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TARIFF AUTHORITY FOR MAJOR PORTS

GNo.133

New Delhi

16 August, 2008

NOTIFICATION

In exercise of the powers conferred under Sections 48, 49 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal of the Paradip Port Trust for upfront tariff setting for iron ore terminal and a coal terminal at the Paradip Port in pursuance of the guidelines for upfront tariff setting for PPP projects at Major Ports vide this Authority's Notification No. TAMP/52/2007-Misc. dated 26 February 2008 as in the Order appended hereto.

(Brahm Dutt)
Chairman

Tariff Authority for Major Ports
Case No. TAMP/18/2008-PPT

The Paradip Port Trust

...

Applicant

ORDER

(Passed on this 14th day of July 2008)

This case relates to a proposal received from Paradip Port Trust (PPT) for upfront tariff setting for construction of a deep draught iron ore berth and a deep draught coal berth at the Paradip Port in pursuance of the guidelines for upfront tariff setting for PPP projects at Major Ports vide Notification No. TAMP/52/2007-Misc. dated 26 February 2008

2.1. PPT has submitted a copy each of the feasibility study carried out by RITES Limited for the construction of the deep draught berths to handle iron ore and coal. To arrive at the upfront tariffs the port has also submitted two separate reports prepared by the National Maritime Academy, Chennai.

2.2. The upfront tariff proposed by PPT for iron ore terminal is as follows:

- (a). Iron ore handling charges - Rs.157 per MT for foreign cargo and Rs.94.20 per MT for coastal cargo.
- (b). To give 12 days free period for storage of cargo and to charge Rs.12, Rs.24 and Rs.48 per ton for different period groups after the free period.
- (c). Berth hire charges - US Dollar 0.00017 per GRT per hour on foreign going vessels and Re. 0.0040 per GRT per hour on coastal vessels.

2.3. The upfront rate proposed by PPT for coal terminal is as follows:

- (a). Handling charges - Rs.130 per MT for foreign cargo and Rs.78 per MT for coastal cargo.
- (b). To give 12 days free period for storage of cargo and to charge Rs.12, Rs.24 and Rs.48 per ton for different period groups after the free period.
- (c). Berth hire - US Dollar 0.000134 per GRT per hour on foreign going vessels and Re. 0.00321 per GRT per hour on coastal vessels.

3. The PPT has proposed the following deviations from the norms prescribed in the guidelines :

Iron Ore

- (i). The turnover ratio norm of 12 has been increased to 16.
- (ii). While arriving at the revenue requirement for storage charges, the free days considered are 18 as against the prescribed norm of 25 days.

Coal

- (i). As per the norms, the coal that could be stacked per sq.m of area is 3 tons per sq.m while arriving at the optimal yard capacity, this factor has been considered at 4.7 tons.
- (ii). The turnover ratio has been considered as 30 instead of 12 prescribed as the norm.

Common to both

While estimating the operating cost of the berth different elements of expenditure such as repairs and maintenance, insurance, depreciation, other expenses etc. have been

included. As per the norm, for calculation of berth hire charges the operating cost is only the maintenance charges and it should be at 1% of the aggregate cost of construction of berth and dredging carried out alongside the berth.

4.1. PPT's proposal was registered as a 'tariff case' and the consultation process was initiated by seeking comments from the relevant user organisations and short-listed bidders, based on the details furnished by PPT.

4.2. The Tamil Nadu Electricity Board informed that it has no comments to offer on the PPT project. MMTC, a short-listed bidder, although by letter dated 27 May 2008 sought additional time to offer its comments has not sent any further communication in this regard.

4.3. The comments as and when received from the user organizations / short listed bidders were forwarded to the PPT for remarks. The PPT has responded to the comments furnished by the users on its proposal

5.1. Based on the preliminary scrutiny of the proposal PPT was requested to furnish following information/clarification on various points vide our letter dated 15 May 2008. PPT furnished its reply under letter dated 27 May 2008. The details sought and the replies received are juxtaposed below.

Sl.	TAMP observation	PPT Clarification												
1.	PPT has requested this Authority to fix pre-determined tariffs for the above mentioned two PPP projects. It is, however, clarified that the tariff caps to be prescribed now would not only be applicable to the projects of iron ore berth and coal berth but would be applicable to all the projects bid out subsequently for identical cargoes at the Paradip Port during the next five years. Hence, it is necessary to prescribe port specific tariffs and not project specific tariffs as proposed by the PPT.	PPT agrees with the TAMP observations that the upfront tariff proposals submitted for Iron ore and Coal are port specific tariffs and not project specific tariffs. As such, the tariffs proposed for Iron ore exports and coal imports shall hold good for all future projects in the port for the next five years.												
2.	PPT in letter dated 16 April 2008 has confirmed that the proposal is based on the updated costs as per the feasibility reports. Documents supporting this statement may please be furnished for perusal.	The feasibility report for the two BOT projects relating to Iron ore and Coal incorporating the cost estimates have been prepared by our consultant, RITES Ltd. during Sept., 2006. The estimates have been updated for costs in March, 2008 in consultation with RITES Ltd. based on the rates for recently awarded/ executed projects, or indexed to inflation, as applicable. These updated estimates have been enclosed to the feasibility report while submitting the tariff proposal.												
3.	To enable this Authority to process the proposals, PPT is requested to comply with the following.													
I.	With reference to Iron Ore Berth: (a). The turnover ratio norm of 12 has been increased to 16 vide para 4.3 of Chapter 4 of the report on formulation of upfront tariff for deep draught iron ore berth. Detailed justification as to why the turn over ratio has been increased may be furnished.	The turn over ratio norm indicated in the guidelines for iron ore berth is 12. In the upfront tariff proposal for the deep draught iron ore berth, a turn over ratio of 16 has been assumed. The turn over ratio already achieved by the iron ore terminals at Chennai Port and Mormugao Port which are typical terminal for mechanized system for iron ore handling is given below: <table border="1"> <thead> <tr> <th>Year</th><th>Chennai Port</th><th>Mormugao Port</th></tr> </thead> <tbody> <tr> <td>2004-05</td><td>11.5</td><td>12.05</td></tr> <tr> <td>2005-06</td><td>10.8</td><td>11.95</td></tr> <tr> <td>2006-07</td><td>12.6</td><td>12.76</td></tr> </tbody> </table>	Year	Chennai Port	Mormugao Port	2004-05	11.5	12.05	2005-06	10.8	11.95	2006-07	12.6	12.76
Year	Chennai Port	Mormugao Port												
2004-05	11.5	12.05												
2005-06	10.8	11.95												
2006-07	12.6	12.76												

		In the assumption of the capacity it has been proposed that the cape size vessels will be to the extent of 80% of the total vessels that will be calling at the iron ore berth. Under the circumstances the BOT operator will be able to achieve higher productivity at the berth and hence will be in a position to clear the cargo at the stacking yard at a faster rate than the rate achieved at Mormugao Port Trust and Chennai Port Trust. Hence an improvement of 33.3% has been assumed and hence a turnover ratio of 16 has been proposed in the tariff formulation.
	(b). While arriving at the revenue requirement for storage charges, the free days considered are 18 as against the prescribed norm of 25 days. Justification for the proposed norm may please be furnished.	With the improvement of turnover ratio from 12 to 16 achieved by the BOT operator, correspondingly the free period allowable for the storage has been reduced proportionately. Hence free period of 18 days have been proposed.
	(c). The amount shown at Sr. No. 5 in Annexure 2.3 is to be corrected.	The amount shown at Sl.5 in Annexure 2.3 stands corrected to Rs.49,557.86 lakhs. It is a typographical error and hence it does not affect other calculations.
	(d). The stackyard area has been considered as 83125 sq.m (in fact it should have been 82125 sq.m as $365 \times 225 = 82125$) at para 4.3. of Chapter 4. In Annexure 6.4, the area of the stackyard has been shown as 1,47,000 sq.m. Kindly consider the correct stackyard area in the calculation.	As pointed out, the stackyard area is infact 82,125sqm. The stackyard area of 1,47,000sqm. Shown at Annexure-6.4 stands corrected to 82,125sqm. Accordingly, the license fees stands corrected to Rs.59.13 lakhs per annum
	(e). At Chapter 7, while proposing the draft Scale of Rates, separate handling charges for 'foreign' and 'coastal' have been prescribed. As per clause 4.3. of the tariff guidelines notified in the Gazette of India on 31 March 2005, coastal concession for iron ore is not mandatory.	The coastal concession for Iron ore is withdrawn. The scale of rates will be prescribed only for foreign vessels as per TAMP observation.
II.	Coal Berth	
	(a). As per the norms, the coal that could be stacked per sq.m of area is 3 tons per sq.m. While arriving at the optimal yard capacity, this factor has been considered at 4.7 tons. Further, the turnover ratio has been considered as 30 instead of 12 prescribed as the norm. Detailed justification for the proposed norms may please be furnished. PPT is also requested to confirm that the optimal yard capacity would in fact be 10 million tones.	The norms prescribed in the guidelines for stacking is 3 tons per sq.m. In the calculation of the optimal yard capacity of 4.7 tons per sq.m has been adopted. Justification for arriving at the figure has also been given in the report. It is clearly brought out that 5.4 tons per sq.m is adopted for the existing MCHP in the port while 4tons per sq.m has been adopted in the port scale of rates for coking and non-coking coal. Hence, an average of 4.7 tons per sq.m (average of 5.4 and 4.0) has been adopted for calculation of the yard capacity.
	(b). While proposing the draft Scale of Rates, separate handling charges for ' foreign' and ' coastal' have been prescribed. As per the Clause 4.3 of the tariff guidelines notified in the Gazette of India on 31 March 2005., coastal concession for thermal coal is not mandatory. PPT to confirm that the differential rates proposed are also applicable for handling of thermal coal.	The coastal concession for coal is withdrawn. The scale of rates will be prescribed only for foreign vessels as per TAMP observation.
III.	Common to both Iron Ore Berth and Coal Berth.	
	(a). Kindly confirm that the unit rate of	Actual rate per unit of electricity is Rs.5.22 and the

