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**Tariff Authority for Major Ports**

**G.No.330** **New Delhi,** **18 November 2014**

# NOTIFICATION

In exercise of the powers conferred by Sections 48 and 50 of the Major Port Trusts Act, 1963 (38 of 1963), the Tariff Authority for Major Ports hereby disposes of the proposal received from the Mormugao Port Trust (MOPT) for fixation of upfront tariff cap for multipurpose cargo terminal under PPP mode at MOPT as in the Order appended hereto.

**(T.S. Balasubramanian)**
Member (Finance)

## Tariff Authority for Major Ports
**Case No. TAMP/21/2014-MOPT**

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

**QUORUM:**

(i). Shri. T.S. Balasubramanian, Member (Finance)
(ii). Shri. C.B. Singh, Member (Economic)

## O R D E R
(Passed on this 30th day of September 2014)

This case relates to a proposal received from the Mormugao Port Trust (MOPT) for fixation of upfront tariff cap for multipurpose cargo terminal under Public Private Partnership (PPP) mode at MOPT.

2. The Ministry of Shipping (MOS) under cover of its letter No.PR-14019/16/2012-PG dated 31 July 2013 has issued 'Guidelines for Determination of Tariff for Projects at Major Ports, 2013' under Section 111 of the Major Port Trusts (MPT) Act, 1963 on 31 July 2013. In compliance of the policy directives issued by the (MOS) under Section 111 of the MPT Act, 1963, the said Guidelines were notified vide Notification No.TAMP/18/2013-Misc. in the Gazette of India on 8 August 2013, vide Gazette no.214. The said Guidelines are effective from 31 July 2013. Subsequently, the MOS has issued Revised Guidelines for Determination of Tariff for Port Projects at Major Ports, 2013 under Section 111 of the Major Port Trusts Act and made effective from 9 September 2013. The said revised guidelines were notified in the Gazette of India vide Gazette No.254 dated 30 September 2013.

3.1. The Mormugao Port Trust (MOPT) had earlier vide its letter dated 8 April 2014 filed a proposal for fixation of the upfront tariff cap (Reference Tariff) for Multipurpose Cargo Terminal under PPP mode at MOPT in pursuance of Revised Guidelines for Determination of Tariff for Port Projects at Major Ports, 2013 notified on 30 September 2013.

3.2 The MOPT stated that it had earlier planned to develop a berth at West of the existing Breakwater (WOB) for handling Iron Ore, by private terminal operator on BOOT basis. Tariffs for this purpose was approved by the Authority vide Order no. TAMP/60/2009-MOPT passed on 04/05/2010. On account of various reasons, the project could not be implemented. The port is now proposing to develop 2 multipurpose berths in the said location for catering to all kinds of general cargo both bulk as well as break bulk. Since the project parameters, cargo to be handled as well as investments have undergone change, the tariff notified earlier will not be valid and hence new tariff is proposed under 2013 guidelines.

3.3. On perusing the proposal of the MOPT it was observed that estimated Annual Revenue Requirement (ARR) apportioned to three tariff groups viz. cargo handling charges, storage charges and miscellaneous charges was itself proposed as the upfront tariff cap. The unit rate arrived by the MOPT was not in line with the methodology prescribed in upfront tariff guidelines. Apart from that, the proposal of MOPT was not accompanied with Performance standards, which needs to be notified by this Authority along with the reference tariff as per Clauses 2.2 of the 2013 guidelines. In view of the above position and various other gaps observed, the MOPT proposal dated 8 April 2014 was returned to MOPT vide our letter dated 17 April 2014.

4.1. In this backdrop, the MOPT vide its letter dated 19 May 2014 has submitted a revised proposal. The revised proposal was, however, not accompanied with Scale of Rates (SOR). The MOPT was, therefore, requested vide our letter dated 22 May 2013 to furnish the proposed draft Scale of Rates.

4.2. In response, the MOPT vide its letter dated 23 May 2014 has submitted a complete proposal along with draft proposed SOR**.** The MOPT in the said letter has also stated that tariff cap for additional Port Dues was inadvertently not included in its earlier proposal dated 19 May 2014. It has, therefore, requested to ignore its earlier proposal of 19 May 2014.

4.3. The highlights of the MOPT proposal dated 23 May 2014 are summarized below:

(i). As per the revised tariff guidelines 2013, Reference Tariff will be the highest tariff fixed for the commodity under 2008 guidelines at its own port with suitable escalation as provided in the guidelines. In case there is no upfront tariff fixed for a particular commodity under 2008 guidelines in its own ports, the highest tariff in the nearest Major Port is to be considered. In case, both these options are not available, tariff has to be determined by applying the principles of 2008 guidelines.

(ii) As per its earlier letter dated 8 April 2014 the Port had earlier planned to develop a berth at West of the existing Breakwater (WOB) for handling Iron Ore, by private terminal operator on BOOT basis. Tariff for this purpose was approved by the Authority vide Order No.TAMP/60/2009-MOPT dated 04 May 2010. On account of various reasons, the project could not be implemented. The port is now proposing to develop 2 multipurpose berths in the said location for catering to all kinds of general cargo both bulk as well as break bulk. Since the project parameters, cargo to be handled as well as investments have undergone change, the tariff notified earlier is not valid and hence tariff under 2013 guidelines is proposed.

(iii). MOPT seeks the approval for upfront tariff for a general cargo terminal based upon the Guidelines of 2008.

(iv). (a). 2 berths are proposed to be constructed with a total length of 750 m. One berth of 400m long will be exclusively used for handling coal. The second berth of 350m long will be used for handling all kinds of General Cargo and containers.

(b). The proposed terminal can handle only Panamax vessels for the time being, since the existing draft of the channel (-13.40 m below CD) does not permit sailing of a fully loaded Capesize vessel. No plans have been drawn up for deepening the channel to handle Capesize vessels.

(c). For Coal, the predominant type of vessel will be Panamax Class whereas for General Cargo and containers it will be Handymax Class.

(d). For computation of Berth Hire Charges, the vessel mix of Panamax and Handymax has been considered as 50:50.

(v). A major disadvantage of the port is an extremely limited land area. Cost of reclamation is quite high because the environmentally-sensitive state of Goa has very few quarries. While designing the terminal the prevalent cost of reclamation has been considered. The entire back up area of about (3,00,000 sq.m.) 75 acres will have to be reclaimed.

(vi). (a). About 40,000 sq.m of area will be utilized for railway and road corridor. Hence, the storage area available is 2,60,000 sq.m.

(b). Of 2,60,000 sq. mtrs of area , 1.60 lakh sq. mtrs of area is earmarked for coal storage and 1.00 lakh square meters for all other general cargo.

(vii). Tariff computation for coal handling and general cargo is arrived separately.

(viii). **Optimal Capacity:**

(a). **Coal:**

(i). Optimal quay capacity:

The optimal quay capacity for coal is computed at 70% of the maximum quantity of coal that could be unloaded from ships. Entire vessel calls have been considered as Panamax Vessels. Ship day output of Panamax Vessels is considered as 35000 tons/day for handling coal. Using the above norms and the formula prescribed in 2008 guidelines optimal quay capacity of the coal terminal is assessed as 8.94 million tons per annum as given below:

Coal Handling Capacity:

| Description | Norms as per the guidelines (unloading) | Parameters considered by MOPT |
|---|---|---|
| Handling rate for Panamax vessel | 35,000 tons/day | 35,000 tons/day |
| Share of Panamax vessel | - | 100% |
| **Optimal capacity for Coal handling berth (0.7 * 35000 * 365)** | | **8.94 MTPA** |

(ii). Optimal yard capacity:

The maximum area available for stockpiling is 1.60 lakh square meters. The norms prescribed for the optimal yard capacity as per guidelines and parameters considered by MOPT for assessing the optimal yard capacity is given below:

| Parameters | Norms as per the guidelines | Parameters given by MOPT |
|---|---|---|
| Area of the yard available | As provided by port | 1,60,000 sq.m. |
| Percentage of total area that could be used for stacking | 70% | 70% |
| Quantity that can be stacked per sq.m of area | 3 Tons/Sq.m. | 4.5 Tons/Sq.m. |
| Turnover ratio of the plot in a year | 12 | 17 |
| **Optimal Yard Capacity** | | **5.99 MTPA** |

(70%*160000*4.5*70%*17)

(iii). The optimal capacity of the coal terminal is assessed at 6 Million Tonnes Per Annum (MTPA), being the lower of optimal quay and yard capacity.

(b). **Other General Cargo**:

In the case of Other General cargo, the optimal capacity assessed for various categories of cargo is tabulated below:

| Type of Cargo | Handling Rate as per norms | Handling Rate considered | Optimal Capacity (MTPA) |
|---|---|---|---|
| Steel and bagged. | 4000 Tons/day | 8000 Tons/day | 8000x365x0.7 =2.04 MTPA |
| Other break bulk cargo. | 2500 Tons/day | 7000 Tons/day | 7000x365x0.7 =1.80 MTPA |
| Dry bulk cargo like food grains and Fertilizers. | 7500 Tons/day | 10,000 Tons/day | 10000x365x0.7 =2.56 MTPA |
| Dry bulk cargo like Limestone, minerals etc. | 10000Tons/day | 12000 Tons/day | 12000x365x0.7 =3.07 MTPA |
| **Total** | | | **9.47** MTPA |

(c). **Containers**:
In case of containers, no dedicated container handling equipment are proposed since the volumes are small. Equipment's will consist of 2 Mobile Harbour Cranes, one reach stacker and fork lift trucks. Hence the tariff calculations will differ from that mentioned in the guidelines. Optimal capacity for container handling is worked out as under.

Container handling per hour/crane = 20
Total capacity considering 2 cranes = 2x20x24x365x0.7 = 2,45,280.00 TEUs

(ix). **Capital Cost:**

(a). The total capital cost of the entire project is ₹1366.13 crores which broadly consist of the following:

**(₹ in crores)**

| Item | Total |
|---|---|
| Berth | 168.56 |
| Dredging | 27.50 |
| Breakwater | 379.38 |
| Other Civil/Electrical Works | 508.69 |
| Handling Equipment | 282.00 |
| **Total** | **1,366.13** |

(b). The total capital cost of the project has been segregated into two cargo categories i.e. coal handling and other general cargo. The detailed bifurcation of the Capital Cost for the Coal Berth and for General cargo considered by MOPT is tabulated below:

**(₹ in crores)**

| Particulars | Estimated Capital Cost for Coal terminal | Estimated Capital Cost for Other General cargo | Total |
|---|---|---|---|
| **A. Berth and Dredging** | | | |
| Berth | 89.90 | 78.66 | 168.56 |
| Dredging & Reclamation | 17.50 | 10.00 | 27.50 |

| | | | |
|---|---|---|---|
| **Total cost of coal berth** | **107.40** | **88.66** | **196.06** |
| | | | |
| **B. Civil and Electrical Works** | | | |
| Bund Structure | 46.00 | 34.50 | 80.50 |
| Armour protection for bund Reclamation area | 28.75 | 17.25 | 46.00 |
| Railway siding area | 8.00 | - | 8.00 |
| Reclamation from outside | 103.64 | 24.50 | 128.14 |
| Railway siding | 24.00 | 12.00 | 36.00 |
| Road approach | 10.50 | 4.50 | 15.00 |
| Covered Storage sheds | 84.00 | - | 84.00 |
| Paving | 45.00 | 30.00 | 75.00 |
| Cable Trench/Drains | 0.53 | 0.53 | 1.06 |
| Electrical Requirements | 2.50 | 2.50 | 5.00 |
| Environmental Upgradation | 2.50 | 2.50 | 5.00 |
| Security Systems | 1.00 | 1.00 | 2.00 |
| Substation | 2.50 | 2.50 | 5.00 |
| Miscellaneous | 5.00 | 5.00 | 10.00 |
| **Total for Civil and Electrical Works** | **363.92** | **136.78** | **500.70** |
| | | | |
| **C. Handling Equipment** | | | |
| Ship Unloader-2 nos | 70.00 | - | 70.00 |
| Conveying Equipment – 2000 mts | 50.00 | - | 50.00 |
| Rail loading System & Silo – 1 no. | 40.00 | - | 40.00 |
| Stacker cum Reclaimers – 2 nos | 40.00 | - | 40.00 |
| Harbour Mobile Cranes – 2 nos | - | 60.00 | 60.00 |
| Fork Lift Trucks 5 Tons- 6 nos | - | 1.50 | 1.50 |
| Fork Lift Trucks 10 Tons- 3 nos | - | 0.99 | 0.99 |
| Pay Loaders 10 Tons – 5 nos | - | **2.50** | **2.50** |
| Reach Stacker – 1 no | - | **3.00** | **3.00** |
| Diesel Locomotive (50% cost) | 6.00 | 6.00 | 12.00 |
| Power Lighting & Communication | 1.00 | 1.00 | 2.00 |

| | | | |
|---|---|---|---|
| **Total for Handling Equipment** | **207.00** | **74.99** | **282.00** |
| | | | |
| **D. Miscellaneous** (5% of civil and equipment cost) | 28.55 | 10.59 | 39.14 |
| | | | |
| **E. Total Capital Cost ((A+B+C+D)** | **706.87** | **311.03** | **1017.90** |
| | | | |
| **F. Breakwater** | | | **379.38** |
| | | | |
| **G. Total capital cost of the project (D+E)** | | | **1397.28** |

[Based on the detailed bifurcation of capital cost furnished by MOPT the total capital cost is ₹1358.12 crores excluding Miscellaneous cost (₹1397.28 crores – ₹39.14 crores) whereas MOPT has mentioned that the total capital cost is ₹ 1366.12 crores**.** The difference is because, the MOPT has considered the total of Civil and Electrical Works as ₹ 508.69 in the summary but the sum as per the above table at Sr. No (B) comes to ₹ 500.70 crores.]

(x). **Operating Cost:**

The Operating Cost projected in the proposal for Coal handling, General Cargo, Container is worked out as follows:

(₹ in crores)

| **Operating Cost** | **Operating cost for Coal** | | **Operating cost for Other General cargo** | | **Operating cost for Container** | | **Total** |
|---|---|---|---|---|---|---|---|
| | **Working** | **Amount** | **Working** | **Amount** | **Working** | **Amount** | |
| Power | 1.40 units/ton* ₹ 7.00 * 6 MTPA | 5.88 | 2 cranes*7 rs*100unit s/4000hr | 0.56 | 8 units* Rs7*2452 80 TEUs | 1.37 | 7.81 |
| Fuel cost | ₹60*0.5* 45 ltr *4000*1 | 0.54 | | 3.90 | 4 ltr*₹ 60* 245280 TEUs | 5.8 | 10.24 |
| Repair and maintenance of Civil Assets | 1%*₹ 363.92 Crore | 3.64 | 1% *134 cr | 1.34 | 1%*134 cr | 1.34 | 6.32 |
| Repair and maintenance of Mechanical Assets | 7%* ₹ 207 Crore | 14.49 | 5%*75 | 3.75 | 2%*75 cr | 1.5 | 19.74 |
| Insurance | 1%*₹ 599.47 Crore | 5.99 | 1%of gross Fixed Asset | 2.22 | 1%of gross Fixed Asset | 2.22 | 10.43 |
| Depreciation | (3.34%*3 63.92+(1 0.34%*2 07) | 33.55 | 3.34%of civil cost & 10.34% of Equipment | 12.32 | 3.34%of civil cost & 10.34% of Equipment | 12.32 | 58.19 |
| Lease Rental(License Fee) | 1.60lakh* 567*10sq .m | 10.89 | As per Scale of Rates | 6.80 | As per Scale of Rates | 6.8 | 24.49 |
| Other expenses as per the norm 5% of the gross fixed asset value | 5%*599. 47 | 29.97 | 5% of Gross Fixed Asset | 11.12 | 5% of Gross Fixed Asset | 11.12 | 52.21 |
| **Total of Operating cost** | | **104.95** | | **42.00** | | **42.47** | **189.43** |

(xi). **Annual Revenue Requirement:**

Annual Revenue Requirement (ARR) for handling, storage and miscellaneous charges for Coal handling, other General Cargo and Container is as follows:-

(₹ In crores)

| Particulars | Coal Handling | Other General Cargo | Containers |
|---|---|---|---|
| a) Gross Fixed Asset Value | 599.47 | 222.37 | 222.37 |
| b) Rate of return on capital employed @16% (16%*a) | 95.92 | 35.58 | 35.58 |
| c) Operating Cost | 104.95 | 42.00 | 42.47 |
| **d) Revenue Requirement (b+c)** | **200.86** | **77.58** | **78.04** |

(xii). From the ARR assessed for coal handling at ₹ 200.86 Crores, MOPT has arrived at average tariff of ₹ 334.80 per ton for optimal capacity for 6 MTPA. Subsequently, applying ratio of 98%, 1% & 1% on the average tariff, the MOPT has arrived at unit rate for handling, Storage and Miscellaneous. Similar approach has been followed by MOPT for arriving at proposed upfront tariff for other cargo and Container except for the ratio of apportionment applied for other cargo is 90:5:5 and for container it is 90:7:3.

[*Upfront tariff guidelines stipulate that the total Revenue Requirement determined as per the norms prescribed in the guidelines is to be apportioned among three tariff groups viz. cargo handling charge, miscellaneous and storage charge as per the normative percentage prescribed in the guidelines and thereafter the rates for individual tariff items is to be determined. As against that, the MOPT has first arrived at average tariff for coal terminal, general cargo, and container by dividing the total ARR assessed for coal terminal and general cargo terminal (cargo-wise) over the optimal capacity and apportioned the average tariff in three tariff groups' viz. cargo handling charge, miscellaneous and storage charge. The approach followed by MOPT is not in line with tariff guidelines and also not in line with general approach followed by Authority for determination of upfront tariff.*]

(xiii). **Additional Port Dues**:

(a). Substantial amount of ₹379.38 crores is expected to be invested by terminal operator on the Breakwater of length 825 meters. As per guidelines, PPP operator is required to collect tariff on facilities provided by him. Accordingly, "Additional Port Dues" are calculated as follows:

(₹ In crores)

| **Break water-825 metres** | |
|---|---|
| Rubble mound for foundation | 34.50 |
| Concrete for vertical wall plus protecting wall | 250.00 |
| Armour Protection | 94.88 |
| Grand Total | 379.38 |
| 16% ROCE | 60.70 |
| 1% Maintenance Expenses | 3.79 |
| 3.34% depreciation | 12.67 |
| Revenue Requirement | 77.16 |
| Total GRT * (Refer Table below) | 60,39,000 |
| **Rate per GRT (RS./GRT)** | **127.80** |

### * The calculation of total GRT is shown below:

| Particulars | Coal berth (A) | Other General Cargo (B) |
|---|---|---|
| Capacity of coal berth. (Note 2). | 6 MTPA | 2.29 MTPA |
| Type of vessel | Panamax (100 %) | Handymax(100%) |
| Average DWT | 75000 | 45000 |
| Avg. Parcel Size | 60,000 T | 40,000 T |
| Nos. | 100 nos | 57 nos |
| Avg. GRT of vessel | 45000 T | 27000 T |
| Total GRT per annum of Panamax and Handy Max vessels | 4500000 GRT | 1539000 GRT |
| **TOTAL GRT** | **6039000** | |

***Column B:** The percentage of share of cargo considered to arrive at capacity calculation of 2.29 MTPA for general cargo berth for the purpose of determining port dues only is given below:

| Category | Percentage | Capacity | Weighted capacity |
|---|---|---|---|
| Steel and bagged cargo. | 58 % | 2.04 MT | 1.18 |
| Other break bulk cargo. | 8 % | 1.80 MT | 0.14 |
| Dry bulk cargo like food grains and fertilizers. | 14 % | 2.56 MT | 0.36 |
| Dry bulk cargo like limestone and minerals. | 12 % | 3.07 MT | 0.37 |
| Containers. | 8 % | 2,45,280 TEUs | *0.24 |
| **Total** | **100%** | | **2.29 MTPA** |

* 1 TEU is considered as 12 tons.

(xiv). (a). **<u>Calculation of Berth Hire Charges is given below</u>**:

The revenue required for construction and maintenance of berth as per the guidelines of 2008 has to be recovered from the vessels calling at the new terminal. The total GRT hrs of the vessels for two berths is calculated considering the vessel mix of Panamax and Handymax as 50:50.

The total GRT-Hrs of the vessels for two berths is calculated as below:

(45000x0.5+27000x0.5) x0.7x365x24x2 = 44, 15, 04,400 GRT-Hrs.

(b). **<u>Tariff computation of berth hire as furnished by MOPT is given below:</u>**

(₹ In crores)

| TARIFF CALCULATION FOR BERTH HIRE CHARGES | |
|---|---|
| Cost of construction of Berth | 168.56 |
| Dredging | 27.50 |
| Repair and Maintenance Cost @ 1% | 1.96 |
| Depreciation | 5.62 |
| Revenue Requirement | 60.20 |
| Total GT-Hrs | 44,15,04,400 |
| **Berth Hire Charges Rs per GT per Hour** | **1.36** |

[Note: Sum of 16% return on capital cost of berth construction and dredging cost and operating cost comes to be ₹. 38.94 crores which does not match with the total Revenue requirement of ₹. 60.20 crores furnished by MOPT.]

(xv). The MOPT has proposed Performance standards for Coal handling, other general cargo & container as given below.

