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**TARIFF AUTHORITY FOR MAJOR PORTS**

G.No.407

New Delhi,

15 November 2016

**NOTIFICATION**

In compliance of the policy direction issued by Government of India in the Ministry of Shipping (MOS) under Section 111 of the Major Port Trusts Act, 1963 (38 of 1963), as conveyed by MOS vide its communication No.PD-11033/73/2013-PT(Pt.) dated 07 October 2016 read with MOS letter dated 17 October 2016, the Tariff Authority for Major Ports hereby notifies the following Guidelines for Determination of Upfront Tariff for Stevedoring and Shore Handling Operations authorized by Major Port Trusts under Section 42 (3) of the Major Port Trusts Act 1963:

The MOS has issued the guidelines as policy direction to this Authority advising to treat it as most immediate. Accordingly, this guidelines should be deemed to have come into effect from 07 October 2016.

**Guidelines for Determination of Upfront Tariff for Stevedoring and Shore Handling Operations authorized by Major Port Trusts under Section 42 (3) of the Major Port Trusts Act 1963**

**1. Preliminary**

- 1.1 These Guidelines shall be called 'Guidelines for determination of upfront tariff for stevedoring and shore handling operations authorised by Major Port Trusts'
- 1.2 These guidelines shall come into force from the date of their publication in the Gazette of India and shall remain in force until the Central Government decides to modify or change or revoke them
- 1.3 These guidelines shall be applicable for fixation of upfront tariff for carrying out all stevedoring and shore handling operations by the agencies or firms who are authorised by Major Port Trusts to carry out these operations under the provisions of Section 42 (3) Major Port Trust Act 1963. For stevedoring and shore handling operations which are carried out by the concerned Major Port Trusts itself. Tariff Policy 2015 as amended from time to time shall continue to apply.
- 1.4 These Tariff Guideline are not applicable for BOT/BOOT operators or any other arrangement for private sector participation who are governed by the Tariff Guidelines of 2005, 2008 and 2013.
- 1.5 It is clarified that the stevedoring or shore handling operations currently carried out by any agencies or firms will continue only until the period the new arrangement under these Guidelines comes into effect. The Major Port Trust will file a proposal to TAMP for fixation of upfront tariff for stevedores and for the shore handling operators under these new guidelines along with performance standards.
- 1.6 In case any difficulty arises in the implementation or interpretation of these guidelines, the Government in consultation with the Tariff Authority for Major Ports (TAMP) may issue the necessary orders to remove such difficulty in consistent with the basic features of these guidelines.
- 1.7 Unless revoked or modified earlier, the Guidelines may be reviewed and revised after 3 (three) years from the date of issue.
- 1.8 TAMP may accept necessary adjustments in the norms, based on the justification to be furnished by the concerned Port Trust keeping in view the port specific conditions having impact on the norms prescribed in these guidelines.
- 1.9 In any question arises requiring clarification or interpretation of the Scale of Rates and Statement of Conditions of the operator., the matter shall be referred to TAMP and decision in this regard will be binding on the operator.

**2. Overall Approach**

- 2.1 Tariff caps for handling various commodities in both the stevedoring and shore handling activities by the private agencies or the firms licensed by Major Port Trusts under Section 42(3) of the Major Port Trust Act, 1963 shall be set upfront by TAMP following these guidelines based on the proposal of the concerned Major Port Trust. Along with upfront tariff caps, performance standards shall also be notified by TAMP based on the proposal of the concerned Port Trust.
- 2.2 For the purpose of fixing upfront tariff, TAMP will follow the normative cost based approach which recognises the operating cost estimates based on the norms set in these guidelines and allow a reasonable rate of return namely margin on the operating cost as set out in these guidelines.
- 2.3 Once the upfront tariff caps are set out for stevedoring and shore handling operations of various commodities for a port, it will be applicable uniformly to the entire port where

the stevedoring and shore handling operations are carried out by private agencies or firms and will be valid for a period of three years.

- 2.4. The upfront tariff and performance standards notified by TAMP will be mentioned in the bid document and subsequently in the agreement in respect of the operator.
- 2.5. The Port Trust concerned shall approach TAMP 3 months before the expiry of the tariff set under these Guidelines for revising the upfront tariff and performance standards for the next three years period.
- 2.6. TAMP will examine and modify the norms set out in these guidelines and set it upwards with the approval of the Ministry of Shipping, to take into account the technological changes in the method of handling and other developments after expiry of three years from the date of issue of this Guidelines.
- 2.7. The upfront tariff so set by TAMP will be the ceiling levels.
- 2.8. TAMP and Major Port Trusts should comply with the policy direction set out by the Government from time to time like coastal cargo/containers, etc., which have bearing on the determination of the tariff.
- 2.9. Operator shall charge only for services provided by them. No notional booking of labour and other similar notional charges would be permitted.
- 2.10. Tariff caps will be indexed to inflation but only to an extent of 60% of the variation in the Wholesale Price Index (WPI) occurring between 1 January and 31 December of the relevant year. Such automatic adjustment of the tariff cap will be made every year and the adjusted tariff cap will come into effect from 1 April of the relevant year till 31 March of the following year.
- 2.11. Before commencement of the stevedoring and or the shore handling operations, the operator will approach TAMP for notification of the Scale of Rates containing the ceiling rates of the stevedoring and or the shore handling charges and performance standards as required under Section 48 of the Major Port Trust Act, 1963.
- 2.12. The Scale of Rates (SoR) to be framed by TAMP as per clause 2.11 and performance standards to be notified shall be in line with the tariff caps and the performance standards prescribed for the port and included in the bid document, subject to indexation explained in Clause 2.10 above. Such SoR and the conditionalities along with performance standards shall be notified by TAMP in the Gazette of India as required by MPT Act 1963.
- 2.13. The stevedoring operation is distinctly different from the shore handling operations, though both of them are cargo handling operations. Hence the procedure for determination of upfront tariff for these two operations are given separately in these Guidelines.

### **3. Estimation of Optimal Capacity, Capital cost and Operating cost for stevedoring operation**

- 3.1 In the case of determining upfront tariff for the stevedoring operation, the optimal capacity determination will not be the annual capacity; rather it will be the optimal capacity per shift for each of the commodity. The berth or the combination of berths will be handling different commodities in a year; it is hence prescribed to calculate the optimal capacity on per shift basis for each commodity.
- 3.2 The commodities that are handled in a port have been grouped for the purpose of tariff determination under two major categories viz., DRY BULK and BREAK BULK. Various commodities of dry bulk cargoes and the break bulk cargoes are classified under different groups separately for bulk cargoes and the break bulk cargoes. The classification of cargoes under the bulk and break bulk cargoes are given under **Annex-I and Annex-II**. The two annexes contain list of commodities which are handled at the

major ports. If any new cargo is to be handled which is not included in the list, then the Major Port Trusts may categorise that cargo under any one of the cargo category based on the nature, physical characteristics and the method of handling that cargo.