	electricity applied is the prevailing rate and the licence fee has been arrived at based on the rate prescribed in the existing Scale of Rates of the port	same will be adopted for calculations. The license fee rate adopted for calculation is Rs.600 per 100 sq.m. This is based on the rate prescribed in the scale of rates for category 3 unpaved area.
	(b). While estimating the operating cost of the berth different elements of expenditure such as repairs and maintenance, insurance, depreciation, other expenses etc. have been included. As per the norm, for calculation of berth hire charges the operating cost is only the maintenance charges and it should be at 1% of the aggregate cost of construction of berth and dredging carried out alongside the berth.	The operating cost for the berth will be reworked on the basis of 1% of the aggregate cost of berth construction and dredging along side the berth. This will be reflected in the upfront tariff report.
	(c). The estimate of revenue requirement for berth may be recast after considering all the suggestions made in the preceding paras.	Agreed. The revenue requirement will be reworked based on these changes and reflected in the upfront tariff report.
	(d). As per the norm, for arriving at the per hour berth hire rate, the value of berth hire per GRT is to be divided by number of working hours of the vessels which is 70% of 365 x 24 hours. Working sheets detailing how the various values have been arrived at vide Annexure 6.10 may please be furnished.	Berth hire rate will also be reworked as per the TAMP guidelines and reflected in the upfront tariff report.

5.2. The optimal quay capacity of the iron ore terminal has been assessed as 15.07 million tonnes whereas the optimal yard capacity is assessed at 9.78 million tonnes. Stating that the capacity of the terminal is the lowest value between the quay and yard capacity, PPT has considered the capacity of the terminal as 10 million tonnes. Since there is wide variation between the assessed quay capacity and the yard capacity PPT was requested to re-confirm vide letter dated 2 June 2008 that the capacity of the terminal indeed can be considered as 10 million tonnes.

5.3. In its replay to the issue raised in para 5.2 above PPT has stated that the yard capacity assessed as per the norm works out to 7.24 million tons, which is almost half of the quay capacity of 15.07 million tons. The major reason for lower yard capacity arrived at is the 25 days free period allowed which is linked with the turnover ratio. The turn over ratio already achieved by the iron ore terminals at Chennai Port and Mormugao Port, which are typical terminal for mechanized system for iron ore handling, is as under:

Year	Chennai Port	Mormugao Port
2004-05	11.5	12.05
2005-06	10.8	11.95
2006-07	12.6	12.76

In the assumption of the capacity it has been proposed that the cape size vessels will be to the extent of 80% of the total vessels that will be calling at the iron ore terminal. Under the circumstances, according to PPT, the BOT operator will be able to assure higher productivity at the terminal and hence will be in a position to clear the cargo at the stack yard at a faster rate than the rate achieved at Mormugao Port Trust and Chennai Port Trust. An improvement of 33.3% has been assumed by PPT and hence a Turnover ratio of 16 has been proposed in the tariff formulation with a corresponding reduction in the free period allowable for the storage. Proposing a free period of 18 days, the optimal yard capacity is calculated at 9,657,900 Tons = $(0.7 \times 82125 \times 0.7 \times 15 \times 16)$. Since the capacity of the terminal is the lowest value between a quay and the yard capacity i.e. the minimum value between 15.07 Million Tonnes and 9.66 Million Tonnes the capacity of the terminal has been assessed by PPT as 10 Million Tonnes.

6. Considering the observations made in this office letter dated 15 May 2008, PPT submitted its revised upfront tariff proposals for construction of the Iron Ore and Coal terminals under its letter dated 29 May 2008. In the revised proposal for iron ore berth the PPT has given additional justification for assessing the terminal capacity at 10 Million Tonnes. While arriving at the operating cost at the berth, PPT

has excluded the insurance and depreciation although at its initial proposal these items were included. The reworking has not resulted in any change in the proposed upfront tariff at Rs.157 per MT for iron ore handling and at Rs.130 per MT for coal handling charges. The reworking has, however, resulted in a change in the proposed berth hire charges from US\$ 0.00017 to US\$ 0.000172 per GRT per hour or part thereof in respect of the iron ore berth. As regards the coal berth the reworking has not resulted in any changes in the berth hire charges which remains at US\$0.000134.

7. A joint hearing was held on 20 June 2008, where the PPT and the users were present and made their submissions.

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

9. With reference to the totality of the information collected during the processing of the case, the following points emerge:

- (i). Although the PPT has requested this Authority to fix upfront tariffs for the Iron Ore and Coal terminals it was clarified to the port that as per clause 2.2 of the Guidelines for upfront tariff setting for PPP Projects at Major Port Trusts of February 2008 the tariff caps to be prescribed now would not only be applicable to the projects of iron ore berth and coal berth but would all so be applicable to all the projects bid out subsequently for identical cargoes at the Paradip Port during the next five years. PPT in its letter dated 27 May 2008 has confirmed that the proposals are not project specific but port specific and the proposed tariff shall hold good for all projects for handling similar cargo which may come up in the Port for the next five years
- (ii). In general, the PPT has followed the guidelines issued for upfront tariff setting vide Notification No. TAMP/52/2007-Misc. dated 26 February 2008 issued by this Authority. Some deviations observed both in respect of the iron ore terminal and coal terminal are discussed below:

A. **Iron Ore Terminal**

The plot turnover ratio norm of 12 has been increased to 16. With a norm of 12 the yard capacity works out to 7.24 million tonnes per annum whereas Paradip Port Trust has considered the yard capacity as 10 million tonnes per annum taking the turn over ratio at 16.

B. **Coal Terminal**

- (a). As per the norms, for arriving at the optimal yard capacity, the coal that could be stacked per sq.m of area is 3 tons. This factor has been considered by PPT at 4.7 tons.
- (b). The turnover ratio norm of 12 has been increased to 30.
- (c). The Yard capacity, based on TAMP guidelines of 3 tons per sq. m. as stacking capacity and the turn over ratio at 12 would be only 2.59 million tonnes per annum. By considering the stacking quantity per sq. m. at 4.7 tons and the turn over ratio at 30 Paradip Port Trust has arrived at the yard capacity as 10 million tonnes per annum .

C. **Common to both Iron ore and coal Terminals**

While initially estimating the operating cost of the berth, different elements of expenditure such as repairs and maintenance, insurance, depreciation, other expenses etc. were included. As per the guidelines for calculation of berth hire charges, the operating cost is only the maintenance charges and it should be at

1% of the aggregate cost of construction of berth and dredging carried out alongside the berth.

- (iii). To a specific query, the PPT has confirmed that the feasibility report for both the projects have been prepared by its consultant, RITES during Sept., 2006 and the capital estimates have been updated for costs in March 2008, based on the rates for recently awarded/ executed projects, or indexed to inflation, as may be applicable.
- (iv). While initially estimating the operating cost of the iron ore and coal berths different elements of expenditure such as repairs and maintenance, insurance, depreciation, other expenses etc. were included by the port. It was pointed out to PPT that the guidelines permit only maintenance cost for berth at 1% of the aggregate cost of construction of berth and dredging carried out alongside the berth. The Port has accordingly revised the operating cost of the berths at 1% of the aggregate cost of berth construction and dredging along side the berth. Although the norms given in the guidelines for operating cost of the berth is restricted at 1% of the capital cost, the fact remains that the assets created require appropriate insurance cover and the value of the assets is bound to depreciate due to wear and tear. This Authority has, therefore, considered the elements of insurance and depreciation respectively in the operating cost at 1% and 3.34% of the capital cost for determining revenue requirement from the berth. In this connection it is noteworthy that clause 3.6 of the guidelines for upfront tariff setting for PPP projects enables this Authority to decide on a particular item of expenditure, which it considers for incorporation, while computing the upfront tariff cap, for which the norms are not explicit in the guidelines.
- (v).
 - (a) The PPT has estimated a capital cost of Rs.545.95 crores for the iron ore terminal which includes pre-project activities, civil works, mechanical works, utilities and contingencies with berth construction cost and berth side dredging. Dredging in the approach channel, entrance channel, turning circle and access to the berths will be the responsibility of the Port.
 - (b). The optimal quay capacity of the iron ore terminal has been assessed as 15.07 million tonnes and the optimal yard capacity assessed at 9.78 million tonnes (rounded off to 10 million tonnes) taking the turnover ratio as 16 instead of 12. As the capacity of the terminal is the lowest value between the quay and yard capacity, PPT has considered the capacity of the terminal as 10 million tonnes. Essar Shipping and Logistics Limited, Lanco Infrastructure Limited and Rio Tinto Pvt. Ltd. have pointed out that the yard capacity based on the guidelines works out to 7.24 million tonnes p.a. and the deviation from the guidelines is made only with a predetermined aim of arriving at a yard capacity of 10 million tonnes p.a. The port has stated that typical iron ore terminals at Chennai Port and Mormugao Port have already achieved the turn over ratio in the range of 11.5 and 12.76. PPT considers that the cape size vessels calling at the berth will be to the extent of 80% and the BOT operator will be able to achieve higher productivity and in a position to clear the cargo at a faster rate. It is noteworthy that the yard capacity on the assumption of a plot turnover of 12 and 100% utilization is more than 10 million tones. It reduces to 7.24 million tonnes if 70% capacity utilization is considered. Therefore it is necessary to ensure that the quay capacity available should be utilized to the maximum extent by efficient use of the yard. Since the upfront tariff now being fixed would have a time frame of 30 years and giving credence to the technological development that could take place in the future, this Authority agrees to the port's proposal to increase the plot turnover ratio to 16 and reckon the yard capacity at 10 million tonnes per annum. Consequently, the capacity of the terminal is considered at 10 million tonnes per annum.
 - (c). Maximum size of the vessel considered to be handled at the iron ore berth is 1,85,000 DWT. Lanco Infrastructure Ltd. has pointed out that the draft available at PPT may not be adequate to handle such vessels. The PPT has, however, pointed out that bids will be invited for handling upto 1,25,000 DWT vessels and as and when the draught is increased to handle 1,85,000 DWT vessels, the concession agreement will be modified. In this regard, it may be relevant to note

that the tariff set will not undergo change except to the extent of annual escalation prescribed under upfront tariff scheme, throughout the concession period. If the landlord port undertakes any investment at a later stage which may benefit the concessionaire, it may be necessary for the port to make adequate provision in the Concession Agreement for the enhanced compensation it may like to claim from the Concessionaire.