**A. Performance Standards for Coal Handling**

**(i). Gross Berth Output**

| Cargo Category | Gross berth day Output |
|---|---|
| **Coking Coal - Import** | |
| For Handling more than 100,000 MT parcel size | 45,000 T/day |
| For handling between 65,000 T-100,000 T parcel size | 35,000 T/day |
| For handling between 30,000 T-65,000 T parcel size | 25,000 T/day |
| For handling less than 30,000 T- parcel size | 15,000 T/day |
| | |
| **Thermal Coal - Import** | |
| For Handling more than 100,000 MT parcel size | 45,000 T/day |
| For handling between 65,000 T-100,000 T parcel size | 35,000 T/day |
| For handling between 30,000 T-65,000 T parcel size | 25,000 T/day |
| For handling less than 30,000 T- parcel size | 10,000 T/day |
| | |
| **Non Coking Coal - Import** | |
| For Handling more than 100,000 MT parcel size | 40,000 T/day |
| For handling between 65,000 T-100,000 T parcel size | 30,000 T/day |
| For handling between 30,000 T-65,000 T parcel size | 25,000 T/day |
| For handling less than 30,000 T- parcel size | 10,000 T/day |
| | |
| **Coke - Import** | |
| For handling more than 30,000 T parcel size | 10,000 T/day |
| For handling less than 30,000 T- parcel size | 7,000 T/day |
| | |

**(ii). Transit Storage Dwell Time**

For Coal and Coke at Stack yard – 10 days on completion of vessel

**(iii) Turnaround Time for Delivery Operation**

This shall be computed as the sum of time taken for loading of cargo divided by the number of trucks/trailers/rakes deployed in a month. Time prescribed for each operation will be as follows;

| | | |
|---|---|---|
| Truck for conventional cargo (single operation) | - | 40 min |
| Truck for conventional cargo (double operation) | - | 80 min |
| Rake for rapid in motion (single operation) | - | 2 Hrs. |
| Rake for rapid in motion (double operation) | - | 2 Hrs. |
| Rake in static condition (single operation) | - | 5 Hrs. |
| Rake in static condition (double operation) | - | 10 Hrs. |

**B. Performance Standards for General Cargo Handling**

| **Type of Cargo** | **Handling Rate** |
|---|---|
| Steel and bagged cargo | 8000 Tons/day |
| Other break bulk cargo | 7000 Tons/day |
| Dry bulk cargo like food grains and Fertilizers | 10,000 Tons/day |
| Dry bulk cargo like Limestone, minerals etc. | 12000 Tons/day |

**C. Performance Standards for Container Handling**

Main Line Vessel - 20 moves/hr
Feeder Vessels - 15 moves/hr

(xvi). The MOPT has proposed the following upfront tariff to meet the estimated revenue requirement:

(a). Berth hire:

| Sl. No. | Vessels | Rate per GRT per hour or part thereof (₹) | |
|---|---|---|---|
| | | Foreign Going Vessel | Coastal Vessel |
| 1. | All Vessels | 1.36 | 0.82 |

(b). Additional Port Dues:

| Sl. No. | Vessels | Rate per GRT (₹) | |
|---|---|---|---|
| | | Foreign Going Vessel | Coastal Vessel |
| 1. | All Vessels | 128.00 | 77.00 |

(c). Cargo handling charges:

| Sl. No. | Cargo Type | Cargo Handling Charges | |
|---|---|---|---|
| | | Foreign (₹) | Coastal |
| 1 | **Coal/Coke** | 331.00 per ton | 199.00 per ton |
| 2 | **Dry Bulk**<br>Food Grains, Fertilizers<br><br>Limestone, Minerals etc. | <br>273.00 per ton<br><br>228.00 per ton | <br>164.00 per ton<br><br>137.00 per ton |
| 3 | **Break Bulk**<br>Steel and Bagged Cargo<br><br>Other break bulk | <br>342.00 per ton<br><br>388.00 per ton | <br>205.00 per ton<br><br>233.00 per ton |
| 4 | **Containers** | 2863 per TEU | **1718.00 TEU** |

(d). Storage charges:
The storage charge for the cargo stored in the stackyard beyond the free period of 20 days shall be as follows:

(i). **Coal**

| | |
|---|---|
| 0-15 days | Nil |
| 16th to 20th day | ₹ 12/- per ton per day or part thereof |
| 20th to 25th day | ₹ 24/- per ton per day or part thereof |
| 26th day onwards | ₹ 48/- per day or part thereof |

(ii). **Other General Cargo**

**a) Free Period**

Import Cargo - 5 days
Export Cargo - 15 days

**b) Storage Charges for balance cargo beyond free period**

| Sl. No. | Particulars | Rate per ton per day or part thereof (₹) | | | |
|---|---|---|---|---|---|
| | | Steel & bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains and Fertilisers | Dry bulk cargo like Limestone, minerals etc. |
| 1 | 1st to 30th day | 19.00 | 21.50 | 15.00 | 12.50 |
| 2 | 31st to 60th day | 22.00 | 25.00 | 17.00 | 14.00 |
| 3 | 61st to 90th day | 25.00 | 29.00 | 20.00 | 16.00 |

(iii). For containers ground charges will be ₹223 per TEU.

(e) Miscellaneous charges:

Charges for all miscellaneous services such as sweeping, collecting, spillage from yard conveyors, galleries etc., moisturizing of cargo, dust separation services, environment, Security charges etc.

The following miscellaneous charges are applicable

| Sr. No. | Particulars | Rate per tone/TEU or part thereof in Rupees |
|---|---|---|
| 1 | Coal /Coke | 3.40 |
| 2 | Steel and bagged cargo | 19.00 |
| 3 | Other break bulk cargo | 21.50 |
| 4 | Fertilizers/food grains etc | 15.00 |
| 5 | Limestone, minerals etc | 12.50 |
| 6 | Containers | 95.00 per TEU |

4.4. The MOPT has vide its email dated 29 May 2014 forwarded the revised list of potential BOT operators.

5. In accordance with the consultative procedure prescribed, the proposal dated 23 May 2014 was circulated to the MOPT, concerned users / user organizations and potential BOT Operators as forwarded by MOPT vide its email dated 29 May 2014 seeking their comments latest by 9 June 2014. None of the users/ user organizations and potential BOT Operators have furnished their comments.

6. Based on a preliminary scrutiny of the proposal, MOPT was requested to furnish additional information / clarifications vide our letter dated 18 June 2014 latest by 25 June 2014.

7.1. A joint hearing was held on 20 June 2014 on this proposal at MOPT premises. The MOPT made a power point presentation of its proposal. At the joint hearing, MOPT and the concerned users / organization bodies have made their submissions.

7.2. At the joint hearing, the Adani Ports and Special Economic Zone Ltd. has filed its written submissions.

7.3. As decided at the joint hearing, the Mormugao Port Trust (MOPT) was requested vide our letter dated 26 June 2014 to take action on the following points and furnish its response by 30 June 2014:

(i). Furnish comments on the written submission dated 19 June 2014 received from Adani Ports and Special Economic Zone Ltd. (APSEZL) on the proposal of MOPT at the joint hearing.

(ii). Furnish its response to the queries raised by us under cover of our letter of even number dated 18 June 2014 latest by 30 June 2014.

(iii). As agreed, APSEZL was requested to submit in writing the arguments made by it at the joint hearing in a week's time with a copy endorsed to MOPT. The MOPT was requested to examine the same and furnish its comments thereon by 30 June 2014.

7.4. As agreed in the joint hearing, the Adani Ports and Special Economic Zone Ltd. (APSEZL) vide our letter dated 26 June 2014 was requested to submit in writing the arguments made by it at the joint hearing, with a copy endorsed to Mormugao Port Trust. The APSEZL has not responded, despite a reminder.

8.1. In response to points of action sought from MOPT by 30 June 2014, the MOPT vide its email dated 30 June 2014 has sought an extension of one week time citing that the port is in a process of recasting its proposal. Since the MOPT did not respond till the extended one week time sought by it, the MOPT was once again requested vide our letter dated 9 July 2014 to file its reply and also to file its recast proposal immediately bringing to its attention the provision of clause 2.4 of the 2013 guidelines which require this Authority to dispose of the Reference tariff proposal in a time bound manner.

8.2. As regards point of action brought out in para 7.3 (i) above, the MOPT vide its email dated 28 July 2014 has furnished its comments on the written submissions made by the APSEZL at the joint hearing.

8.3. As regards point of action brought out in para 7.3 (ii), the MOPT vide its email dated 28 July 2014 has furnished its response to our queries raised vide our letter dated 18 June 2014. A summary of the queries raised by us and reply furnished by the port is tabulated below:

| Sl. No. | Queries raised by us | Response by MOPT |
|---|---|---|
| **(A)** | **General:** | |
| (i) | The MOPT has proposed 2 berths configuration to be constructed with a total length of 750 mtrs. The number of vessels that can be handled in 750 mtrs berth length envisaged in the proposal and length of such vessels that can be accommodated to be indicated. | The berth length has been reduced to 600 mts. 2 vessels of Panamax or Handymax Class or a combination of both can be berthed at any time. |
| (ii). | The proposal of MOPT envisages 2, 60,000 sq. mtrs. for storage area of which 1,60,000 sq. mtrs. is earmarked for coal storage and 1,00,000 sq. mtrs. for storage of all other general cargo. The proposal does not make any specific mention about storage area for container. MOPT to confirm whether the area earmarked for storage of general cargo includes storage area for container | The storage area of 2,60,000 sq.m includes the storage for containers.<br><br>[Of total 3,00,000 sq. mtrs to be reclaimed, 40,000 sq.m. is for railway and corridors]. |
| **(B).** | **Optimal Capacity:** | |
| (i) | Coal handling: | |
| (a) | Optimal Quay Capacity | |
| (i). | The MOPT has assumed share of panamax vessels to be 100% for time being. The port has not assumed any share of capesize vessels while assessing the optimal quay capacity of coal terminal on the ground that | Deepening of channel for Capesize vessels will cost at least Rs.400 crores. The port is not in a position to incur such costs. We are examining the possibility of taking up the |

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| | existing draft of channel does not permit scaling of fully loaded capesize vessel. Para 5.4.3. of the Feasibility Report submitted by MOPT in the concluding para states that berthing of a fully loaded capsize vessels is possible if capital dredging of the channel and basin area alongside the berth is undertaken. Deepening the channel in future to handle capesize vessel is also not ruled out by MOPT. In view of the above position in the Feasibility Report and bearing in mind that the upfront tariff to be approved is for a long horizon of 30 years, the MOPT to state whether capesize vessels will also be handled at the proposed coal handling terminal during the 30 years project period. If so, the optimal quay capacity calculation requires to be modified | deepening as a PPP Project. However, at this time we cannot guarantee whether this project will materialise or not. In any case except for coal, all the cargo will be handled either by Panamax or Handymax vessels. Hence at this stage handling of Capesize vessel is ruled out. |
| (ii) | (a). It appears from quay capacity calculation furnished by the MOPT that on any given day in a year of 365 days, only one panamax will be berthed in the berth of 400 mt. length. That being so, MOPT to examine whether 400 mt. berth length is required to accommodate one panamax vessel. Consideration of 400 mt. berth length requires justification. | In the revised proposal, the total berth length is reduced from 750 mts to 600 mts. Capacity calculation has been made considering 2 vessels with a berth occupancy of 70% for 365 days. |
| | (b). MOPT to also clarify whether at a given point of time one panamax vessel and two handymax vessels can be handled at the berth of 750 mt. length. If not, the berthing capacity proposed to be created may remain under-utilized and the MOPT to address this concern of this Authority. | |
| (iii). | For assessing the optimal quay capacity, the port has considered output norms of 35,000 tonnes per day for handling coal. However, in the performance standards proposed by MOPT for coal handling, the gross output rate is proposed for import of different categories of coal cargo viz. coking coal, thermal coal, non-coking coal and coke for different parcel size of vessels. Moreover, the handling rate of coal considered in the optimal quay capacity is 35000 tonnes/ day which does not match with the different output rates (based on different vessel size) proposed for different categories of coal in the performance standards. The MOPT to explicitly indicate the coal cargo categories envisaged to be handled at the terminal and include the same in the optimal quay capacity calculation. If the handling rate of different coal categories is not expected to be uniform and in case there is any deviation in the output norms (to be) adopted from the output norms prescribed in guidelines, the reasons for deviation need to be explained and justified with reference to the actual performance achieved in its port or by the operator in MOPT. | As per revised proposal, there will not be a dedicated coal terminal, hence all queries related to coal handling are no more relevant. |
| (b). | Optimal Yard Capacity: | |
| (i). | The stacking factor considered by MOPT for | As per revised proposal filed by |

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| | optimal yard capacity is 4.5 tonnes per sq. mtrs. and annual turnover is 17. MOPT to explain the basis of assuming this parameters. | MOPT, there will not be a dedicated coal terminal. Hence, all queries related to coal handling is no more relevant. |
| (ii). | This Authority while setting upfront tariff for coal terminal (thermal coal and other than thermal coal) at MOPT vide Order No.TAMP/23/2008-MOPT dated 18 August 2008 has considered stacking factor of 4.70 tonnes per sq. mtrs. and annual turnover of 20. In case of V.O. Chidambaranar Port Trust (VOCPT), this Authority vide Order No.TAMP/27/2009-TPT dated 23 February 2010 has considered stacking factor for thermal coal at 6.6 and turnover of 28. Thus, when stack height of 6.6 tonnes sq. mtrs. and turnover of 28 can be achieved at VOCPT for handling thermal coal, the reasons why same cannot be adopted in the case of MOPT to be explained. | |
| (iii) | The optimal quay capacity for coal handling terminal is assessed as 8.94 Million Tonnes Per Annum. But, the optimal capacity of the coal handling terminal is pegged at 5.99 Million Tonnes Per Annum as the optimal yard capacity is the limiting factor. Thus, there is wide mismatch between the optimal quay and yard capacities. It has to be borne in mind that 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 which may result in windfall gain to the operator which will not be a result of the efficiency of the operator but may be due to the parameters assumed at the planning stage.<br><br>It is relevant here to mention that the upfront tariff guidelines do not prescribe any norm nor does it place any restriction on the port on area to be allotted to the operator for storage purpose. The expectation is to consider the area required to handle the anticipated capacity. In view of the wide gap observed between the optimal quay and optimal yard capacity, the port to examine all the possibilities of improving the yard capacity by improving the other parameters i.e. stacking parameter, storage area for coal, improving the turnover rates etc. considered in assessing the optimal yard capacity. | |
| (ii) | <u>General cargo and containers</u>: | |
| (a) | Optimal Quay Capacity: | |
| | (i). The MOPT has assessed optimum capacity of each of the cargo viz. steel and bagged cargo, other break bulk cargo, dry bulk cargo and containers for 365 days at 70% utilization. The MOPT has not taken into consideration percentage share of each cargo category in the computation of optimal quay capacity. The MOPT to reassess the optimal capacity for | The MOPT in its revised proposal has considered the percentage share of each category of cargo. The basis for the percentage share is arrived at considering likely demand from the trade.<br><br>The % share is tabulated below : |

<table>
<tr>
<td></td>
<td>general cargo and containers considering the percentage share of capacity of each cargo category and container expected to be handled. The basis for the percentage share of capacity of cargo (to be considered by MOPT) to also be furnished.</td>
<td>
<table>
<tr><th>Type of cargo</th><th>Percentage share</th></tr>
<tr><td>Steel and bagged</td><td>22%</td></tr>
<tr><td>Other break bulk cargo</td><td>13%</td></tr>
<tr><td>Dry bulk cargo like food grains and fertilisers</td><td>22%</td></tr>
<tr><td>Dry bulk cargo like coal, limestone, minerals etc.</td><td>40%</td></tr>
<tr><td>containers</td><td>3%</td></tr>
<tr><td>Total</td><td>100%</td></tr>
</table>
</td>
</tr>
<tr>
<td>(b)</td>
<td>The handling rates assumed in the optimal capacity calculation is 8,000 tonnes per day for steel and bagged cargo, 7,000 tonnes per day for other break bulk cargo, 10,000 tonnes per day for dry bulk cargo like foodgrains and fertilisers, 12,000 tonnes per day for dry bulk cargo like limestone, minerals, etc. and 20 TEUs per day for containers. The basis of assuming the above mentioned handling parameters is explained. MOPT to also clarify whether the above mentioned handling rates considered by MOPT is with reference to 1 HMC or 2 HMC as the MOPT proposes deployment of 2 HMC for handling general cargo.</td>
<td rowspan="2">[The Port has not replied to this point.]<br><br>However, the handling rate considered by MOPT for 1 berth vis a vis the handling norms as per 2008 guidelines as furnished by MOPT in its proposal is tabulated below :<br><br>
<table>
<tr><th>Type of cargo</th><th>Handling rate per berth as per norms</th><th>Handling rate per berth considered</th></tr>
<tr><td>Steel and bagged</td><td>4000 Tons/day</td><td>8000 Tons/day</td></tr>
<tr><td>Other break bulk cargo</td><td>2500 Tons/day</td><td>5500 Tons/day</td></tr>
<tr><td>Dry bulk cargo like food grains and fertilisers</td><td>7500 Tons/day</td><td>12000 Tons/day</td></tr>
<tr><td>Dry bulk cargo like coal, limestone, minerals etc.</td><td>10000</td><td>12000 Tons/day</td></tr>
<tr><td>containers</td><td>25 moves/hr (this norm is for dedicated container terminal with RMQC)</td><td>25 moves/hr</td></tr>
</table>
<br>The MOPT to the subsequent query has clarified that 2 HMC each of 100 T is proposed to be deployed at one berth.</td>
</tr>
<tr>
<td>(c)</td>
<td>The upfront tariff guidelines of 2008 for multipurpose cargo berth prescribes cargo handling rate of 10,000 tonnes per day for dry bulk (food grains and fertiliser) for vessel more than 30,000 tonnes parcel size, 10,000 tonnes per day for coal, limestone, minerals, etc., 4,000 tonnes per day for bulk cargo and steel and bagged cargo and 2,500 tonnes per day for other break bulk cargo. The above mentioned output norms prescribed in the 2008 guidelines is with reference to deployment of 3 numbers of 20 tonnes level luffing crane aggregating to 60 Tonnes. As against that the proposal of MOPT envisages 2 HMC for handling general cargo and containers. In this regard, the following points is clarified:</td>
</tr>
<tr>
<td></td>
<td>(i). MOPT to Indicate the capacity of HMC proposed to be deployed.</td>
<td rowspan="2">The handling rate considered is based on practical considerations. The problem faced by MOPT is with respect to cargo evacuation. Smooth cargo evacuation will happen only after the railway line between Hospet and Vasco is doubled. The railways has not fixed any timelines for taking up and completing the doubling work. This will adversely affect port handling capacity. 2 HMCs are proposed to be deployed for one berth with 100 ton capacity each.</td>
</tr>
<tr>
<td></td>
<td>(ii). This Authority while approving upfront tariff for VOCPT for HMC under PPP mode vide Order No.TAMP/16/2010-TPT dated 23 July 2010 has considered higher handling rate of HMC as compared to the aggregate capacity of 3 numbers of level luffing crane of 20 tonnes each. The handling rate considered for dry bulk cargo is 12,500 tonnes per day, 6,000 tonnes per day for steel and bagged cargo (break bulk) and 3,750 tonnes per day for other bulk break cargo. This is based on the point examined by this Authority while approving the hire charges for 100 tonnes HMC in Paradip</td>
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| | Port Trust and also applied in cases pertaining to New Mangalore Port Trust, Visakhapatnam Port Trust and VOCPT and also in upfront tariff cases of VPT, VOCPT, etc., involving deployment of 100T HMC. The MOPT is, therefore, to consider improved handling rate parameters for HMC at the level assumed in the other upfront tariff Orders involving deployment of 100T HMC. The above mentioned handling rate is for 1 HMC of 100 tonnes. If MOPT envisages deployment of 2 HMC at the 2nd berth for handling general cargo/ containers, the optimal capacity calculation need to capture the effect of the same. | |
| (d) | The basis of considering the handling rate of container as 20 moves / hour per HMC to be explained and justified. | For containers, 25 moves /hr has been considered as per TAMP guidelines. However, it may not be possible to handle 25 moves/hr using Harbour Mobile Crane. |
| (e) | The consideration of 350 meters length of berth to be justified to handle other general cargo and containers with reference to the optimal capacity of other cargo (9.47 Million Tonnes) and 2,45,280 TEUs) | In the current proposal the length of the berth is reduced.<br><br>[The revised proposal envisages total berth length of 600 mtrs. i.e. 300 mtrs of each berth] |
| **(C)** | **Capital Cost Estimation:** | |
| (i) | The 2008 upfront tariff guidelines prescribe list of civil works and handling equipment for coal unloading terminal. The civil construction cost estimated by the MOPT does not include capital cost of berth apron and approach, transfer towers, wagon loading and truck loading station, building, conveyor gallery and marshalling yard prescribed in the list of civil construction cost. The equipment cost estimated by MOPT does not include Cranes - 2 nos., payloader and dozers - 4 nos. listed in the guidelines. The reasons for deviation from the list of civil and equipment items prescribed in the guidelines to be explained, with justification. | (a). Based on the inputs received during the joint hearing, the capital cost estimate has been revised to Rs.950 crores. This includes the cost of berth, storage yard and transit shed.<br><br>(b). The cargo handling equipments have also been revised in line with the guidelines except 2 HMCs have been considered per berth in place of 3 nos of level luffing cranes.<br><br>(c). Also, deviations from the normative list of civil works prescribed in the upfront tariff guidelines has been adhered while preparing the revised estimate.<br><br>The civil cost has been arrived at by considering the recent cost. |
| (ii) | (a). The 2008 upfront tariff guidelines prescribe list of civil works for multipurpose cargo terminal. The civil construction cost estimated by the MOPT for general cargo including container does not include cost of berth apron and approach, Storage yard and transit shed. The reasons for deviation from the list of civil items prescribed in the guidelines to be explained, with justification. | |
| | (b). The list of Cargo handling equipment prescribed in the 2008 guidelines for a multipurpose cargo terminal apart from other equipment includes 4 numbers of 5 tonne Fork Lifts truck, 2 numbers of 10 tonne Fork Lifts truck and 3 numbers of 10 tons Pay loaders. As against that, the MOPT has considered 6 numbers of 5 tonnes Fork Lift truck, 3 numbers | |

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| | of 10 tonne Fork Lift truck, 5 numbers of 10 tonnes Pay loaders and 1 reach stacker for estimating capital cost of general cargo and container. The MOPT to explain the reasons for deviation from list of handling equipment prescribed in the guidelines and justify the consideration of more number of each type of equipment. | |
| (iii) | (a). The civil and electrical capital cost estimated by MOPT for coal terminal as well as general cargo include electrical requirements, environmental upgradation, security systems, substation under civil and electrical works. These items included by MOPT are not found to be as per the normative list of civil works prescribed in the upfront tariff guidelines. MOPT to explain the reasons for deviation from the guidelines. | The deviation from the normative list of civil work prescribed in the upfront tariff guidelines has been rectified and norms are adhered while preparing the revised estimate. |
| | (b). The port has estimated capital cost of diesel locomotive while estimating capital cost of handling equipment. The said item is not as per the list of equipment prescribed in the 2008 guidelines. MOPT to explain the reasons for deviation from the normative list of equipment prescribed in the guidelines. Also, to justify the basis of considering 50% capital cost of diesel locomotive for coal handling and 50% of towards general cargo. | [The Port has not replied to this point.] |
| | (c) The MOPT has estimated miscellaneous cost at 5% of civil and equipment capital cost as per the norms prescribed in the guidelines. Apart from that, miscellaneous cost of ₹5 crores each is estimated for coal handling and general cargo under civil construction cost. MOPT to explain the reasons and the basis for estimating miscellaneous capital cost of ₹. 5 crores each for coal handling and general cargo which is not as per the norms prescribed in the guidelines | [The Port has not replied to this point.]<br><br>(It is, seen from the revised cost statement that apart from 5% of civil and equipment capital cost estimated as miscellaneous capital cost, MOPT has estimated miscellaneous capital cost of ₹.10 lakhs in civil work as against of ₹.5 crores estimated in the original proposal). |
| (iv) | The port has not furnished any documentary support of unit rate adopted in the estimation of civil cost and equipment cost. Proposal doesn't contain any document validating the unit rate. MOPT to furnish copies of supporting documents/ calculation/ rate analysis/ budgetary quotations, market rates to justify the estimates of civil capital cost and equipment capital cost. | |
| (v) | MOPT to confirm that the capital cost estimated by the MOPT reflect the current market position. | The capital cost reflects the current market position. |
| (vi) | MOPT to clarify whether the reach stacker considered in the capital cost for handling general cargo is relevant for General cargo or for handling containers. Also to clarity whether all the equipment envisaged for handling general cargo are relevant for handling container. If not, then the port to segregate the capital cost relevant for handling multipurpose cargo and containers and suitably | [The Port has not replied to this point.] |