### 3.3 **Optimal Capacity**

As explained in clause 3.1 above the optimal capacity is to be calculated on per shift basis for each of the cargo that is to be handled. For this purpose, the productivity basis norms have been set out for both dry bulk and break bulk cargoes for each of the cargo classification therein and is attached in **Annex-III and Annex-IV** respectively.

### 3.4 **Capital cost**

For the stevedoring activity, capital cost requirement will be for deployment of equipment for handling cargo between ship and shore. As the licensing is for limited period of three years, direct capital investment in the handling equipment is not reckoned with for the purpose of upfront tariff determination. The cost towards equipment is reckoned with in the form of equipment hire charges.

#### 3.4.1 **Bulk cargo**

For the stevedoring activity, equipment for handling cargo between ship and shore will be required. Equipment such as dozers may be required for deployment inside the hatch. The type and capacity of equipment that can be deployed for Bulk Cargo is given in the **Annex-V**.

The hire charges towards deployment of equipment prescribed shall be estimated by Major Port Trusts based on the equipment hire cost prevailing at the relevant port locations or prevailing market based hire cost.

#### 3.4.2 **Break Bulk**

For handling break bulk cargo, mostly the ship board cranes are used and the requirement of HMC will be very limited. The requirement of HMC may arise for handling heavy project cargo and machineries.

The type and capacity of equipment that can be deployed for Break Bulk Cargo is given in the **Annex-VI**

The hire charges towards deployment of equipment prescribed shall be estimated by Major Port Trusts based on the equipment hire cost prevailing at the relevant port locations or prevailing market based hire cost.

### 3.5. **Operating Cost**

3.5.1 The operating cost shall be estimated cargo wise on per shift basis to achieve the per shift productivity prescribed under clause 3.3 following the norms prescribed for various components of the Operating Cost.

3.5.2 The Operating Cost are grouped under the following major heads

- (i). Equipment hire cost
- (ii). Labour cost
- (iii). Operational Overheads
- (iv). Administrative Overheads

3.5.3 As stated in clause 3.4. above, no capital investment is envisaged in this model, hence no depreciation cost will be considered.

3.5.4 No license fee is considered as no land is allotted for stevedoring operations. The Port

will continue to charge and collect the wharfage, storage charges or any other cargo related prescribed in the Scale of Rate of the Port from the respective cargo owners or their authorised representatives.

- 3.5.5 Royalty/ Revenue share will not be considered as cost for determination of upfront tariff
- (a). Clause 3 (v) of the Stevedoring and Shore Handling Policy for Major Ports, 2016 stipulates that Port shall charge royalty as the license fee from the Stevedoring and Shore Handling Licenses. The Port Trust shall fix a per metric tonne royalty rate from all the agents. For fixing the per ton royalty, to be paid by the Stevedoring and Shore handling agents to the Port, the following aspects shall be considered by the Port
- (i). The cargo profile.
  - (ii). The market conditions
  - (iii). The infrastructure and other operating local conditions.
  - (iv). The profit margin of 20% allowed in this guidelines for the stevedoring and shore handling operations.
- (b). If royalty is assessed by the port in absolute terms, then this royalty is also be subject to indexation to an extent of 60% of the variation in the Wholesale Price Index occurring between 1 January and 31 December of the relevant year.
- 3.5.6 The equipment hire cost shall be estimated for normative list of equipments to be taken on hire as per norms prescribed at **Annex-VII**. The concerned Port shall consider the hire cost for these equipments based on the equipment hire cost prevailing at the relevant port locations or prevailing market based hire cost.
- 3.5.7 The labour deployment for handling various commodities shall be only as per the norms prescribed by the National Tribunal Award. The norms for deployment of Labour for Stevedoring operations from the National Tribunal Award are provided under **Annex-VIII** for various commodities. These norms and any other norms specifically given for a port shall be followed for calculation of labour cost. The unit rate for labour deployment will be the prevailing actual cost of labour for the quantum of labour prescribed in the norms.
- 3.5.8 The operational overheads shall be estimated at 20% of the sum total of the equipment hire cost and the labour cost.
- 3.5.9 The administrative overheads shall also be estimated at 20% of the sum total of the equipment hire cost and the labour cost.
- 3.5.10. TAMP in consultation with the concerned Port may decide on particular item of expenditure, which it considers necessary for incorporation, while computing upfront tariff cap, for which norms are not explicit in the Guidelines.

#### **4. Estimation of Optimal Capacity, Capital cost and Operating cost for shore handling operation**

- 4.1 The procedure adopted for determination of tariff for the stevedoring operation shall be followed for the determination of tariff for the shore handling operations. The optimal capacity determination will not be the annual basis, but will be on per shift basis for each of the commodity.
- 4.2 The classification of commodities that are handled in a port and grouped for the purpose of upfront tariff determination for stevedoring operations at **Annex I and Annex II** shall be followed for the shore handling operation also.
- 4.3 Optimal Capacity**  
The optimal capacity for shore handling need to match with the optimal capacity of the stevedoring operations. Accordingly, the optimal capacity of the shore handling operations for each of the commodity will be same as that for the stevedoring operations.

#### 4.4 Capital cost

For the shore handling activity, the capital cost requirement will be towards deployment in cargo handling equipment for unloading of cargo into truck for direct delivery to the consignees' premises or to a temporary storage within the port. As the licensing is limited for three years, direct investment in the handling equipment is not reckoned with. The cost towards equipment is reckoned with in the form of equipment hire charges.

##### 4.4.1 Bulk cargo

The different handling methods adopted for shore handling operations of bulk cargo are given below:

| Methods | Detail of Handling Methods   |
|---------|--|
| 1       | Cargo unloaded onto truck for direct delivery to consignees premises.                                    |
| 2       | Cargo unloaded onto truck (without hopper) and moved to storage yard within the port premises.           |
| 3       | Cargo unloaded onto truck through hopper and moved to storage yard within the port premises for storage. |
| 4       | Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises.                        |
| 5       | Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard.                        |

The norms for the requirement of the equipment for the above five different methods are given under **Annex-IX**.

##### 4.4.2 Break Bulk

The different handling methods that are adopted for shore handling of the break bulk cargos are listed below:

| Method | Details of Handling Method  |
|--------|---|
| 1      | Cargo unloaded onto truck for direct delivery to consignees premises or vice versa                                      |
| 2      | Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises or vice versa                          |
| 3      | Cargo unloaded onto truck and transported to storage yard within the port premises or vice versa                        |
| 4      | Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard within the port premises or vice versa |

The norms for the requirement of the equipment for the above four different methods for shore handling operations are given under **Annex-X**.

#### 4.5 Operating Cost

- 4.5.1. The operating cost shall be estimated cargo wise on per shift basis to achieve the per shift productivity prescribed under 4.3 following the norms prescribed for various components of the Operating Cost for each of methods of handling envisaged.
- 4.5.2 The Operating Cost are grouped under the following major heads
  - (i) Equipment hire cost
  - (ii) Labour cost
  - (iii) Operational Overheads
  - (iv) Administrative Overheads
- 4.5.3 As stated in clause 4.4. above, no capital investment is envisaged in this model, hence no depreciation cost will be considered.
- 4.5.4 No license fee is considered as land is not allotted for shore handling operations as such. The Port will continue to charge the applicable wharfage on the cargo handled

as per the prevailing Scale of Rate. Besides, the Port will also collect the storage charges for the cargos stored at the Port premises as per the prevailing Scale of Rates.