- (d). Storage charges is leviable for storage of Iron Ore at the yard beyond allowable free period of 25 days. While arriving at the revenue requirement for storage charges of the iron ore export cargo, the free days considered by PPT are 18 as against the prescribed norm of 25. The port has stated that with the improvement of turnover ratio from 12 to 16 to be achieved by the terminal operator, the free period has been reduced proportionately. The justification furnished by PPT is accepted.
- (e). A statement, attached as **Annex – I**, gives the computation of upfront tariff in respect of the iron ore terminal as finally furnished by PPT and considered by this Authority. The statement reveals that after providing ROCE at 16% on a capital cost of Rs.43697 lakhs and taking the operating cost at Rs.8861 lakhs, the annual revenue requirement for iron ore handling operation works out to Rs.15853 lakhs. As per the norms the revenue requirement is to be apportioned among iron ore handling charges, storage charges and miscellaneous charges in the ratio of 98:1:1. The port has however proposed to apportion the revenue requirement only among iron ore handling charges(Rs.15723 lakhs) and storage charges(Rs.154 lakhs) in the ratio of 99 : 1. On this basis the ore handling charges works out to Rs.157/- per ton. The revenue requirement of Rs.154 lakhs towards storage charges can be met by levying Rs.12/-, Rs.24/- and Rs.48/- per ton (respectively from storage between 19th to 23rd day, 24th to 28th and 29 beyond) from the cargo that may remain after providing 18 days free period.
- (f). Strictly adhering to the guidelines, the PPT has arrived at the berth side revenue requirement and berth hire charges. The estimated capital cost of the iron ore handling berth consisting of berth cost (Rs.5661 lakhs), berth side dredging (Rs.4224 lakhs), and contingencies(Rs.1013 lakhs), works out to Rs.10898 lakhs. Due to the inclusion of insurance and depreciation at Rs.109 lakhs and Rs.364 lakhs respectively, for reasons explained earlier, the iron ore berth operating cost has been increased to Rs.582 lakhs from Rs.109 lakhs considered by the port. After providing ROCE at 16% on a capital cost of Rs.10898 lakhs and taking the operating cost at Rs. 582 lakhs, the revenue requirement for iron ore berth operation works out to Rs.2326 lakhs.
- (vi). (a) The capital cost estimated for the coal terminal is at Rs.462.01 crores which also includes pre-project activities, civil works, mechanical works, utilities and contingencies and berth construction cost with berth side dredging. Dredging in the approach channel, entrance channel, turning circle and access to the berths will be the responsibility of the Port.
- (b). As per the norms given in the guidelines, coal that could be stacked per sq.m of area is 3 tons. This factor has been considered by PPT at 4.7 tons. In addition, the plot turnover ratio has been considered as 30 instead of 12. The users/bidders have raised objection to this deviations stating it would be detrimental for the developer as the cost recovery/earning would be based on 10 million tonnes p.a. capacity. Paradip Port has stated that it is already handling sizable quantity of thermal as well as coking coal. With a stacking capacity of 4 Metric Tonnes/sq.mts. for coking coal and a stacking capacity of 5.4 metric ton/sq.m. at its own mechanised coal handling plant, the port has arrived at the mean value of 4.7 metric ton/sq.m. According to PPT it may not be necessary to allow 25 days free period as stipulated in the norms after the completion of unloading operation as PPT's own mechanised coal handling plant has achieved a turnover of 21.3. The free period allowable for storage has been reduced by PPT

to 10 days. If the turnover ratio and cargo stacking factor per sq meter are considered as per the norms, the yard capacity becomes 2.59 million tonnes at 70% capacity level. This means, there would be a serious mismatch between the quay and yard capacities. Since the lower yard capacity arises due to physical constraints at the port, it is necessary to utilize the available resources effectively to increase the capacity. Considering the designed capacity of the proposed coal terminal, the performance already achieved at the port and keeping in view the port specific conditions having impact on the norms prescribed in the guidelines, the turnover ratio of 30 and stacking factor of 4.7 proposed by PPT are accepted. With this modification the optimal capacity of the terminal is estimated at 10 million tonnes per annum.

- (c). The statement, attached as **Annex – II**, furnishes the computation of upfront tariff in respect of the coal terminal as finally furnished by PPT and considered by this Authority. After providing ROCE at 16% on a capital cost of Rs.35461 lakhs and taking the operating cost at Rs.7409 lakhs, the revenue requirement for coal handling operation works out to Rs.13083 lakhs. Here too, as in the case of iron ore terminal the port has proposed to apportion the revenue requirement only among coal handling charges(Rs.12952 lakhs) and storage charges(Rs.131 lakhs) in the ratio of 99 : 1. On this basis the coal handling charges works out to Rs.130/- per ton. The revenue requirement of Rs.131 lakhs towards storage charges can be met by levying Rs.12/-, Rs.24/- and Rs.48/- per ton (respectively from storage between 11th to 15th day, 16th to 20th day and 21st and beyond) from the cargo that may remain after providing 10 days free period.
- (d). The estimated capital cost of the coal handling berth consisting of berth cost (Rs.5661 lakhs), berth side dredging (Rs.4080 lakhs) and contingencies (Rs.999 lakhs), works out to Rs. 10740 lakhs. Due to the inclusion of insurance and depreciation at Rs.107 lakhs and 359 lakhs respectively, the operating cost has been increased to Rs.574 lakhs from Rs.107 lakhs considered by the port. After providing ROCE at 16% on a capital cost of Rs.10740 lakhs and taking the operating cost at Rs. 574 lakhs, the revenue requirement for the coal berth operation works out to Rs.2292 lakhs.
- (vii). In the initial draft tariff schedule submitted to this Authority, separate iron ore handling charges and coal handling charges for 'foreign' and 'coastal' were prescribed by the Port. Port was informed that as per clause 4.3. of the tariff guidelines notified in the Gazette of India on 31 March 2005, coastal concession for iron ore and thermal coal is not mandatory. The port thereupon informed that coastal concession for iron ore and coal is withdrawn and it did not propose any coastal rates in the scale of rates. Since the coal terminal will handle both thermal and coking coal it is necessary to provide concessional rates for coastal cargo of coal other than thermal coal. Further, although coastal concession is not mandatory in the cargo handling charges for iron ore and thermal coal, the revised tariff guidelines stipulate that in case of coastal vessels the vessel related charges should not exceed 60% of the corresponding charges for other vessels. Though it is understood that there will not be any coastal vessels either loading iron ore or landing coal from/to the port that would impact the revenue realization by granting coastal concession, to meet with any eventuality, coastal berth hire rates have been prescribed in the upfront tariff schedule for both the terminals.
- (viii). It is observed that the unit rate of berth hire by PPT would not meet with the estimated revenue requirement for the berthing operation as the approach followed by PPT for arriving at the unit rate berth hire from the target revenue is not correct. The methodology in arriving at the per GRT per hour charges has been modified by dividing the revenue requirement by the total GRT hours. The detailed computation of upfront berth hire of the iron ore terminal and coal terminal are attached as **Annex-III** and **Annex-IV** respectively. The modifications have resulted, in changes in the per GRT hour berth hire tariff from Re 0.0069 to Re 0.86 in respect of iron ore berth and from Re 0.0054 to Re. 0.74 in respect of the coal berth. Normally vessel related charges for foreign going vessels are denominated in US dollar terms by converting the rupee value to dollar terms by applying the Re-\$

exchange rate prevailing at the time of notification of the relevant tariff order. This approach is not appropriate in the upfront tariff cases which will have a validity of 30 years. Firstly, applying a WPI based escalation on a foreign currency is not correct. Secondly, the foreign exchange variation over the next 30 year cannot be predicted. In case of any abnormal variations, either the users or the operator will have to bear the incidence, depending on which side the appreciation takes place. Therefore, the upfront berth hire charge will be denominated in Rupee term only. The rate for foreign going vessel will be Re. 0.86 per GRT per hour at Iron Ore berth and Re 0.74 per GRT per hour at coal berth. The corresponding coastal rates for iron ore berth will be Re.0.52 and for coal berth Re.0.44.

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.

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 Paradip Port Trust. If any action is to be taken against the private operators, the Paradip 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 Paradip 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 the iron ore terminal and coal terminal at Paradip Port Trust attached as **Annex – V** and **Annex – VI** respectively.