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| | modify the operating cost and Annual Revenue Requirement estimations. For this purpose, MOPT may ,if necessary, refer Order No.TAMP/43/2009-PPT dated 19 January 2010 passed by this Authority relating to upfront tariff fixed for multipurpose cargo including container at Paradip Port Trust. | [It is seen that in the revised proposal, the MOPT has not considered reach stacker] |
| **(D)** | **<u>Operating Cost:</u>** | |
| (i) | <u>Power and Fuel cost (coal handling)</u>: | |
| | The norms prescribed for coal terminal in the 2008 tariff guidelines do not prescribe any norm for estimating for diesel consumption in operating cost. MOPT to explain the reasons for considering fuel (diesel) cost apart from power cost. Also, to explain the basis of considering diesel consumption at 50% usage i.e. 45 litres/ hour. | In the revised proposal, only fuel cost has been considered as per 2008 guidelines. |
| (ii). | <u>Power and Fuel cost (General cargo)</u>: | |
| | (a). MOPT to explain the basis of considering power cost for HMC at 100 units per crane. The consumption of fuel for 100 tonne HMC considered by Authority in upfront tariff Order No.TAMP/43/2009-PPT dated 19 January 2010 is 70 ltrs. per hour in line with power consumption considered for 100T HMC in other cases. The MOPT may, therefore, consider to modify the power consumption for 100 HMC in line with the consumption level considered by Authority in PPT and other Orders | In the revised proposal, only fuel cost has been considered as per TAMP guidelines. |
| | (b). MOPT to explain the basis of considering fuel consumption for reach stacker @ 15 ltrs./ hour. | (The port has not considered reach stacker and diesel locomotive in its revised proposal). |
| | (c). Explain the basis for considering the fuel consumption for diesel locomotive at 90 ltrs. per hour. Also, explain the basis of allocating 50% usage to coal handling and 50% to general cargo. | |
| (iii) | <u>Power and Fuel cost (containers)</u>: | |
| | (a) The reasons for considering both power and fuel for HMC to handle each TEU is furnished. | In the revised proposal, only fuel cost has been considered as per TAMP guidelines. |
| | (b). The MOPT has considered power cost of 8 units/ TEUs which appears to be for two HMC. The power consumption norm of 8 units / TEU prescribed in the 2008 guidelines for Container Terminal is with reference to deployment of quay crane and the fuel consumption norm of 4 litre per TEU is with reference to other ancillary equipment like rail mounted gantry crane, rubber tyred gantry crane envisage in the 2008 guidelines. In the case of MOPT, the port proposes deployment of HMC apart from a few ancillary equipment like Reach stacker, fork lift tools as per guidelines for container terminal. Hence, explain the relevance of estimating power consumption at 4 units/ TEU. Since HMC is proposed to be deployed, fuel cost for operation of HMC for container handling may be more relevant in its case. The MOPT may | |

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| | consider to modify the estimates of power and fuel cost of container in the light of the above observation. | |
| | (c). The unit rate of the power and diesel considered at ₹7.00 per unit and ₹60 per litre respectively should be substantiated with the copy of the bill relevant for last 4 months bill. | The MOPT has subsequently furnished copies of recent diesel bills. |
| (iv). | Depreciation: | |
| | (a). The MOPT has estimated depreciation on civil capital cost @ 3.34% and on handling equipments @ 10.34% as per the Companies Act, 1956. It is, however, relevant to mention that Companies Act, 2013 has been announced by the Ministry of Corporate Affairs which suggests useful life of asset to be considered for computing depreciation. The MOPT, therefore, to review and modify the deprecation rate applicable under the Companies Act, 2013, if necessary. This point is relevant for estimating depreciation of assets for both coal handling as well as general cargo. | The depreciation considered at 3.34% for civil assets and 10.34% for mechanical assets are reasonable. |
| | (b). Capital cost relating to civil work estimated by MOPT includes capital cost of electrical equipment, environmental upgradation, security system and substation. The MOPT to confirm whether the depreciation rate applied by MOPT to civil cost will apply to above mentioned items. | The Port has not replied to this point.<br><br>(In the revised proposal, the MOPT has not considered the capital cost of electrical equipment, environmental upgradation, security system and substation in the capital cost relating to civil work.) |
| (v) | License fees: | |
| | (a). As per the upfront tariff guidelines, license fee has to be estimated as per the rates prescribed in the Scale of Rates of the concerned Major Port Trust. The basis of considering the unit rate of license fee at ₹567/- per 10 sq. mtr. per month to be indicated giving reference of the relevant rate adopted by MOPT from the existing Scale of Rates of the port. The escalation factor, if any, applicable as per the existing Scale of Rates and applied by the port to the base license fee also to be indicated. | The present License Fee fixed for MOPT is Rs.520/- per 10 sq.m per month. Pension levy of 9% will be applicable over this. Accordingly, the rate works out to Rs.567 per 10 sq.m per month. This rate will be applicable for water area to be reclaimed also. The same logic has been followed in other PPP projects awarded by MPT. |
| | (b). MOPT to clarify how the rate, if adopted from the scale of rates of MOPT, is relevant for the backup area of 75 acres of land yet to be reclaimed by the successful BOT operator. | |
| **(E)** | **<u>Annual Revenue Requirement (ARR) and cargo handling charges:</u>** | |
| (i) | (a). Para 2 of Annex III and V of 2008 upfront tariff stipulates that the total Revenue Requirement determined as per the norms prescribed in the guidelines is to be apportioned among three tariff groups viz. cargo handling charge, miscellaneous and storage charge as per the normative percentage prescribed in the guidelines and thereafter the rates for individual tariff items is to be determined. As against that, the MOPT has first arrived at average tariff for coal terminal, general cargo, and container by | Annual revenue requirement and Cargo handling charges has been reworked based on the requirements of TAMP. All the shortcomings mentioned by TAMP in our earlier proposal has been rectified. The basis of vessel parameters has been adopted as earlier worked out for our previous PPP project namely Berth No.7, and agreed by TAMP. |

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| | dividing the total ARR assessed for coal terminal and general cargo terminal (cargo-wise) over the optimal capacity and apportioned the average tariff in three tariff groups' viz. cargo handling charge, miscellaneous and storage charge. The approach followed by MOPT is not in line with tariff guidelines and also not in line with general approach followed by Authority for determination of upfront tariff. The MOPT to modify the computation of upfront tariff for all the cargo categories in line with the provision prescribed in the tariff guidelines and in line with general approach followed by Authority for determination of upfront tariff. | |
| | (b). The ARR for general cargo is assessed at ₹77.58 crores (page 12 of the proposal). It is not clear how the tariff cap for each cargo viz. steel and bagged cargo, other break bulk cargo, dry bulk cargo (foodgrains and fertilizer) and dry bulk cargo (limestone, minerals) is arrived at in the table given at page 13 of the proposal as no detailed working is furnished. | |
| | (c). For arriving at handling charge for general cargo and container the MOPT has not computed the commodity-wise tariff caps taking into consideration the percentage share of each general cargo and container expected to be handled, cargo working days with reference to the handling rate. Moreover, share of foreign/ coastal cargo is also not considered in determination of handling charges of general cargo/ container as well as coal. Since coastal cargo except thermal coal, crude including POL and iron ore and iron ore pellets enjoy coastal concession as per the coastal concession policy of the Government, the impact of coastal concession need to be considered while arriving at the handling rate. The MOPT, therefore, to relook the computation of handling rate and make necessary modification in the computation. The MOPT may refer the upfront tariff Orders passed by this Authority which are hosted in the web site which contain the detailed computation of arriving at handling charge. | |
| (ii) | At page 12 of the proposal, the port has estimated repairs and maintenance cost, insurance cost, depreciation and other expenses on the civil and equipment capital cost as per the prescribed norms for multipurpose cargo. In page 14 of the proposal, considering the same capital cost of civil and equipment capital cost for general cargo, the MOPT has again estimated repairs and maintenance cost, insurance, other expenses applying the norms for container terminal for arriving at operating cost for container. Likewise, license fees for 1 lakh sq.m. earmarked for storage of general cargo, | In the revised proposal, cost has been considered as per TAMP guidelines. |

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| | is estimated twice once for general cargo and again separately for container. Further, ROCE @ 16% on total capital cost ₹222.37 crores for handling general cargo is considered for arriving at ARR of general cargo as well as for assessing ARR of container. This has resulted in duplication of all cost elements as well as ROCE in the ARR computed for container handling. The MOPT to relook and modify its proposal. As suggested earlier, MOPT may, if necessary, consider to segregate capital cost relevant for general cargo and container handling and arrive at the upfront tariff rate as done in the case of PPT Order No.TAMP/43/2009-PPT dated 19 January 2010. | |
| **(F)** | **<u>Storage charge computation</u>**: | |
| (i) | Tariff cap for storage charge of coal cargo at page 7 of the proposal is computed at ₹. 3.40 per tonne. At page 8 of its proposal, the slab-wise storage charge is indicated as nil for 0-15 days, ₹15 per tonne/ day for 16$^{th}$ - 20$^{th}$ day and so on. There is no correlation between the rate of ₹.3.40 per tonne and the proposed slab-wise rate nor working furnished to arrive at the slab wise rate.<br><br>In case of general cargo and container, the average tariff cap for storage is arrived on per tonne basis. The same is proposed as per tonne (for general cargo)/ Per TEU (for container) on per day or part thereof basis without making any adjustment in the unit rate for determining the rate on per day basis. The MOPT to furnish detailed working for arriving at the storage charge for coal, general cargo (cargo-wise) and container taking into consideration the optimal capacity of each cargo group likely to attract storage charge beyond the proposed free period, average stay of cargo assumed for arriving at the revised storage charge (to be) proposed by the port. Each of the parameters/ basis adopted by the MOPT for arriving at storage charge may also be explained. | Storage Charges has been reworked considering the average stay of cargo at port in the revised proposal. |
| (ii) | Actual average dwell time of coal, steel and bagged, other bulk cargo at MOPT, the average number of days each of these cargo attracted storage charge beyond the free period prescribed in its SOR in the last three years to be furnished. | [The port has not replied to this point.] |
| **(G)** | **<u>Berth hire calculation:</u>** | |
| (i) | In the berth hire calculation, the MOPT has, *inter alia*, considered average DWT of 75,000 tonnes for panamax vessels and 45,000 tonnes for Handymax vessels. In view of our earlier observation about possibility of capesize vessels of 1,00,000 DWT that can be handled after capital dredging of channel at MOPT as per page 57 of the Feasibility Report, the | Handling of Capesize vessels is not possible at present on account of the draft/depth availability. |

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| | MOPT to examine to consider this category of vessel also in the berth hire calculation. | |
| (ii). | The basis of vessel parameters viz. DWT of vessel, average parcel size of panamax vessels and handy max vessel, GRT of vessels adopted by the MOPT for coal and general cargo handling including containers to be explained. | Vessel parameters and basis of calculation of berth hire charges are given in the revised proposal |
| (iii). | Justify the vessel parameters adopted for determination of berth hire with reference the average GRT, parcel size, DWT of coal and general cargo vessels handled at MOPT berth during the last three years viz. 2011-12 to 2013-14. | |
| (iv). | This Authority while approving the berth hire charges in other upfront tariff cases including MOPT has allowed insurance cost at 1% of the capital cost. The MOPT may, therefore, consider to include this element in the estimation of operating cost. | Insurance cost at 1% of the Capital cost is to be considered. |
| (v). | The sum of repairs and maintenance cost, depreciation and 16% ROCE on the capital cost of berth construction and dredging will come to ₹.38.94 crores as against ARR of ₹.60.20 crores estimated in page 9 of its proposal. The inconsistency in the figure need to be corrected. | Proposal has been revised. |
| (vi). | For arriving at the GRT hours, the MOPT has not taken into consideration the handling rate of different cargo items, stay of vessel at berth for different cargo groups which will vary in view of difference in the handling rate of different cargo. The MOPT has not taken into consideration the share of foreign and coastal vessels and the impact of coastal concession in the berth hire calculation. The MOPT to modify the berth hire calculation in view of the above observation and take into consideration the approach followed in the other upfront tariff cases including MOPT. While doing so, the factor in the current proposal of MOPT that there are two berths should also be captured while computing the berth hire charges. | Proposal has been revised. |
| **(H)** | **Additional Port Dues:** | |
| (i). | (a). The port envisages an investment of ₹379.38 crores by the successful BOT operator towards construction of break water of 825 mtrs length. MOPT to clarify whether the proposed multipurpose cargo terminal will be the sole beneficiary of this investment in the next 30 year period. | The successful BOT Operator will be the sole beneficiary of the investment on the breakwater.<br><br>The Additional Port dues will be payable by only vessels calling at these proposed berths and not on any other berths of the port. We feel it would be better not to club the berth hire charges with the additional port dues since the charges are collected for different purposes. However, TAMP may decide suitable charge for recovery of cost of Breakwater. |
| | (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 multipurpose cargo terminal in additional to the port dues proposed to be collected by the operator? | |
| | (c). It is noted that in case of Chennai Port Trust (CHPT) with reference to their proposal | |

| | | |
|---|---|---|
| | for fixation of upfront tariff for Mega Container Terminal, the construction cost of break water envisaged to be incurred by the operator has been included in the berth hire computation based on the proposal of the CHPT (refer Order No.TAMP/47/2009-CHPT dated 3 March 2010). The MOPT to consider to adopt the approach followed in the case of CHPT Mega Container Terminal instead of proposing additional port dues. | |
| (ii) | In page 15 of the proposal for arriving at the additional port dues, the MOPT has considered the percentage share of general cargo viz. steel and bagged cargo at 58%, other break bulk cargo including containers at 8%, dry bulk cargo (food grains and fertilisers) at 14% and dry bulk cargo (limestone and minerals) at 12% and again containers at 8% separately. MOPT to explain the basis of adopting above mentioned percentage share of cargo. Applying the above mentioned percentage, the MOPT has arrived at total weightage capacity of general cargo at 2.29 MTPA and considered it in the computation of port dues. The capacity of 2.29 MTPA for other cargo do not match with the optimal capacity of 9.47 Million Tonnes and 2,45,280 TEUs assessed by MOPT at page 11 and 14 of its proposal. The inconsistency in in the proposal to be corrected. | [The MOPT has not replied to this point.] |
| **(I)** | **<u>Performance Standards</u>** | |
| (i). | For assessing the optimal quay capacity, the port has considered output norms of 35,000 tonnes per day for handling coal. Whereas the performance standards for coal handling proposes the gross output rate for coking coal (import), thermal coal ( import), non-coking coal (import) and coke (import) for different parcel size of vessels. The cargo description of coal and the output norms considered in the optimal quay capacity for coal handling do not match with the cargo description of different categories of coal and performance standards of different categories of coal (vessel size wise) proposed in the performance standards. In fixation of reference tariff, the cargo items for which performance standards is proposed generally match with the cargo item for which the upfront (reference) tariff schedule which should be approved by this Authority. The MOPT to re-examine the performance standards proposed by the port and ensure that the cargo description match with the coal cargo for which the approval of the reference tariff is sought from this Authority and the gross output rate proposed as performance standards match with the output rate considered in the optimal quay capacity. | The performance standards proposed are in line with the output standards prescribed. |
| (ii). | The basis of proposing other performance standards relating to Transit Storage Dwell Time for coal and coke at stackyard, | [The port has not replied to this point.] |

| | | |
|---|---|---|
| | Turnaround Time for delivery operation by truck/ trailer/ rakes may please be explained. | |
| **(J)** | **Scale of Rates :** | |
| (i) | Schedule 3 – Cargo Handling Charges:<br><br>The cargo handling charges for coal/ coke is proposed at ₹. 331 per tonne in Schedule 3 whereas the computation given at page 7 of its proposal indicated the unit rate at ₹328 per tonne. The MOPT to re-look and remove the inconsistency in the proposal. | Revised Scale of Rates has been submitted to TAMP. |
| (ii). | Schedule 4 – Storage charges | |
| | (a). The tariff guidelines of 2008 for coal handling terminal prescribes free period as 25 days. As against the above norms, the MOPT has in the proposal proposed a free period of 15 days for storage of the coal at the yard. MOPT to explain the reason for proposing less free period for coal as 15 days. MOPT to justify prescription of lower free period to avoid issues in future. | Revised Scale of Rates has been submitted to TAMP. |
| | (b). The first sentence of the above mentioned schedule prescribes free period of 20 days for coal. Whereas in the schedule, free period for first slab is proposed for 0-15 days. The MOPT to remove the inconsistency in the free period. | |
| | (c)The MOPT has proposed single ground rent charges for container at ₹. 223 per TEU. It doesn't mention the periodicity of levy whether it is on per day/ per week basis. The MOPT to modify the proposed storage charge indicating the periodicity of levy taking into consideration our observation relating to storage computation. Further, the MOPT to consider to propose the slab-wise telescopic storage charge with increase in the storage period as a deterrent to discourage longer duration of stay of cargo at the terminal. | Containers ground charges of Rs.223 per TEU proposed in the SOR to be ignored in view of the slab-wise rates proposed. |
| | (d). The MOPT also to indicate whether the proposed storage charge will apply for both laden container as well as empty container. The MOPT may suitably incorporate the position in its draft proposed SOR. | Revised Scale of Rates has been submitted to TAMP. The proposed storage charges for containers will include both laden as well as empty containers. |

9.1. As stated by the port in its reply to our queries, the MOPT has recasted its proposal and has filed a revised proposal vide its letter dated 11 July 2014. The highlights of the revised proposal dated 11 July 2014 are summarized below:

(i). (a). The berth length (2 berths) has been reduced from 700 mts. to 600 mts. Both the berths will be for handling general cargo and there will not be any dedicated coal berth. Each berth will be 300m long and will be used for handling all kinds of General Cargo including containers.

(b). Mormugao Port has reiterated that it has not made any plans for deepening of the channel. Hence, there is no question of capesize vessels being handled at the Port in the near future.

(c). The area to be reclaimed and the storage area is maintained as envisaged in its original proposal and hence not reiterated here.

(ii). **Optimal Capacity**

(a). Optimal Capacity has been worked out as per the norms. The optimal capacity for 2 berths is assessed at 5.74 MTPA.

(b). The handling rate (cargowise) considered for assessing the optimal capacity and percentage share of cargo are as follows :

| Sr. No. | Type of cargo | % share |
|---|---|---|
| 1. | Steel and bagged | 22% |
| 2. | Other break bulk cargo | 13% |
| 3. | Dry bulk cargo like food grains and fertilizers | 22% |
| 4. | Dry bulk cargo like coal, limestone, minerals | 40% |
| 5. | Containers | 3% |
| | **Total** | **100%** |

(c). The optimal capacity is assessed cargo-wise - steel and bagged cargo at 1.00 MTPA, other break bulk cargo at 0.40 MTPA, dry bulk cargo like food grains and fertilizers at 1.40 MTPA, dry bulk cargo like coal, limestone, minerals at 2.50 MTPA and for containers at 0.44 MTPA aggregating to 5.74 MTPA.

(iii). **Capital Cost**

In the revised proposal, the total capital cost for the entire project is estimated at ₹.971.49 cr. which broadly consist of the following

| Sr. | Item | Cost (₹ in crores) |
|---|---|---|
| 1. | Berth | 118.60 |
| 2. | Dredging | 20.00 |
| 3. | Breakwater | 379.39 |
| 4. | Other Civil/Electrical Works | 304.00 |
| 5. | Handling Equipment | 127.90 |
| 6. | Miscellaneous cost | 21.60 |
| | **Total** | **971.49** |

(iv). **Operating Cost**

The operating cost is considered as ₹ 91.18 crores and the basis of calculating the operating cost is tabulated below:

**Calculation of Capital Cost** **(₹ in crores)**

| | Group | Norm | Amount |
|---|---|---|---|
| 1. | Fuel<br>100 T HMC – 4 Nos.<br><br>5T FLT- 8 nos<br>15T FLT – 4 nos<br>Pay Loaders 10T- 6 nos | 70 litres/hr/crane =<br>4 HMC x70 x4000hrs x Rs.60/liter<br>8 nos.x4000x7xRs.60<br>4 nos.x4000x10xRs.60<br>6 nos. x4000x12xRs.60 | 6.72<br><br>1.34<br>0.96<br>1.73 |

| | | | |
|---|---|---|---|
| 2. | a) Repair and maintenance of civil assets.<br>b) Repair and maintenance of mechanical & electrical equipments including spares. | 1% of cost of all civil assets<br>5% of cost of all mechanical and electrical equipments | 3.04<br><br>6.40 |
| 3. | Insurance | 1% of Gross Fixed Assets | 4.54 |
| 4. | Depreciation | As per companies Act. Rate for Civil Assets-3.34 % and Equipments- 10.34 % | 23.37 |
| 5. | License fee (3.00 lakh sq.m @ Rs.567 per 10 sq.m per month) | As per Scale of Rate | 20.41 |
| 6. | Other expenses | 5% Gross Fixed Assets value | 22.67 |
| **Annual Operating Costs** | | | **91.18** |

(v). **Annual Revenue Requirement**

(a). The MOPT has calculated the Annual Revenue Requirement (ARR) as 163.73 cr. by aggregating the operating cost plus 16% Return on capital employed.

(b). The estimated ARR is apportioned cargo-wise for steel and bagged cargo at ₹.28.50 cr, other break bulk cargo ₹.11.50 cr., dry bulk cargo like food grains and fertilizers ₹.40.00 cr, dry bulk cargo like coal, limestone, minerals ₹.71.40 cr. and for container at ₹.12.40 cr.