- 4.5.5 Revenue share will not be considered as cost for determination of upfront tariff
- 4.5.6 The equipment hire cost for shore handling operations shall be estimated for equipments to be taken on hire as per norms prescribed at **Annex - IX** for Dry bulk cargo and **Annex – X** for Break cargo. The concerned Port shall obtain the hire cost for these equipments from the market for the determination of the upfront tariff.
- 4.5.7 The operator will be deploying their own labour for shore handling operations. The norm for estimation of labour cost for shore handling operations is 5% of the equipment hire cost for dry bulk cargo and 10% of equipment hire cost for break bulk cargo.
- 4.5.8 The operational overheads shall be estimated at 20% of the sum total of the equipment hire cost and the labour cost.
- 4.5.9 The administrative overheads shall also be estimated at 20% of the sum total of the equipment hire cost and the labour cost.
- 4.5.10. TAMP in consultation with the concerned Port may decide on particular item of expenditure, which it considers necessary for incorporation, while computing upfront tariff cap, for which norms are not explicit in the Guidelines.

## **5. Allowable Margin**

There is no capital investment considered in the upfront tariff determination as explained under 3.4. and 4.4. above. Recognising that stevedoring and shore handling is a labour intensive activity, in lieu of the Return on Capital Employed, a fair margin of 20% on the total operating cost shall be allowed while arriving at the upfront tariff.

## **6. Revenue Requirement, determination of upfront tariff framing Scale of Rates**

- 6.1 The per shift Revenue Requirement for performing the stevedoring operation for each commodity will be the sum total of the operating cost of the operation per shift as estimated as per clause 3.5 above and the margin estimated as per clause 5 above.
- 6.2 The per shift Revenue Requirement for performing the shore operation for each commodity under each methods will be the sum total of the operating cost of the operation per shift as estimated as per clause 4.5 and the margin estimated as per clause 5 above.
- 6.3 The cargo wise per shift Revenue Requirement for stevedoring operations is to be realized through tariff. The upfront tariffs caps for stevedoring shall be computed on per ton per shift basis by spreading the per shift Revenue Requirement over the per shift optimal capacity assessed for each commodity so as to realize the Revenue Requirement for handling the commodity.
- 6.4 The cargo wise per shift Revenue Requirement for shore handling operations is to be realized through tariff. The upfront tariffs caps for shore handling shall be computed on per ton per shift basis by spreading the per shift Revenue Requirement over the per shift optimal capacity assessed for each commodity under each of the methods of handling so as to realize the Revenue Requirement assessed for handling the commodity under the particular method of handling.
- 6.5 The conditionalities for providing the handling service shall be prescribed.
- 6.6 Wharfage, storage charges, and other miscellaneous charges shall continue to be levied by the port as per the prevailing Scale of Rates.

## **7. Performance Linked Tariff**

- 7.1. From the date of Commercial Operation (CoD) till 31st March of the same financial year, the tariff would be limited to the indexed upfront Tariff relevant to that year, which would be the ceiling. The aforesaid Tariff shall be automatically revised every year based on an indexation as provided in para 2.10. above which will be applicable for the entire License period.

However, the operator would be entitled to 100% WPI indexation instead of 60% WPI indexation prescribed at clause 2.10 above, from the second year of operation on achievement of performance standards as prescribed in the Berthing Policy issued by the Ministry of Shipping vide letter no. PD-11033/73/2013-PT (pt) dated 16.06.2016 for dry bulk cargo. For other cargoes, the Performance Standards would be prescribed by the respective ports, will be applicable. For this purpose, the Operator shall approach the concerned Major Port Trust within 30 days of completion of financial year of operation along with details of cargo wise average Performance standard achieved for each cargo. The operator can apply 100% indexation instead of 60% prescribed at clause 2.10 above, on written confirmation by the Major Port Trust to the operator that it has achieved the Performance Standards notified for various cargo. An illustration showing determination of indexed upfront Tariff and Performance Linked Tariff is at **Annex-XI**.

- 7.2. In the event the Major Port Trust confirms that the Operator has not achieved the Performance Standards as notified by TAMP in previous 12 months, the operator will not be entitled for 100% WPI indexation. The operator will continue to levy the tariff with 60% indexation as prescribed at clause 2.9. above.

## **8. Mandatory disclosures by operators**

- 8.1. All the operators shall furnish to the Major Port Trust and TAMP annual reports on cargo traffic, ship berth day output, per shift output within a month following the end of financial year in respect of stevedoring/shore handling operations licensed by the port. Any other information which may be required by TAMP shall also be furnished to them from time to time.
- 8.2. TAMP shall publish on its website all such information received from operators and Major Port Trusts. However, TAMP shall consider a request from any operator or Major Port Trust 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. TAMP's decision in this regard would be final.

## **9.0 Performance Monitoring**

- 9.1 The performance norms prescribed for various commodities shall be the minimum that should be achieved by the operator. These performance norms shall be incorporated in the bid documents.
- 9.2 The performance actually achieved by the operator shall be monitored by both the Port and the TAMP on a quarterly basis. In the event of any shortfall in achieving the performance prescribed, the Port will initiate action on the operator as per the terms contained in the agreement entered into with the operator by the Port.

## **10. Grievance Redressal**

In the event any user has any grievance regarding non-achievement by the operator of the Performance Standards as notified by the TAMP, he may prefer a representation to TAMP 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 contract conditions of the Agreement.