(Brahm Dutt)
Chairman

Annex - I

FORMULATION OF UPFRONT TARIFF FOR DEEP DRAUGHT IRON ORE BERTH AT PARADIP PORT

Sr.No.	Particulars	As estimated by PPT	As considered by TAMP
A.	Capacity		
(i).	Quay capacity		
	(a). Number of capsized vessels to be handled	80%	
	(b). Number of panamax vessels to be handled	20%	
	(c). Ship day output of capsized vessels-tons	60000	
	(d). Ship day output of panamax vessels-tons	55000	
	(e). Optimal quay capacity $0.7 (0.8 \times 60000 + 0.2 \times 55000) \times 365$		
		15.07 MT	15.07 MT
(ii).	Yard capacity		
	(a). Area allotted (sq. mtrs.)	82125	
	(b). Area available for stacking	70%	
	(c). Stacking quantity per sq. mtr. (tons)	15	
	(d). Annual turnover ratio	12	
	(e). Yard capacity as per norms $82125 \times 0.7 \times 15 \times 12 \times 0.7$ (tons)	7243425	
	(f). Yard capacity arrived at by PPT by considering turnover ratio at 16 (tons) $82125 \times 0.7 \times 15 \times 16 \times 0.7$ (tons)	9657900 (rounded off to 10 MT)	
		10 MT	10 MT
B.	Capital Cost of the terminal (Rs. in lakhs)		
(i).	Civil Construction	14127	14127
(ii).	Iron Ore Handling Equipment	27489	27489
	Sub-Total	41616	41616
(iii).	5% Miscellaneous on (i) and (ii)	2081	2081
(iv).	Total Cost	43697	43697
C.	Operating Cost of the terminal (Rs. in lakhs)		
	(a). Power and Fuel	731	
	(b). Repairs and Maintenance - Civil	141	
	(c). Repairs and Maintenance - Mechanical	1924	
	(d). Insurance	437	
	(e). Depreciation	3384	
	(f). License fee	59	
	(g). Other expenses at 5% of Rs.43697 lakhs	2185	
	Total	8861	8861
D.	Revenue Requirement for cargo handling (Rs. in lakhs)		
(i).	Operating Cost	8861	8861
(ii).	ROCE @ 16% on Rs.43697 lakhs	6992	6992
	Total Revenue Requirement	15853	15853
E.	Tariff and Free Period		
(i).	Handling Charges (Rs. per ton)	157	157
(ii).	Free Storage Period (days)	18	18
F.	Capital Cost of Berth (Rs. in lakhs)		
(i).	Berth Cost	5661	5661
(ii).	Berthside dredging	4224	4224
	Sub-Total	9885	9885
(iii).	5% Contingencies and Engineering Project Management	494	494
	Total of (i) + (ii) + (iii)	10379	10379
(iv).	5% towards Contingencies	519	519
	Total	10898	10898
G.	Operating Cost of berth		
(i).	Repairs and Maintenance (1% of Rs.10898 lakhs)	109	109
(ii).	Insurance (1% of 1 Rs.10898 lakhs)	--	109
(iii).	Depreciation (3.34% of Rs.10898 lakhs)	--	364
	Total (Rs. in lakhs)	109	582
H.	Revenue Requirement for berth operation (Rs. in lakhs)		
(i).	Operating Cost	109	582
(ii).	ROCE @ 16% on Rs.10898 lakhs	1744	1744
	Total Revenue Requirement	1853	2326

Annex-II

FORMULATION OF UPFRONT TARIFF FOR DEEP DRAUGHT COAL BERTH AT PARADIP PORT

Sr. No.	Particulars	As estimated by PPT	As considered by TAMP
A.	Capacity		
(i).	Quay capacity		
	(a). Number of capsized vessels to be handled	80%	
	(b). Number of panamax vessels to be handled	20%	
	(c). Ship day output of capsized vessels-tons	50000	
	(d). Ship day output of panamax vessels-tons	35000	
	(e). Optimal quay capacity 0.7 (0.8 x 50000 + 0.2 x 35000) x 365		
		12 MT	12 MT
(ii).	Yard capacity		
	(a). Area allotted (sq. mtrs.)	147000	
	(b). Area available for stacking	70%	
	(c). Stacking quantity per sq. mtr. (tons)	3	
	(d). Annual turnover ratio	12	
	(e). Yard capacity as per norms 147000 x 0.7 x 3 x 12 x 0.7 (tons)	2593080	
	(f). Yard capacity arrived at by PPT by considering turnover ratio at 30 and stacking quantity per sq. mtr. at 4.7 (tons) 147000 x 0.7 x 4.7 x 30 x 0.7 (tons)	10.16 (rounded off to 10 MT)	
		10 MT	10 MT
B.	Capital Cost of the Terminal (Rs. in lakhs)		
(i).	Civil Construction	11292	11292
(ii).	Coal Handling Equipment	22480	22480
	Sub-Total	33772	33772
(iii).	5% Miscellaneous on (i) and (ii)	1689	1689
(iv).	Total Cost	35461	35461
C.	Operating Cost of the Terminal (Rs. in lakhs)		
	(a). Power and Fuel	730	
	(b). Repairs and Maintenance - Civil	113	
	(c). Repairs and Maintenance - Mechanical	1574	
	(d). Insurance	355	
	(e). Depreciation	2758	
	(f). License fee	106	
	(g). Other expenses at 5% of Rs.35461 lakhs	1773	
	Total	7409	7409
D.	Revenue Requirement for cargo handling (Rs. in lakhs)		
(i).	Operating Cost	7409	7409
(ii).	ROCE @ 16% on Rs.35461 lakhs	5674	5674
	Total Revenue Requirement	13083	13083
E.	Tariff and Free Period		
(i).	Coal Handling Charges (Rs. per ton)	130	130
(ii).	Free Storage Period (days)	10	10
F.	Capital Cost of Berth (Rs. in lakhs)		
(i).	Berth Cost	5661	5661
(ii).	Berthside dredging	4080	4080
	Sub-Total	9741	9741
(iii).	5% Contingencies and Engineering Project Management	487	487
	Total of (i) + (ii) + (iii)	10228	10228
(iv).	5% towards Contingencies	512	512
	Total	10740	10740
G.	Operating Cost of berth		
(i).	Repairs and Maintenance (1% of Rs.10740 lakhs)	107	107
(ii).	Insurance (1% of Rs.10740 lakhs)	--	107
(iii).	Depreciation (3.34% of Rs.10740 lakhs)	--	359
	Total (Rs. in lakhs)	107	573
H.	Revenue Requirement for berth operation (Rs. in lakhs)		
(i).	Operating Cost	107	573
(ii).	ROCE @ 16% on Rs.10740 lakhs	1718	1718
	Total Revenue Requirement	1825	2291

Annex-III

COMPUTATION OF UPFRONT BERTH HIRE OF IRON ORE TERMINAL (PPP PROJECT) AT PARADIP PORT

Sr. No	Particulars	Unit	As per PPT			As considered by TAMP		
			Cape size	Panamax	Total	Cape size	Panamax	Total
i	Ratio	%	80%	20%		80%	20%	
ii	Tonnage to be handled	tonnes	8000000	2000000		8000000	2000000	
iii	Ship day output	TPD	60000	55000		60000	55000	
iv	No of berth days (ii /iii)	berth days	133	37		133	37	
v	Number of berth hours (iv * 24)	hours	3192	888	4080	3192	888	4080
vi	Parcel size of vessels	tonnes	110000	70000		110000	70000	
vii	Number of vessels (ii / vi)	nos	73	29	102	73	29	102
viii	Unberthing hours - 3 Hours each vessel	hours	219	87	306	219	87	306
ix	Total berth hours including unberthing hours (v +viii)	hours	3411	975	4386	3411	975	4386
x	Average GRT	tonnes	66550	44400		66550	44400	
xi	Total GRT as per PPT (vii) x (x)	tonnes	4858150	1287600	6145750			
xii	Total GRT as moderated by TAMP (ix)x(x)	tonnes				227002050	43290000	270292050
xiii	Revenue Requirement	Rs. In crores			18.53			23.26
xiv	Berth hire per GRT as per PPT (xiii /xi)	Rs.			30.15			
xv	Berth hire per GRT per hour as per PPT (xiv /ix)	Re. Per GRT			0.00687			
xvi	Berth hire per GRT per hour (xiii /xii)	Re. Per GRT						0.86

Annex – IV

COMPUTATION OF UPFRONT BERTH HIRE OF COALTERMINAL (PPP PROJECT) AT PARADIP PORT

Sr. No	Particulars	Unit	As per PPT			As considered by TAMP		
			Cape size	Panamax	Total	Cape size	Panamax	Total
i	Ratio	%	80%	20%		80%	20%	
ii	Tonnage to be handled	tonnes	8000000	2000000		8000000	2000000	
iii	Ship day output	TPD	50000	35000		50000	35000	
iv	No of berth days (ii /iii)	berth days	160	57		160	57	
v	Number of berth hours (iv * 24)	hours	3840	1368	5208	3840	1368	5208
vi	Parcel size of vessels	tonnes	100000	70000		100000	70000	
vii	Number of vessels (ii / vi)	nos	80	29	109	80	29	109
viii	Unberthing hours - 3 Hours each vessel	hours	240	87	327	240	87	327
ix	Total berth hours including unberthing hours (v +viii)	hours	4080	1455	5535	4080	1455	5535
x	Average GRT	tonnes	60500	44400		60500	44400	
xi	Total GRT as per PPT (vii) x (x)	tonnes	4840000	1287600	6127600	4840000	1287600	6127600
xii	Total GRT as moderated by TAMP (ix)x(x)	tonnes				246840000	64602000	311442000
xiii	Revenue Requirement	Rs. In crores			18.25			22.91
xiv	Berth hire per GRT as per PPT (xiii /xi)	Rs.			29.78			
xv	Berth hire per GRT per hour as per PPT (xiv /ix)	Re. Per GRT			0.00538			
xvi	Berth hire per GRT per hour (xiii / xii)	Re. Per GRT						0.74

Annex - V

Upfront tariff schedule for the Iron Ore Terminal Berth at Paradip Port

1. The Cargo Handling Charges

The cargo handling charges at the deep draught Iron Ore berth at Paradip Port shall be payable on the manifested cargo directly by the importer of cargo at the rates specified below :

Sl.	Commodity	Unit	Rate in Rupees
1.	Iron Ore handling charges (all types)	MT	157

The above rate is the composite rate for unloading the Iron Ore from the railway wagon, conveying to stackyard, storage at the stackyard upto a free period of 18 days after the time of unloading the iron ore from railway wagon, reclaiming from the stackyard and loading on to the ship and all other miscellaneous services provided.