(c). On the basis of the ARR, the MOPT has calculated the tariff cap for cargo handling charges, storage charges, miscellaneous charges for each cargo categories except container in the proportion of 90%,5%,5% respectively. For container, the estimated ARR is apportioned in the ratio of 90%, 7%, 3% for the three services. The average rate is arrived by dividing the revenue requirement apportioned to each cargo categories by their respective cargo capacity.

(vi). **Calculation of Berth Hire Charges**

(a). The annual revenue requirement for construction and maintenance of berth is estimated at ₹.28.18 crores.

(b). The ratio of panamax and handymax vessels considered for arriving at berth hire charges is 30% : 70%. The total GRT hours estimated by MOPT for the vessel parameters is 39,73,53,600 GRT hours.

(c). The berth hire charges estimated by MOPT is ₹0.71 Per GRT per hour for foreign going vessel.

(vii). **Additional Port Dues**

(a). The capital cost to construct a breakwater of 825 mtrs. by the PPP operator is estimated at about Rs.379 crores as in its original proposal.

(b). To recover this cost, tariff namely Additional Port Dues has been proposed to be collected by the PPP operator. Ships calling at this terminal will have to pay this levy which will be over and above the normal port dues which will be levied by the MOPT. The Port feels that it is better to keep Additional Port Dues as a separate item and not merge it with the Berth Hire Charges.

(c). Accordingly, Additional Port Dues is calculated as follows:

| **Sr. No.** | **Computation of Total GRT** | |
|---|---|---|
| 1 | Capacity of berths | 5.74 MTPA |
| 2 | Type of vessel | Panamax (30 %) |
| | | Handymax (70%) |
| 3 | Average DWT of Panamax vessels | 75,000 T |
| 4 | Avg. Parcel Size of Panamax vessels | 60,000 T |
| 5 | Avg. GRT of Panamax vessel | 45000 T |
| 6 | No. of Panmax vessels | 29 nos |
| 7 | Total GRT per annum of Panamax vessels | 1305000 GRT |
| 8 | Average DWT of Handymax | 45000 |
| 9 | Avg. Parcel Size | 40,000 T |
| 10 | No. of Vessels | 100 nos |
| 11 | Avg. GRT of Handymax vessel | 27000 T |
| 12 | Total GRT per annum for Handymax vessels | 2700000 GRT |
| 13 | Total GRT | 40,05,000 |

(d). Computation of Additional Port Dues :

| **Sr.** | **Particulars** | **(₹. in crores)** |
|---|---|---|
| **(i)** | **Capital cost of Break water-825 metres** | |
| a | Rubble mound for foundation | 34.50 |
| b | Concrete for vertical wall plus protecting wall | 250.00 |
| c | Armour Protection | 94.88 |
| | **Total capital cost of breakwater (a+b+c)** | **379.38** |
| **(ii)** | **16% ROCE** | **60.70** |
| (iii) | Operating cost | |
| a | 1% Maintenance Expenses | 3.79 |
| b | 3.34% depreciation | 12.67 |
| | Total operating cost (a+b) | |
| (iv) | Annual Revenue Requirement(ii + iii) | 77.16 |
| | Total GRT | 40,05,000 |
| | **Additional Port dues (₹./GRT)** | **192.00** |

(viii). The rate proposed by the MOPT is as follows :

(a). Cargo handling charges (cargo wise)

| Sr. | Cargo Type | Cargo Handling Charges | |
|---|---|---|---|
| | | Foreign (₹.) | Coastal (₹.) |
| 1 | **Dry Bulk**<br>Food Grains, Fertilisers<br>Limestone, Minerals etc | 258.00 per ton | 155.00 per ton |
| | Limestone, Minerals etc | 258.00 per ton | 155.00 per ton |
| 2 | **Break Bulk**<br>Steel and Bagged Cargo | 257.00 per ton | 154.00 per ton |
| | Other break bulk | 260.00 per ton | 156.00 per ton |
| 3 | **Containers** | 3110 per TEU | 1866.00 per ton |

(b). Storage Charges

(i). Free Period
Import Cargo - 15 days
Export Cargo - 25 days

(ii). Storage Charges for balance cargo beyond free period

| | Period | Rate per ton per day or part thereof (in ₹) | | | | Rate/TEU/day or part thereof (in ₹.) |
|---|---|---|---|---|---|---|
| | | Steel & bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains & Fertilisers | Dry bulk cargo like Limestone, minerals etc. | Containers |
| 1 | 16 to 20 Days | 16.00 | 16.00 | 16.00 | 16.00 | 275 |
| 2 | 21 to 25 Days | 32.00 | 32.00 | 32.00 | 32.00 | 550 |
| 3 | $26^{th}$ Day Onwards | 64.00 | 64.00 | 64.00 | 64.00 | 1100 |

(c). Miscellaneous Charges

Miscellaneous Charges will include all miscellaneous services such as Security Charges, Sweeping, weighment and dust suppression. The miscellaneous charges is proposed at ₹14/- per tonne for each cargo categories and ₹. 104 per TEU for container.

(d). Additional Port Dues

| Sl. No. | Vessels | Rate per GRT (₹) | |
|---|---|---|---|
| | | Foreign Going Vessel (US $) | Coastal Vessel (₹) |
| 1. | All Vessels | 192.00 | 115.00 |

(e). Berth Hire Charges

| Sl. No. | Vessels | Rate per GRT per hour or part thereof (₹) | |
|---|---|---|---|
| | | Foreign Going Vessel | Coastal Vessel |
| 1. | All Vessels | 0.71 | 0.43 |

(ix). The Performance standards proposed by MOPT in its revised proposal is given below:

(a). Performance Standards for General Cargo Handling

| **Type of Cargo** | **Handling Rate considered** |
|---|---|
| Steel and bagged | 8000 Tons/day |
| Other break bulk cargo | 5500 Tons/day |
| Dry bulk cargo like food grains and Fertilisers | 12,000 Tons/day |
| Dry bulk cargo like Limestone, minerals etc. | 12000 Tons/day |

(b). Performance Standards for Container Handling

Main Line Vessel - 25 moves/hr
Feeder Vessels - 20 moves/hr

9.2. Since the MOPT completely revised its proposal vide its letter dated 11 July 2014, a copy of the revised proposal was circulated to the MOPT and concerned users / user organizations and Potential BOT Operators giving them 10 days' time to furnish their comments. None of the users/ user organizations and Potential BOT Operators have furnished their comments.

10.1. On examination of the revised proposal furnished by the MOPT vide its letter dated 11 July 2014 and its reply to our queries vide its letter dated 28 July 2014, it was seen that the inconsistencies/gaps observed in our letter dated 18 June 2014 were still not addressed. The MOPT was, therefore, requested vide our letter dated 7 August 2014 to relook at its revised proposal and furnish requisite information and the revised proposal addressing the vital gaps / inconsistencies observed in its proposal latest by 11 August 2014. Since the proposal has to be disposed by this Authority in a time bound manner, the MOPT was again reminded specifically to furnish requisite information within the stipulated time. The MOPT was also requested to simultaneously forward a copy of the revised proposal to the concerned users/user organizations/ prospective BOT operators with a request to forward their comments to this Authority within two days thereafter with a copy to MOPT. A summary of gaps observed in the revised proposal of the MOPT dated 11 July 2014 and response of MOPT in its final revised proposal dated 19 August 2014 is tabulated below:

| **Sl. No.** | **Information gap pointed out by us** | **Response by MOPT** |
|---|---|---|
| (i). | Query B (ii) (c) (ii): | |
| | The handling rate considered by MOPT at one multipurpose cargo berth which is envisaged to have 2 HMCs is 8000 tons/day for steel & bagged cargo, 5500 tons/day for other break bulk cargo and 12000 tons/day Dry bulk cargo like food grains fertilizers Coal, Limestone, minerals etc. This means, for one HMC it works out 4000 tons/day for steel & bagged cargo 2750 tons/day for other break bulk cargo and 6000 tons/day for dry bulk cargo.<br><br>As already stated in our earlier query, this Authority has considered handling rate of 100 T HMC for dry bulk cargo at 12,500 tonnes per day, 6,000 tonnes per day for steel and bagged cargo (break bulk) and 3,750 tonnes per day for other bulk break cargo in cases pertaining to New Mangalore Port Trust, Visakhapatnam Port Trust and VOCPT and also in upfront tariff | The MOPT has addressed this issue in the revised proposal. |

| | | |
|---|---|---|
| | cases of VPT, VOCPT, etc., which envisaged deployment of 100T HMC. Despite specific request, the MOPT has not considered the improved handling parameters for HMC at the level assumed in the other upfront tariff Orders involving deployment of 100T HMC. Hence, the query to reassess the optimal capacity in light of the observation made in our earlier letter is reiterated. | |
| (ii) | (a). The MOPT in its revised proposal has considered 4 nos of HMC for the 2 multipurpose cargo berths. The normative list of cargo handling equipment for a multipurpose cargo berth, prescribe norms of 3 number of 20 tonnes level luffing crane aggregating to 60 tonnes for a multipurpose cargo berth. Whereas, the proposal of MOPT is for deployment of 2 HMC of 100T for each of its multipurpose cargo berths i.e. total 4 HMC's. In this regard, the MOPT to justify the reasons for considering total 4 HMC of 100T each instead of 2 HMCs. The MOPT to examine and furnish sufficient justification as to why total 2 HMCs of 100 T each may not suffice for the two berths for optimal utilisation of equipment and facilities. | The MOPT has accepted the suggestion of considering 2 HMC's instead of 4. The proposal has been revised considering 2 nos. 100T HMC's instead of 4 nos. The cost of each 100T HMC works out to approx. ₹ 30.00 Crores excluding the Customs Duty. MOPT had availed a Customs Duty exemption of ₹ 7.26 crores which may or may not be available to the successful bidder. |
| | (b). In view of the above position, the MOPT to either to moderate the capital cost estimation by considering 2 HMCs instead of 4 HMC. Else, if the port feel justified the need for deployment of 4 nos of the HMC, then the optimal capacity should be reassessed considering the handling rate as mentioned in query at 2(i) above for 4 numbers of HMC proposed for deployment. | |
| (iii) | Query B (ii) (c): | |
| | The MOPT while responding to the said query has stated that it may not be possible to handle 25 moves per hour using 100T HMC. The port has, however, not modified the handling rate for containers in the light of its observation. It is relevant to mention that handling rate of 25 moves per hour per crane prescribed in the 2008 guidelines is specifically for RMQC in the dedicated container terminal. In fact, the MOPT in another proposal relating to fixation of the rate for container handling by 100 tonne HMC, has considered the handling rate as 20 moves/hr. The MOPT , therefore, if necessary, to modify the handling rate for container in line with the handling rate assumed in its HMC proposal and reassess the optimal capacity. | The handling rate for containers has been taken as 25 moves/hr as per the Guidelines for Upfront Tariff setting for PPP Projects at Major Port Trusts, 2008. |
| (iv) | Query no 5 (i) (c): | |
| | In the said query, the MOPT was specifically to relook into the computation of proposed handling charges by considering the number of working days with reference to the handling rates (cargo–wise) and make necessary modification in the computation. The port was advised to refer to the upfront tariff Orders | The Handling Charges have been recomputed and the detailed working is furnished in the revised proposal. |

| | | |
|---|---|---|
| | passed by this Authority which are hosted in the website and contain the details in this regard. The MOPT has, however, not taken into account this position while filing its revised proposal. Hence, our query is reiterated. In this regard, for ease of reference for MOPT, a sample calculation was furnished.<br><br>The MOPT to recompute the handling charges based on sample calculation furnished to MOPT. | |
| (v) | Query no 6 (i): | |
| | It was clearly pointed out in the said query that the MOPT should furnish detailed working for arriving at the storage charge for coal, general cargo (cargo-wise) and container taking into consideration the optimal capacity of each cargo group likely to attract storage charge beyond the proposed free period, average stay of cargo assumed for arriving at the revised storage charge, and also each of the parameters/ basis adopted by the Port for arriving at storage charge may also be explained. The port has, however, not furnished the detailed working of the storage charges addressing the gaps observed in its calculation. Hence, the query is reiterated. In this regard, for ease of reference for MOPT, a sample calculation of the approach followed in general for arriving at storage charge was furnished.<br>The MOPT to recompute the storage charge and furnish detailed working in this regard. | The Storage Charges have been recomputed and the detailed working is furnished in the revised proposal. |
| (vi) | Query no 7 (vi): | |
| | The berth hire calculation furnished by the MOPT in the revised proposal is not in line with the approach following by this Authority in other upfront tariff cases. It does not take into consideration the gaps observed in the above mentioned query. Hence, the query is reiterated. However, for ease of the MOPT, a sample calculation of Berth Hire charges is furnished.<br>The MOPT to recompute the berth hire charge and furnish detailed working in this regard | The Berth Hire Charges have been recomputed and the detailed working is furnished at in the revised proposal. |

10.2. The MOPT has vide its email dated 14 August 2014 filed a revised proposal. Subsequently, the MOPT vide its email dated 19 August 2014 has requested to ignore its earlier email dated 14 August 2014. The MOPT in its email dated 19 August 2014 has addressed the inconsistencies/gaps observed in the computation of tariff and has also filed a final revised proposal.

10.3 The background of proposal reiterates that the proposal is filed based on the upfront tariff guidelines of 2008 as there is no comparable berth in the port nor in any other port due to the cargo composition to be handled and also the additional cost to be incurred on reclamation of land.

10.4 The main modifications done by the MOPT in its final revised proposal dated 19 August 2014 are summarized below:

(i). In the final revised proposal, the MOPT has stated that, the proposed terminal can handle Capesize, Panamax, Handymax, as plan has been drawn up for deepening the channel to handle Cape Size Vessels. The port has furnished the vessel profile wherein, it has assumed share of panamax and handy max in ratio of 60: 40 for vessels handling steel and bagged cargo, other break bulk cargo. For dry bulk cargo the share of capsize, panamax and handy max is assumed to be 50:20:30 and for container 100% handy max is assumed.

(ii). **Optimal Capacity:**

(a). Optimal capacity of two berths is re-assessed at 4.88 MTPA for all cargo categories and 9198 TEUs for containers.

(b). The MOPT has considered the handling rate per berth for steel and bagged cargo at 6000 tonnes per day, other break bulk cargo at 3750 tonnes per day, dry bulk cargo like food grains and fertilizers at 12500 tonnes per day and dry bulk cargo like coal, limestone, minerals at 12500 tonnes per day. For container the MOPT has considered handling rate at 25 moves/hour per HMC as per the norms applicable for dedicated container terminal.

(c). The MOPT has also considered the percentage share for each cargo category and has computed the optimal capacity as per the formula prescribed in the 2008 guidelines. The calculation for optimal Capacity furnished by MOPT is given below:

| Sr. No. | Particulars | Steel and bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains and Fertilizers | Dry bulk cargo like Coal, Limestone, minerals etc. | Containers (TEU's) |
|---|---|---|---|---|---|---|
| 1 | Norms as per 2008 Guidelines (Tonnes / TEU's Day) | 4000 | 2500 | 10000 | 10000 | 480 |
| 2 | Handling Rate per 100T HMC considered by this Authority (Tonnes / TEU's Day) | 6000 | 3750 | 12500 | 12500 | 600 |
| 3 | No. of 100T HMC per Berth | 1 | 1 | 1 | 1 | 1 |
| 4 | Handling Rate per Berth Considered (Tonnes / TEU's Day) | 6000 | 3750 | 12500 | 12500 | 600 |
| 5 | No. of Berths | 2 | 2 | 2 | 2 | 2 |
| 6 | Total Handling Rate for 2 Berths (Tonnes / TEU's Day) | 12000 | 7500 | 25000 | 25000 | 1200 |
| 7 | Percentage Share | 22% | 13% | 22% | 40% | 3% |
| 8 | **Total Optimal Capacity (Tonnes/TEU's) [0.70 x 365 x (6) x (7)]** | **674520** | **249113** | **1405250** | **2555000** | **9198** |
| | **Total optimal capacity** | **48,83,883 Tonnes** | | | | **9,198** |

(iii). **Calculation of Capital Cost**

In the revised proposal, the total capital cost for the project is estimated at ₹.908.48 crores as against ₹.971.49 crores estimated in its 11 July 2014 proposal.

Detail break up of Capital Cost is as below:

| Item | Rate (₹ .) | Amount (₹ . in Cr) |
|---|---|---|
| **I. Berth and Dredging** | | |
| Berth Length – 600 m, 13950 sq.m | 85,000/ sq.m | 118.60 |
| Dredging & Reclamation-5,00,000 cum | 400.00 | 20.00 |
| **Total capital cost of berth** | | **138.60** |
| | | |
| **II. Breakwater** | | **379.38** |
| | | |
| **III. Civil and Electrical Works** | | |
| Bund Structure- 5,50,000 cum | 1000 per cum | 55.00 |
| Armour protection for bund -300 | 9.75 lakhs/m | 29.25 |
| Reclamation from outside-24,00,000 cum | 500.00 | 120.00 |
| Railway siding- 4kms | 3.00 crores/km | 12.00 |
| Road approach – 3000 mts | 25000/m | 7.50 |
| Paving – 2,60,000 sq.m | 2500/sq.m | 65.00 |
| Cable Trench/Drains – 1000 mts | 7500/m | 0.75 |
| Transit Shed (8000 sq.m ) | 18000/ sq.m | 14.40 |
| Miscellaneous | LS | 0.10 |
| **Total capital cost for Civil and Electrical Works** | | **304.00** |
| | | |
| **IV. Handling Equipment for General Cargo** | | |
| Harbour Mobile Cranes – 2 nos | 30.00 | 60.00 |
| Fork Lift Trucks 5 Tons- 8 nos | 0.30 | 2.40 |
| Fork Lift Trucks 15 Tons- 4 nos | 0.45 | 1.80 |
| Pay Loaders 10 Tons – 6 nos | 0.45 | 2.70 |
| Power and Lighting | LS | 1.00 |
| **Total capital cost for Handling Equipment** | | **67.90** |
| | | |
| **V. Miscellaneous Capital** | 5% on( civil and equipment cost (304+67.90) | **18.60** |
| **TOTAL CAPITAL COST** | | **908.48** |

(iv). **Operating Cost**

(a). The operating cost is considered as ₹ 79.55 crores and the basis of calculating the operating cost is tabulated below:

**₹. in crores**

| | Group | Norm | Amount |
|---|---|---|---|
| 1. | Fuel<br><br>Cranes – 2 Nos.<br>5T FLT- 8 nos<br>15T FLT – 4 nos<br>Pay Loaders 10T- 6 nos | <br><br>2x70ltrs/hour/crane x6132hrsx Rs.64<br>8x6132x7xRs.64<br>4x6132x10xRs.64<br>6x6132x12xRs.64 | <br><br>5.49<br>2.20<br>1.57<br>2.83 |
| 2. | a)Repair and maintenance of civil assets.<br>b) Repair and maintenance of mechanical & electrical equipments including spares. | 1% of cost of all civil assets<br><br>5% of cost of all mechanical and electrical equipments | <br>3.04<br><br>3.40 |

| | | | |
|---|---|---|---|
| 3. | Insurance | 1% of Gross Fixed Assets value | 3.91 |
| 4. | Depreciation | As per Companies Act. Depreciation rate for Civil Assets- 3.34% and Equipments- 10.34 % | 10.15<br>7.02 |
| 5. | License fee (3.00 lakh sq.m @ Rs.567 per 10 sq.m per month) | As per Scale of Rates | 20.41 |
| 6. | Other expenses | 5% Gross Fixed Assets value | 19.53 |
| | **Annual Operating Costs** | | **79.55** |

(b). License Fee has been considered as per the Scale of Rates of MOPT which is presently Rs.520 per 10 sq.m /month and considering Pension Levy of 9% over this amount, it works out to Rs.567 per 10 sq.m/month. The rate will be applicable for the area of 75 acres to be reclaimed by the concessionaire.

(v). **<u>Annual Revenue Requirement</u>**

The MOPT has assessed the Annual Revenue Requirement (ARR) by aggregating the operating cost plus 16% Return on capital employed as tabulated below:

| Sr. No. | Particulars | ₹. in Crores |
|---|---|---|
| 1 | Total capital Cost | 390.50 |
| 2 | **16% ROCE** | **62.48** |
| 3 | **Operating Cost** | **79.55** |
| 4 | **Total Annual Revenue Requirement (ARR)** | **142.03** |
| 5 | Apportionment of ARR | |
| a | Cargo Handling Charges – 90% | 127.82 |
| b | Storage Charges – 5% | 7.10 |
| c | Misc. Charges – 5% | 7.10 |

The ARR apportioned to each activity is further apportioned cargo wise to arrive at the proposed rate. The MOPT has furnished the calculation of cargo-wise handling charge, storage charge and the miscellaneous charge.

(vi). **<u>Calculation of Berth Hire Charges</u>**

(a). The earlier proposal to levy additional port dues separately to recover capital cost of break water is done away with. It is merged with berth hire charges. Thus, for calculation of berth hire charges, the MOPT in the revised proposal has considered the capital cost of construction of 2 berths, cost of dredging alongside the berths and cost of construction of Break water of 825 metres length.

(b). The revenue requirement for Berth Hire Charges along with breakwater is as below:

| Sr. | Particulars | (₹. In cr.) |
|---|---|---|
| (i) | Total Capital Cost for 2 berth and cost of break water (₹.138.60 cr + ₹.379.38 cr) | 517.98 |
| (ii). | ROCE @ 16% [16%*(i)] | 82.88 |
| (iii) | Operating Cost | |
| a. | Repair and Maintenance Cost @ 1% | 5.18 |

| | | |
|---|---|---|
| b. | Depreciation @ 3.34% | 17.30 |
| c. | Insurance @ 1% | 5.17 |
| | **Total Operating Cost** | **27.65** |
| | **Annual Revenue Requirement for two Berths [ii + iii ]** | **110.53** |

(vii). The rate proposed by MOPT in the final revised proposal and the proposed performance standards are given below:

(a) Cargo Handling charges

| Sr | Cargo | Cargo Handling Charges | |
|---|---|---|---|
| | | **Foreign (₹ per Tonne)** | **Coastal (₹ per Tonne)** |
| 1 | Steel and Bagged Cargo | 416.92 | 250.15 |
| 2 | Other Break Bulk Cargo | 667.07 | 400.24 |
| 3 | Dry Bulk Cargo like Food Grains and Fertilisers | 208.46 | 125.08 |
| 4 | Dry Bulk Cargo like Coal, Limestone, Minerals etc. | 208.46 | 125.08 |
| 5 | Containers | 4254.26 per TEU | 2552.56 per TEU |

(b). Storage Charges

(i). Free Period

Import Cargo - 15 days
Export Cargo - 25 days

(ii). Storage Charges for balance cargo beyond free period

| | Period | Rate per ton per day or part thereof (in ₹.) | | | | Rate / TEU/day or part thereof (in ₹.) |
|---|---|---|---|---|---|---|
| | | Steel & bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains & Fertilisers | Dry bulk cargo like Limestone, minerals etc. | Containers |
| 1 | First 5 Days | 23.16 | 37.06 | 11.12 | 11.12 | 231.52 |
| 2 | 6 to 10 Days | 34.74 | 55.59 | 16.68 | 16.68 | 347.28 |
| 3 | 11th Day Onwards | 46.32 | 74.12 | 22.24 | 22.24 | 463.04 |

(c). Miscellaneous Charges

The miscellaneous charges is proposed at ₹14.10/- per tonne for each cargo categories and ₹ 231.57/TEU for Container. Miscellaneous Charges will include all miscellaneous services such as Security Charges, Sweeping, weighment and dust suppression.