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

**Annex-I****CLASSIFICATION OF COMMODITIES FOR UPFRONT TARIFF DETERMINATION – DRY BULK  
CARGO**

| <b>G. No.</b> | <b>Commodity Group</b>   | <b>Details of cargo</b>  |
|---------------|--|--|
| 1             | Finished Fertilizers   | All Fertilizers that can be directly used without processing such as: MOP, Urea, DAP, SOP, NPK, Ammonium Nitrate, etc.   |
| 2             | Fertilizer-Raw Materials   | All Fertilizers that are used for production of Finished fertilizers such as: Sulphur, Rock Phosphate, etc.  |
| 3             | Food Grains  | All types of Food Grains and Pulses such as: Rice, Wheat, Maize, other Food grains, Cereals, Pulses Bran of all kinds, Peas, Bulgur wheat, Corn Soya blend, Seeds of all kinds, Oilseeds, Sugar; candy or cube in bulk, Cattle Feed/Animal Feed, Bone and Bone Meal, Oil Cakes, Fodder, Copra cake, all types of Oil Extractions, etc.       |
| 4             | Non Coking Coal (Thermal Coal)   | Thermal Coal   |
| 5             | Coking Coal  | All types of Coal other than Thermal Coal such as: Calcined petroleum coke, Coke/Charcoal, Metallurgical Coke, Coking Coal, coke of all kinds and charcoal of all kinds, etc.  |
| 6             | Iron Ore, Iron Ore Pellets, Bentonite, Bauxite, Copper Concentrate, Led and Zinc Ore | Include Iron Ore; Fines & Lumps, Iron Ore Pellets, Bentonite, Bauxite, Copper Concentrate, Led and Zinc Ore, etc.  |
| 7             | Shredded Scrap   | All types of Shredded Scrap such as: Iron scrap, Metal scrap of all kinds, Steel Scrap, etc.   |
| 8             | Heavy Melting Scrap  | All types of Heavy Melting Scrap such as: Iron scrap, Metal scrap of all kinds, Steel Scrap, etc.  |
| 9             | Other Ores and Minerals  | Ores other than Iron Ore, Bauxite, Copper Concentrate, Led and Zinc Ore, and minerals other than Bentonite such as: Manganese Ore, Charge chrome, Ferro Manganese, Ferro Silicon, Silicon Manganese, High carbon Ferrochrome, Gypsum, Chrome Ore /Chrome Concentrate, Magnesite, Graphite, Silicon Carbide, Mullite, Barytes, Feldspar, etc. |
| 10            | Limestone, Dolomite, Clinker, Clay, Sand and other similar Dry Bulk cargo            | Include Limestone, Dolomite, Clinker, Clay, Sand and other similar Dry Bulk cargo such as: River sand, stone dust, Fly Ash, Blast furnace slag, Dolomite chips, Ilmenite sand, Mill Scale, Other fluxing materials, Chalk, Rock sand, etc.   |
| 11            | Salt   | All kinds of Salt handled in bulk.   |
| 12            | Alumina and Pig Iron ingots and similar Dry Bulk Cargo                               | All types of Alumina and Pig Iron ingots and similar Dry Bulk Cargo such as: Alumina, Pig iron, Fused alumina, Sponge Iron, Hot Briquetted Iron, Mica Block /flake /spitting /waste /scrap /powder, sized kerb stones /cobble stones, Wood Chips, Reframul, Wood Pulp in bulk, Ferro silicon, bricks, tiles, etc.                            |

**Annex-II****CLASSIFICATION OF COMMODITIES FOR UPFRONT TARIFF DETERMINATION – BREAK  
BULK CARGO**

| <b>Sl. No.</b> | <b>Commodity Group</b>         | <b>Details of cargo</b>  |
|----------------|--------------------------------|--|
| 1              | Bagged cargo                   | All cargo in bags of various weights (25, 50, 60 kg, etc.) that are manually handled such as: Cashew Nuts, Cashew Kernels, Tamarind Seed, Cement, Rice, Wheat and other food grains, Salt, Sugar, Candy or cube, Soda Ash, etc.  |
| 2              | Jumbo Bags                     | All cargo in bags of various weights (0.5, 1.0, 1.5 MT) that are handled only by hooking the bags to slings; and include cargo in boxes, cartons, barrels, drums or rolls such as: Wood Pulp in boxes, Processed wood such as Boards, Poles, Plywood, News Print, Oil-Animal or Vegetables in barrels, Rubber-Raw, Rubber–Manufactured, Synthetic Resin, Paper, paper products and newsprint, Asphalt and Bitumen in barrels, etc. |
| 3              | Iron and steel-coils and slabs | All Iron and steel coils and slabs of varying weights and dimensions: Include all Metal Products and Asbestos of similar nature.   |
| 4              | Iron and steel-pipes, tubes,   | All Iron and steel pipes, tubes, plates of varying weights and dimensions: Include all Metal Products and Asbestos of similar nature such as:  |

| Sl. No. | Commodity Group                        | Details of cargo   |
|---------|--|--|
|         | plates                                 | Iron and Steel Materials, Aluminum Products, Alumina Billets, Steel Pipe, Aluminum Ingots, Asbestos, etc.  |
| 5       | Timber logs-Soft                       | Timber Logs of varying length and of light weight; normally less than 1.5 MT per piece.  |
| 6       | Timber logs-Hard                       | Timber Logs of varying length and of heavy weight; normally more than 1.5 MT per piece.  |
| 7       | Granites and Marbles                   | Granite Blocks of all dimensions normally in the range of 3.0 to 40.0 MT per block and Marbles of varying weight such as: Granite, Granite Blocks & Marbles, Stones-Sculptural, engraved slabs, dressed, etc.  |
| 8       | Containers Empty                       | Containers of 20' and 40' in length and other odd sizes weighing normally 2.5 MT for 20' and 4.0 MT for 40'  |
| 9       | Containers Laden                       | Containers of 20' and 40' in length and other odd sizes weighing up to 30.5 MT for 20' and 32.5 MT for 40'   |
| 10      | Project Cargo                          | Cargo for specific projects, often with OOG specifications and handled through specialized means such as: Project material, Project equipment, Railway coaches and wagons, All types of project cargo including over dimensional consignment, etc.   |
| 11      | Motor vehicles other than through RORO | All motor vehicles handled using Shackles, Hooks, Chain Slings and Heavy Lifting Beams such as: Any rubber tyred vehicle; Cargo moving equipment; Earth-moving equipment, Powered two wheeled vehicles, Auto Rickshaws and other three wheeled vehicles including their chassis on wheels, Motor cars, Jeeps, Vans and Tourist Caravans, Motor vehicles like buses, dumpers, lorries, tractors, trucks, & trawlers, Locomotives, Vehicles not specified above and parts and accessories of conveyances, tubes and all earth moving equipment like Excavators, Pay loaders Bulldozers, Dozers, Poclaimers, FLTs, TLTs, Reach Stackers, etc. |
| 12      | Machinery and machinery parts          | All types of Machinery and machinery products that are of varying weights and dimensions such as: Machinery and Spares, Machinery parts, Military Goods, Arms, Ammunition, Explosives and Defense Stores, Tank and Tank parts, Arms, Ammunitions, Explosives, Defense Stores and Defense equipment / machinery.  |

**Annex-III**

**PRODUCTIVITY NORMS PER HOOK PER SHIFT AND PER SHIFT FOR DRY BULK CARGO FOR STEVEDORING OPERATIONS**

| Group No. | Commodity  | Norm in tons per hook per shift | Average Number of hooks per shift |
|-----------|--|---------------------------------|-----------------------------------|
| 1         | Finished Fertilizers   | 900                             | 3                                 |
| 2         | Fertilizer-Raw Materials   | 810                             | 3                                 |
| 3         | Food Grains  | 660                             | 3                                 |
| 4         | Non Coking Coal (Thermal Coal)   | 1000                            | 4                                 |
| 5         | Coking Coal  | 900                             | 4                                 |
| 6         | Iron Ore, Iron Ore Pellets, Bentonite, Bauxite, Copper Concentrate, Led and Zinc Ore | 1460                            | 4                                 |
| 7         | Shredded Scrap   | 700                             | 3                                 |
| 8         | Heavy Melting Scrap  | 360                             | 3                                 |
| 9         | Other Ores and Minerals  | 870                             | 3                                 |
| 10        | Limestone, Dolomite, Clinker, Clay, Sand and other similar Dry Bulk cargo            | 1080                            | 3                                 |
| 11        | Salt   | 1000                            | 4                                 |
| 12        | Alumina and Pig Iron ingots and similar Dry Bulk Cargo                               | 1120                            | 3                                 |

**Annex-IV****PRODUCTIVITY NORMS FOR THE PRODUCTIVITY PER HOOK PER SHIFT AND PER SHIFT FOR BREAK BULK CARGO**

| GROUP NO | COMMODITY                              | NORM IN TONS PER HOOK PER SHIFT   |
|----------|--|---|
| 1        | Bagged cargo                           | 300   |
| 2        | Jumbo Bags                             | 560   |
| 3        | Iron and steel- coils and slabs        | 1360  |
| 4        | Iron and steel- pipes, tubes, plates   | 280   |
| 5        | Timber logs-Soft                       | 320   |
| 6        | Timber logs-Hard                       | 480   |
| 7        | Granites and Marbles                   | 500   |
| 8        | Containers Empty                       | 200   |
| 9        | Containers Laden                       | 1050  |
| 10       | Project Cargo                          | The cargos are homogeneous and they come in different size, shape and weight. Hence no productivity norm prescribed. Tariff to be prescribed on per shift basis <b>based on the best productivity achieved by any of the ports in handling such cargo.</b> The cost shall be worked for handling these cargo for a shift. |
| 11       | Motor vehicles other than through RORO |   |
| 12       | Machinery and machinery parts          |   |

**Annex-V****NORMS ON TYPE AND CAPACITY OF EQUIPMENT TO BE DEPLOYED FOR HANDLING BULK CARGO BETWEEN SHIP AND SHORE**

| GROUP NO | COMMODITY   | Handling equipment for ship to shore                     | Handling equipment for hatch working            |
|----------|---|--|---|
| 1        | Finished Fertilizers  | Ship Crane or Shore Crane or HMC or combination of these | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |
| 2        | Fertilizer-Raw Materials  | Ship Crane or Shore Crane or HMC or combination of these | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |
| 3        | Food Grains   | Ship Crane or Shore Crane or HMC or combination of these | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |
| 4        | Non Coking Coal (Thermal Coal)  | Ship Crane or Shore Crane or HMC or combination of these | Excavator -1 No. Per hatch, Grab - 1 No./ hook  |
| 5        | Coking Coal   | Ship Crane or Shore Crane or HMC or combination of these | Excavator -1 No. Per hatch, Grab - 1 No./ hook  |
| 6        | Iron Ore, Iron Ore Pellets, Bentonite, Bauxite, Copper Concentrate, Lead and Zinc Ore | Ship Crane or Shore Crane or HMC or combination of these | Excavator -1 No. Per hatch, Grab - 1 No./ hook  |
| 7        | Shredded Scrap  | Ship Crane or Shore Crane or HMC or combination of these | Excavator -1 No. Per hatch, Grab - 1 No./ hook  |
| 8        | Heavy Melting Scrap   | Ship Crane or Shore Crane or HMC or combination of these | Excavator -1 No. Per hatch, Grab - 1 No./ hook  |
| 9        | Other Ores and Minerals   | Ship Crane or Shore Crane or HMC or combination of these | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |
| 10       | Limestone, Dolomite, Clinker, Clay, Sand and other similar Dry Bulk cargo             | Ship Crane or Shore Crane or HMC or combination of these | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |
| 11       | Salt  | Ship Crane or Shore Crane or HMC or combination of these | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |
| 12       | Alumina and Pig Iron ingots and similar Dry Bulk Cargo                                | Ship Crane or Shore Crane or combination of these        | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook |

**Note:**

1. The HMC crane indicated here is of 100 ton capacity  
Depending on the local condition the Port may decide on the type of equipment to be used for Ship to Shore handling.

**Annex-VI****NORMS ON TYPE AND CAPACITY OF EQUIPMENT TO BE DEPLOYED FOR HANDLING BREAK BULK CARGO BETWEEN SHIP AND SHORE**

| <b>GROUP NO</b> | <b>COMMODITY</b>                       | <b>Handling equipment for ship to shore</b>                | <b>Handling equipment for hatch working</b> |
|-----------------|--|--|---|
| 1               | Bagged cargo                           | By net slings (maximum load 5T) and hooks if required      | No Equipment                                |
| 2               | Jumbo Bags                             | By hooks   | DFLT 5T - 1 No.                             |
| 3               | Iron and steel- coils and slabs        | By ship cranes using wire rop slings attached to the hooks | DFLT 30T - 1 No.                            |
| 4               | Iron and steel- pipes, tubes, plates   | By ship cranes using slings                                | DFLT 30T - 1 No.                            |
| 5               | Timber logs-Soft                       | By ship cranes using log grabs                             | Log Grabber 10T - 1 No.                     |
| 6               | Timber logs-Hard                       | By ship cranes using log grabs                             | Log Grabber 10T - 1 No.                     |
| 7               | Granites and Marbles                   | By ship cranes using slings                                | DFLT-30T- 1 No.                             |
| 8               | Containers Empty                       | By ship cranes using manual spreaders                      | No Equipment                                |
| 9               | Containers Laden                       | By ship cranes using manual spreaders                      | No Equipment                                |
| 10              | Project Cargo                          | By ship cranes using slings                                | No Equipment                                |
| 11              | Motor vehicles other than through RORO | By ship cranes using slings                                | No Equipment                                |
| 12              | Machinery and machinery parts          | By ship cranes using slings                                | No Equipment                                |

**Annex-VII****NORMS FOR ESTIMATION OF EQUIPMENT HIRE COST FOR STEVEDORING OPERATION****A: DRY BULK CARGO**

| <b>GROUP NO</b> | <b>COMMODITY</b>   | <b>Handling equipment for ship to shore</b>              | <b>Number of hooks worked per shift</b> | <b>Handling equipment for hatch working</b>     | <b>Number of hatch worked per shift</b> |
|-----------------|--|--|---|---|---|
| 1               | Finished Fertilizers   | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 3                                       |
| 2               | Fertilizer-Raw Materials   | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 3                                       |
| 3               | Food Grains  | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 3                                       |
| 4               | Non Coking Coal (Thermal Coal)   | Ship Crane or Shore Crane or HMC or combination of these | 4                                       | Excavator -1 No. Per hatch, Grab - 1 No./ hook  | 4                                       |
| 5               | Coking Coal  | Ship Crane or Shore Crane or HMC or combination of these | 4                                       | Excavator -1 No. Per hatch, Grab - 1 No./ hook  | 4                                       |
| 6               | Iron Ore, Iron Ore Pellets, Bentonite, Bauxite, Copper Concentrate, Led and Zinc Ore | Ship Crane or Shore Crane or HMC or combination of these | 4                                       | Excavator -1 No. Per hatch, Grab - 1 No./ hook  | 4                                       |
| 7               | Shredded Scrap   | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Excavator -1 No. Per hatch, Grab - 1 No./ hook  | 3                                       |
| 8               | Heavy Melting Scrap  | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Excavator -1 No. Per hatch, Grab - 1 No./ hook  | 3                                       |
| 9               | Other Ores and Minerals  | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 3                                       |
| 10              | Limestone, Dolomite, Clinker, Clay, Sand and other                                   | Ship Crane or Shore Crane or HMC or combination of these | 3                                       | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 3                                       |

| GROUP NO | COMMODITY  | Handling equipment for ship to shore                     | Number of hooks worked per shift | Handling equipment for hatch working            | Number of hatch worked per shift |
|----------|--|--|----------------------------------|---|----------------------------------|
|          | similar Dry Bulk cargo                                 |  |                                  |   |                                  |
| 11       | Salt   | Ship Crane or Shore Crane or HMC or combination of these | 4                                | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 4                                |
| 12       | Alumina and Pig Iron ingots and similar Dry Bulk Cargo | Ship Crane or Shore Crane or combination of these        | 3                                | Dozer 5T - 1 No. Per hatch, Grabs - 1 No./ hook | 3                                |

### B: BREAK BULK CARGO

| GROUP NO | COMMODITY                              | Handling equipment for ship to shore                       | Number of hooks worked per shift | Handling equipment for hatch working | Number of hatch worked per shift |
|----------|--|--|----------------------------------|--------------------------------------|----------------------------------|
| 1        | Bagged cargo                           | By net slings (maximum load 5T) and hooks if required      | 2.5                              | No Equipment                         | 2.5                              |
| 2        | Jumbo Bags                             | By hooks   | 2.5                              | DFLT 5T - 1 No.                      | 2.5                              |
| 3        | Iron and steel- coils and slabs        | By ship cranes using wire rop slings attached to the hooks | 2.5                              | DFLT 30T - 1 No.                     | 2.5                              |
| 4        | Iron and steel- pipes, tubes, plates   | By ship cranes using slings                                | 2.5                              | DFLT 30T - 1 No.                     | 2.5                              |
| 5        | Timber logs-Soft                       | By ship cranes using log grabs                             | 2.5                              | Log Grabber 10T - 1 No.              | 2.5                              |
| 6        | Timber logs-Hard                       | By ship cranes using log grabs                             | 2.5                              | Log Grabber 10T - 1 No.              | 2.5                              |
| 7        | Granites and Marbles                   | By ship cranes using slings                                | 2                                | DFLT-30T- 1 No.                      | 2                                |
| 8        | Containers Empty                       | By ship cranes using manual spreaders                      | 2                                | No Equipment                         | 2                                |
| 9        | Containers Laden                       | By ship cranes using manual spreaders                      | 2                                | No Equipment                         | 2                                |
| 10       | Project Cargo                          | By ship cranes using slings                                |                                  | No Equipment                         |                                  |
| 11       | Motor vehicles other than through RORO | By ship cranes using slings                                |                                  | No Equipment                         |                                  |
| 12       | Machinery and machinery parts          | By ship cranes using slings                                |                                  | No Equipment                         |                                  |

### Annex-VIII

#### **NORMS FOR ESTIMATION OF LABOUR COST FOR STEVEDORING OPERATION**

##### **A: DRY BULK CARGO**

| Group No | Commodity  | Norms for manpower requirement |                     |                  |                        |                        |
|----------|--|--------------------------------|---------------------|------------------|------------------------|------------------------|
|          |  | Tindal per shit                | Signal man per hook | Mazdoor per hook | Operator per equipment | No. of Hooks per shift |
| 1        | Finished Fertilizers   | 0                              | 1                   | 0                | 1                      | 3                      |
| 2        | Fertilizer-Raw Materials   | 0                              | 1                   | 0                | 1                      | 3                      |
| 3        | Food Grains  | 0                              | 1                   | 0                | 1                      | 3                      |
| 4        | Non Coking Coal (Thermal Coal)   | 0                              | 1                   | 0                | 1                      | 4                      |
| 5        | Coking Coal  | 0                              | 1                   | 0                | 1                      | 4                      |
| 6        | Iron Ore, Iron Ore Pellets, Bentonite, Bauxite, Copper Concentrate, Led and Zinc Ore | 0                              | 1                   | 0                | 1                      | 4                      |
| 7        | Shredded Scrap   | 0                              | 1                   | 0                | 1                      | 3                      |
| 8        | Heavy Melting Scrap  | 0                              | 1                   | 0                | 1                      | 3                      |
| 9        | Other Ores and Minerals  | 0                              | 1                   | 0                | 1                      | 3                      |
| 10       | Limestone, Dolomite, Clinker, Clay, Sand and other similar Dry Bulk cargo            | 0                              | 1                   | 0                | 1                      | 3                      |
| 11       | Salt   | 0                              | 1                   | 0                | 1                      | 4                      |
| 12       | Alumina and Pig Iron ingots and similar Dry Bulk Cargo                               | 0                              | 1                   | 0                | 1                      | 3                      |

**B: Break Bulk**

| Group No | Commodity                              | Norms for manpower requirement   |                     |                  |                        |                        |
|----------|--|--|---------------------|------------------|------------------------|------------------------|
|          |  | Tindal per shit  | Signal man per hook | Mazdoor per hook | Operator per equipment | No. of Hooks per shift |
| 1        | Bagged cargo                           | 1  | 1                   | 4                | 1                      | 3                      |
| 2        | Jumbo Bags                             | 1  | 1                   | 4                | 1                      | 3                      |
| 3        | Iron and steel- coils and slabs        | 1  | 1                   | 2                | 1                      | 3                      |
| 4        | Iron and steel- pipes, tubes, plates   | 1  | 1                   | 2                | 1                      | 4                      |
| 5        | Timber logs-Soft                       | 1  | 1                   | 2                | 1                      | 4                      |
| 6        | Timber logs-Hard                       | 1  | 1                   | 2                | 1                      | 4                      |
| 7        | Granites and Marbles                   | 1  | 1                   | 2                | 1                      | 3                      |
| 8        | Containers Empty                       | 1  | 1                   | 2                | 1                      | 3                      |
| 9        | Containers Laden                       | 1  | 1                   | 2                | 1                      | 3                      |
| 10       | Project Cargo                          | The cargos are not homogeneous and they come in different size, shape and weight. Hence no productivity norm prescribed. Tariff to be prescribed on per shift basis. The cost shall be worked for handling these cargos for a shift. |                     |                  |                        | 3                      |
| 11       | Motor vehicles other than through RORO |  |                     |                  |                        | 4                      |
| 12       | Machinery and machinery parts          |  |                     |                  |                        | 3                      |

## ANNEX- IX

**NORMS FOR EQUIPMENT ON HIRE BASIS FOR SHORE HANDLING OPERATIONS OF DRY BULK CARGO UNDER DIFFERENT HANDLING METHODS**

| SI<br>·<br>N<br>o. | Cargo  | Method 1: Cargo unloaded onto truck for direct delivery to consignees premises | Method 2: Cargo unloaded onto truck (without hopper) and moved to storage yard within the port premises |  | Method 3: Cargo unloaded onto truck through hopper and moved to storage yard within the port premises for storage |   | Method 4: Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises | Method 5: Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard            |  |
|--------------------|--|--|---|--|---|---|--|---|--|
|                    |  | With Hopper  | Within 1 km   | Beyond 1 km  | Within 1 km   | Beyond 1 km   |  | Within 1 km   | Beyond 1 km  |
| 1                  | Finished Fertilizers - Urea, DAP, SOP, MOP and NPK | Mobile Hoppers 30 cum - 4 nos  | Trucks 15T - 12 nos,<br>Payloaders 10T -2 nos (at storage yard)   | A. Ship Crane :Trucks 15T -20 nos,<br>B. HMC Payloaders 10T -2 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos<br>Trucks 15T - 12 nos, Payloaders 10T -2 nos (at storage yard)                      | Mobile Hoppers 30 cub -4 nos,<br>Trucks 15T -20 nos<br>Payloaders 10T - 2 nos (at storage yard) | Payloaders 10T - 3 nos,  | Payloaders 10T - 3 nos (at berth)<br>Trucks 15T - 12 nos ,<br>Payloaders 10T -2 nos (at storage yard) | Payloaders 10T - 3 nos (at berth)<br>Trucks 15T - 20 nos,<br>Payloaders 10T -2 nos (at storage yard) |
| 2                  | Fertilizer - Raw materials                         | Mobile Hoppers 30 cum – 3 nos  | Trucks 15T - 12 nos,<br>Payloaders 10T -2 nos (at storage yard)   | Trucks 15T -20 nos,<br>Payloaders 10T -2 nos (at storage yard)                       | Mobile Hoppers 30 cub - 4nos<br>Trucks 15T - 12 nos, Payloaders 10T -2 nos (at storage yard)                      | Mobile Hoppers 30 cub -4 nos,<br>Trucks 15T -20 nos<br>Payloaders 10T - 2 nos (at storage yard) | Payloaders 10T - 3 nos,  | Payloaders 10T - 3nos (at berth)<br>Trucks 15T - 12 nos ,<br>Payloaders 10T -2 nos (at storage yard)  | Payloaders 10T - 3 nos (at berth)<br>Trucks 15T - 20 nos,<br>Payloaders 10T -2 nos (at storage yard) |
| 3                  | Food Grains -                                      | Mobile Hoppers 30 cum – 4 nos  | Trucks 15T - 12 nos,<br>Payloaders 10T -2 nos (at storage yard)   | Trucks 15T -20 nos,<br>Payloaders 10T -2 nos (at storage yard)                       | Mobile Hoppers 30 cub - 4nos<br>Trucks 15T - 12 nos, Payloaders 10T -2 nos (at storage yard)                      | Mobile Hoppers 30 cub -4nos,<br>Trucks 15T - 20nos<br>Payloaders 10T - 2 nos (at storage yard)  | Payloaders 10T - 3 nos,  | Payloaders 10T - 3nos (at berth)<br>Trucks 15T - 12 nos ,<br>Payloaders 10T -2 nos (at storage yard)  | Payloaders 10T - 3 nos (at berth)<br>Trucks 15T - 20 nos,<br>Payloaders 10T -2 nos (at storage yard) |



| SI<br>·<br>N<br>o. | Cargo   | Method 1: Cargo unloaded onto truck for direct delivery to consignees premises | Method 2: Cargo unloaded onto truck (without hopper) and moved to storage yard within the port premises |   | Method 3: Cargo unloaded onto truck through hopper and moved to storage yard within the port premises for storage |   | Method 4: Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises | Method 5: Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard     |  |
|--------------------|---|--|---|---|---|---|--|--|--|
|                    |   | With Hopper  | Within 1 km   | Beyond 1 km   | Within 1 km   | Beyond 1 km   |  | Within 1 km  | Beyond 1 km  |
| 4                  | Non Coking Coal (thermal coal)  | Mobile Hoppers 30 cum - 4 nos  | Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)  | Trucks 15T -25 nos, Payloaders 10T -4 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)                         | Mobile Hoppers 30 cub - 4nos, Trucks 15T - 25nos Payloaders 10T - 4 nos (at storage yard) | Payloaders 10T - 6 nos,  | Payloaders 10T - 6nos (at berth) Trucks 15T - 15 nos , Payloaders 10T -4 nos (at storage yard) | Payloaders 10T - 6 nos (at berth) Trucks 15T - 25 nos, Payloaders 10T -4 nos (at storage yard) |
| 5                  | Coking Coal   | Mobile Hoppers 30 cum – 4 nos  | Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)  | Trucks 15T -25 nos, Payloaders 10T -4 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)                         | Mobile Hoppers 30 cub - 4nos, Trucks 15T - 25nos Payloaders 10T - 4 nos (at storage yard) | Payloaders 10T - 6 nos,  | Payloaders 10T - 6nos (at berth) Trucks 15T - 15 nos , Payloaders 10T -4 nos (at storage yard) | Payloaders 10T - 6 nos (at berth) Trucks 15T - 25 nos, Payloaders 10T -4 nos (at storage yard) |
| 6                  | Iron Ore , iron ore pellets, bentonite, bauxite, copper concentrate, led and zinc | Mobile Hoppers 30 cum – 4 nos  | Trucks 15T - 20 nos, Payloaders 10T -4 nos (at storage yard)  | Trucks 15T -34 nos, Payloaders 10T -4 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos Trucks 15T - 20 nos, Payloaders 10T -4 nos (at storage yard)                         | Mobile Hoppers 30 cub - 4nos, Trucks 15T - 34nos Payloaders 10T - 4 nos (at storage yard) | Payloaders 10T - 6 nos,  | Payloaders 10T - 6nos (at berth) Trucks 15T - 20 nos , Payloaders 10T -4 nos (at storage yard) | Payloaders 10T - 6 nos (at berth) Trucks 15T - 34 nos, Payloaders 10T -4 nos (at storage yard) |

| SI<br>·<br>N<br>o. | Cargo                                     | Method 1: Cargo unloaded onto truck for direct delivery to consignees premises | Method 2: Cargo unloaded onto truck (without hopper) and moved to storage yard within the port premises |  | Method 3: Cargo unloaded onto truck through hopper and moved to storage yard within the port premises for storage |  | Method 4: Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises | Method 5: Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard   |   |
|--------------------|---|--|---|--|---|--|--|--|---|
|                    |   | With Hopper  | Within 1 km   | Beyond 1 km  | Within 1 km   | Beyond 1 km  |  | Within 1 km  | Beyond 1 km   |
| 7                  | Shredded Scrap                            | NA   | Trucks 15T - 9 nos,<br>Payloaders 10T -2 nos and excavators 2 nos (at storage yard)                     | Trucks 15T - 15 nos,<br>Payloaders 10T -2 nos and excavators 2 nos (at storage yard) | NA  | NA   | Trucks 15T - 15 nos,<br>Payloaders 10T -3 nos at berth and excavators 3 nos at the berth   | Trucks 15T - 9 nos,<br>Payloaders 10T -3 nos at berth and excavators 3 nos at the berth,<br>Payloaders and excavators 2 nos each at the yard | Trucks 15T - 15 nos,<br>Payloaders 10T -3 nos at berth and excavators 3 nos at the berth,<br>Payloaders and excavators 2 nos each at the yard |
| 8                  | Heavy Melting Scrap (HMS)                 | NA   | Trucks 15T - 9 nos,<br>Mobile Cranes 15T- 2 nos at yard   | Trucks 15T - 15 nos,<br>Mobile Cranes 15T- 2 nos at yard                             | NA  | NA   | Trucks 15T - 15 nos,<br>Mobile Cranes 15T - 3 nos at berth                                 | Trucks 15T - 9 nos,<br>Mobile Cranes 15T -3 nos at berth and 2 nos at yard   | Trucks 15T - 15 nos,<br>Mobile Cranes 15T - 3 nos at berth and 2 nos at yard  |
| 9                  | Manganese Ore and other ores and minerals | Mobile Hoppers 30 cum - 3 nos  | Trucks 15T - 12 nos,<br>Payloaders 10T -2 nos (at storage yard)   | Trucks 15T -20 nos,<br>Payloaders 10T -2 nos (at storage yard)                       | Mobile Hoppers 30 cub - 4nos<br>Trucks 15T - 12 nos,<br>Payloaders 10T -2 nos (at storage yard)                   | Mobile Hoppers 30 cub -4nos,<br>Trucks 15T - 20nos<br>Payloaders 10T - 2 nos (at storage yard) | Payloaders 10T - 3 nos,  | Payloaders 10T - 3nos (at berth)<br>Trucks 15T - 12 nos,<br>Payloaders 10T -2 nos (at storage yard)  | Payloaders 10T - 3 nos (at berth)<br>Trucks 15T - 20 nos,<br>Payloaders 10T -2 nos (at storage yard)  |

| SI<br>·<br>N<br>o. | Cargo  | Method 1: Cargo unloaded onto truck for direct delivery to consignees premises | Method 2: Cargo unloaded onto truck (without hopper) and moved to storage yard within the port premises |   | Method 3: Cargo unloaded onto truck through hopper and moved to storage yard within the port premises for storage |   | Method 4: Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises | Method 5: Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard     |  |
|--------------------|--|--|---|---|---|---|--|--|--|
|                    |  | With Hopper  | Within 1 km   | Beyond 1 km   | Within 1 km   | Beyond 1 km   |  | Within 1 km  | Beyond 1 km  |
| 10                 | Lime stone, Dolomite, clinker, clay, sand and other similar dry bulk cargo | Mobile Hoppers 30 cum - 4 nos  | Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)  | Trucks 15T -25 nos, Payloaders 10T -4 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)                         | Mobile Hoppers 30 cub - 4nos, Trucks 15T - 25nos Payloaders 10T - 4 nos (at storage yard) | Payloaders 10T - 6 nos,  | Payloaders 10T - 6nos (at berth) Trucks 15T - 15 nos , Payloaders 10T -4 nos (at storage yard) | Payloaders 10T - 6 nos (at berth) Trucks 15T - 25 nos, Payloaders 10T -4 nos (at storage yard) |
| 11                 | Salt   | Mobile Hoppers 30 cum - 4 nos  | Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)  | Trucks 15T -25 nos, Payloaders 10T -4 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)                         | Mobile Hoppers 30 cub - 4nos, Trucks 15T - 25nos Payloaders 10T - 4 nos (at storage yard) | Payloaders 10T - 6 nos,  | Payloaders 10T - 6nos (at berth) Trucks 15T - 15 nos , Payloaders 10T -4 nos (at storage yard) | Payloaders 10T - 6 nos (at berth) Trucks 15T - 25 nos, Payloaders 10T -4 nos (at storage yard) |
| 12                 | Alumina and pig iron ingots and similar dry bulk cargo                     | Mobile Hoppers 30 cum - 4 nos  | Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)  | Trucks 15T -25 nos, Payloaders 10T -4 nos (at storage yard) | Mobile Hoppers 30 cub - 4nos Trucks 15T - 15 nos, Payloaders 10T -4 nos (at storage yard)                         | Mobile Hoppers 30 cub - 4nos, Trucks 15T - 25nos Payloaders 10T - 4 nos (at storage yard) | Payloaders 10T - 6 nos,  | Payloaders 10T - 6nos (at berth) Trucks 15T - 15 nos , Payloaders 10T -4 nos (at storage yard) | Payloaders 10T - 6 nos (at berth) Trucks 15T - 25 nos, Payloaders 10T -4 nos (at storage yard) |

## ANNEX-X

**NORMS FOR EQUIPMENT ON HIRE BASIS FOR SHORE HANDLING OPERATIONS OF BREAK BULK CARGO UNDER DIFFERENT HANDLING METHODS**

| Sl. No. | Cargo Group                         | Handling Method (Handling by ship gears)                   | Ship Day output Norms by ship gears | Method 1: Cargo unloaded onto truck for direct delivery to consignees premises or vice versa | Method 2: Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises or vice versa | Method 3: Cargo unloaded onto truck and transported to storage yard within the port premises or vice versa | Method 4: Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard within the port premises or vice versa | Remarks                          |
|---------|-------------------------------------|--|-------------------------------------|--|--|--|---|----------------------------------|
| 1       | Bagged cargo                        | By net slings (maximum load 5T) and hooks if required      | 2400                                | Not Applicable   | No Equipment (manually loaded onto truck)  | Not Applicable   | Trucks 10 T- 9 nos.   | 40 min / cycle / truck           |
| 2       | Jumbo bags                          | By hooks   | 4200                                | No Equipment   | Not Applicable   | Trucks 15 T- 9 nos.  | Not Applicable  | 30 min / cycle / truck           |
| 3       | Iron & steel - coils and slabs      | By ship cranes using wire rop slings attached to the hooks | 10200                               | No Equipment   | Fork Lift Truck 30 T - 1 nos at berth  | Mobile Cranes 30 T - 2 nos at yard, Tractor Trailers - 40T - 9 nos   | Fork Lift Truck 30 T - 1 nos at berth and 2 nos at yard, Tractor Trailers - 40T - 9 nos   | 30 min / cycle / tractor trailer |
| 4       | Iron & steel - pipes, tubes, plates | By ship cranes using slings                                | 2100                                | No Equipment   | Fork Lift Truck 10 T - 1 nos at berth  | Mobile Cranes 10 T - 2 nos at yard, Tractor Trailers - 40T - 9 nos   | Fork Lift Truck 10 T - 1 nos at berth and Mobile cranes 10T 2 nos at yard, Tractor Trailers - 40T - 9 nos                         |                                  |
| 5       | Timber logs - soft                  | By ship cranes using log grabs                             | 2400                                | Not Applicable   | Log Grabbers 10 T - 5 nos at berth   | Not Applicable   | Log Grabbers 10 T - 5 nos at berth and 2 nos at yard, Tractor Trailers - 40T - 12 nos   |                                  |

| