on Gross fixed asset value)	3.43	3.60
	(d). Depreciation (As per the companies Act)	28.39	29.81
	(e). Lease Rentals	5.31	5.31
	(f). Other Expenses (5% of Gross fixed Assets)	17.15	18.00
	Total Operating Cost	**76.75**	**79.21**
IV	**Revenue Requirement**		
(i).	**Composite Cargo Handling charge**		
	Revenue Requirement		
	(a). Total Operating Cost	76.75	79.21
	(b). Return on capital Employed @ 16%	54.86	57.61
	(c). Total Revenue requirement from cargo handling activity	**131.62**	**136.82**
	Apportionment of Revenue Requirement		
	(a). Iron Ore Handling Charges (98% of the revenue requirement)	128.98	134.08
	(b). Storage Charges (1% of revenue requirement)	1.32	1.37
	(c). Miscelleneous Charge (1% of revenue requirement)	1.32	1.37
	Total Revenue requirement from cargo handling activity	**131.62**	**136.82**
V	**Proposed Upfront Tariff**		
	(i).Composite Handling charge (Rs. Per tonne) (Annex II)		
	(a) .For rail Borne Cargo	179.07	171.17
	(b) .For barge Borne Cargo	161.38	224.66
	(ii) Storage Charge (beyond the free period)	**Rs. Per tonne per day**	**Rs. Per tonne per day or part thereof**
	-First five days	12.00	2.28
	-6th day to 10th day	24.00	4.56
	-11th day onwards	48.00	9.12
	(iii) Miscelleneous Charge		
	- Revenue Requirement (Rs. in crores)	1.32	1.37
	- Capacity (Million Tonnes per annum)	7.20	7.20
	- Miscellenous Charge per tonne	**1.83**	**1.90**
	(iv). Berth Hire Charges (Rs. per GRT per hour) (Annex III)	1.47	1.54
	(v). Port Dues (Rs. per GRT) (Annex III)	103.45	108.53

ANNEX - II

Computation of differential handling rate between Rail and Barge bound Iron Ore Cargo at the proposed terminal at Mormugao Port Trust.			
1	**Total Optimal Terminal Capacity in million tonnes**	**7.20**	
	(i). Rail Bound Capacity (72%)	5.2	
	(ii). Barge bound Capacity (28%)	2.0	
2	**Cost of Capital Assets included in the Total Capital Cost which are relevant for Barge Bound cargo.**	**Barge borne**	**Rail borne**
		Rs. in crores	**Rs. in crores**
	(a). Civil Cost		
	Railway siding	0.0	19.5
	(b). Equipment Cost		
	Wagon Tippler	0.00	20.00
	Barge Unloaders	40.00	0.00
	(c). Miscellaneous (5% of civil and equipment cost)	2.00	1.98
	Total Capital Cost (a + b + c)	**42.00**	**41.48**
3	**Operating Cost linked to Capital Assets**		
	(a). Repair & Maintenance		
	- Civil Assets (1% on Civil cost)	0.00	0.20
	- Mechanical & Electrical Equipment including spares (7% on mechanical and electrical asset cost)	2.80	1.40
	(b). Insurance (1% on Gross fixed asset value)	0.42	0.41
	(c). Depreciation (As per the companies Act)	4.34	2.86
	(d). Lease Rentals (pertaining to railway siding area of 6500 sq. mtrs)	0.00	0.25
	(e). Other Expenses (5% of Gross fixed Assets)	2.10	2.07
	Total Operating Cost	**9.65**	**7.19**
4	**Differential Revenue Requirement**		
	Total Operating Cost	9.65	7.19
	Return on capital Employed @ 16%	6.72	6.64
	Total	**16.38**	**13.82**
5	**Per Tonne handling rate differential between rail and barge bound cargo**		
	Revenue Requirement from handling charge (98%) (Rs. In crores)	16.06	13.55
	Per tonne differential handling rate (in Rs.)	**79.61**	**26.12**

Total Handling Revenue Requirement	134.08
Less: Barge bound cargo Revenue Requirement	16.06
Less: Rail bound cargo Revenue Requirement	13.55
Revenue Requirement from other than rail and barge (Rs. In Crores)	104.48
Total Tonnage (Million Tonnes)	7.20
Base rate per tonne in Rupees	145.05
Thus,	
- Barge bound rate	224.66
- Rail bound rate	171.17

Annex - III

CALCULATION OF BERTH HIRE CHARGES BY CONSIDERING REVENUE REQUIREMENT FROM BERTHING ACTIVITY

Revenue Requirement

(Rs. in crores)

Particulars	Estimates given by MOPT	Estimates moderated by TAMP
a). Operating Cost for Berthing Activity		
Repairs & Maintenance Charge (1% on captial cost for berth)	1.09	1.09
Depreciation (3.34% on captial cost for berth)	3.64	3.64
Insurance (1% on captial cost for berth)	0.00	1.09
Subtotal (a)	4.73	5.82
b). Return on capital Employed @ 16%	17.43	17.43
Total Revenue requirement from Berthing services (a + b)	**22.16**	**23.25**

Sr. No.	Particulars	Unit	As given by MOPT			As moderated by TAMP		
			Panamax	Handymax	Total	Panamax	Handymax	Total
a	Ratio	%	80%	20%	100%	80%	20%	100%
b	Tonnage to be handled	tonnes	5762400	1440600	7203000	5762400	1440600	7203000
c	Ship day Output	Tonnes per day	55000	25000		55000	25000	
d	No of berth days (b / c)	berth days	105	58		105	58	
e	No. of berth hours (d*24 hrs)	hours	2515	1383		2515	1383	
f	Average Parcel size	tonnes	60000	40000		60000	40000	
g	No. of vessels (b / f)	nos.	96	36		96	36	
h	Average GRT	tonnes	45000	27000		45000	27000	
i	Total GRT hours (e * h)	tonne hours	113152582	37340352	150492933.8	113152582	37340352	150492934
j	Revenue Requirement	Rupees			221615000			232499300
k	Berth hire per GRT per hour (j / i)	Rupees			**1.47**			**1.54**

CALCULATION OF PORT DUES

(Rs. in crores)

Sr. No.	Particulars	Estimates given by MOPT	Estimates moderated by TAMP
1	**Revenue Requirement**		
	a). Operating Cost for Port Dues		
	Repairs & Maintenance Charge (1% on capital cost for port dues)	2.69	2.69
	Depreciation (3.34% on captial cost for port dues)	8.99	8.99
	Insurance (1% on captial cost for port dues)	0.00	2.69
	Subtotal (a)	11.68	14.37
	b). Return on capital Employed @ 16%	43.06	43.06
	Total Revenue requirement from Berthing services (a + b)	54.75	57.44
2	**Total GRT of the vessels (as taken from Berth hire computation)**		
	- Average GRT of a vessel	45000 tonnes for Panamax and 27000 tonnes for Handymax Vessels	45000 tonnes for Panamax and 27000 tonnes for Handymax Vessels
	- No. of vessels	96 Panamax and 36 Handymax vessels	96 Panamax and 36 Handymax vessels
	Total GRT of vessels	(45000 * 96 + 27000 * 36) 5292000	(45000 * 96 + 27000 * 36) 5292000
3	**Port Dues per GRT (1 / 2) (Rs. Per GRT)**	**103.45**	**108.53**

ANNEX - IV

MORMUGAO PORT TRUST

UPFRONT TARIFF SCHEDULE FOR IRON ORE HANDLING

1.1 DEFINITIONS:

In this Scale of Rates unless the context otherwise requires, the following definition shall apply.

(i). "**Coastal Vessel**" means any vessel exclusively employed in trading between any port or place in India to any other port or place in India having a valid coastal license issued by the competent authority.

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

(iii). "**Per Day**" means per calendar day unless otherwise stated.

1.2 GENERAL TERMS AND CONDITIONS:

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

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

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

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

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

(iii). Interest on delayed payments / refunds.

(a). The User shall pay penal interest on delayed payments under this Scale of Rates. Likewise, the terminal operator shall pay penal interest on delayed refunds.

(b). The rate of penal interest will be 2% above the Prime Lending Rate of the State Bank of India.

(c). The delay in refunds will be counted only 20 days from the date of completion of services or on production of all the documents required from the Users, whichever is later.

(d). The delay in payment by the users will be counted only 10 days after the date of raising the bills by the Terminal Operator. This provision shall, however, not apply to the cases where payment is to be made before availing the services where payment of charges in advance is prescribed as a condition in this Scale of Rates.

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

(v). (a). The rates prescribed in the Scale of Rates are ceiling levels, likewise, rebates and discounts are floor levels. The operator may, if they so desire, charge lower rates and/or allow higher rebates and discounts.

(b). The operator may also, if they so desire rationalize the prescribed conditionalities governing the application of rates prescribed in the Scale of Rates if such rationalisation gives relief to the users in the rate per unit and the unit rates prescribed in the Scale of Rates do not exceed the ceiling level.

(c). The operator should notify the public such lower rates and/ or rationalisation of the conditionalites governing the application of such rates and continue to notify the public any further charges in such lower rates and/or in the conditionalities governing the application of such rates provided the new rates fixed shall not exceed the rate notified by the TAMP

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

2.1. BERTH HIRE:

The Berth Hire charges payable by masters/owners/agents of the vessel shall be as per rates below:

Sl. No.	Vessels	Rate per GRT per hour or part thereof (Rs.)	
		Foreign Going Vessel	**Coastal Vessel**
1.	All Vessels	1.54	0.92

(i). The period of berth hire shall be calculated from the time vessel occupies the berth.

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

(iii). In case vessel idles due to breakdown or non availability of the shore based facilities of the operator, or any other reasons attributable to operator, rebate equivalent to berth hire charges payable to the Mormugao Port Trust accrued during the period of idling of vessel shall be allowed by the operator.

(iv). (a). Berth hire shall stop 4 hours after the time of vessel signaling its readiness to sail.

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

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

(v). The Penal Berth hire shall be equal to one-day's (24 hours) berth hire charge for a false signal.

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

2.2. PORT DUES:

The Port dues for vessels calling at the Port shall be as per rates below:

Sl. No.	Vessels	Rate per GRT (Rs.)	
		Foreign Going Vessel	Coastal Vessel
1.	All Vessels	108.53	65.12

3. CARGO HANDLING CHARGES:

Sr. No.	Particulars	Rate in Rupees per metric tonne	
		Foreign	Coastal
(i).	Iron Ore Handling Charges		
(a).	For rail borne cargo	171.17	102.70
(b).	For barge borne cargo	224.66	134.80

Notes:

(i). The handling charges prescribed at (i).(a). above for rail borne cargo is a composite charge for unloading of cargo from wagon through unloading facilities at Marshalling Yard, transfer the same upto the point of storage, storage at the stackyard upto a free period of 20 days, reclaiming from stackyard and loading onto the ship, wharfage and all other miscellaneous services not specifically prescribed in the Scale of Rates.

(ii). The handling charge prescribed at (i).(b). above for barge borne cargo is a composite charge for receiving of the cargo at barge jetty / barge, its unloading, conveying the unloaded iron ore, stacking, reclaiming, conveying to shiploader, and loading onto the ship.

4. STORAGE CHARGES:

The storage charge for the cargo stored in the stackyard beyond the free period of 20 days shall be as follows:

(**Rate in Rs. per tonne per day or part thereof**)

	Commodity	Rate for five days for the balance cargo remaining after the free period.	Rate for sixth day to tenth day for the balance cargo.	Rate for eleventh day onwards for the balance cargo.
1.	Iron Ore (all types)	2.28	4.56	9.12

Notes:

(i). For the purpose of calculation of free period Customs notified holidays and Terminal's non- working days shall be excluded.

(ii). Free period for import cargo shall be reckoned from the day following the day of completion of final discharge from the vessel.

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

5. MISCELLANEOUS CHARGES:

The following miscellaneous charges are applicable on the Iron ore handled:

Sr. No.	Particulars	Rate per tonne or par thereof in Rupees
(i).	Charges for all miscellaneous services such as sweeping, collecting, spillage from yard conveyors, galleries etc., moisturizing of cargo, dust separation services, environment etc.,	1.90

6. GENERAL NOTE TO SCHEDULE (2) TO (5) ABOVE:

The tariff caps will be indexed to inflation but only to an extent of 60% of the variation in Wholesale Price Index (WPI) occurring between 1 January 2010 and 1 January of the relevant year. Such automatic adjustment of tariff caps will be made every year and the adjusted tariff caps will come into force from 1 April of the relevant year to 31 March of the following year.

*****

SUMMARY OF THE COMMENTS RECEIVED FROM THE PORT USERS / SHORTLISTED APPLICANTS / PROSPECTIVE USERS AND ARGUMENTS MADE IN THIS CASE DURING THE JOINT HEARING BEFORE THE AUTHORITY

F. No.TAMP/60/2009-MOPT - **Proposal from the Mormugao Port Trust for fixation for upfront tariff fixation of iron ore terminal at the port on BOT basis.**

A summary of comments received from users / user organisations, short listed applicants and prospective users and reply of MOPT thereon are tabulated below:

Sl. No.	Comments of users / user organisations, short listed applicants and prospective users	Comments of MOPT
(1).	**Goa Mineral Ore Exporters' Association**	
(i).	There are certain concerns in regard to the area where the said terminal would come. As indicated in the chart in the MOPT website, it is seen that the new breakwater would be constructed very close to the approach channel leading to Berth No.9. It is expected that this would not result in higher dredging cost to players who do not participate in WOB but have their operations at Berth No.9.	The construction of a new breakwater, West of the existing breakwater will not have any impact on the maintenance dredging costs. Hence, the Shippers / Exporters who use Berth No.9 at present, will not be adversely affected in any manner.
(ii).	It was indicated earlier, that wagon tipplers may be erected to supplement cargo at Berth No.9 and the JICA proposal had planned for an estimated 18 million tonnes to 22 millions tonnes based on this. However, it appears that wagon tipplers may not be used at Berth No.9 but only for the WOB project. In this regard, the total cost investment at Berth No.9 may have to be shouldered by a lower tonnage than as indicated earlier, and this may increase the price / ton at Berth No.9.	Installation of Wagon Tippler at Berth No.9 has not been found feasible in view of the limited land areas, constraints of rail connectivity, issues concerning environment clearance in the context of increasing capacity of the MOHP / Berth No.9, etc. Hence, the MOHP has to be replaced / refurbished without any significant increase in capacity, and without installation of Wagon Tippler at Berth No.9.
(iii).	It has been indicated that the entire tonnage of 8 million tonnes at WOB would be Karnataka Ore and would be bought by railway rakes. It is expected that this holds true and Railways would get additional rakes down the western ghats, which is the current bottleneck.	The proposed WOB facility envisages mainly export of Karnataka ore brought to MOPT by railway rakes. The rail handling facility / wagon tippler is supplemented with a barge receiving facility capable of handling upto 2 Million Tonnes per annum. Accordingly, the TAMP proposal envisages cargo handling rates for both, i.e. rail handled ore, as well as the barge handled ore. As regards GMOEA's concern about the current bottleneck due to rail connectivity, we understand that the Indian Railways have virtually finalised the proposal for doubling the Hospet - Vasco rail connectivity. According to unofficial information available with us, the project of doubling is in its final stages and is awaiting CCEA approval. Thus, adequate rail connectivity is expected in place by 2014-15.
(iv).	The total project cost has been indicated is Rs.721.01 crores. No comments can be offered on this in the absence of adequate details. The MOPT may also give an idea	GMOEA seems to be just making some observations about the projected cost of Rs.721.01 crores. It is clarified that the cost estimate is based on the conclusions of the

	about rocky levels exposed below upto 14.1 mtrs. Costs may increase substantially if substantial quantity has to be dredged in rocky strata.	MOPT Consultant, as reflected in the Techno-feasibility report. The Techno-feasibility report has been hosted on the MOPT website and is available for scrutiny / examination by all. Details about subsoil strata / existence of rock, etc. is covered in the Techno-feasibility report.
(v).	With the charges proposed for operations at WOB being much higher than the Berth No.9 charges, it is felt that Berth No.9 charges may be under pressure or preferential treatment may be given to the WOB at the cost of Berth No.9.	The observations of GMOEA appear to be baseless. Essentially, the WOB facility is for direct export of the Karnataka ore brought to MOPT in railway wagons. The limited barge facility provided at WOB is only to supplement the rail handling of the ore and to provide a sense of comfort / security to the terminal operator for handling Goan Ore brought to the WOB facility in barges. In any case, it is noteworthy that the total exports of iron ore from Goa (MOPT and Panaji put together) were 44 MMT in 2008-09. Berth No.9 has continued to be the preferred mode for many years, and will always be in demand, even if the level of iron ore exports from Goa are reduced significantly in the near or even distant future. There is, therefore, no question of berth no.9 coming under any pressure whatsoever, or being given less favourable treatment than WOB.
(vi).	It is expected that all necessary approvals by way of Environmental Clearance and other clearances / requirements that needs to be obtained / fulfilled are processed in advance.	The Ministry of Environment and Forests (MoEF), Government of India has already accepted the WOB project as a feasible project from the environment standpoint. WOB is being considered as an “expansion project of an existing Major Port” and “Terms of Reference (TOR)” have been agreed to be framed by MoEF in a recent meeting held on 29 January 2010. The Terms of Reference will be posted on the MOPT website immediately after receipt of the same from MoEF (expected with the next fortnight). The comprehensive Environmental Impact Assessment (EIA) study is being carried out by M/s.WAPCOS, New Delhi and for the impact on coastal morphology are being assessed by M/s.CWPRS, Pune. Since Environment Clearance / CRZ clearance has recently been obtained for the 5 MMTPA Coal Terminal at Berth No.7 of MOPT, for which a comprehensive EIA was carried out for the area within 10 kms. radius of MOPT, environment clearance is virtually a certainty for the WOB project.
(2).	**MSPL Limited**	
	MSPL Limited has not furnished any specific comments on the proposal of MOPT for upfront tariff fixation for iron ore terminal. It has quoted the queries raised by the prospective bidders mainly relating to bidding matters and has furnished the query raised by prospective bidders to the port and	MOPT is retaining the water area up to a distance of 150-200 mtrs. parallel to the existing breakwater on the western side of the breakwater, for its own use. The waterfront / water area near abouts the southern base of the MOPT existing breakwater and the Headland Hill, will be

	clarification thereon furnished by the port. The MOPT has clarified that the water area of 150 mtrs. width along the western side of the existing breakwater will not be leased to the successful terminal operator. This water area will remain with the port. Only the water area beyond 150 mtrs. from the existing breakwater of MOPT, on the western side, will be made available for the Iron Ore facility.	made available to the terminal operator for providing an approach to the WOB facilities. The extent of water front which will be allowed to be reclaimed will be decided on a mutually acceptable basis at the time of finalisation of the DPR. A certain portion of the reclaimed land within the 150-200 mtrs. parallel may be used by MOPT for its own purposes. These details will be worked out at the stage of the DPR. It is further clarified that the concessionaire will pay rentals for the total land area reclaimed over the existing water area for creating facilities including breakwater, berths, mole, stacking area, etc. Further, if any portion of the Headland Hill is utilised for the project, rentals will be charged for the land area in accordance with the Scale of Rates.
(3).	**M/s. ESSAR Shipping, Ports & Logistics**	
(i).	**Calculation of Terminal Capacity:**	
	(a). MOPT has considered a stackyard turnover of 14 times while determining the Yard capacity as against the TAMP guidelines which considers a turnover of 12 for calculation of yard capacity. MOPT has cited the example of Berth No.9 where MOPT is currently able to achieve a higher turnover. MOPT has not supplied any supporting data or detailed analysis to support this argument which should include details of the existing yard area available for stockpiling, designed stacking capacity, number of stackyard machines, number of users, parcel sizes etc in order to conclusively determine if the two facilities are similar and a turnover of 14 is achievable at the new facility. The yard turnover is a function of various factors like total yard area available, rate of receipt by barges and rail, rate of despatch by ships which may be irregular at times, number of parcels, number of users, stackyard machines, distance to berth etc. In order to increase the Yard capacity it is suggested that MOPT should consider increasing the stockpile area instead of considering a higher turnover which may not be feasible and may result in overestimating the Terminal Capacity leading to concessionaire incurring big losses.	Essar correctly states that yard turnover is a function of many combined factors. At a basic level, the storage yard must buffer cargo arrival against ship arrival and loading rates. However, the most important factor in determining cargo velocity through the storage yard is the capacity and rate of stockpiling desired by the cargo owner. This factor cannot be quantified in terms of norms or guidelines, but rather is a function of the market conditions. Therefore, the best way to approximate the turnover rate is to use the benchmark set by the current operation, which in the case of MOPT is 11.94 turns per annum at Berth 9. The respondents to the West of Breakwater tender are free to make any turnover assumptions that may fit their own market conditions as well as to propose a configuration to the storage yard that may better suit their specific needs. However, the current trends at MOPT cannot be ignored. At present port is having an area of 80,000 sq. mtrs. of area for stacking 1 million tons of iron ore at Berth No.9 (MOHP). This area has been divided into plots of different sizes and given to different parties. It is seen that very few holders, that too only those who hold larger plots are achieving turnover of more than 15 times. All others achieve much lower turnover. Further, MOHP is not operated for a period of 45 days during monsoons. Thus, turnover of 14 is fully justified. It may please be kept in mind that the proposed (new) WOB facility will be a common user facility. Hence, turnover can never be high as some users will be exporting smaller parcels and will take more time to aggregate cargo.
	(b). The free storage time considered by MOPT is 25 days. Hence storage charges	The free storage time proposed is in accordance with existing MOPT tariff terms

	(i.e. penal charges for shipper to evacuate the stockyard in order to enable other users to use the stackyard) are applicable only after this 25 free storage time is exceeded. Considering all shippers use the stackyard for the full free storage period, the turnover of the stackyard works out to be just 13.2 times (considering 330 working days) Hence considering a turnover of 14 times for calculation of stockyard capacity for such a high free storage period is not practical. It is suggested that the free storage period be reduced to 10 days and further the storage charges should be set at a high rate so that shippers are encouraged to evacuate the stackyard promptly. This will not only ensure higher turnover of the stackyard but also make enough stackyard space available for all users.	as approved by TAMP. The proposer is free to suggest an alternative tariff structure. However, there is no assurance that it can be approved. We have now modified our proposal to 20 free days as against earlier 25 free days.
	(c). Calculation of berth capacity does not take into account the monsoon season during which loading of Iron Ore at Mormugao is restricted. The monsoon restrictions which are presently faced by IOHP terminal of MOPT should be applicable for the proposed BOT terminal while determining the Terminal capacity.	Essar is correct in assuming that terminal loading operations will be constrained by sea conditions during the monsoon season. These factors were considered in the design recommendations for the ship loading berths and equipment in order to provide higher than necessary loading rates. During the monsoon season, vessels can be loaded during windows of favourable weather at a high enough rate to compensate for periodic shut-downs for strong wind conditions.
(ii).	**Calculation of Capital Cost Estimate:** It is felt that the Capital Cost for the project is under estimated and it should be reviewed again. Important areas of under estimation of capital cost are presented below:	
	(a). The civil construction cost estimate of Rs.100.9 crores (excluding berth cost) given in the proposal does include cost of civil works for stockpile area development, civil works for rail tracks of stackers and reclaimers, foundation & structural work of transfer towers for conveyor galleries, water supply & drainage system for the terminal, and construction cost for wagon tippler station/dumper house. The cost of following seems to have been underestimated: ➢ Cost of retaining structure/slope protection work has been considered as Rs.4.93 crores for a quantity of 29,787 cum at a rate of Rs.1650 per cum. It is not clear what is the length of retaining structure considered in this cost. In previous BOT projects of other Major ports this cost has been completely left out. It is envisaged that the height of slope protection will vary from 4.0 m to 14.0 mtrs. and will be required along all the sides of the new basin being created.	At the conceptual level of construction cost estimating, the costs of civil works were included in the overall cost items and not broken out in detail. These costs were derived from similar construction projects in Goa and elsewhere. To prepare a substantive tender, the individual proposer must prepare their own cost estimates according to their own specific needs and business plans.

	➢ The project envisages reclamation of about 70 acres of sea area of average depth of about 10 mtrs to a height of +5.0 m above CD. The total dredging quantity of 7.21 lakh cum as envisaged by MOPT will be inadequate for complete reclamation. Hence it is envisaged that substantial amount of infil will be required from nearby quarries. The TEFR also states that the cost of reclamation in Mormugao is very high because environmentally sensitive state of Goa has very few quarries which are far off from the port site. Hence the rate of Rs.372 per cum used for infil is considered grossly inadequate. The cost considered should cover the cost of quarrying, transporting to the site by barges/road and unloading at the site. It is requested that this cost be re-evaluated by a independent EPC contractor.	
	(b). The cost of the equipment, plant and machinery either does not consider the following equipment or has underestimated the cost ➢ The length of conveyor considered is just 2000 meters which seems inadequate for such a terminal. Normally for such terminals two conveyor streams are considered to allow for redundancy and flexibility (TEFR provides for 2 streams). The single conveyor length for such facilities is normally about 2500 – 3000 mtrs. depending on the location of the wagon tippler, stackyard and berth. The conveyor length will include the receiving conveyor (from wagon tippler to stackyard), the yard conveyor (along the multiple stockpiles) and the shipping conveyor (from stackyard to jetty). Hence it is requested that the length of the conveyor be re-evaluated and accordingly enhanced. ➢ The equipment cost considered by MOPT in their proposal is not supported by quotes from equipment manufacturers. It is requested that MOPT furnish latest quotes of the major equipment proposed to be used for the facility. ➢ The cost of electricity connection, laying of HT cable from the nearest substation of the utility supplier, cost of laying water pipeline from the	As above, the proposer (the successful bidder or proposer) must evaluate their own plant needs and increase or reduce the cost estimate in their tender accordingly.

	nearest tap off point has not been taken into account. ➢ The estimate does not take into account the cost of following equipment which are considered essential for such a terminal: - Electrical hoist, mobile hoist & mobile cranes - Pay-loader & dozers - Workshop equipment - Electrical power, utilities & control switches - Power back up generators of sufficient capacity - Fire fighting & water supply system and pumps - Instrumentation & automation system - HVAC and APC systems - Diverter gates - Mobile belt changing car and belt vulcanising machine	
	(c). The cost of construction of berth involves construction of a finger pier for berthing capsize vessels, cost of construction of western side berth for barge unloading and dredging for the new basin. Dredging of about 7.21 lakh cum of soil and rocks is envisaged at a rate of Rs.240 per cum. The rate considered by MOPT is grossly inadequate for rock dredging which is time consuming and almost 4 times the cost of normal soil dredging. Hence a separate estimate of the quantity of soil and rock dredging needs to be worked out to give a realistic cost of dredging to be considered for tariff calculations. It is envisaged in the TEFR that for larger ships rock dredging at an average of about - 4.5 mtrs. will be required for this project.	According to the subsurface profiling, very little if any consolidated rock will be encountered in dredging and much of the dredged material may be suitable for reclamation. It is recommended that a drilling and sampling program be initiated by the respondents prior to detailed project design. Cost estimates for dredging assumed a toothed clamshell bucket dredge would be used. This type of equipment is capable of dredging unconsolidated laterite rocks and gravel such as are found at the site.
	(d). The new breakwater of 630 mtrs. long and mole of mtrs. long is recommended at 6.5 m height above chart datum plus 1.5 mtrs. of stone or block at top. The cost of Rs.269.15 crores is not supported by detailed engineering and hydrodynamic modelling study to determine that the design considered by the consultants is adequate or not. It is essential to note here that the present breakwater has been inadequate with frequent damages sustained due to rough weather during monsoon season. Any changes in the design proposed after completion of CWPRS studies could have a major impact on the capital cost of the breakwater. Hence it is proposed that a consultant be appointed to determine the true cost of the breakwater after carrying out detailed studies before undertaking tariff setting.	Essar correctly understands that additional hydrographic (as well as geotechnical) studies will be necessary prior to completing design of the terminal. These studies will be the responsibility of the proposer. A study of the proposed breakwater geometry has recently been completed by CWPRS that confirms the effectiveness of the design in providing a protected harbour for cargo loading. Maximum wave height within the berthing area is found to be 0.7 meters during extreme weather events.
	(e). The capital cost of construction of berth,	At the conceptual level, the cost estimates

	dredging and breakwater/ mole does not take into account any miscellaneous charges such as interest during construction, upfront payments, working margin capital etc as required under capital cost estimation for civil construction (excluding berth) and equipments. It will be appreciated that the capital cost of construction of berth, dredging and breakwater construction will also attract similar charges and cannot be avoided. Hence it is requested that these charges are included in the estimates.	were not broken down to reflect these items as individual cost elements. Interest during construction (IDC) was included as part the financial analysis and not as part of the construction budget.
	(f). We presume 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 and prevalent item cost of handling equipments etc., the capital cost cannot be accurately estimated at this stage. Therefore, it is believed that the actual cost to completion and actual operating costs will be taken into account while fixing the final tariff.	As per the guidelines for fixation of upfront tariff, based on the parameters given in the guidelines and cost worked out based on the market rates, upfront tariff is required to be calculated. Only escalation based on Whole Sale Price Index will be allowed for escalation in the tariff. Tariff will not be reworked based on the actual cost.
	(g). The capital cost estimate is based on today's item rates and does not take into account any provision for escalation on account of inflation and price escalation even though the project would be implemented over a period of 2-3 years. A provision of atleast 25% should be considered.	A five year inflation factor was included in the cost estimate and financial evaluation.
	(h). The capital cost is based on estimated BOQ's and is not backed by detailed engineering. Therefore, provision for Contingency in the Capital Cost should be atleast 15% to provide for unforeseen situations and as margin for error in estimation.	The proposer is free to assume additional contingency reserves in their financial evaluation of the project.
	(i). The provision of 5% (Rs.17.5 crores) under the head "Miscellaneous Cost" 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%, fire fighting equipment would cost about Rs.1.5 crores, electrical system would cost about Rs.10.0-12.0 crores, HVAC/dust suppression system would cost about Rs.3.0 crores. Therefore, the provision under the head "Miscellaneous Cost" should be atleast 30%.	Normally, the entire project budget would not be subject to IDC during the assumed 30 month construction period as equipment installed later in the development would not require purchase until the civil works were complete. Therefore, IDC is figured into the financial analysis instead of the construction budget estimate.
	(j). The return on capital employed at 16% p.a. is quite low. The return on capital employed is enhanced to atleast 20% p.a. in order to make project attractive and bankable.	The proposer must make their own internal decision as to the attractiveness of this project based on ROCE.
	(k). Capital cost estimate does not take into account cost of equipment erection and commissioning fees etc which forms a	Delivery, erection, testing, training and spare parts were included in the delivered equipment cost estimates that were used to

	necessary and substantial amount of the project cost.	prepare the project budget.
(iii).	**Calculation of Operating Cost for Container Handling**	
	(a). The power rates considered by MOPT in their proposal for calculating Operating cost is Rs.4.50. This is the prevailing rate for Goa electricity board supply which has voltage fluctuations and supply shortages as mentioned by MOPT in their TEFR. MOPT themselves have shifted from using Goa State electricity supply to REL energy supply for all main port operations because of these inherent problems. Hence it is felt that Electricity rates for REL energy should be used for OPEX calculations to arrive at a realistic cost. REL Energy rates are about three times the Goa electricity board rates.	Port switched over its supply of power from Electricity Dept, Govt. of Goa to Reliance Infrastructure Ltd., nine years back as the position was not satisfactory at that point in time. Now even BOT operator at berths 5 & 6 are availing power from Electricity Dept., Govt. of Goa. Port is feeling the burden of exorbitant rates charged by the Reliance Infrastructure Ltd., since Electricity Dept, Govt. of Goa has not conveyed their inability to provide power to new users, the same has been considered.
	(b). The TAMP norm for electricity usage is given as 1.4 units/tons. The norm is grossly inadequate for such a terminal which needs a connected load of about 10.0 MW to run all the terminal equipment and needs to be revised upwards to give a realistic consumption of electricity. MOPT should provide documents supporting the current electricity usage for their existing IOHP terminal.	Upfront tariff has been calculated based on the norms fixed by the TAMP. As far as MOHP is concerned, electricity usage comes to less than 1.4 units/ton. e.g., in the month of June 2010, quantity handled is 2.9 million tons where as units of power consumed is 2.08 million units which works out to 0.7 units/ton. Therefore, need for upward revision of norm of 1.4 units/ton is not justifiable. It is also stated that at present our contract demand with RIL is 5.250 mega watts for 12 MMTPA. In addition to MOHP plant, it also caters to the need of workshop, Administration Building and General Cargo berths. Therefore, requirement of 10 megawatts for 8 MMTPA plant appears to be ambitious.
	(c). The lease rentals for land area of 140,000 sqm at the rate of Rs.31.60 as per the SOR works out to be Rs.4.42 crores and not Rs.5.31 crores as given in the proposal. This charge should be in effect be waived as the concessionaire is at his own cost reclaiming this land area from sea area. Hence in effect no existing port land is being used for the project site and hence the SOR rates cannot be applicable to this reclaimed land area. Further it must be noted that the Capital cost for reclaiming is being considered for calculation of Port Dues chargeable by the BOT operator directly from ship owners.	Rate of Rs.31.6 per month per sq mtr. for 1,40,000 square meters works out to Rs.5.31 crs. per annum and not Rs.4.42 crs. and therefore calculations given in the proposal are in order.
(iv).	**Calculation of Cargo Handling Charges**	
	(a). The MOPT proposal has worked out that the Revenue requirement of the terminal as per the TAMP guidelines works out to be Rs.131.63 crores. Out of this 98% (Rs.128.99 crores) of the revenue is apportioned to cargo handling charges. As per the MOPT proposal following tariffs are applicable for the terminal: - Handling charges for rail borne cargo Rs.179.08/- per ton	For the purpose of upfront fixation of tariff, only tariff proposed in the proposal will be considered i.e., Rs.179.08 per ton for handling rail borne cargo and Rs.161.39 for barge borne cargo. Further, it is worked out as per TAMP's principles adopted in the case of New Mangalore Port Trust in the case of Rail borne cargo and road borne cargo. This does not affect the revenue requirement.

	- Handling charges for barge borne cargo Rs.161.39/- per ton As per the TEFR M/s.Mir Transystem envisages 75% of Iron ore (5.4 MMTPA) will be received by rail and 25% iron ore (1.8 MMTPA) will be received by barges. If these volumes do realise from the 1st day onwards then the yearly revenue from cargo handling charges as per the tariff proposed by MOPT works out to be - Rail borne cargo = Rs.179.08 x 5.4 MMTPA = Rs.96.70 crores - Barge borne carge = Rs.161.39 x 1.8 MMTPA = Rs.29.05 crores Total revenue realisation from cargo handling charges works out to Rs.125.75 crores which is less then the Rs.128.99 crores as required by TAMP norms. Hence in order to realise the total revenue requirement from cargo handling charges it is important that the rates for both rail borne and barge borne cargo is kept same otherwise the concessionaire will not realise the revenue envisaged by the TAMP guidelines.	
	(b). MOPT has not provided any supporting calculations or assumptions for determining the tariffs for storage charges (Rs.1.83/- per ton) and miscellaneous charges (Rs.1.83 ton). It is important to show that the revenue requirement from these charges can in fact be realised by the concessionaire. Further the storage charges shall be fixed with an aim to penalise the shipper in case he exceeds the free storage period. This will ensure that the stackyard capacity as envisaged by MOPT can be achieved and the users of the terminal are benefited in the long term.	Para 2.0 of Norms for fixation of upfront tariff for services rendered at iron ore terminals deals with norms for apportionment of revenue requirement wherein percentage of total revenue allocated to Storage charges is indicated which is 1% of revenue requirement. Accordingly, storage charges are arrived at.
	(c). Cargo Handling charges are worked out based on Optimal Terminal Capacity which is 70% of the maximum terminal capacity applied to all the years of operation right from day one. However, it is pertinent to note that the capacity utilization cannot be ramped upto 70% from the very first year itself. Industry practice and past experience shows that the capacity utilization ramp up happens over a period of time. Moreover, the operations face initial teething problems, and take time to stabilize. Therefore, in our view, the capacity utilization 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%).	Formula for fixation of cargo handling charges is specified at para 2.0 of Norms for fixation of upfront tariff for services rendered at iron ore terminals. It is clearly stated that the revenue requirement determined as per guidelines is apportioned to handling charges and no weightage is given for lower capacity utilization in the initial years.

(v).	**Calculation of Berth Hire Charges**	
	(a). While determining the revenue requirement for calculation the berth hire charges and port dues (for recovering the cost of construction of breakwater) only ROCE on capital employed, repair and maintenance cost of the berth/breakwater and depreciation has been considered. Other expenses like salaries and wages of maintenance staff, management and administration staff including welfare and other expenses towards them has not been considered. Neither has any insurance cost been considered although substantial amount of capital expenditure is related to these assets.	Clause 4.4 of norms for fixation of upfront tariff for services rendered at iron ore terminal deals with calculation of berth hire charges. As per the norms 16% ROCE is to be calculated only on (i) Cost of construction of berth and (ii) cost of dredging if any carried out alongside the berth. Only 1% of capital cost is allowed towards maintenance expenditure. As the calculations are to be done in accordance with the norms, salaries as suggested cannot be taken.
	(b). The discount on berth hire charges for coastal vessels will not allow the concessionaire to recover the full revenue requirement as determined in the proposal towards the cost of construction of berth/ dredging. Hence it is proposed that an evaluation should be done in order to determine the loss in revenue to the concessionaire due to handling of coastal vessels. This loss on account of coastal vessels shall be recovered from Foreign going vessels by increasing the berth hire charges for such vessels.	From our experience in MPT, it is seen that Iron ore is mainly an export cargo which mainly goes to China and Japan. The facility is mainly for loading iron ore. Negligible amount of cargo is moved in coastal vessels. Therefore, possibility of loss on account of coastal vessels is not envisaged.
(vi).	**Fixation of upfront tariff cap in respect of Port Dues for construction of Breakwater and mole**	
	It is given in the Port Trust proposal that since the BOT operator is investing a substantial amount of Rs.269.10 crores in construction of breakwater of length 630 m and mole of 230 m. Hence the Port Dues of Rs.103.45 per GRT shall be chargeable by the BOT operator. Since the BOT operator will be also investing a substantial amount in reclaiming 75 acres of land at a cost of about Rs.37 crores as estimated by port consultants, it is proposed that this cost should also be considered for calculation of Port dues instead of being considered under civil construction cost/cargo handling charges.	Cost on construction of Breakwater or mole are specifically mentioned by the consultant. Cost of infill of Rs.37 crores is in respect of common facilities for the terminal. It has no direct relation to either Breakwater or the Mole. Therefore, there is no justification for considering infill expenditure of RS.37 crores towards “Port Dues”.
(4).	**Goa Chamber of Commerce and Industry**	
	Mormugao Port Trust has decided to develop a berth at West of the existing Breakwater (WOB) for handling iron ore, by private terminal operator on BOOT basis. For fixing the upfront tariff, normative cost based approach has been adopted considering the return on capital employed at 16% and operating costs as per guidelines by the TAMP. The optimum capacity of terminal has been considered at 70% and the following tariffs have been fixed: Tariff cap for Cargo Handling Charges (Rail borne) 179.08 INR	They have recommended the proposal for approval. Accordingly, MOPT has no further comments to offer.

	Tariff cap for Storage Charges (Rail borne) 1.83 INR Tariff cap for Miscellaneous Charges (Rail borne) 1.83 INR Tariff cap Cargo Handling Charges (Barge borne) 161.39 INR Tariff cap Storage Charges (Barge borne) 1.81 INR Tariff cap for Miscellaneous Charges (Barge borne) 1.81 INR Berth Hire Charges per GT per hour 1.48 INR Port Dues Rate per GRT 103.45 INR It is observed that the guidelines for upfront tariff for setting PPP projects provide port trust concerned to approach TAMP with its proposal for fixing tariff caps and shall include the tariff caps so fixed in the bid document as upfront tariff (para 2.3.). The said guidelines also provide for the private operator, before commencement of commercial operations, to approach TAMP for notifications or Scale of Rates containing ceiling rates applicable to his operations (para 2.9.1.). As the proposal of MOPT is to notify tariff caps for use by the bidders for all iron ore import terminals to be developed under PPP, the same may be considered for approval.	
(5).	**Confederation of Indian Industry**	
	CII supports all the suggestions furnished by GMOEA on the subject of 8 MMPTA Iron Ore Export Terminal - West of Breakwater.	
(6).	**Mormugao Maritima Limited**	
	Our company had written to MOPT in November 2008, expressing our interest in setting up a floating cum gravity based steel and or concrete bulk cargo handling facility, inside the port waters north of the channel between the two turning circles of the port, for loading / unloading iron ore / coal etc., the terminal can be fed / evacuated by river; the rail borne cargo can be handled through a rail river terminal on the banks of the zuari river, which our company had proposed to railways. We have not received any response to our proposal from MOPT, it will be a much cheaper option than the west of breakwater project which involves construction of a new breakwater of 620 meters costing 269 crores.	No comments furnished.

2. A joint hearing in this case was held on 8 March 2010 at the Mormugao Port Trust premises. The MOPT made a power point presentation explaining the salient features of the proposal. At the joint hearing, MOPT and the concerned users / user organisations, short listed applicants and prospective users have made the following submissions:

Mormugao Port Trust

(i). Cost of civil construction is estimated at the market price prevailing in June 2009. Please apply WPI to bring to current level.

(ii). The proposed tariff is acceptable to investors and users.

(iii). MOPT will not levy separate port dues on vessels calling at the terminal.

(iv). Safety, Security and conservancy functions will remain with port, the cost of which will be met out of the revenue share receivable.

(v). Cargo aggregation is a problem. Turnover beyond 14 may not be possible at all atleast in the initial period.

(vi). The breakwater cannot be extended to further north to improve reclaimed area because of wave action.

Goa Mineral Ore Exporters Association

(i). We do not have any major points to make.

Goa Chamber of Commerce & Industry

(i). The proposal appears to meet all norms and therefore it can be accepted.

Mormugao Stevedores Association

(i). No comments.

Navyug-Salgaonkar Construction

(i). We don't have any issues.

Mormugao Ships' Agents Association

(i). We agree with the proposal.

M/s. MSPL Limited

(i). We appreciate the port's initiative to improve capacity for iron ore handling.

(ii). Since tariff is fixed for 30 years, we should not rely only on historic data. Plot turnover can be improved with infrastructure development in the logistic chain.

(iii). TAMP considered higher turnover for coking coal. Please revise in this case also.

(iv). Even today capesize vessels come to port. But they can't load to the full extent. Over a time horizon of 30 years, capesize will be a reality as it will provide economics of scale. Please consider atleast 10% share of capesize vessels.

(v). Today average panamax can lift around 72000 tonnes / day.

(vi). Since the entire land is reclaimed and created, there cannot be separate lease rental. Return on reclamation cost is already claimed in tariff.

(vii). There appears to be some anomaly as barge loading tariff is lower that rail loading though capex is higher.

(viii). Available land of 1.4 lakhs sq. mtr. is reduced by 50%. It should be by 70%. In the coal terminal, the port had considered 70% utilisation of total area. Why not in this case.

Sterlite

(i). We agree with the proposal.

Container Shipping Lines Association (India)

(i). No comments.

Shipping Corporation of India Ltd.

(i). No comments.

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