2. Storage charges

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

(Rate in Rs. Per ton)

Sl.No.	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)	12	24	48

3. 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	0.86	0.52

Note: 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.

Upfront tariff schedule for the Coal Terminal at Paradip Port

1. The Cargo Handling Charges

The cargo handling charges at the deep draught coal berth at Paradip Port shall be payable on the manifested cargo directly by the importer of cargo at the rates specified below :

Sl. No.	Commodity	Unit	Rate in Rupees	
			Foreign	Coastal
1.	Coal handling charges			
(a).	For Thermal coal	MT	130	130
(b).	For other than Thermal coal	MT	130	78

The above rate is the composite rate for unloading the coal from the ship, conveying to stackyard, storage at the stackyard upto a free period of 10 days after the time of completion of the ship, reclaiming from the stackyard and loading on to the railway wagon all other miscellaneous services provided.

2. Storage charges

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

(Rate in Rs. Per ton)

Sl.No.	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.	Coal (all types)	12	24	48

3. 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	0.74	0.44

Note: 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.

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

No.TAMP/18/2008-PPT

- **Proposal from the Paradip Port Trust for upfront tariff setting for construction of (i) a deep draught iron ore and (ii) a deep draught coal Berth on BOT basis.**

1. Summary of the comments received from the user organizations/ short listed bidders in regard to **Iron Ore Berth** and the clarifications furnished by PPT vide letter dated 23 June 2008 are tabulated below:

Sl. No.	Comments by users / user organizations	Reply of PPT
1.	Essar Shipping Ports & Logistics Ltd. (formally known as Essar Shipping Ltd.)	
(i).	Capital Cost and Operating Cost	
(a).	We presume the capital cost and operating cost estimates given in the report are only indicative, and therefore, the tariff workings are also indicative. As the cost estimates are not based on Detailed Engineering, the capital cost cannot be accurately estimated at this stage. Therefore, we believe the actual cost to completion and actual operating costs will be taken into account while fixing the final tariff.	The upfront tariff to be fixed and included in the RFP documents shall be indexed to inflation to an extent of 60% variation in WPI occurring between 1 st January,2008 and 1 st January of the relevant year. This shall be the operative tariff.
(b).	The capital cost shall also take into account provision for escalation on account of inflation and price escalation of atleast 25% (as the project would be implemented over a period of 3-4 years)	Please refer to reply at Sl. (i) (a) above
(c).	Contingency provision of 3% is quite low. Contingency shall be provided atleast at 10%, as the detailed engineering for the project is not yet carried out.	Provision for contingency taken in the calculation is 5% as per the TAMP guide line which is adequate.
(d).	The provision of 5% under the head "Miscellaneous" is quite low considering the fact that this includes costs such as pollution control, fire fighting equipment, upfront payments, Interest during Construction (IDC), working capital margin, miscellaneous equipment, power supply, lighting, etc. For example, considering a three year construction schedule, the IDC alone works out to over 15%. Therefore, in our view the provision under the head "Miscellaneous" shall be atleast 25%	Provision of 5% is as per the guidelines.
(e).	The power cost of Rs.5.00 per unit is low. This shall be increased to Rs.7.00 per unit.	Power cost has been considered at Rs. 5.22 per unit in the revised report.
(ii).	Yard Capacity: The Yard capacity based on TAMP guidelines works out to 7.24 million tonnes p.a. (mmtpa) whereas Paradip Port Trust has considered yard capacity of 10 mmtpa. This is highly detrimental for the developer, as the cost recovery / revenue earning would be based on 10 mmtpa capacity whereas the actual capacity of the terminal would be only 7.24 mmtpa. It	A turn over ratio of 13 has already been achieved in Ports like Chennai and Mormugao with semi-mechanized system of Iron Ore handling. Bigger vessels like Cape size and Panamax will be handled at the proposed berth. Moreover ultra modern unloading / loading equipments are going to be installed. Under the circumstances, the BOT operator will be

	appears, the deviation from TAMP guidelines for calculation of Yard Capacity is made only with a pre-determined aim of arriving at a Yard Capacity of 10 mmtpa. Further, there appears to be arithmetical error while computing the stackyard area based on plot size of 365 m x 225 m. The area as per the given plot size works out to 82125 sq. mt., whereas PPT has considered it at 83125 sq. mtr.	able to achieve higher productivity at the berth and hence will be in a position to clear the cargo at the stacking yard at a faster rate than the rates achieved in Ports like Mormugao and Chennai. Hence an improvement of 33.3% has been assumed and thus turn over ratio of 16 has been considered. The typographical error, as regards the stackyard area is corrected in the revised report.
(iii).	Vessel Mix: The vessel mix of 80:20 (capesize – 80 and panamax – 20) is very high. Considering the fact that not many capesize vessels are likely to call at the port, higher weightage shall be attached to the panamax vessels. In our views, the vessel mix shall be 60:40	The proposed facility is a Deep draught berth and as such, the vessel mix of 80:20 for Capesize and Panamax vessels has been adopted in the calculations.
(iv).	Capacity utilization: Cargo Handling charges are worked out based on 70% capacity utilization which applies to all the years. However, it is pertinent to note that the capacity utilization cannot be ramped upto 70% from the very first year itself. Past experience shows that the capacity utilization ramp up happens over a period of time. Moreover, the operations face 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%)	The figure of 70% adopted in the calculations is as per the guidelines.
(v).	Coastal vessels rebate: A rebate of 40% is provided in the Scale of Rates for coastal vessels, whereas the tariff calculations are worked out based on composition of 100% foreign vessels, and 0% coastal vessels. It is suggested that the factor of 40% rebate for coastal vessels is taken into account while fixing the charges, and therefore, the charges worked may be enhanced accordingly.	The rebate for coastal vessel is withdrawn. Please refer to the revised report.
(vi).	Storage charges: The working of charges for storage is not clear.	As per the assumptions only 10% of the total quantity unloaded will earn the storage charges i.e. 90% of the cargo will be cleared within 18 days free period. Of the cargo that will attract storage charges 75% is assumed to be cleared within the first slab of 19th to 23rd day, 20% within the 2nd slab of 24th to 28th days and 5% in the 3rd slab of 29th day and beyond.
(vii).	Berth Hire Charges: The berth cost for calculation of “Berth Hire Charges” is taken only at 75% of the estimated berth cost of Rs.7548 lakh. This should be taken at full value i.e. 100% of Rs.7548 lakh.	The balance 25% is towards berth apron and approaches. This has been considered while calculating the iron ore handling charges.
(viii).	While calculating the berth hire charges, the basis for arriving at 72 and 28 no. of vessels is not clear. Pl. clarify the same.	At Annexure 6.10 of the revised report the calculation has been detailed.

2.	Emirates Trading Agency LLC – Saqr Port Authority	
(i).	Capacity required in 2010-11 is 8.5 million ton, whereas the capacity considered for tariff calculation is 10 million ton. Hence tariff needs to be revised upwards. With 8.5 million ton as target Traffic: 1.Cargo handling charges - Rs 182 per ton 2. Storage charges after free period of 18 days First 5 days -Rs 14 per ton From 6th day to 10 th day -Rs 28 per ton From 11 day and beyond –Rs 56 per ton 3. Berth Hire Charges per GRT per hour =Rs 0.00682	The traffic projections given by RITES may be seen together with the projections given in the PPT business plan report available in the port web site www.paradiport.gov.in. Infact, the port has handled about 13 million tons of iron ore in the year 2007-08. The traffic projections for Iron Ore will exceed 15MTPA by 2011. Also, as per the guidelines tariff is to be fixed with reference to the optimal capacity of the terminal irrespective of any traffic forecast. As such, the assessment of terminal capacity as 10 MTPA given in the report stands along with the prescribed scale of rates.
(ii).	In view of recent hike in the construction material cost and inflation the Civil Work cost will be significantly higher than the indicated cost and same should be considered for tariff calculation.	The estimates are based on feasibility report prepared by our consultants, RITES. The cost estimates have also been updated while submitting the tariff fixation proposal to TAMP.
(iii).	For arriving at estimation of revenue requirement, ROCE is considered @16% in reference to WPI of year 2007-08. In view of recent increase in inflation / WPI, ROCE should be recalculated with reference to higher WPI and tariff calculated for the year 2010-11 should be revised at that time on request from Developer.	The ROCE is taken @ 16% as per the guidelines .The upfront tariff to be fixed and included in the RFP documents shall be indexed to inflation to an extent of 60% of the variation in WPI occurring between 1 st January, 08 and 1 st January of the relevant year.
(iv).	What percentage out of 10% is assumed for each slab of 5 days for collection of storage charges? What is maximum full period considered to match the storage revenue due to non-evacuation of cargo after free period?	As per the assumptions only 10% of the total quantity unloaded will earn the storage charges i.e. 90% of the cargo will be cleared within 18 days free period. Of the cargo that will attract storage charges 75% is assumed to be cleared within the first slab of 19 th to 23 rd day, 20% within the 2 nd slab of 24 th to 28 th days and 5% in the 3 rd slab of 29 th day and beyond.
3.	Lanco Infratech Limited	
(i).	We understand that the cost estimates are based on feasibility report prepared by the port sometime back. There is steep increase in the prices of all commodities in recent past. Therefore, the updated costs, duly adjusted to price increase shall be taken as basis.	The cost estimates given in the feasibility report have been updated while submitting the upfront tariff fixation proposal to TAMP.
(ii).	(a). The draft of the Vessel considered i.e. 16 M may be inadequate for 1,85,000 DWT ship with parcel load of 1,50,000 DWT. It may be adequate for 1,25,000 DWT ship. (b). The berth capacity of 10 Million Tonnes is high since the berth capacity is worked out as 7.25 Million Tonnes. The assumption that BOT Operator would be compelled to plan his operation to have better utilization of asset and thereby obtaining 10 Million Tonnes throughput is hypothetical. The tariff be fixed with 7.25 Million Tonnes capacity and same	(a). Bids will be invited for handling up to 1,25,000 DWT vessels. As and when the draught is increased further to handle 1,85,000 DWT vessels, the concession agreement will be modified. (b). A turn over ratio of 13 has already been achieved in Ports like Chennai and Mormugao with semi-mechanized system of Iron Ore handling. Bigger vessels like Cape size and Panamax will be handled at the proposed berth. Moreover ultra modern unloading / loading equipments are going to be installed. Under

	can be reviewed after 3 years of operations based on capacity achieved.	the circumstances, the BOT operator will be able to achieve higher productivity at the berth and hence will be in a position to clear the cargo at the stacking yard at a faster rate than the rates achieved in Ports like Mormugao and Chennai. Hence an improvement of 33.3% has been assumed and thus turn over ratio of 16 has been considered.
	(c). It is further mentioned that the vessel mix shall be 1,25,000 DWT and Panamax in 80:20 ratio. This will have direct impact on berth productivity and in turn berth capacity (throughput). From this consideration also the berth capacity shall be taken as 7.25 Million Tonnes for working our tariff.	(c). The difference between the berth day out put between capsized and panamax vessels is only 5,000 tons per day. Moreover, the berth day out put per vessel itself is taken on lower side.
(iii).	The Engineering and project management shall be considered as 5% (instead of 2%, which is very low).	The capital cost for purpose of tariff fixation is taken as per the guidelines as 5%.
(iv).	"Optimal Quay Capacity": The number of days considered as 365, whereas it shall be only port operating period (of 330 days).	The number of days taken as 365 days as per the guidelines. Even if we take 330 days, the quay capacity will be more than 10 MTPA.
(v).	The capacity shall be revised as 7.25 Million Tonnes as indicated above	The optimal capacity of the terminal derived with justification as 10MTPA as given above shall prevail.
(vi).	The civil construction estimates shall be based on requirements affected upon detailed engineering and also represent the latest market prices.	The estimates are based on feasibility report prepared by our consultants, RITES. The cost estimates have also been updated while submitting the tariff fixation proposal to TAMP. Engineering details have been taken into account by the consultant while preparing the feasibility report.
(vii).	As the Feasibility Report is not available, it will not be possible to comment on the reasonableness of the estimates provided for various items	The summary of the project cost estimates as per the feasibility report are given at Annexure-2.1 to 2.3. The feasibility report will be made available to the shortlisted bidders along with the RFP documents.
4.	Rio Tinto India Private Limited	
(i).	Our comments on the Coal Berth also apply to the Iron Ore Berth.	PPT's response is yet to be received.
(ii).	Current iron ore traffic for the 2008-09 year is indicated approximately at 13 million metric tons per annum. Export tonnage is projected at 13 million tons by the year 2010-11. Please indicate whether the figures include both imports and exports. If so, please indicate whether the new iron ore berth is intended to handle iron ore import as well as export. Please indicate the anticipated import traffic for the years 2010-11 and 2015-16.	The proposed terminal is for export of iron ore. The figure in section 1.1 is for iron ore export. As regards details on traffic projection sought please refer to reply at Sl. 2(i) to query raised by Emirates Trading Agency LLC – Saqr Port Authority.
(iii).	Current iron ore export capacity is taken as 5 million metric tons per annum. Please indicate whether existing facilities will continue to handle no more than the current 5 million metric tons per annum. Please	The existing iron ore handling plant (mechanical) will continue to be in operation. However, the manual handling of Iron ore will stop.

	indicate whether the PPT intends to give the new iron ore berth a preference for all iron ore exports and / or imports.	
(iv).	Other modern, private port facilities in the region guarantee a loading rate of between 15,000 metric tons (for thermal coal) to 30,000 metric tons (coking coal) per weather working day for Capemax vessels subject to vessel side stoppages. In calculating the optimal quay capacity, however, loading rates of 60,000 metric tons per day for Capemax vessels and 55,000 metric tons per day for Panamax vessels have been assumed. These rates seem overly optimistic and have material impact on the formulation of the tariff. Please indicate the basis for the assumed loading rates.	The assumed loading rates are as per the guidelines.
5.	SICAL Logistics Ltd.	
(i).	In India Panamax are expected to be continued to call for some more years and 50:50 vessel is more realistic in the near future. This may increase to 80:20 over the years. It is too farfetched to expect 80:20 vessel in the initial stage.	The proposed facility is a Deep draught berth and as such, the vessel mix of 80:20 for Capesize and Panamax vessels has been adopted in the calculations.
(ii).	To accumulate a parcel size of 1 lakh ton, approximately 30 rakes are required. Considering that there will be 7-8 parcels accumulated at a time, it will require at least 30 days cargo residence considering 1 rake per day for each exporter. Hence, less than 30 days turnover is not possible. Correspondingly, the yard capacity as per the calculation is only 7.24 million tons. Expecting 16 turnover of plot will not be workable.	It is possible to move 10 rakes per day by various exporters to the port which works out to more than 10 MTPA. The stackyard can store cargo to the extent of 1.2 Million tons at any point of time. Hence, the turn over ratio of 16 is realistic.
(iii).	Considering 12 turnover of plot, 7.24 million tons may be taken as stockyard capacity in place of 10million tons.	Please refer to reply at Sl.3 (ii) (b) above to the query raised by Lanco Infratech Limited.
(iv).	While calculating the project cost civil cost per building has been clubbed into others which comes to Rs.5. crores. This is inadequate. For workshop, a provision of Rs.5 crores has been made, electric power and control is another Rs.5 crores. For a project of this size a good administrative building is also required. To house a suitable workshop and substations, suitable weightage in civil cost is required and accordingly the figure of Rs.5 crores has to be enhanced to Rs.10 crores. Hence, while calculating the ROC suitable amendments are required.	Lumpsum provision has been made for ancillary works under the head 'others' and 'contingencies'. The cost of building etc. would be adjusted within these items.
(v).	Considering the capacity of the terminal (based on the stockyard made available and as per TAMP guidelines), as 7.24 million tons, the iron ore handling charges should be approximately Rs.216.98 per ton.	The optimal capacity of the terminal derived with justification as 10 MTPA shall prevail. As such the iron ore handling charges determined as Rs.157/- per ton stands.
(vi).	Considering the capacity of the terminal (based on the stockyard made available and as per TAMP guidelines) , as 7.24 million tons, the storage cost should be	As per the assumptions only 10% of the total quantity unloaded will earn the storage charges i.e. 90% of the cargo of each ship will be cleared within 18 days free period.

	approximately Rs.16.59, Rs.23.18 and Rs.46.36 with free days of 25 days which is for the same revenue requirement of Rs.158.69 lakhs	
(vii).	The GRT considered for the vessels are not matching to the size of vessels expected to call at Paradip Port. Moreover, the computation of total GRT of vessels and total berth occupancy time is not correct. The revised computation is approximately Rs.2.13.	The berth hire charges is recalculated as Rs.0.00687 per hour per GRT.
(viii).	Iron ore handling charges for foreign going vessels should be Rs.217 per metric ton and 130.2 for coastal vessels.	The concession for coastal vessels is withdrawn. The Iron ore handling charges stands at Rs.157/- per MT.
(ix).	The cargo handling rate is the composite rate for unloading the Iron Ore from the ship, conveying to stockyard, storage at the stockyard upto a free period of 12 days after time of completion of the ship, reclaiming from the stockyard and loading on the railway wagons. As per the description given, it is indicated that the terminal is meant for unloading iron ore but the terminal is meant export of iron ore.	Please read 'unloading the Iron ore from the ship' as 'unloading the iron ore from the wagons'.
(x).	Storage charges is fixed at Rs.12, Rs.24 and Rs.48 per ton. The rate should be Rs.16.59, Rs.23.18 and Rs.46.36 per ton respectively.	Storage charges given in the revised report stands.
(xi).	Berth hire charges are fixed as 0.00017 USD for foreign going vessels and Rs.0.0040 for coastal vessels. The rate should be 0.057 USD for foreign going vessels and Rs.1.383 for coastal vessels.	The optimal capacity of the terminal derived with justification as 10 MTPA shall prevail. As such the iron ore handling charges determined as Rs.157/- per ton stands.
6. Federation of Indian Mineral Industry		
(i).	The return on Capital Employed (ROCE) considered for the purpose of calculating tariff is 16% which seems to be on higher side. Generally the concession period for infrastructure projects are for longer duration and therefore the rate of return should be lower. Further the risk of this project is less as cargo availability will not be a problem as mentioned in the report. IN our view the ROCE for such project should be considered as 12%. Further with improvement in efficiency the overall cost will come down which will directly benefit the operator.	ROCE of 16% taken in the calculation is as per the guidelines.
(ii).	The calculation of total operating cost as per annexure 6.4 needs further detailing element wise for every year particularly for Repair & Maintenance of Mechanical and Electrical works (considered 7% of capital cost) and other expenses (considered 5% of total capital cost).	The figures of 7% and 5% adopted in the calculations are as per the guidelines.
(iii).	Please correct the para 6.2.1 of chapter 7 as " composite rate for unloading the iron ore from the railway wagons, conveying to stackyard storage of the stackyard up to a free period of	Agreed. However, the free period is 18 days.

	12 days after the time of unloading the iron ore from the railway wagons, reclaiming from the stackyard and loading on to the ship".	
(iv).	The proposed iron ore berth is fully mechanical with all latest technology, so the operating cost should be less than the present tariff rate for handling iron ore at Paradip port i.e. Rs. 119 per ton.	The iron ore handling charges is derived with justification as Rs.157/- per ton and is as per the guidelines.
7.	Essel Mining and Industries Limited	
(i).	The Return on Capital Employed (ROCE) considered for the purpose of calculating tariff is 16% which seems to be on higher side. Generally the concession period for infrastructure projects are for longer duration and therefore the rate of return should be lower. Further the risk of this project is less as cargo availability will not be a problem as mentioned in the report. In our view the ROCE for such project should be considered at 12%. Further with improvement in efficiency the overall cost will come down which will directly benefit the operator.	PPT's comments are awaited.
(ii).	The calculation of total operating cost as per annexure 6.4 needs further detailing element wise for every year particularly for Repair and Maintenance of Mechanical and Electrical works (considered 7% of capital cost) and other expenses (considered 5% of total capital cost).	PPT's comments are awaited.
(iii).	The proposed iron ore berth is fully mechanical with all latest technology, so the operating cost should be less than the present tariff rate for handling iron ore at Paradip Port i.e. Rs.119 per ton.	PPT's comments are awaited.
(iv).	In view of the above the upfront tariff shall be much lower than the proposed Rs.157 per ton to remain competitive and able to attract the cargo as number of multiuser ports are being developed near Paradip like Dhamra, Gopalpur etc.	PPT's comments are awaited.

2. A summary of the comments received from the user organizations/ short listed bidders in regard to **Coal Berth** and the clarifications furnished by PPT vide letter dated 23 June 2008 are tabulated below:

Sl. No.	Comments by users / user organizations	Reply of PPT
1.	Essar Shipping Ports & Logistics Ltd. (formally known as Essar Shipping Ltd.)	
(i).	Capital Cost and Operating Cost	
(a).	We presume the capital cost and operating cost estimates given in the report are only indicative, and therefore, the tariff workings are also indicative. As the cost estimates are not based on Detailed Engineering, the capital cost cannot be accurately estimated at this stage. Therefore, we believe the actual cost to completion and actual operating costs will be taken into account while fixing the final tariff.	The upfront tariff to be fixed and included in the RFP documents shall be indexed to inflation to an extent of 60% variation in WPI occurring between 1 st January, 2008 and 1 st January of the relevant year. This shall be the operative tariff.

(b).	The capital cost shall also take into account provision for escalation on account of inflation and price escalation of atleast 25% (as the project would be implemented over a period of 3-4 years)	Please refer to reply at Sl.1(i)(a)
(c).	Contingency provision of 3% is quite low. Contingency shall be provided atleast at 10%, as the detailed engineering for the project is not yet carried out.	Provision for contingency taken in the calculation is 5% as per the TAMP guidelines.
(d).	The provision of 5% under the head "Miscellaneous" is quite low considering the fact that this includes costs such as pollution control, fire fighting equipment, upfront payments, Interest during Construction (IDC), working capital margin, miscellaneous equipment, power supply, lighting, etc. For example, considering a three year construction schedule, the IDC alone works out to over 15%. Therefore, in our view the provision under the head "Miscellaneous" shall be atleast 25%	Provision of 5% is as per the guidelines.
(e).	The power cost of Rs.5.00 per unit is low. This shall be increased to Rs.7.00 per unit	Power cost has been considered at Rs.5.22/- per unit in the revised report
(ii).	Yard Capacity: The Yard capacity based on TAMP guidelines works out to 2.59 million tonnes p.a. (mmtpa) whereas Paradip Port Trust has considered yard capacity of 10 mmtpa. This is highly detrimental for the developer, as the cost recovery / revenue earning would be based on 10 mmtpa capacity and not 2.59 mmtpa capacity whereas the actual capacity of the terminal would be only 2.59 mmtpa. It appears, the deviation from TAMP guidelines for calculation of Yard Capacity is made only with a pre-determined aim of arriving at a Yard Capacity of 10 mmtpa.	The norms prescribed in the guidelines for stacking is 3tons per sq.mtr. In the calculation of the optimal yard capacity, a rate of 4.7tons per sq.mtr. has been adopted. Justification for arriving at the figure has also been given in the report. It is clearly brought out that 5.4ton per sq.mtr. is adopted for the existing MCHP in the port while 4tons per sq.m. has been adopted in the port scale of rates for coking and non-coking coal. Hence, an average of 4.7 tons per sq.m. (average of 5.4. and 4) has been adopted for calculation of the yard capacity. Also, coking coal is required for steel mills and there is likelihood for large number of users of coal handling facilities for import of coal and its expeditious evacuation for their steel mills. Multiple users of the facility would necessitate in curtailing the free period and thereby increasing the capacity of the yard. In fact, the present MCHP at Paradip Port is designed for 20MTPA. It has a stackyard area of 1,23,000 Sqmtr.with capacity to store 6,50,000tons of coal. For a throughput of 20MTPA, the turn over ratio works out to 30.76. Thus, the figure of 30 adopted in the calculation for determining the optimal yard capacity is justified leading to an optimum terminal capacity of 10MTPA.
(iii).	Vessel Mix: The vessel mix of 80:20 (capesize – 80 and panamax – 20) is very high. Considering the fact that not many capesize vessels are likely to call at the port, higher weightage shall be attached to the panamax vessels. In our views, the vessel	The proposed facility is a Deep draught berth and as such, the vessel mix of 80:20 for Capesize and Panamax vessels has been adopted in the calculations.

	mix shall be 60:40	
(iv).	Capacity utilization: Cargo Handling charges are worked out based on 70% capacity utilization which applies to all the years. However, it is pertinent to note that the capacity utilization cannot be ramped upto 70% from the very first year itself. Past experience shows that the capacity utilization ramp up happens over a period of time. Moreover, the operations face 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%)	The figure of 70% adopted in the calculation is as per the guidelines.
(v).	Coastal vessels rebate: A rebate of 40% is provided in the Scale of Rates for coastal vessels, whereas the tariff calculations are worked out based on composition of 100% foreign vessels, and 0% coastal vessels. It is suggested that the factor of 40% rebate for coastal vessels is taken into account while fixing the charges, and therefore, the charges worked may be enhanced accordingly.	The rebate for coastal vessels is withdrawn.
(vi).	Storage charges: The workings of charges for storage as per Annexure 6.6 is not clear.	As per the assumptions only 10% of the total quantity unloaded will earn the storage charges i.e. 90% of the cargo of each ship will be cleared within 10 days free period. Of the cargo that will attract storage charges 75% is assumed to be cleared within the first slab of 11 th to 15 th day, 20% within the 2 nd slab of 16 th to 20 th days and 5% in the 3 rd slab of 21 st day and beyond.
(vii).	Berth Hire Charges: The berth cost for calculation of "Berth Hire Charges" is taken only at 75% of the estimated berth cost of Rs.7548 lakh. This should be taken at full value i.e. 100% of Rs.7548 lakh.	The balance 25% is towards berth apron and approaches. This has been considered while calculating the coal handling charges.
(viii).	The basis for arriving at 72 and 28 no. of vessels is not clear. Pl. clarify the same.	At Annexure 6.10 of the revised report the calculation has been detailed.
2.	Karnataka Power Corporation Limited	
(i).	The implementation period of the project is not indicated.	Implementation period of the project is 42 months.
(ii).	The IDC is not reflected in the capital cost estimates of the coal berth and the coal handling system which may have impact on the estimation of the operating cost and revenue.	'Interest during construction' for the Deep draught Iron Ore is included under the miscellaneous items in Annexure 6.3. of the final report.
(iii).	The sensitivity analysis on coal handling charges and berth hire charges in respect of the terminal capacity is not reflected in the draft report.	The final report giving details on back up calculations for deriving the wharfage and berth hire charges is in line with the TAMP guidelines. These guidelines have not incorporated sensitivity analysis calculations.
(iv).	The project is otherwise good and timely. We welcome it.	No comments.
3.	Emirates Trading Agency LLC – Saqr Port Authority	
(i).	Coking coal traffic handled in 2007-08 was 4.7 million ton	Traffic projection of 13.5MTPA for coking / non-coking coal by the year 2010-11 given

	Traffic projection in 2010-11:- 13.5 million ton Though Port is proposing for 10 million ton traffic to handle in 2010-11, it is felt that not more than 8.8 million ton (13.5 – 4.7) may be available to handle at new Berth. Hence tariff needs to be revised upwards. With consideration of Traffic as 8.8 million ton and free period as 12 days: 1. Cargo handling charges - Rs.146 per ton 2. Storage charges after free period of 12 days First 5 days –Rs.14 per ton From 6th day to 10th day –Rs.28 per ton From 11 day and beyond –Rs.56 per ton 3. Berth Hire Charges per GRT per hour =Rs.0.00633	in the report is realistic. The coal handling charges given in the revised report stands.
(ii).	Average growth rate of coking coal for the last four years is 13%. Going by this growth rate, in year 2010-11 the traffic handling requirement is coming approximately 7 million ton. Hence tariff needs to be revised upwards.	Tariff shall be fixed for the optimal capacity of the terminal and is not related to traffic forecast.
(iii).	In view of recent hike in the construction material cost and inflation the Civil Work cost will be significantly higher than the indicated cost and same should be considered for tariff calculation.	The estimates are based on feasibility report prepared by our consultants, RITES. The cost estimates have also been updated while submitting the tariff fixation proposal to TAMP.
(iv).	Port has handled 4.7 million ton traffic in the existing Coking Coal Berth whereas handling capacity is 3.5 million ton. To make the Project viable to the Developers Paradip Port Authority should restrict handling of cargo in old existing berths to the designed capacity only.	The BOT operator will have the first right for refusal.
(v).	New mechanized Berth should be given priority of handling the cargo to the designed capacity of 10 million ton and any excess may be diverted to the old berths.	No reply received from PPT.
(vi).	For arriving at estimation of revenue requirement, ROCE is considered @16% in reference to WPI of year 2007-08. In view of recent increase in inflation / WPI, ROCE should be recalculated with reference to higher WPI and tariff calculated for the year 2010-11 should be revised at that time on request from Developer.	The ROCE is taken @ 16% as per the guidelines .The upfront tariff to be fixed and included in the RFP documents shall be indexed to inflation to an extent of 60% of the variation in WPI occurring between 1 st January, 08 and 1 st January of the relevant year.
(vii).	What percentage out of 10% is assumed for each slab of 5 days for collection of storage charges? What is maximum full period considered to match the storage revenue due to non-evacuation of cargo after free period?	As per the assumptions only 10% of the total quantity unloaded will earn the storage charges i.e. 90% of the cargo will be cleared within 18 days free period. Of the cargo that will attract storage charges 75% is assumed to be cleared within the first slab of 19 th to 23 rd day, 20% within the 2 nd slab of 24 th to 28 th days and 5% in the 3 rd slab of 29 th day and beyond.
(viii).	Free period of 10 days seems to be on lesser side and needs to be increased to at least 12 days.	Free period of 10 days stands.

4.	Lanco Infratech Limited	
(i).	The Optimal yard capacity as given as 10.16 Million Tons will be work as 7.2 Million Tons after incorporating the following corrections: (a). The value taken for stacking is 4.7 MT/M². It is desirable to stack only 4.0 T.M² (b). The free period given is 12 days, whereas same has been taken as 10 days while assessing the optimal yard capacity. (c). With the above, the turnover of the plot would also be reduced from 30 to 25 days.	Please refer to reply at Sl.1 (ii) above to query raised by Essar Shipping Ports & Logistics Ltd.
(ii).	The free period needs to be revised as 12 days from 10 days.	The prescribed free period is 10 days.
5.	Rio Tinto India Private Limited	
(i).	The study predicts a rise in coal traffic from 4.7 million tons in 2007-08 to 13.5 million tons in 2010-11 and to 17.5 million tons 2015-18. The baseline figure used in this section for the year 2007-08 represents only coking coal tonnage not including thermal coal tonnage. Please confirm whether the PPT intends the new coal berth to handle only coking coal traffic. If the new facility will handle only coking coal, please indicate whether the existing coal berth adjoining the new facility will continue to handle a portion of coking coal traffic. If the new coal berth will handle thermal coal as well, please indicate the tonnage of thermal coal traffic projected for the years 2010-11 and 2015-18.	No reply received.
(ii).	Please confirm whether the RITES study is available for examination by potential bidders.	The feasibility report prepared by RITES will be made available along with the RFP documents.
(iii).	Please indicate whether PPT, NAM or RITES have prepared detailed projections of steelmaking in the region. Please indicate whether such studies are available to potential bidders.	The Business Plan report is available in the PPT website www.paradiport.gov.in
(iv).	Other private projects in the region handle Capemax vessels of upto 200,000 DWT at a berth having a length of only 320 meters. Please indicate the reasons underlying the PPT/RITES plan to construct a longer berth of 370 meters to service smaller vessels.	Berth construction shall be one time construction for the future. Berth length of 370 mtrs. is given to make optimum use of the available water front. Bids will be invited for handling up to 1,25,000 DWT vessels. As and when the draught is increased further to handle 1,85,000 DWT, the concession agreement will be modified.
(v).	Similar ports facilities offer a berthside draught of atleast 19.50 meters. Please indicate whether the decision to offer a draught of 16 meters is linked to the MNA assumption that only small to medium size Capemax vessels (upto 125,000 DWT) will call at the port. Please also indicate whether the port can accommodate vessels having a deeper draft.	

(vi).	BITES study anticipates that vessels of a size between 100,000 and 185,000 DWT will call at the new coal berth. PPT, however, assumes that the maximum vessel size will be only 125,000 DWT. Please indicate whether proposed unloading/handling system is adequate to handle cargos from vessels upto 185,000 DWT or above.	Bids will be invited for handling up to 1,25,000 DWT vessels. As and when the draught is increased further to handle 1,85,000 DWT, the concession agreement will be modified.
(vii).	A Capemax vessel of 125,000 DWT is on the smaller end of the scale. Other ports in the region offer access to vessels of upto 200,000 DWT. Thermal coal is transported in a variety of vessel sizes ranging from Handymax through Capemax. If a greater proportion of small vessels is likely to call, the optimal quay capacity will fall. This in turn affects the achievability of the projected ROCE. Please indicate the reasons for assuming that the new coal berth will be designed to accommodate only vessel size upto 125,000 DWT. Is this limitation based on commercial considerations or on size and draught limitations within the Paradip Port. If the PPT anticipates that the new coal berth will also handle thermal coal, please indicate the reasons why the assumed vessel mix excludes Handymax ships.	The proposed facility is a deep draught berth and as such, the vessel mix of 80:20 for capsizes and panamax vessels has been considered in the calculations. Presently the draught available in the port is to the tune of 12.5mtrs. Dredging work to increase the draught to 16mtrs. is under execution. Hence, the proposed facilities are planned to handle vessels up to 1,25,000 DWT. Please refer to 1st paragraph above.
(viii).	The assumption is that the BOT operator will bear the cost of berthside dredging. This cost does not appear to form part of the capital or operating costs taken into account when formulating the tariff. Please indicate the anticipated scope and extent of dredging. Will the operator be required to dredge an accessway from the main channel to the new coal berth? Does it assume that this dredging will be a one-time capital cost or will maintenance dredge for the berth and accessway be required? Please also indicate the reasons why the cost of such dredging has not been taken into account as part of the operator's capital or operating costs. How will the operator recover these costs?	The berth side dredging cost is taken into account while deriving the berth hire charges. Dredging in the approach channel, entrance channel, turning circle and access to the berths will be the responsibility of the Port. BOT operator shall only carry out berth face dredging.
(ix).	Other modern, private port facilities in the region guarantee a discharge rate of only between 25,000 metric tons (for thermal coal) to 35,000 metric tons (coking coal) per weather working day for Capemax vessels subject to vessel side stoppages. In calculating the optimal quay capacity, however, this section of the report assumes discharge rates of 50,000 metric tons per day for Capemax vessels and 35,000 metric tons per day for Panamax vessels. These rates	The assumed unloading rates are as per the guidelines.

	seem overly optimistic and have a material impact on the formulation of the tariff. Please indicate the basis for the assumed unloading rates.	
(x).	TAMP guidelines for the calculation of yard capacity fix a turnover rate of 12 per annum, yet the study uses a 30 turnover ratio. The study assumes that a number of users will drive down the free stacking period from 25 days to 10 days, thus increasing the turnover and the new facility's optimal capacity. It has been assumed a stacking capacity of 4.7 tons per square meter rather than the TAMP guidelines of 3 tons per square meter. This higher rate increases the new facility's optimal capacity and has a material impact on the formulation of the tariff. Please indicate the basis for the basis for these changes in assumptions. Do the TAMP turnover and stacking rates govern or can they be adjusted by consultants?	Please refer to reply at Sl.1 (ii) above to query raised by Essar Shipping Ports & Logistics Ltd.
(xi).	The PPT uses the revised assumptions to push the terminal capacity to 10 MTPA rather than the 2.6 MTPA that would apply under the TAMP guidelines discussed above.	The optimal capacity of the terminal stands at 10MTPA. Please refer to reply at Sl.1 (ii) above to query raised by Essar Shipping Ports & Logistics Ltd.
(xii).	The PPT assumes that the anticipated cargo tonnage of 100,000 metric tons per vessel equates to the gross registered tonnage of the vessel. We also note that GRT is a measure of the internal volume of a vessel. We further note that the berthing tariff is calculated on GRT, not cargo size. Please confirm the accuracy of the assumed GRT.	At Annexure 6.10 of the revised report the calculation has been detained.
(xiii).	No basis is given for the coal handling tariff for coastal vessels. These smaller vessels are less efficient to unload, and thus the cost per ton should be higher not lower. This tariff amounts to a subsidy of coastwise trade. Please indicate the volume of coastwise traffic anticipated at the new coal berth. Please also indicate the anticipated vessel size and discharge rates for coastal traffic at the port. Please confirm that the "coastal" tariff will apply only to shipments directly from one Indian port to another and not to all India flag vessels.	Rebate for coastal vessels has been withdrawn. Please refer to the revised report.

3. A joint hearing was held on 20 June 2008, where the PPT and the users were present. The gist of the joint hearing held is as under:

Paradip Port Trust

- (i). Made a power point presentation of the proposal highlighting the salient points thereof. Hard copy given.

- (ii). PPT furnishes its tentative response to the comments of users made in their written submission. It wants one week's time to finalise its comments and furnish them to TAMP. PPT agrees to put up its comments in its website for downloading by any interested parties.
- (iii). The channel is being dredged to handle vessels upto 1.25 lakh DWT. Though we will attempt to deepen further in the second phase, no firm commitment can be given at this juncture. It will be our endeavour to initiate second phase dredging work within 5 years.
- (iv). Our assessment of capacity is strictly based on the guidelines. The figures assumed for stack height and plot turnover are based on the levels already achieved by us and also at some other major ports.

Emirates Trading

- (i). In order to handle capesize vessels of 1.85 lakh DWT, it is absolutely necessary for PPT to dredge the channel further. The commitment of the Port about draft availability should be made known before bidding.
- (ii). The traffic potential at PPT is not at the level as projected by the Port. There would be capacity under utilisation for reasons beyond the control of the operators.

Chairman (TAMP)

- (i). The issue raised may be a project specific requirement. PPT may reassess and specify the maximum time by which second phase dredging would be completed. Alternatively, PPT may consider expanding the scope of BOT work to include dredging. It is for PPT to decide appropriately.

Rio Tinto

- (i). Yard capacity determined by the PPT requires to be reviewed. The parameters assumed for plot turnover and stack height should be relooked at bearing in mind the reality. Assessed capacity will have a serious impact on the upfront tariff and, therefore, the port should capture all factors imposing restriction on the capacity.

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