(d). Berth Hire charges

| Sl. No. | Vessels | Rate per GRT per hour or part thereof (₹) | |
|---|---|---|---|
| | | Foreign Vessel | Coastal Vessel |
| 1. | All Vessels | 3.86 | 2.32 |

(e). The Performance standards proposed by MOPT in its revised proposal is given below:

| Sr. | Type of Cargo | Handling Rate |
|---|---|---|
| 1 | Steel and bagged | 6000 Tons/day |
| 2 | Other break bulk cargo | 3750 Tons/day |
| 3 | Dry bulk cargo like food grains and Fertilisers | 12,500 Tons/day |
| 4 | Dry bulk cargo like Limestone, minerals etc. | 12,500 Tons/day |
| 5 | Container Handling | 25 moves/hr |

10.5. As directed at the joint hearing, the MOPT vide its email dated 22 August 2014 has confirmed that they have forwarded the final revised proposal dated 19 August 2014 to all the concerned users for their comments within two days. No comments are received from any stake holders on the final revised proposal.

11. As regards point of action brought out in para 7.3 (iii), the MOPT in its email dated 28 July 2014 has stated that the APSEZL has not furnished in writing the argument put forth by them during the joint hearing, despite reminders. It is not found appropriate to keep the matter pending for this sake. Hence, this Authority decides to proceed with finalization of this case. In any case, the APSEZL had furnished their written submissions at the joint hearing on which the MOPT has also furnished its comments.

12. To summarise, a comparative position on some of the main parameters considered by MOPT in the original proposal dated 23 May 2014, revised proposal through email dated 11 July 2014 and final revised proposal dated 19 August 2014 is given below:

(₹. in lakhs)

| Sl. No. | Particulars | Original Proposal dated 23.5.14 | Revised Proposal dated 11.7.14 | Final Revised Proposal dated 19.8.2014 |
|---|---|---|---|---|
| 1 | Berth length (mtrs) (2 berths) | 750 | 600 | 600 |
| 2 | Berth profile | 1berth dedicated for coal handling and second berth for multipurpose cargo | Both the Berths are multipurpose cargo including coal handling. | Both the Berths are multipurpose cargo including coal handling. |
| 3 | Backup area (sq.m) | 3,00,000 | 3,00,000 | 3,00,000 |
| 4 | Total capital cost (Rs. in Cr) | 1397.28 (with 2 HMC of 100 T each and 2 shiploaders) | 971.49 (with 4 HMCs of 100 T each) | 908.48 (with 2 HMCs of 100 T each) |

13. 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.

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

(i). The proposal is to fix reference tariff for multipurpose cargo terminal to be developed at the Mormugao Port Trust (MOPT) under Public Private Partnership (PPP) mode.

The plan of the port to develop a berth at West of the existing Breakwater (WOB) for handling Iron Ore, by private terminal operator on BOOT basis for which upfront tariff was approved by this Authority vide its Order of May 2010 did not materialize. It is in this backdrop, the MOPT has proposed to develop two berths as multipurpose cargo terminal on PPP mode and has sought approval for Reference Tariff based on the Revised Guidelines for Determination of Tariff for Projects at Major Ports, 2013, effective from 9 September 2013, issued by the Ministry of Shipping.

(ii). Clause 2.4 of the said guidelines stipulates that if in the view of the Major Port Trust, the tariff determined for a particular commodity under 2008 guidelines at that Major Port Trust or any other Major Port Trust is not a representative Reference Tariff for that commodity, then the Major Port is free to approach this Authority with a proposal to fix Reference Tariff under 2008 guidelines for the project giving detailed and sufficient justification.

Citing that there is no comparable berth in its port nor in any other port due to the cargo composition proposed to be handled and also in view of huge capital cost envisaged to be incurred by the BOT operator on reclamation of land, the MOPT has filed the proposal for fixation of Reference tariff following the principles of 2008 Guidelines.

(iii). In the initial proposal of May 2014, the MOPT envisaged two berths of total length 750mtrs, of which one berth of 450mtrs was for dedicated coal handling terminal with two ship unloaders and another berth of 300mtrs was for handling multipurpose cargo with 2 numbers of 100 T HMC. Subsequently, based on the submission made M/s Adani Ports and Special Economic Zone Ltd (APSEZL) to allow all cargo including coal to be handled at the two berths so as to give more flexibility to the prospective operator to handle any cargo at two berths, the MOPT has reviewed and filed a completely revised proposal dated 11 July 2014 and the final revised proposal dated 19 August 2014. In the final revised proposal, the MOPT has reduced the berth length from 750mtrs to 600mtrs. Both the berths are envisaged to handle general cargo viz. steel and bagged cargo, other break bulk cargo, dry bulk cargo like food grains, fertilizers. etc., dry bulk cargo like coal, limestone, minerals, etc., and containers with deployment of total 2 HMC of 100 T each. The final revised proposal of MOPT does not envisage to have a dedicated coal berth. It is relevant here to mention that the final revised proposal which is modified on the suggestions of concerned stakeholders is not supported with the feasibility report. However, recognising that the revised proposal filed by the MOPT is to address the specific concern raised by the prospective bidders, the revised proposal filed by the MOPT is taken up for consideration. The MOPT has confirmed to have forwarded the final revised proposal to the relevant stakeholders for their comments.

The final revised proposal of the MOPT vide its email dated 19 August 2014 along with the information/ clarification furnished by MOPT during the processing of the case in reference are considered in this analysis.

(iv). Optimal Capacity:

(a). The MOPT envisages to handle five cargo categories viz steel and bagged cargo, other break bulk cargo, dry bulk cargo like food grains, fertilizers, coal, limestone, minerals, etc., and Containers. The percentage share of cargo is estimated at 22%, 13%, 22%, 40% and 3%, respectively. The optimal capacity has been assessed taking into consideration the handling rate for different types of cargo categories and the percentage share of each type of cargo as per the formula prescribed for determination of optimal capacity in the upfront tariff guidelines of February, 2008 for multipurpose berth. The basis of the percentage share of each cargo category is reportedly based on likely demand from the trade. The percentage share considered by MOPT for various cargo categories is relied upon.

(b). The handling rate prescribed in the upfront tariff guidelines of 2008 for multipurpose cargo berth is 10,000 tonnes per day for dry bulk (food grains and fertilizer) for vessel more than 30,000 tonnes parcel size, 10,000 tonnes per day for dry bulk cargo like coal, limestone, minerals, etc., 4,000 tonnes per day for break bulk cargo like steel and bagged cargo and 2,500 tonnes per day for other break bulk cargo. The above mentioned output norms prescribed in the 2008 guidelines is with reference to deployment of 3 numbers of 20 tonnes level luffing crane aggregating to 60 Tonnes. Since the MOPT has envisaged that the multipurpose cargo handling facility would operate with one HMC of 100 tonnes capacity for each of the two berths, the normative handling rate prescribed in the guidelines of 2008 needs to be updated.

This Authority while approving upfront tariff for VOCPT for HMC under PPP mode vide Order No.TAMP/16/2010-TPT dated 23 July 2010 has considered higher handling rate of HMC as compared to the aggregate capacity of 3 numbers of level luffing crane of 20 tonnes each. The handling rate considered for dry bulk cargo is 12,500 tonnes per day, 6,000 tonnes per day for steel and bagged cargo and 3,750 tonnes per day for other break bulk cargo. This is based on the point examined by this Authority while approving the hire charges for 100 tonnes HMC in Paradip Port Trust (PPT) and also applied in cases pertaining to New Mangalore Port Trust (NMPT), Visakhapatnam Port Trust (VPT) and V.O. Chidambaranar Port Trust (VOCPT) and also in upfront tariff cases of VPT and VOCPT and PPT etc., involving deployment of 100T HMC.

On pointing out the above position, the MOPT in its final revised proposal has considered the handling rate of 12500 tonnes/ day for dry bulk cargo like food grains and fertilizers, 12500 tonnes/ day for dry bulk cargo like coal, limestone & minerals, 6000 tonnes/ day steel and bagged cargo and 3750 tonnes / day for other break bulk cargo for one 100 T HMC per berth. For containers, the MOPT has considered handling rate of 25 moves/hr per HMC.

Since the handling rate considered by the MOPT for the cargo categories (except containers) is in line with the decision of this Authority in the earlier cases involving deployment of 100T HMC, the handling rate for the cargo as considered by the MOPT is reckoned with.

For containers, the MOPT had earlier considered handling rate of 20 moves per hour per HMC which it has subsequently revised to 25 moves per hour per HMC. The tariff guidelines of 2008 prescribe norms for handling dry bulk cargo, break bulk cargo and other cargo but do not prescribe handling norms for handling container in a Multipurpose Berth. The norm of 25 moves per hour per crane prescribed in the 2008 guidelines is for container handling by quay crane and that too in a dedicated container terminal. The said handling norm of 25 mover per hour considered by the MOPT for container handling in the multipurpose berth is not found to be relevant in the instant case as the subject proposal involves deployment of 100 T HMC and not a quay crane. Moreover, the project is for handling multipurpose cargo including containers and it is not a dedicated container terminal. Even though the MOPT has admitted that it may not be possible to achieve 25 moves/hr using HMC, it has not moderated the handling rate. In this context, it is relevant here to mention that this Authority while approving upfront tariff for Paradip Port Trust for multipurpose berth involving handling of cargo and containers using 100 T HMC in its Order No.TAMP/43/2009-PPT dated 19 January 2010 has allowed handling rate of 16 moves per hour per HMC based on the proposal of the PPT at the relevant point of time. Incidentally, the MOPT in its another proposal filed in July 2013 for fixation of handling charge for containers using 100 tonne HMC has considered container handling rate at 20 moves/ hour which has been accepted by this Authority vide Order No. TAMP/25/2013 dated 4 August 2014 relying on the judgment of the MOPT. Hence, in the absence of any specific norms available for container handling by HMC and considering the admittance of MOPT that it may not be possible to achieve the handling rate of 25 moves per hour by HMC, it may not be unreasonable to consider the handling rate for containers at 20 moves per hour at the level considered in the another proposal of MOPT disposed of by this Authority vide its Order dated 4 August 2014.

It is relevant here to mention that the norms for assessing the optimal capacity for container terminal prescribes a multiplying TEU factor of 1.3. In the tariff Order dated 19 January 2010 relating to PPT for assessing the optimal capacity of containers, TEU factor of 1.3 was applied while arriving at the optimal capacity of containers. It is seen that though the MOPT in its original proposal had applied this factor, the same is not considered in the revised proposal of 19 August 2014. The optimal capacity for containers is, therefore, modified applying the TEU factor of 1.3 in line with the norms prescribed in the tariff guidelines.

(c). Thus, considering deployment of two HMCs for two berths, handling rate of 20 moves /hour/ HMC and for the share of container capacity, the optimal capacity for handling container works out to 9566 TEUs (0.7 x 2 berths. x 20 moves/hour x 3% x 1.3 TEU factor x 24 hrs. x 365 days) by applying the formula given in the tariff guidelines of 2008.

Considering deployment of two HMCs, handling rate and the share of individual cargo, the optimal capacity assessed by the MOPT for the two berths cargo wise is 6,74,520 tonnes per annum for steel & Bagged cargo, 2,49,113 tonnes per annum for Other break bulk cargo, 14,05,250 tonnes per annum for dry bulk cargo like food grains and fertilizers, 25,55,000 tonnes per annum dry bulk cargo like coal, limestone, minerals, aggregating 48,83,883 tonnes per annum (i.e. 4.88 MTPA) plus 9566 TEUs.

(v). Capital cost:

In the revised proposal of 19 August 2014, the total capital cost of the multipurpose cargo berths is estimated at ₹908.48 crores by the MOPT of which ₹390.50 crores is estimated for cargo / container handling activity and ₹517.98 crores for berthing activity including the capital cost estimated for break water. The estimated capital cost is discussed as herein under:

(a). Cargo/container handling activity:

(i). Civil Works:

As per the upfront tariff guidelines, the capital cost for civil structure includes berth apron and approach, storage yard, transit sheds, roads, rail tracks, buildings, water supply, sewage, etc. The MOPT has estimated capital cost of the road approach, armour protection, railway sliding, paving, transit shed, cable trench in the capital cost relating to civil works for cargo handling activity. The civil works considered by the MOPT generally adheres to the norms stipulated in the guidelines.

The MOPT has also estimated ₹120 crores towards reclamation in the civil works for cargo handling activity. The port has justified this item of estimate stating that since the port has extremely limited land area, 75 acres of back up area is proposed for reclamation by the BOT operator of this project. The upfront tariff guidelines specify to rely upon the estimates of the port for civil cost necessary for achieving the optimal terminal capacity. Though the documentary proof for the unit rate considered for estimating the reclamation cost is not furnished, the MOPT has confirmed that the capital cost of civil works is based on the current market rate. In view of the above position brought out and recognising that none of the users have made any pointed objection on this capital cost item and also that the tariff guidelines require to rely on the capital cost of civil works as per the estimates of the concerned port, the said capital cost estimate is relied upon and accepted. Incidentally, this Authority has allowed such reclamation cost in upfront tariff determination of other Major Port Trusts like Container terminal at Jawaharlal Nehru Port Trust, etc.,

The estimates of other civil works are also not backed by any budgetary quotations. The MOPT has however, confirmed that the estimates of civil work is based on the prevailing market rates. Based on the confirmation furnished by the MOPT, and recognizing that none of the users / bidders have raised any pointed objection with reference to this estimate and also recognising that the tariff guidelines require to consider the capital cost of civil works as per the estimates of the concerned port, the total civil construction cost as estimated by the MOPT is relied upon.

The MOPT has estimated miscellaneous capital cost of ₹10 lakhs in civil works. The MOPT has not explained any reasons for estimating miscellaneous capital cost as a separate item under the lead civil works in addition to estimation of miscellaneous capital cost at 5% of the civil works as per the norms prescribed in the guidelines. In this context, it is relevant here to mention that in case of the upfront tariff proposals determined for various projects of VPT and in case of coal terminal at VOCPT, etc., based on the proposals of the concerned port trust, this Authority has allowed contingencies in the capital cost of civil and equipment cost to take care of any contingency in the upfront tariff determination. Assuming that the miscellaneous cost of ₹10 lakhs estimated by the MOPT under civil works which is not significant proportion in the total capital cost is to cover contingency the estimate of ₹10 lakhs towards miscellaneous capital cost under the head civil works is considered as estimated by the MOPT.

(ii). Equipment cost:

As per the guidelines, the equipment cost is to be estimated for the list of equipment prescribed therein.

The MOPT in its earlier proposal had estimated capital cost of diesel locomotive, electrical requirements, environmental upgradation, security systems, substation, etc., apart from other items. On being pointed out about the deviation from the normative list, the MOPT has clarified that in the revised proposal, deviation has been rectified. It has further clarified that the revised proposal adheres to normative list of equipment.

The normative list of equipment for multipurpose berth includes 3 numbers of level luffing wharf crane of 20 tonne capacity with grab / hook attachments. As against that, as stated earlier, the MOPT has proposed deployment of one number of 100 tonnes HMC per berth i.e. total two HMCs for the proposed two multipurpose cargo berths. It is relevant to mention here that 100T HMC instead of 3 nos of Level luffing cranes has been allowed in the upfront tariff determination for multipurpose cargo berths at other Major Port Trusts like the PPT, VOCPT, etc. based on the proposal of the concerned port trust. The handling rates considered by the MOPT as well as capacity of the facility have been updated for 100 Tonne HMC as considered in the other Major Port Trusts. Therefore, the proposal of the MOPT to recognize deployment of two HMC of 100 tonne each for the two cargo berths is accepted.

The normative list of equipment also includes, 4 numbers of Fork Lift Truck of 5 tonnes capacity, 2 numbers of 10 tonnes Fork Lift Trucks and 3 numbers of pay loaders of 10 tonne capacity for a multipurpose berth. The MOPT has (for two multipurpose berths) proposed deployment of 8 numbers of Fork Lift Truck of 5 tonnes capacity, 4 numbers of 15 tonnes Fork Lift Trucks and 6 numbers of pay loaders of 10 tonne capacity. These equipment proposed to be deployed by MOPT are found to be in line with the normative list of equipment except for higher capacity fork lift of 15 tone proposed by the MOPT instead of 10 Fork lift truck prescribed in the guidelines. This deviation in the capacity of the fork lift truck proposed by the MOPT is not likely to have any impact on the overall capacity of the terminal. The deployment of the equipment proposed by the MOPT in general adheres to the normative list of equipment prescribed in the guidelines and hence is accepted.

As regards the HMC capital cost, the capital cost estimated at approximately ₹.30 crores per HMC excludes the customs duty as stated by the MOPT. Since it was possible for MOPT to avail customs duty exemption, it may not be unreasonable to expect the BOT operators also to avail customs duty exemption. Even if the BOT operator avails customs duty exemption, it will not have any impact on the capital cost considered in the estimates and also in the Reference tariff determined in this exercise.

The MOPT has confirmed that the capital cost estimated is based on the current market rate. In view of the above position brought and recognising that none of the users have made any pointed objection on this capital cost item and also that the tariff guidelines require to rely as per the estimates of the concerned port, the said capital cost of equipment is relied upon and accepted.

(iii). As per the norms prescribed in the guidelines, the miscellaneous cost at 5% of civil and equipment capital cost has to be considered while computing the capital cost of the project. The port has estimated miscellaneous capital cost at 5% of civil and equipment capital cost as per the norms prescribed in the guidelines, which is considered in this analysis.

(b). Berthing activity:

As per the upfront tariff guidelines, the capital cost of berth hire services includes cost of construction of berth and cost of dredging, if any, carried out alongside the berth.

Before proceeding ahead with the analysis relating to the capital cost of berth it is relevant here to mention that the proposal of the MOPT includes capital cost of ₹379.38 crores towards construction of break water of 825 metres length. In the current proposal, the cost of construction of break water is to the account of the BOT operator. It is not a general practice to account the breakwater related expenses in the capital cost. A reference in this regard was earlier made to the Government for advice, if any, on the matter. The response of the Government has not been received till finalization of this case. In the case of Chennai Port Trust (CHPT) for the upfront tariff determination of mega Container Terminal approved by this Authority vide Order No.TAMP/47/2009-CHPT dated 3 March 2010, the capital cost of break water was admitted for determination of upfront berth hire. On the same line and recognising that the current project of MOPT envisages construction of break water which is also supported by the Feasibility Report submitted by the MOPT alongwith its original proposal, the capital cost of ₹379.38 crores towards break water is considered as estimated by the MOPT.

The MOPT in its original proposal and until its revised proposal of 11 July 2014 had proposed a separate tariff in the nomenclature of “Additional Port Dues” to recover the return on capital cost and operating cost relating to break water envisaged to be constructed by the BOT operator of the project. The MOPT has clarified that successful BOT Operator will be the sole beneficiary of the investment on the breakwater and hence additional port dues was proposed to be collected by the BOT operator from vessels arriving at the proposed facility. This Authority has in a similar case of CHPT referred above, allowed the capital cost relating to break water to be included in the berth hire computation. On being pointed out, the MOPT has in its final revised proposal of 19 August 2014 proposed to recover the costs relating to break water as part of the berth hire charge.

Thus, in the final revised proposal of the MOPT, the total capital cost for recovery of berth hire services includes capital cost of construction of 2 berths and cost of dredging and reclamation to the tune of ₹138.60 and capital cost for construction of break water estimated of ₹379.38 crores aggregating to the total capital cost of berthing services at ₹517.98 crores. The capital cost of ₹517.98 crores estimated by the MOPT which is reportedly based on the prevailing market price is relied upon and considered. It is seen that the MOPT has not considered miscellaneous cost @5% on the total capital cost estimated for berthing services. It is relevant to mention here that this Authority has in the upfront tariff Orders of other Major Port Trusts like the VPT, PPT including the proposal of the MOPT for coal terminal with dome has, based on the proposal of the concerned Port Trusts, allowed miscellaneous cost at 5% of the capital cost of berthing service in line with the norms prescribed for estimating miscellaneous cost at 5% of civil and equipment cost. That being so, 5% of the total capital cost of berthing service is allowed as miscellaneous cost in line with the decision taken in other upfront tariff cases.

(c). Subject to above modification, the modified capital cost works out to ₹934.37 crores as against ₹908.48 crores estimated by the MOPT. Of ₹934.47 crores, ₹390.49 crores is considered for cargo / container handling activity as estimated by the MOPT and ₹543.88 crores for berthing activity including the cost of break waters as against ₹517.98 crores estimated by the MOPT.

(d). The return on capital employed is calculated at 16% of the estimated capital cost. It is relevant here to mention that the rate of ROCE was reviewed by this Authority and it was decided to adopt ROCE at 16% for the year 2014-15 to determine tariff for major ports and private terminals. Hence, the ROCE is computed at 16% on the estimated capital cost. This works out to ₹62.48 crores for cargo/container handling services and ₹87.02 crores for berth hire services.

(vi). Operating Cost:

(a). Fuel:

The tariff guidelines of 2008 do not prescribe any norm for fuel consumption of 100 HMC. For estimation of fuel cost for operation of HMCs, the MOPT has considered 70 litres per hour/ per HMC. In the upfront tariff cases for multipurpose berths at other Major Port Trusts such as Paradip Port Trust (PPT), Kolkata Port Trust (KOPT) etc., involving deployment of 100 tonnes HMC, fuel consumption is considered as 70 litres per hour. Consumption of fuel at 70 litres per hour considered by MOPT is in line with the fuel consumption considered in the upfront tariff cases in other Major Port Trusts and hence accepted. Fuel consumption to operate the Fork Lift Trucks and the Pay Loaders considered by the MOPT are found to be in line with the norms prescribed in the upfront tariff guidelines for multipurpose cargo berths.

For estimating the fuel cost, the port has in its revised proposal considered the unit rate of fuel at ₹64/- per liter which is supported with copies of recent fuel bills of the Port. Hence, the unit rate of diesel at ₹64 per litre considered by MOPT is accepted.

The guidelines for multipurpose cargo berth prescribe a norm of 4000 hours for estimation of fuel and power cost of equipment. As against the said working hours norms, the port has considered 6132 working hours for estimation of fuel cost of each of the equipments viz. HMC, Fork Lift Trucks and Pay Loaders. It is relevant to state here that as far as the hours of working of the HMC at the multipurpose berth is concerned, the capacity of the cargo items is not restricted with reference to 4000 hours of cranes. The MOPT has assessed the optimal capacity considering the working hours of 6132 per berth applying 70% capacity utilization for the 24 hours for all 365 days. Even the berth hire has been computed for 6132 hours by the MOPT. That being so, the estimation of fuel cost by MOPT for 6132 hours appears to be correct and hence accepted. This is also in line with the approach followed in the upfront tariff determined for multipurpose berths at other Major Port Trusts like Paradip Port Trust, V.O. Chidambaranar Port Trust, etc.

(b). The estimation of Repairs and Maintenance cost at 1% on the civil assets and 5% on the mechanical and electrical components is found to be as per the norms prescribed in the guidelines for multipurpose berth. The estimation of insurance cost at 1% of the gross fixed assets and estimation of other expenses at 5% of the gross fixed assets is also found to be as per the norms prescribed in the upfront guidelines for multipurpose berth. In the modified cost statement, the estimation of operating cost is considered without rounding off of figures in some of the cost elements.

(c). The depreciation estimated 3.34% for civil work and 10.34% on equipment cost is as per the norms prescribed in the guidelines.

(d). The guidelines stipulate that the license fee for land is to be considered as per the rates prescribed in the Scale of Rates of the concerned major port trust. License fee is estimated by MOPT for 3 lakhs sq. mtrs. of area proposed to be reclaimed by the BOT operator. The unit rate adopted by MOPT is ₹567 per 10 sq. mtr. per month. The port has clarified that the unit rate of ₹567 per 10 sq. mtr. per month is based on the lease rent prescribed in its Scale of Rates of MOPT duly escalated by @ 2% p.a. to arrive at the prevailing lease rent ₹.520.20 per 10 sq. per month. Applying 9% pension fund levy thereon, the unit rate comes to ₹.567 per 10 sq. mtr per month.

It is relevant here to mention the lease rent estimated by the MOPT is for the area which is yet to be reclaimed by the BOT operator. The MOPT was requested to clarify as to how the lease rent of land adopted from the Scale of Rates is relevant for the backup area of 75 acres of land yet to be reclaimed by the successful BOT operator.

The port has clarified that the lease rate considered by it will be applicable for the area of 75 acres to be reclaimed by the concessionaire.

In this context, it is relevant to mention that for determination of upfront tariff for container terminal at JNPT which involved use of the land of 10,00,000 sq meters by reclamation of water area, the JNPT had estimated license fee then levied by it for water area from the Gateway Terminal India Private Limited for undeveloped land which was accepted by this Authority in its Order No TAMP/40/2008-JNPT dated 25 February 2009. At JNPT it was noted that reclamation of water area was applicable for any terminal coming up in the port. In the MOPT also in view of scarcity of land and the port proposing vast water area to be reclaimed, it cannot be denied that similar situation prevails there. It has to be recognised that once the water is reclaimed, it is equivalent to land available in any other place in the port area. Hence the proposal of the port to apply lease rent applicable for land which was also allowed in the case of JNPT is recognized in upfront tariff determination.

In the case of MOPT it is, however, seen that lease rent schedule does not prescribe license fee for undeveloped land. That being so, the license fee for the land as considered by the MOPT as per its rent schedule is considered subject to exclusion of Pension Fund Levy as explained in the subsequent paragraphs.

As stated earlier, the guidelines stipulate that the lease rental is to be considered as per the rates prescribed in the Scale of Rates of the concerned major port trust. The existing lease rent schedule of the MOPT stipulates that licence fees for water area shall be charged 50% of the licence fee of abutting land which is in line with the land policy guidelines of 2011 as well as revised land policy guidelines of 2014. Since the existing water area of 3 lakh sq. mtrs. is proposed to be reclaimed in the project, the license fee for water area is to be applied in line with the decision taken in the JNPT container terminal.

It is seen that the unit rate of lease rent considered by the MOPT includes the component of 9% pension fund levy on the prevailing base license fee on land at ₹520.20 per 10 sq. mtrs per month. It is relevant to mention that the Pension Fund Levy approved in the general revision of the Scale of Rates of the MOPT in the tariff Order No 38/2010/MOPT dated 18 February 2010 is for specific purpose to augment the shortfall in the Pension Fund balance and is subject to review in the next tariff cycle. Since the upfront tariff determined here is for a long horizon of 30 years, it is not found appropriate to perpetuate pension fund levy which is a onetime special levy in the determination of upfront tariff. It is noteworthy that the MOPT had not considered Pension Fund levy in its earlier upfront tariff proposal relating to coal terminal (covered storage dome). Hence, there is no justification for considering this item only for this project.

Subject to the above analysis, the license fee estimated by the MOPT is, therefore, suitably modified excluding the component of 9% pension fund levy. Accordingly, the modified lease rent comes to ₹1872.72 lakhs (i.e. 3 lakh sq mtrs * ₹520.20 per 10 sq. mtr/ month * 12 months). Exclusion of pension fund levy in the computation of lease rental will, however, not put MOPT in any disadvantageous position because the computation for arriving at the said pension fund levy approved in the last tariff Order did not reckon the income likely to accrue from the license fee from the proposed project.

(e). Operating cost for berthing service :
The upfront tariff guidelines require the operating cost for berthing services to be estimated at 1% of the cost of construction of berth and cost of dredging carried out alongside the berth. In the final revised proposal, the MOPT has considered depreciation at 3.34% and insurance at 1% on the aggregate capital cost, while estimating the annual revenue requirement of berthing service, apart from the prescribed norms of 1% towards maintenance. Although the guideline restricts the operating cost at 1% of the berth cost and dredging, the asset requires adequate insurance coverage and the fact that the value of the asset will depreciate due to wear & tear can also not be denied. While fixing upfront berth hire for other Major Port Trusts including coal terminal at the Mormugao Port Trust, this position was recognised and the cost of insurance and depreciation was considered to assess the annual revenue requirement from berthing service.

In view of the position explained above, the insurance cost at 1% and depreciation at 3.34% of the capital cost are considered in this case also while estimating the operating cost for assessment of the revenue requirement from berth hire service as done by the MOPT. In this context, it is relevant here to mention that clause 3.6 of the upfront tariff guidelines gives flexibility to this Authority to decide on a particular item of expenditure, which it considers for incorporation, while computing the upfront tariff cap for which norms are not explicit in the guidelines.

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

(a). The annual revenue requirement which is sum of the operating cost and return on capital employed is estimated at ₹14,033.33 lakhs from cargo handling service as against ₹14,203.00 lakhs estimated by the port.

(b). The guidelines for multipurpose cargo terminal require 90% of the total revenue requirement to be apportioned to handling charge, 5% towards storage charge and 5% each towards miscellaneous charge. The MOPT in its final revised proposal has apportioned the estimated revenue requirement as per the norms prescribed in the guidelines. Hence, apportionment of the total revenue requirement between the three tariff heads is accepted as proposed by the port.

(c). The upfront tariff caps are determined so as to meet the revenue requirement estimated for each of the cargo groups and with reference to the share in the optimal capacity.

(d). As per policy direction of the Government, concessional tariff are to be prescribed for coastal cargo (other than thermal coal and POL including crude oil, iron ore and iron ore pellets) and coastal vessels not exceeding 60% of the normal cargo/ vessel related charges. For the multipurpose cargo terminal, entire steel and bagged cargo capacity and other break bulk cargo capacity are expected to be foreign cargo. The ratio of foreign and coastal cargo with reference to both the categories of dry bulk cargo is expected to be 90% and 10% respectively and for container it is expected to be 95 % and 5% respectively. The ratio of cargo wise share of foreign and coastal as furnished by the MOPT is relied upon.

The upfront tariff is to be determined to meet the estimated revenue requirement over the optimal capacity. The approach followed by the MOPT in arriving at the unit handling rate for cargo group based on the individual composition of foreign and coastal movement is found to be in line with the approach followed in determining upfront tariff for multipurpose berths at other Major Port Trusts.

It is relevant to mention that in few other cases such as coal at general cargo berth, mechanised fertiliser handling facilities at VPT and other Major Port where the entire cargo was expected to be foreign, the upfront tariff is determined to meet the cargo capacity from foreign cargo. Concessional upfront rate for coastal cargo is, however, prescribed to comply with the Government guidelines though it may not have any impact on the revenue realisation. In the instant case also, the MOPT has proposed rates for both foreign/ coastal category for all the cargo groups including “steel and bagged” and “other break bulk” cargo though prescription of coastal rate for “steel and bagged cargo” and “other break bulk cargo” will not have any impact on the revenue realization.

(e). Based on the above analysis, the handling rate comes to ₹411.94 per tonne for steel and bagged cargo (100% foreign) as against ₹.416.92 per tonne proposed by MOPT, ₹659.10 per tonne for other break bulk cargo (100% foreign) as against ₹667.07 per tonne proposed by MOPT, ₹205.97 per tonne for foreign and ₹123.58 for coastal category for dry bulk cargo like food grain fertilizer and dry bulk cargo like coal, limestone and minerals comes as against ₹.208.46 per tonne and ₹125.08 per tonne proposed by MOPT for corresponding categories and ₹4041.73 per TEU for foreign and ₹2425.04 per TEU for coastal category of containers as against ₹4254.26 per TEU and ₹2552.56 per TEU proposed by MOPT for corresponding categories.

(f). The MOPT has proposed a provision to state that the composite charges include charges for loading/unloading of cargo, transferring the same upto the point of storage, storage at stack yard upto the prescribed free period, reclaiming from stackyard and loading onto the ship/train/trucks as applicable, wharfage and all other miscellaneous services not specifically prescribed in the Scale of Rates. The proposed note is in line with similar prescription in other Major Port Trusts in upfront tariff determining and hence approved.

(g). As per the upfront tariff guidelines, storage charge for the multipurpose terminal is leviable for storage of cargoes at the storage area beyond the allowable free period of 5 days for import and 15 days for export. The MOPT in the original proposal had proposed free period for multipurpose cargo in line with the free period prescribed in the guidelines. For coal handling envisaged as dedicated facility in the original proposal, free period of 15 days as against 25 days free period prescribed in the upfront tariff guidelines for coal berth. As stated earlier, in view of the suggestion of one of the prospective bidders APSEZL, the MOPT has in its final revised proposal proposed two berths for multipurpose cargo handling giving more flexibility to the BOT operator to handle any general cargo including coal. As regards the storage charge proposed in the original proposal, the APSEZL has during the proceedings of this case submitted out that the average dwell time of 40 days is allowed for handling coal at Mundra. Hence they have requested the MOPT to allow free period of 25 days for coal handling which is as per the norms prescribed in the guidelines for coal terminal as against free period of 15 days proposed by the port. The APSEZL has pointed out that the number of days proposed by MOPT is very less and not workable as per the market realities of doing business. They have submitted that the free period available for other competing terminals at MOPT is 21 days and that no commodity like Steel coils, Steel Plates, Food Grains, Fertilisers, Limestone etc. can be evacuated within the free period of 5 days for import and 15 days for export and hence have requested to allow 25 days free both for import and export cargo. The MOPT apparently in view of the request made by APSEZL in the revised proposal has proposed uniform free period of 15 days of Import cargo and 25 days for export cargo. The free period of 15 days for import and 25 days for export proposed by the MOPT in the final revised proposal is not in line with the free period norms prescribed in the tariff guidelines for multipurpose berth.

It is relevant here to state that in the upfront tariff cases in other Major Port Trusts like VPT, VOCPT, KPT, etc., free period of 5 days for import and 15 days for export cargo is allowed as per the norms prescribed in the tariff guidelines. In the case of KOPT multipurpose terminal, however, this Authority vide Order No TAMP/24/2011- KOPT dated 8 September 2011 has allowed the 25 days free period for iron ore and for other dry bulk export cargo as proposed by the port in view of the reasons cited by them about more time taken for accumulation of cargo for export.

In the instant case, the MOPT has highlighted that its port faces severe yard constraint in respect of cargo evacuation and land area is a constraint in its port. The port anticipates smooth cargo evacuation to happen only after the railway line between Hospet and Vasco is doubled for which no time lines are set. Relying on the cargo evacuation and yard constraint expressed by the MOPT and recognising that the free period proposed by the MOPT emanates mainly based on the point made by one of the prospective bidders, the deviation in the number of free period proposed by the MOPT in its revised proposal i.e. free period of 15 days for import cargo and 25 days for export cargo as against norm of 5 free days for import cargo and 15 free days for export cargo prescribed in the guidelines is accepted.

(h). APSEZL has stated that dwell time of 25 days should be considered for calculating turnover ratio of plot for assessing the yard capacity of coal. This point is not found relevant since as rightly pointed out by MOPT, the revised proposal of the MOPT does not envisage a separate dedicated coal terminal.

(i). The port has considered 20% of the cargo share capacity that will attract storage charge beyond the proposed free period. The position furnished by the MOPT is solely relied upon. The MOPT has furnished calculation for arriving at storage charge. In the upfront tariff calculation furnished by MOPT to meet estimated annual revenue requirement of ₹710.14 lakhs from storage charge beyond the proposed free period, the rate for the first slab of 5 days comes to ₹23.16 per tonne/ day for steel and bagged cargo, ₹37.06 per tonne/ day for other break bulk cargo, ₹11.12 per tonne/ day for dry bulk cargo like food grain, and fertilizer comes and dry bulk cargo like coal, limestone and minerals comes and ₹231.52 per TEU/ day for container. The rate for the subsequent slab is proposed 1.5 times and 2 times the rate for first slab.

In view of modification in the estimated annual revenue requirement and the optimal capacity for containers, the storage charge proposed by the MOPT has been modified keeping the slab structure and the approach adopted by the MOPT unaltered. For the modified annual revenue requirement of ₹701.66 lakhs from storage charge, the storage rate beyond the proposed free period for the first slab of 5 days comes to ₹22.89 per tonne/ day for steel and bagged cargo, ₹36.62 per tonne/ day for other break bulk cargo, ₹10.98 per tonne/day for dry bulk cargo like food grain, and fertilizer and dry bulk cargo like coal, limestone, minerals, etc. and ₹220.07 per TEU/day for container. The rate for the subsequent two slabs are prescribed at 1.5 times and 2 times the rate for first slab in line with the approach followed by the MOPT.

(j). In the final revised proposal MOPT has estimated the annual revenue requirement towards miscellaneous charges for all the cargo categories and container reportedly to cover the expenses towards security charges, sweeping, weighment and dust suppression etc. To meet estimated annual revenue requirement of ₹710.14 lakhs, the MOPT has arrived at miscellaneous charge of ₹231.62 per TEU and ₹14.10 per tonne for all the three cargo categories.

In view of modification in the estimated annual revenue requirement and the optimal capacity for container, the miscellaneous charge proposed by the MOPT has been modified keeping the approach adopted by the MOPT unaltered. Based on the modified annual revenue requirement of ₹701.66 lakhs from the miscellaneous services, the miscellaneous charge comes to ₹220.05 per TEU for container and ₹13.94 per tonne for all cargo categories.

(viii). (a). Subject to the above analysis, the modified revenue requirement from berthing service comes to ₹11,606.38 lakhs as against ₹11,053.69 lakhs estimated by the port.

(b). The original proposal of the MOPT envisaged the vessel mix of Panamax and Handymax in the ratio of 50:50. The MOPT had stated that the existing draft of the channel does not permit sailing of a fully loaded Capesize vessel for the computation of Berth Hire Charges. In para 5.4.3. of the Feasibility Report submitted by MOPT along with its original proposal states that berthing of a fully loaded capsize vessels is possible if capital dredging of the channel and basin area alongside the berth is undertaken and the channel is deepened in future to handle capesize vessel. On being pointed out, the MOPT in its the final revised proposal has submitted that the proposed terminal can handle Capesize, Panamax, Handymax, as plan has been drawn up for deepening the channel to handle cape size vessels. Thus, in the final revised proposal, the port has for computation of berth hire charges, considered different vessel mix of Panamax vessel, Handymax vessel and Capesize vessel for different cargo categories of cargo. The MOPT has assumed share of panamax and handy max in ratio of 40:60 for steel and bagged cargo and other break bulk cargo, for dry bulk cargo, capsize, panamax and handy max is assumed to be 50:20:30 and for container the port has assumed 100% share of handymax vessel. The share of vessel profile and vessel parameters considered by the MOPT is relied upon.

(c). The MOPT has considered the impact of concession applicable to the coastal vessels as per the 2005 tariff guidelines while arriving at the pre-determined berth hire. The MOPT has considered steel & bagged and other break bulk cargo vessel to be 100% foreign-going, dry bulk cargo is assumed 90% foreign-going and 10% coastal vessel and for container 95% foreign-going and 5% coastal vessel have been assumed by the MOPT. The ratio of foreign going and coastal vessel as furnished by the MOPT is relied upon.

The MOPT has furnished detailed computation of berth hire. The methodology followed by the 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 except that the port has considered total berth days of 255.5 for two berths instead of 255.5 days applicable for one berth as per the norms prescribed in the guidelines for computation of berth hire. That being so, the computation of berth hire is modified considering handling rate, optimal capacity, the GRT hours first for one berth and then multiplied by two to arrive at GRT hours for two berths. This is in line with the approach followed in the berth hire computation of VPT involving two berths WQ7 and WQ8 in Order No.TAMP/51/2012-VPT dated 21 January 2013 and amendment to the berth hire in the Order dated 25 February 2013.

Subject to the above analysis, the berth hire for foreign going vessel vessels works out to ₹2.03 per GRT per hour and ₹1.22 per GRT per hour for coastal vessel as compared to ₹3.86 per GRT per hour and ₹2.32 per GRT per hour for foreign going vessel and coastal vessel respectively computed by the MOPT. The detailed computation of berth hire of multipurpose berth is furnished in the **Annex-II** attached.

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

(ix). (a). Clause 2.2 of the revised tariff guidelines of 2013 requires this Authority to prescribe the Reference Tariff along with the Performance Standards. Though the revised guidelines of 2013 do not require this Authority to go into the Performance Standards proposed by the port it may not be unreasonable to assume that the ports would propose reasonable and achievable Performance Standards.

(b). The MOPT has proposed the Performance Standards at 6000 tonnes/ day/ berth in respect of steel and bagged cargo, 3,750 tonnes/ day/ berth for other break bulk cargo, 12,500 tonnes/ day/ berth for dry bulk cargo like food grains, and fertilizers, 12,500 tonnes/ day/ berth for dry bulk cargo like coal, limestone, mineral, etc., and 25 moves / hour berth per container. The performance standard proposed by the MOPT on per berth / per day basis are found to be in line with the handling rate considered in the optimal capacity calculation and hence it is prescribed as approved except for modification in the performance standard for containers. Since in the modified optimal capacity calculation, the handling rate for container is considered at 20 moves per hour per HMC, the performance standard for container is also modified at the level considered in the optimal capacity calculation. Apart from this, the title is modified as "performance Standards per HMC per berth" instead of "Handling Rate per Berth" given by the MOPT.

(c). It is relevant here to mention that Clause 2.5 of the 2013 revised tariff guidelines stipulates that the Reference Tariff and Performance Standards notified by TAMP would be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. As per the said guidelines, it is only on the achievement of the Performance Standards as incorporated in the Concession Agreement, that the operator would be eligible for any performance linked tariff. It is true that the revised 2013 guidelines only requires prescription of performance standards. It does not stipulate as to what constitutes performance standard. Since the MOPT has expressed its desire to prescribe the performance standards as proposed by it, the same is prescribed by this Authority subject to minor modification in respect of container.

(x). The definition of various terms proposed by MOPT in the draft Scale of Rates is found to be in line with the definition commonly prescribed in the Scale of Rates.

Some of the common conditions stipulated in the guidelines of 2005 and the conditions uniformly prescribed in the Scale of Rates of other major ports / private terminals about status of the vessel for the purpose of vessel related charges, criteria for conversion of foreign to coastal vessel, conditions relating to concession to coastal vessel and cargo, users should not be required to pay charges for delays beyond reasonable level attributable to the private terminal operator, berth hire shall not accrue 4 hours after the time of vessel signaling its readiness to sail, free days to exclude Customs holidays and terminal's non-operating days, storage charge shall not be levied if the terminal operator is not in a position to deliver/ ship the cargo when requested by user for reasons attributable to the operators, etc., proposed by MOPT are incorporated in the upfront tariff schedule for the proposed multipurpose cargo terminal.

(xi). The MOPT has proposed a note that 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. Since the berth hire will be levied by the BOT operator in this case, the said note is suitably modified to state that no berth hire shall be levied for the period the vessel is compelled to idle at berth operated by the terminal operator for continuous one hour or more due to non-availability/ break down of equipment or power failure or any other reasons attributable to the terminal operator in line with the prescription in the other similar upfront tariff Orders.

(xii). The MOPT has proposed to prescribe a few conditions regarding the commencement of free period which are in line with the prescription at the other major ports/ private terminals.

(xiii). Since the estimation of capital cost and unit rate of operating cost considered in the upfront tariff calculation are as of the year 2014, it is found appropriate and relevant to prescribe the base WPI to be considered for automatic adjustment every year as 1 January 2014 instead of 1 January 2015 proposed by the MOPT.

15.1. Subject to above, the Reference Tariff Schedule along with conditionalities governing the Reference Tariff has been modified.

15.2. The modified Reference Tariff Schedule is attached as **Annex - III** and the Performance Standards as proposed by the port and subject to changes made, as mentioned in the earlier paragraph above, is attached as **Annex - IV**.

15.3. In the result, and for the reasons given above, and based on a collective application of mind, this Authority approves the Reference Tariff Schedule for multipurpose cargo terminal at MOPT and notifies it alongwith the Performance Standards.

15.4. As per clause 2.5 of the Revised Tariff Guidelines 2013, the Reference Tariff and Performance Standards notified by this Authority shall be mentioned in the bid document and subsequently in the Concession Agreement in respect of PPP Projects. Accordingly, the MOPT is advised to incorporate the Reference Tariff and Performance Standards, in the bid document and subsequently in the Concession Agreement in respect of PPP Project.

15.5. From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed Reference Tariff relevant to that year, which would be the ceiling. The aforesaid Reference Tariff shall be automatically revised every year based on an indexation as provided in para 2.2 of the tariff guidelines of 2013 which will be applicable for the entire concession period.

However, the PPP operator would be free to propose a tariff along with Performance Standards (the "Performance Linked Tariff") from the second year of operation onwards, over and above the indexed Reference Tariff for the relevant financial year, at least 90 days before the 1st April of the ensuing financial year. Such Performance Linked Tariff shall not be higher than 15% over and above the indexed Reference Tariff for that relevant financial year (and this will be the Tariff Cap). The Performance Linked Tariff would come into force from the first day of the following financial year and would be applicable for the entire financial year.

15.6. The proposal shall be submitted to this Authority along with a certificate from the independent engineer appointed under the Concession Agreement of the Project indicating the achievement of Performance Standards in the previous 12 months as incorporated in the Concession Agreement or for the actual number of months of operation in the first year of operation, as the case may be.

15.7. On receipt of the proposal, this Authority will seek the views of the MOPT on the achievement of Performance Standards as outlined in para 5 of the tariff guidelines of 2013, within 7 days of receipt.

15.8. In the event of Operator not achieving the Performance Standards as incorporated in the Concession Agreement in previous 12 months, this Authority will not consider the proposal for notifying the Performance Linked Tariff for the ensuing financial year and the Operator shall be entitled to only the indexed Reference Tariff applicable for the ensuing financial year.

15.9. After considering the views of the MOPT, if this Authority is satisfied that the Performance Standards as incorporated in the Concession Agreement have been achieved, it shall notify the performance linked tariff by 15th of March to be effective from 1st of April of the ensuing financial year.

15.10 While considering the proposal for Performance Linked Tariff, this Authority will look into the Performance Standards and its adherence by the Operator. This Authority will decide on the acceptance or rejection of the Performance Linked Tariff proposal based on the achievement or otherwise of the Performance Standards by the operator. Determination of indexed Reference Tariff and Performance Linked Tariff will follow the illustration shown in the Appendix attached to the tariff guidelines of 2013.

15.11. From the third year of operation, the Performance Linked Tariff proposal from the PPP operator shall be automatically notified by this Authority subject to the achievement of Performance Standards in the previous 12 months period as certified by the Independent Engineer. The PPP operator, for the Performance Linked Tariff from the third year onwards, will submit the Performance Linked Tariff proposal along with the achievement certificate from the independent engineer by 1st March and this Authority shall notify by 20th March, the Performance Linked Tariff to be effective from the ensuing financial year.

15.12. As stipulated in Clause 6.2 of the revised 2013 guidelines, in the event any user has any grievance regarding non-achievement by the PPP operator of the Performance Standards as notified by this Authority, he may prefer a representation to this Authority which, thereafter, shall conduct an inquiry into the representation and give its finding to the concerned Major Port Trust. The Major Port Trust will be bound to take necessary action on the findings as per the provisions of the respective Concession Agreement.

15.13. As stipulated in Clause 6.3.1 of the revised 2013 guidelines, within 15 (fifteen) days of the signing of the Concession Agreement, the concerned operator will forward the Concession Agreement to this Authority which will host it on its website.

15.14. As stipulated in clause 6.3.2 of the revised 2013 guidelines, the PPP operator shall furnish to this Authority quarterly reports on cargo traffic, ship berth day output as well as the tariff realized for each berth. The quarterly reports shall be submitted by the PPP operator within a month following the end of each quarter. Any other information which is required by this Authority shall also be furnished to them from time to time.

15.15. As stipulated in clause 6.3.3 of the revised 2013 guidelines, this Authority shall publish on its website all such information received from PPP operator. However, this Authority shall consider a request from the PPP operator about not publishing certain data/ information furnished which may be commercially sensitive. Such requests should be accompanied by detailed justification regarding the commercial sensitiveness of the data/ information in question and the likely adverse impact on their revenue/ operation of upon publication. This Authority's decision in this regard would be final.

15.16. 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.

15.17. The performance norms for the projects should be clearly brought out in the bid documents. The operator is expected to perform at least at the performance norms brought out in the bid document/concession agreement.

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

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

**(T.S. Balasubramanian)**
Member (Finance)

| | | | | ANNEX -I |
|---|---|---|---|---|
| | **REFERENCE TARIFF CALCULATION FOR MULTIPURPOSE CARGO TERMINAL AT MORMUGAO PORT TRUST** | | | |
| **Sr. No.** | **Particulars** | | **Final Revised Proposal furnished by MOPT dated19.8.2014 [2 HMC of 100T]** | **Modified by TAMP** |
| | **MULTIPURPOSE BERTH:** | | | |
| **I** | **Optimal capacity** | | | |
| | **Optimal Quay Capacity** | | | |
| **(a)** | Share of capacity of different cargo items | | | |
| | - Percentage share of capacity of Steel and bagged Cargo | (S1) | 22.00% | 22.00% |
| | -Percentage share of capacity of Other Break Bulk Cargo | (S2) | 13.00% | 13.00% |
| | -Percentage share of capacity of Dry Bulk Cargo like food grains and fertilizers | (S3) | 22.00% | 22.00% |
| | -Percentage share of capacity of Dry Bulk Cargo like Coal, Limestone, minerals etc. | (S4) | 40.00% | 40.00% |
| | -Percentage share of capacity of Containers | (S5) | 3.00% | 3.00% |
| | | | | |
| **(b)** | Handling rate for one berth/day | | | |
| | -Handling rate of capacity of Steel and bagged Cargo | | 6000 | 6000 |
| | - Handling rate of capacity of Other Break Bulk Cargo | | 3750 | 3750 |
| | - Handling rate of capacity of Dry Bulk Cargo like food grains and fertilizers | | 12500 | 12500 |
| | - Handling rate of capacity of Dry Bulk Cargo like Coal, Limestone, minerals etc. | | 12500 | 12500 |
| | - Handling rate off capacity of Containers (moves/day) [ MOPT - based on 25 moves/ hour/ HMC. TAMP - 20 moves/ hour/ HMC) | | 600 | 480 |
| | | | | |
| **(b)** | Hence, the handling rate for two berths/day | | | |
| | -Handling rate for Steel and bagged Cargo | (P1) | 12000 | 12000 |
| | - Handling rate for Other Break Bulk Cargo | (P2) | 7500 | 7500 |
| | - Handling rate for Dry Bulk Cargo like food grains and fertilizers | (P3) | 25000 | 25000 |
| | - Handling rate for Dry Bulk Cargo like Coal, Limestone, minerals etc. | (P4) | 25000 | 25000 |
| | - Handling rate for Containers (moves/day) [ MOPT - 25 moves/ hour/ HMC. TAMP - 20 move/ hour/ HMC) | (P5) | 1200 | 960 |
| | | | | |
| | | | | |
| **(c)** | Optimal Capacity per Berth | | | |
| | -Steel and bagged cargo 0.7 * S1 * P1 * 365 tonnes/ annum | | 337,260 | 337,260 |
| | -Other Break Bulk Cargo 0.7 * S2* P2 * 365 tonnes/ annum | | 124,556 | 124,556 |
| | - Dry Bulk Cargo like food grains and fertilizers 0.7 * S3* P3 * 365 tonnes/ annum | | 702,625 | 702,625 |
| | - Dry Bulk Cargo like Coal, Limestone, minerals etc. 0.7 * S4* P4* 365 tonnes/ annum | | 1,277,500 | 1,277,500 |
| | -Containers (TEU's) 0.7 * S5* P5* 365 TEUs/ annum [Calculation of TAMP considers 1.3 TEU factor which is not captured by MOPT] | | 4,599 | 4,783 |
| | (container In tonnes) | | - | - |
| | **Total Optimal Capacity of one berth in Tonnes for cargo and** | | **2,441,941** | **2,441,941** |
| | **For container in TEUs/ annum** | | **4,599** | **4,783** |
| **(d)** | Optimal Capacity for two Berths | | | |
| | -Steel and bagged cargo | | 674,520 | 674,520 |
| | -Other Break Bulk Cargo | | 249,113 | 249,113 |
| | - Dry Bulk Cargo like food grains and fertilizers | | 1,405,250 | 1,405,250 |
| | - Dry Bulk Cargo like Coal, Limestone, minerals etc. | | 2,555,000 | 2,555,000 |
| | -Containers (TEU's) 0 | | 9,198 | - |
| | | | | |
| | **Total Optimal Capacity of two berths in Tonnes for cargo and** | | **4,883,883** | **4,883,883** |
| | **For Container in TEUS/annum** | | **9,198** | **9,566** |
| **II** | **Capital Cost** | | **₹ in crores** | |
| **(i).** | **Cargo handling Activity** | | | |
| **(a)** | **Civil & Electrical Works** | | | |
| | -Bund Structure- 5,50,000 cum | | 5500.00 | 5500.00 |
| | -Armour protection for bund -300 | | 2925.00 | 2925.00 |
| | -Reclamation from outside-24,00,000 cum | | 12000.00 | 12000.00 |
| | -Railway siding- 4kms | | 1200.00 | 1200.00 |
| | -Road approach – 3000 mts | | 750.00 | 750.00 |
| | -Paving – 2,60,000 sq.m | | 6500.00 | 6500.00 |
| | -Cable Trench/Drains – 1000 mts | | 75.00 | 75.00 |
| | -Transit Shed (8000 sq.m ) | | 1440.00 | 1440.00 |
| | -Miscellaneous | | 10.00 | 10.00 |
| | **Sub-Total** | | **30400.00** | **30400.00** |
| | | | | |
| **(b)** | **(ii). Equipment Cost for General Cargo** | | | |
| | -Harbour Mobile Cranes 100T –(4 nos in 11.7.2014 proposal) (2 nos in 13.8.2014 proposal) | | 6,000.00 | 6000.00 |
| | -Fork Lift Trucks 5 Tons- 8 nos | | 240.00 | 240.00 |
| | -Fork Lift Trucks 15 Tons- 4 nos | | 180.00 | 180.00 |
| | -Pay Loaders 10 Tons – 6 nos | | 270.00 | 270.00 |
| | -Power and Lighting | | 100.00 | 100.00 |
| | **Sub-Total** | | **6790.00** | **6790.00** |
| | | | | |
| **(c)** | **Miscellenous Cost at 5% of Capital Cost of Cargo Handling [(a+b)*c]** | | 1860.00 | 1859.50 |
| | | | | |
| | **Total Capital Cost for Cargo Handling Activity** | | **39050.00** | **39049.50** |

| Sr. No. | Particulars | | Final Revised Proposal furnished by MOPT dated19.8.2014 [2 HMC of 100T] | Modified by TAMP |
|---|---|---|---|---|
| | | | | |
| (ii) | **Capital Cost for Berthing Services** | | | |
| (a) | **Berth & Dredging** | | | |
| | - Berth Length – 600 m, 13950 sq.m | | 11860.00 | 11860.00 |
| | - Dredging & Reclamation-5,00,000 cum | | 2000.00 | 2000.00 |
| | | | | |
| | **Sub-Total** | | **13860.00** | **13860.00** |
| | | | | |
| (b) | **Break Water-825 metres** | | | |
| | -Rubble mound for foundation | | 3450.00 | 3450.00 |
| | -Concrete for vertical wall plus protecting wall | | 25000.00 | 25000.00 |
| | -Armour Protection | | 9488.00 | 9488.00 |
| | **Sub-Total** | | **37938.00** | **37938.00** |
| (c) | Miscellenous Cost at 5% of Total Capital Cost [(a+b) * 5% considered by TAMP ] | | 0.00 | 2589.90 |
| | | | | |
| | **Total Capital Cost for Berthing Services (a+b+c)** | | **51798.00** | **54387.90** |
| | **Total Capital Cost of the Project (i+ii)** | | **90848.00** | **93437.40** |
| III | **Operating Cost for Cargo Handling Activity** | | **₹ in lakhs** | |
| | (b). Fuel Cost | | | |
| | **- Cranes** | | 549.43 | 549.43 |
| | (MOPT - 70 ltrs/ hour/ crane* Rs.64 per litre * 6132 hours pa * 2 HMC)<br>(TAMP - 70 ltrs/ hour/ crane * Rs.64 per litre * 6132 hours pa * 2 HMC) | | | |
| | **- 5T FLT** | | 219.77 | 219.77 |
| | (MOPT - 7 ltrs/ hour/ truck * Rs.64 per litre * 6132 hours pa * 8 trucks)<br>(TAMP - 7 ltrs /hour /truck * Rs.64 per litre * 6132 hours pa * 8 Trucks) | | | |
| | **- 15T FLT** | | 156.98 | 156.98 |
| | (MOPT 10 ltrs /hour /truck * Rs.64 per litre * 6132 hours pa * 4 Trucks)<br>(TAMP - 10 ltrs /hour /truck * Rs.64 per litre * 6132 hours pa * 4 Trucks) | | | |
| | **- Pay Loaders** | | 282.56 | 282.56 |
| | ( MOPT - 12 ltrs /hour/ loader * Rs.64 per litre * 6132 hours pa * 6pay loaders<br>(TAMP - 12 ltrs /hour /loader *Rs.64 per litre * 6132 hours pa *6pay loaders) | | | |
| | (c). Repair & Maintenance | | | |
| | - Civil Assets (1% on civil work) | | 304.00 | 304.00 |
| | - Mechanical & Electrical Equipment including spares (5% on equipment cost) | | 339.50 | 339.50 |
| | (d). Insurance (1% on Gross fixed assets) | | 391.00 | 390.50 |
| | (e). Depreciation | | | |
| | - Civil Work @ 3.34% | | 1015.36 | 1015.36 |
| | - Mechanical Work @ 10.34% | | 702.09 | 702.09 |
| | (f). License Fee | | 2041.20 | 1872.72 |
| | (MOPT -3 lakh sq.mtrs. * 567 per 10 sq mtr / month * 12 months)<br>(TAMP 3 lakh sq.mtrs. * 520.20 per 10 sq mtr / month * 12 months) | | | |
| | (g). Other Expenses towards salaries and overheads (5% on gross value of assets) | | 1953.00 | 1952.48 |
| | | | | |
| | **Total Operating Cost** | | **7,955.00** | **7,785.38** |
| | | | | |
| IV | **Estimated Annual Revenue Requirement & upfront tariff for Cargo Handling Activity.** | | **₹ in lakhs** | |
| A. | | | | |
| (i). | **Estimated Annual Revenue Requirement (ARR)** | | | |
| | (a). Total Operating Cost | | 7955.00 | 7785.38 |
| | (b). Total Capital Cost | | 39050.00 | 39049.50 |
| | (c ). 16% ROCE | | 6248.00 | 6247.92 |
| | (c). Total Revenue requirement from cargo handling activity | | **14203.00** | **14033.30** |
| | | | | |
| (ii) | **Apportionment of ARR** | | | |
| | - Cargo handling Activity (90%) | | 12782.70 | 12629.97 |
| | - Storage Charges (5%) | | 710.15 | 701.66 |
| | - Miscellaneous Charges (5%) | | 710.15 | 701.66 |
| | | | | |
| (iii) | **Proposed Tariff (Rate in Rs/Tonne/TEU)** | | | |
| | **(a). Cargo Handling Charge** | | | |
| | | | | |
| | (i) Steel and bagged cargo (100% Foreign Cargo) | | 416.92 | 411.94 |
| | | | | |
| | (ii) Other break bulk cargo (100% Foreign Cargo) | | 667.07 | 659.10 |
| | | | | |
| | (iii) Dry bulk cargo like food grains and Fertilisers | | | |
| | -Foreign Cargo (90% ) | | 208.46 | 205.97 |
| | -Coastal Cargo (10%) | | 125.08 | 123.58 |
| | (iv) Dry bulk cargo like Coal, Limestone, minerals etc. | | | |
| | -Foreign Cargo (90% ) | | 208.46 | 205.97 |
| | -Coastal Cargo (10%) | | 125.08 | 123.58 |
| | (v) Containers ( Rs per TEU's) | | | |
| | -Foreign Cargo (95% ) | | 4254.26 | 4041.73 |
| | -Coastal Cargo (5%) | | 2552.56 | 2425.04 |

| Sr. No. | Particulars | | Final Revised Proposal furnished by MOPT dated19.8.2014 [2 HMC of 100T] | Modified by TAMP |
|---|---|---|---|---|
| | | | | |
| | **(b). Storage Charge** | | | |
| | - Revenue Requirement (Rs in lakhs) | | 710.15 | 701.66 |
| | - % of Cargo to attract storage charge | | 20% | 20% |
| | - Capacity of cargo to attract storage charge ( tonnes) | | 1,840 | - |
| | - Free period | | | |
| | Import | | | |
| | Export | | 15 | 15 |
| | | | 25 | 25 |
| | - Storage charge beyond free period (cargo-wise) (Rs. per tonne/ day) | | | |
| | - Steel and bagged Cargo | | | |
| | (Proposal dt:11.7.2014 (Proposal dt:22.8.2014) | | | |
| | 16 to 20th day 1st 5 days | | 23.16 | 22.89 |
| | 21 to 25 th day 6th to 10th day | | 34.74 | 34.33 |
| | 26th Day Onwards 11th day Onwards | | 46.32 | 45.77 |
| | | | | |
| | - Other break bulk cargo | | | |
| | (Proposal dt:11.7.2014 (Proposal dt:22.8.2014) | | | |
| | 16 to 20 days 1st 5 Days | | 37.06 | 36.62 |
| | 21 to 25 days 6th to 10th Day | | 55.59 | 54.92 |
| | 26th Day Onwards 11th Day Onwards | | 74.12 | 73.23 |
| | | | | |
| | - Dry bulk cargo like food grains and Fertilisers | | | |
| | (Proposal dt:11.7.2014 (Proposal dt:22.8.2014) | | | |
| | 16 to 20 days 1st 5 Days | | 11.12 | 10.98 |
| | 21 to 25 days 6th to 10th Day | | 16.68 | 16.48 |
| | 26th Day Onwards 11th Day Onwards | | 22.24 | 21.97 |
| | | | | |
| | - Dry bulk cargo like Coal, Limestone, minerals etc. | | | |
| | (Proposal dt:11.7.2014 (Proposal dt:22.8.2014) | | | |
| | 16 to 20 days 1st 5 Days | | 11.12 | 10.98 |
| | 21 to 25 days 6th to 10th Day | | 16.68 | 16.48 |
| | 26th Day Onwards 11th Day Onwards | | 22.24 | 21.97 |
| | | | | |
| | - Containers (TEU's) | | | |
| | (Proposal dt:11.7.2014 (Proposal dt:22.8.2014) | | | |
| | 16 to 20 days 1st 5 Days | | 231.52 | 220.07 |
| | 21 to 25 days 6th to 10th Day | | 347.28 | 330.11 |
| | 26th Day Onwards 11th Day Onwards | | 463.04 | 440.15 |
| | | | | |
| | **(b).Miscellaneous Charge** | | | |
| | - Revenue Requirement (Rs in lakhs) | | **710.15** | **701.66** |
| | Steel and Bagged Cargo (Rs. Per tonne) | | 14.10 | 13.94 |
| | Other Break Bulk Cargo (Rs. Per tonne) | | 14.10 | 13.94 |
| | Dry Bulk Cargo like Food Grains and Fertilisers (Rs. Per tonne) | | 14.10 | 13.94 |
| | Dry Bulk Cargo like Coal, Limestone, Minerals etc. (Rs. Per tonne) | | 14.10 | 13.94 |
| | Containers (TEU's) (Rs. Per TEU) | | 231.62 | 220.05 |
| **B.** | **BERTH HIRE CHARGES** | | | **Rs in lakhs** |
| | **Revenue Requirement for 2 Berths** | | | |
| | **Total Operating Cost** | | | |
| | - Repair and Maintenance Cost @ 1% | | 517.98 | 543.88 |
| | - Depreciation @ 3.34% | | 1730.05 | 1816.56 |
| | - Insurance @ 1% | | 517.98 | 543.88 |
| | **Total Operating Cost** | | **2766.01** | **2904.31** |
| | Return On Capital Employed ROCE @ 16% | | 8287.68 | 8702.06 |
| | **Total Revenue Requirement for Berth** | | **11053.69** | **11606.38** |
| | Berth Hire Charges per GRT per hour in Rs (Foreign going vessel) | | **3.86** | **2.03** |
| | Berth Hire Charges per GRT per hour in Rs (Coastal going vessel) | | **2.32** | **1.22** |

### STATEMENT SHOWING THE CALCULATIONS OF HANDLING CHARGES UNDER DIFFERENT CARGO GROUPS

**Computation of Handling Charges by MOPT (proposal dated 19.8.2014)**

| Cargo Group | Cargo Share | Handling Rate Per Day (for cargo in tonne and container in TEU's) | Cargo to be handled (tonnes/TEU's) | Cargo Working Days | Percen-tage of Cargo Working days | Revenue Requirement (Rs. in Lakhs) | Cargo to be handled | | Rate in Rs. Per tonne/TEU's | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Foreign (in tonnes/TEU's) | Coastal (in tonnes/TEU's) | For Foreign cargo | For Coastal cargo |
| Steel and bagged (100% Foreign Cargo) | 22.00% | 12000 | 674520 | 56 | 22.00% | 2,812.19 | 674520 | 0 | 416.92 | 250.15 |
| Other break bulk cargo (100% Foreign Cargo) | 13.00% | 7500 | 249113 | 33 | 13.00% | 1,661.75 | 249113 | 0 | 667.07 | 400.24 |
| Dry bulk cargo like food grains and Fertilisers (90% Foreign Cargo, 10% Coastal Cargo) | 22.00% | 25000 | 1405250 | 56 | 22.00% | 2,812.19 | 1264725 | 140525 | 208.46 | 125.08 |
| Dry bulk cargo like Coal, Limestone, minerals etc. (90% Foreign Cargo, 10% Coastal Cargo) | 40.00% | 25000 | 2555000 | 102 | 40.00% | 5,113.08 | 2299500 | 255500 | 208.46 | 125.08 |
| **Sub total (for Cargo)** | **97.00%** | | **4883883** | **248** | **97.00%** | **12399.22** | **4487858** | **396025** | | |
| **Sub total (for Containers)** | 3.00% | 1200 | 9198 | 8 | 3.00% | 383.48 | 8738 | 460 | 4254.26 | 2552.56 |
| **Total** | **100.00%** | | | **256** | **100.00%** | **12782.70** | | | | |

**Handling Charge modified by theTAMP**

| Cargo Group | Cargo Share | Handling Rate Per Day | Cargo to be handled (tonnes/TEU's) | Cargo Working Days | Percen-tage of Cargo Working days | Revenue Requirement (Rs. in Lakhs) | Cargo to be handled | | Rate in Rs. Per tonne/TEU's | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Foreign (in tonnes/TEU's) | Coastal (in tonnes/TEU's) | For Foreign cargo | For Coastal cargo |
| Steel and bagged (100% Foreign Cargo) | 22.00% | 12000 | 674520 | 56 | 22.00% | 2,778.59 | 674520 | 0 | 411.94 | 247.16 |
| Other break bulk cargo (100% Foreign Cargo) | 13.00% | 7500 | 249113 | 33 | 13.00% | 1,641.90 | 249113 | 0 | 659.10 | 395.46 |
| Dry bulk cargo like food grains and Fertilisers (90% Foreign Cargo, 10% Coastal Cargo) | 22.00% | 25000 | 1405250 | 56 | 22.00% | 2,778.59 | 1264725 | 140525 | 205.97 | 123.58 |
| Dry bulk cargo like Coal, Limestone, minerals etc. (90% Foreign Cargo, 10% Coastal Cargo) | 40.00% | 25000 | 2555000 | 102 | 40.00% | 5,051.99 | 2299500 | 255500 | 205.97 | 123.58 |
| **Sub-Total** | **97.00%** | **0** | **4883883** | **248** | **97.00%** | **12251.07** | **4487858** | **396025** | | |
| Sub Total Containers (95% Foreign Cargo, 5% Costal Cargo) | 3.00% | 1248 | 9566 | 8 | 3.00% | 378.90 | 9088 | 478 | 4041.73 | 2425.04 |
| **Sub-Total** | **100.00%** | **0** | **0** | **256** | **100.00%** | **12629.97** | | | | |

* Note: Handling rate for container taken in the optimal capacity is 960 boxes/ day for 2 HMC. TEU factor of 1.3 is captured in the optimal capacity calculation. Hence, in this statement as well, TEU factor of 1.3 is applied to arrive at 1248 TEUS per day( 960 * 1.3)

**Computation of Storage Charges by MOPT of proposal dated 19.8.2014** **Rs. per tonne/ TEU per day**

| Sr. No. | Particulars | Steel and bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains and Fertilisers | Dry bulk cargo like Coal, Limestone, minerals etc. | Containers | Total |
|---|---|---|---|---|---|---|---|
| (i) | Optimal Capacity | 674520 | 249113 | 1405250 | 2555000 | 9198 | |
| (ii) | Percentage Share | 22% | 13% | 22% | 40% | 3% | 100% |
| (iii) | Revenue Requirement (Rs. in lakhs) | **156.23** | **92.32** | **156.23** | **284.06** | **21.30** | 710.15 |
| (iv) | % of Cargo Attracting Storage Charge | 20% | 20% | 20% | 20% | 20% | |
| (v) | Cargo Attracting Storage Charge beyond Free Period (i*iv) | 134904 | 49823 | 281050 | 511000 | 1840 | |
| (vi) | **Storage Charges Proposed (Rs. per Tonne/TEU per Day)** | | | | | | |
| (vii) | 1st 5 Days (1.5 times the first slab rate) i.e **(iii / v / 5 Days)** | 23.16 | 37.06 | 11.12 | 11.12 | 231.52 | |
| (viii) | 6th to 10th Day (2 times the first slab rate) **(vii*1.5times)** | 34.74 | 55.59 | 16.68 | 16.68 | 347.28 | |
| (ix) | 11th Day Onwards **(vii*2times)** | 46.32 | 74.12 | 22.24 | 22.24 | 463.04 | |

**Storage Charges Modified by TAMP** **Rs. per tonne/ TEU per day**

| Sr. No. | Particulars | Steel and bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains and Fertilisers | Dry bulk cargo like Coal, Limestone, minerals etc. | Containers | Total |
|---|---|---|---|---|---|---|---|
| (i) | Optimal Capacity | 674520 | 249113 | 1405250 | 2555000 | 9566 | |
| (ii) | Percentage Share | 22% | 13% | 22% | 40% | 3% | 100% |
| (iii) | Revenue Requirement (Rs. in lakhs) | 154.37 | 91.22 | 154.37 | 280.67 | 21.05 | 701.66 |
| (iv) | % of Cargo Attracting Storage Charge | 20% | 20% | 20% | 20% | 20% | |
| (v) | Cargo Attracting Storage Charge beyond Free Period | 134904 | 49823 | 281050 | 511000 | 1913 | |
| (vi) | **Storage Charges Proposed (Rs. per Tonne/TEU per Day)** | | | | | | |
| (vii) | 1st 5 Days (1.5 times the first slab rate) i.e **(iii / v / 5 Days)** | 22.89 | 36.62 | 10.98 | 10.98 | 220.07 | |
| (viii) | 6th to 10th Day (2 times the first slab rate) **(vii*1.5 times)** | 34.33 | 54.92 | 16.48 | 16.48 | 330.11 | |
| (ix) | 11th Day Onwards **(vii*2 times)** | 45.77 | 73.23 | 21.97 | 21.97 | 440.15 | |

ANNEX -II

**Computation of Berth Charges by MOPT in its proposal dated 19.8.2014**

| Sr. No | Particulars | Steel and bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains and Fertilisers | Dry bulk cargo like Coal, Limestone, minerals etc. | Containers (TEU's) | Total |
|---|---|---|---|---|---|---|---|
| (i) | Handling Rate (Tonnes/ TEU day) | 12000 | 7500 | 25000 | 25000 | 1200 | |
| (ii) | Average GRT of Vessel ( In tonnes) | 34200 | 34200 | 34200 | 69600 | 27000 | |
| (iii) | Average Parcel Size per Vessel (Tonnes) | 50800 | 50800 | 50800 | 103900 | 480 | |
| (iv) | Optimal Capacity (In tonnes) | 674520 | 249113 | 1405250 | 2555000 | 9198 | |
| (v) | No. of Berth Days **(iv/i)** | 56 | 33 | 56 | 102 | 8 | **255.5** |
| (vi) | No. of Berth Hours **(v*24)** | 1349 | 797 | 1349 | 2453 | 184 | **6132** |
| (vii) | No. of Vessels **(iv/iii)** | 13 | 5 | 28 | 25 | 19 | **90** |
| (viii) | Total GRT Hours **(vi*ii)** | 46137168 | 27262927 | 46137168 | 170714880 | 4966920 | 295219063 |
| (ix) | % Foreign Cargo | 100.00% | 100.00% | 90.00% | 90.00% | 95.00% | |
| (x) | % Coastal Cargo | 0.00% | 0.00% | 10.00% | 10.00% | 5.00% | |
| (xi) | Total GRT Hours (Foreign Vessels) **(viii*ix)** | 46137168 | 27262927 | 41523451 | 153643392 | 4718574 | **273285512** |
| (xii) | Total GRT Hours (Coastal Vessels) **(viii*x)** | 0 | 0 | 4613717 | 17071488 | 248346 | **21933551** |
| (xiii) | Total Revenue Requirement (Rs. in Lakhs) | | | | | | **11054.00** |
| (xiv) | Berth Hire Charges in Rs per GRT per Hour (Foreign) **(xiii/(xi+(0.6*xii))** | | | | | | **3.86** |
| (xv) | Berth Hire Charges in Rs per GRT per Hour (Coastal) **(xiv*0.6)** | | | | | | **2.32** |

**Berth Hire Charges Modified by TAMP**

| Sr. No | Particulars | Steel and bagged cargo | Other break bulk cargo | Dry bulk cargo like food grains and Fertilisers | Dry bulk cargo like Coal, Limestone, minerals etc. | Containers (TEU's) | Total |
|---|---|---|---|---|---|---|---|
| (i) | Handling Rate (Tonnes/ TEU day/ per berth) | 6000 | 3750 | 12500 | 12500 | 624 | |
| (ii) | Average GRT of Vessel ( In tonnes) | 34200 | 34200 | 34200 | 69600 | 27000 | |
| (iii) | Average Parcel Size per Vessel (Tonnes) | 50800 | 50800 | 50800 | 103900 | 480 | |
| (iv) | Optimal Capacity (In tonnes/ TEUs/berth) | 337260 | 124556.5 | 702625 | 1277500 | 4783 | |
| (v) | No. of Berth Days **(iv/i)** | 56 | 33 | 56 | 102 | 8 | **255.5** |
| (vi) | No. of Berth Hours **(v*24)** | 1349 | 797 | 1349 | 2453 | 184 | **6132** |
| (vii) | No. of Vessels **(iv/iii)** | 7 | 2 | 14 | 12 | 10 | **45** |
| (viii) | Total GRT Hours **(vi*ii)** | 46137168 | 27262927 | 46137168 | 170714880 | 4966962 | **295219104** |
| (ix) | % Foreign Cargo | 100.00% | 100.00% | 90.00% | 90.00% | 95.00% | |
| (x) | % Coastal Cargo | 0.00% | 0.00% | 10.00% | 10.00% | 5.00% | |
| (xi) | Total GRT Hours (Foreign Vessels) per berth **(viii*ix)** | 46137168 | 27262927 | 41523451 | 153643392 | 4718613 | **273285551** |
| (xii) | Total GRT Hours (Coastal Vessels) per berth **(viii*x)** | 0 | 0 | 4613717 | 17071488 | 248348 | **21933553** |
| (xiii) | Total GRT Hours (Foreign Vessels) for 2 berths **(xi *2)** | | | | | | **546571103** |
| (xiv) | Total GRT Hours (Coastal Vessels) for 2 berths **(xii*2)** | | | | | | **43867106** |
| | | | | | | | |
| (xv) | Total Revenue Requirement (Rs. in Lakhs) | | | | | | **11606.38** |
| (xvi) | Berth Hire Charges in Rs per GRT per Hour (Foreign) **(xv/(xiii+(0.6*xiv))** | | | | | | **2.03** |
| (xvii) | Berth Hire Charges in Rs per GRT per Hour (Coastal) **(xvi*0.6)** | | | | | | **1.22** |

**ANNEX - III**

**MORMUGAO PORT TRUST**

**UPFRONT TARIFF SCHEDULE FOR MULTIPURPOSE CARGO TERMINAL**

## 1.1 DEFINITIONS:

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

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

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

(iii). "**Per Day**" means per calendar day unless 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. **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 (₹)** | |
|---|---|---|---|
| | | **Foreign Vessel** | **Coastal Vessel** |
| 1. | All Vessels | 2.03 | 1.22 |

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

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

(iii). No berth hire shall be levied for the period the vessel is compelled to idle at berth operated by the terminal operator for continuous one hour or more due to non-availability / breakdown of equipment or power failure or any other reasons attributed to the terminal operator.

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

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

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

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

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

## 3. CARGO HANDLING CHARGES:

| | Cargo | Cargo Handling Charges | |
|---|---|---|---|
| | | **Foreign (₹ per Tonne)** | **Coastal (₹ per Tonne)** |
| 1 | Steel and Bagged Cargo | 411.94 | 247.16 |
| 2 | Other Break Bulk Cargo | 659.10 | 395.46 |
| 3 | Dry Bulk Cargo like Food Grains and Fertilisers | 205.97 | 123.58 |
| 4 | Dry Bulk Cargo like Coal, Limestone, Minerals etc. | 205.97 | 123.58 |
| 5 | Containers | 4041.73 per TEU | 2425.04 per TEU |

**Notes**:

The handling charges prescribed above is a composite charge for loading/unloading of cargo, transferring the same upto the point of storage, storage at the stackyard upto the prescribed free period, reclaiming from stackyard and loading onto the ship/train/trucks as applicable, wharfage and all other miscellaneous services not specifically prescribed in the Scale of Rates.

## 4. STORAGE CHARGES:

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

**Free Period**

Import Cargo - 15 days
Export Cargo - 25 days

**a) Storage Charges for balance cargo beyond free period**

| | Period | Rate per Tonne per day or part thereof (₹) | | | | Containers ( Rate per TEU/day or part thereof) |
|---|---|---|---|---|---|---|
| | | **Steel & bagged cargo** | **Other break bulk cargo** | **Dry bulk cargo like food grains & Fertilisers** | **Dry bulk cargo like Limestone, minerals** | |
| 1 | First 5 Days | 22.89 | 36.62 | 10.98 | 10.98 | 220.07 |
| 2 | $6^{th}$ to $10^{th}$ Day | 34.33 | 54.92 | 16.48 | 16.48 | 330.11 |
| 3 | $11^{th}$ Day Onwards | 45.77 | 73.23 | 21.97 | 21.97 | 440.15 |

**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:

Charges for all miscellaneous services such as sweeping, collecting, spillage from yard conveyors, galleries etc., moisturizing of cargo, dust separation services, environment, Security charges etc.

The following miscellaneous charges are applicable:

| Sr. No. | Particulars | Rate in ₹. per Tonne for cargo and ₹. per TEU for container |
|---|---|---|
| 1 | Steel and Bagged Cargo | 13.94 |
| 2 | Other Break Bulk Cargo | 13.94 |
| 3 | Dry Bulk Cargo like Food Grains and Fertilisers | 13.94 |
| 4 | Dry Bulk Cargo like Coal, Limestone, Minerals etc. | 13.94 |
| 5 | Containers | 220.05 per TEU |

**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 2014 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.

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ANNEX - IV

# Performance Standards For Multipurpose Cargo Terminal

| Type of Cargo | Performance Standards per HMC per berth |
|---|---|
| Steel and Bagged Cargo | 6000 Tons/day |
| Other Break Bulk Cargo | 3750 Tons/day |
| Dry Bulk Cargo like Food Grains and Fertilisers | 12500 Tons/day |
| Dry Bulk Cargo like Coal, Limestone, Minerals etc. | 12500 Tons/day |
| Containers | 20 moves/hour |

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

**F. No.TAMP/21/2014- MOPT - Proposal received from the Mormugao Port Trust (MOPT) for fixation of upfront tariff cap for multipurpose cargo terminal under PPP mode at MOPT**

A joint hearing on the case in reference was held on 20 June 2014 at the premises of MOPT. The MOPT made a power point presentation of its proposal. At the joint hearing, MOPT and the concerned users / organization bodies have made the following submissions:

**Mormugao Port Trust (MOPT)**

(i) Makes a brief power point presentation of its proposal. Hard copy is given.

(ii). Two berth of 750 mtrs. are envisaged for the project. One berth is earmarked for coal and the other for handling general cargo and containers.

(iii). Breakwater of 825 mtrs. is to be constructed in this project.

(iv). Main cargo expected to be handled are coal, finished steel products, containers, wood chips, granite, etc.

(v). Coal will be handled through panamax vessel and other cargo by handymax vessel.

(vi). 75 acres of water area is to be reclaimed. 10 acres is earmarked for rail/ road corridor.

(vii). For coal berth, quay capacity is assessed at 8.3 MTPA and yard capacity is assessed at 6 MTPA. Hence, capacity is restricted to 6 MTPA.

(viii). Apart from cargo handling charge and berth hire, we also propose additional port dues at ₹127.70 per GRT to recover the cost relating to breakwater to be undertaken by the operator.

(ix). 600 mtrs. length is enough for 2 berths. But, there can be a situation to handle three handymax vessel. Hence, berth length of 750 mtrs. is envisaged for the project.

(x). By reducing berth size, only berth hire charge will be reduced. But, by allowing 750 mtrs. berth length, the operator has more flexibility to handle three vessels (handymax), if necessary. The proposed berth length gives more maneuverability.

(xi). There is no scope to increase the yard space or yard capacity.

(xii). Yard area is a constraint in our Port.

(xiii). HMC was installed at Berth no.10 and 11 in July 2013.

(xiv). Cost of crane is ₹28 crores. Hire charge of HMC for handling container was not included in the last tariff revision proposal.

(xv). The existing Scale of Rates prescribes rate for container handling. But, it is with reference to handling container through ship's gear.

(xvi). Handling capacity of HMC is considered at 20 containers (TEUs)/ hour. Annual capacity for handling container is assessed at 1,22,640 TEUs.

(xvii). We are charging the proposed rate since July 2013 on adhoc basis.

**<u>Adani Ports and Special Economic Zone Ltd.</u>**

(i). Makes a written submission.

(ii). Yard capacity assessed by MOPT is on the higher side.

(iii). MOPT has considered dwell time of 21 days for coal handling. This is on lower side. Current dwell time at competing coal terminals is 25 days.

(iv). At Mundra, average dwell time for handling coal is 40 days. Hence, dwell time of 25 days should be considered for calculating turnover ratio of plot for assessing the yard capacity of coal.

(v). Free days proposed for coal is 15 days. This is very less. Guidelines allow 25 days free period for coal.

(vi). Allow free storage of 25 days instead of 15 days for coal.

(vii). Do not prescribe telescopic storage rate as proposed by the port. Flat storage rate of ₹3.40 per tonne per day can be prescribed for coal.

(viii). Major Port Trusts charge nominal rate on monthly basis for storage of cargo.

(ix). Handling rate of 8000 T/ day for steel and bagged cargo is not possible. It should be 4000 T/ day as per norms.

(x). For other break bulk cargo, handling rate should be 2500 T/ day as per norms instead of 7000 T/ day considered by MOPT.

(xi). Free period of 21 days is allowed at other competing terminals. No cargo can be evacuated within 5 days for import and 15 days for export. Moreover, the telescopic increase is proposed in rates.

(xii). Handling rate for coal proposed at ₹328/ T is very high. It should be reduced.

(xiii). It is impossible to move coal cargo within 15 days free period. How can the BOT operator manage with such high handling rate and very low free storage period?

(xiv). The rates proposed are not level playing field with the competing terminals at MOPT.

(xv). One berth is designed exclusively for coal handling. No other cargo can be handled. Allow all cargo including coal to be handled at the two berths.

(xvi). Give flexibility to the operator to handle any cargo at two berths.

(xvii). Fertilizer is not handled in bulk. It is handled in bagged form. Time should be available for bagging. It cannot be done within free period of 5 days.

(xviii). Steel is handled on volumetric basis and not on tonnage handled.

(xix). How can other cargo be assimilated in 15 days for export?

(xx). Business model of the proposal needs to be reviewed.

(xxi). As regards food grain, more storage space should be provided as this cargo also needs to be bagged for export. More free period is also required for export.

(xxii). Increase the yard area by considering more area for reclamation as yard capacity is a limiting factor.

2. The MOPT was requested to furnish comments on the written submission received from Adani Ports and Special Economic Zone Ltd. (APSEZL) on the proposal of MOPT at the joint hearing. The MOPT has furnished its comments on the written submissions made by the APSEZL at the joint hearing. A summary of written submissions made by APSEZL at the joint hearing and comments of MOPT is tabulated below:

| Sr. No. | Comments received from the users/users Organization | Reply Furnished by MOPT |
|---|---|---|
| **I** | Tariff for Coal Handling | |
| (i) | We feel that Yard Capacity calculated in the proposal is on a higher sider. The reasons for the same can be seen as under : | |
| Is | Mormugao Port has considered the dwell time of cargo at 21 days which is on a lower side. It is seen that dwell time at Mormugao Port for competing coal terminals currently is 25 days. It is noted that dwell time is even higher than 25 days for the cargo imported by traders for stock and sell in various ports. | In our recast proposal, we have done away with a dedicated coal terminal. Both the berths will be general cargo berths. |
| (b) | Mundra Port is handling more than 35 Million Tonnes of coal per annum. The average Dwell Time for handling coal at Mundra Port is around 40 days. | |
| (c) | Hence, in view of the above situation it is suggested that a Dwell Time of 25 days should be considered for calculating Turnover Ratio of the plot | |
| (ii) | In the section related to Storage Charges it has been mentioned as first 15 days will be free storage and beyond that the storage shall be chargeable at telescopic rate. | |
| (a) | The number of days proposed by MOPT is very less and not workable as per the market realities of doing business. TAMP norm states that in case of coal terminal upto 25 days of free storage is allowed. | This request is no more relevant in view of the fact that there will not be a dedicated coal terminal |
| (b) | The major ports provide large parts of storage area on monthly fixed tariffs where the per MT/day storage tariffs work out to a fraction of the tariff notification for PPP projects. Major Ports by themselves are also handling these cargoes by giving storage area by charging nominal rates as per TAMP. There is no level playing field for PPP operators to handle the cargoes economically. | |
| (c). | Hence, it suggested that free storage period of 25 days should be allowed for coal terminal. Beyond the free storage period a flat rate of ₹.3.40 per ton per day can be charges. | |

| | | |
|---|---|---|
| | | |
| II | Tariff for other General Cargo :- | |
| (i) | In the section related to calculation of optimal capacity for various categories of cargo, the handling rate considered is on a higher side. | |
| (a) | The handling rate for Steel and bagged cargo considered by MOPT is 8000 tons/day which is not achievable. Based on the Steel cargo handled at various ports in India the average handling rate is in the range of 3000-3500 tons/day. Hence, the rate considered for handling steel should be the TAMP norm of 4000 tons/day. | In our view, 8000 tons per day for steel and bagged cargo and 5500 tons per day for other bulk cargo are achievable. |
| (b). | Similarly for other break bulk cargo the handling rate should be kept the same as norm prescribed by TAMP i.e. 2500 tons/day. | |
| (ii). | In the section related to Storage Charges it has been mentioned that free period for import cargo is 5 days and export cargo is 15 days. Beyond that the storage shall be chargeable at telescopic rate. | In our present proposal, free storage period for import and export cargo has been increased to 15 days and 25 days respectively. |
| (a). | The number of days proposed by MOPT is very less and not workable as per the market realities of doing business. The free period available for other competing terminals at MOPT is 21 days. No import commodity like Steel coils, Steel Plates, Food Grains, Fertilisers, Limestone etc. can be evacuated within the free period of 5 days. | |
| (b). | We are afraid that BOT operator will not be able to attract any business with the current proposal having free period of 5 days of import and 15 days for export and add to it telescopic increase in storage charges. | |
| (c). | There will be no level playing filed with the competing terminals at MOPT and neighbouring ports with such low period of free days. | |
| (c). | Hence, it is requested to increase the free storage period of days both for import and export to 25 days to make the business viability of handling dry bulk and dry break-bulb cargo. | |

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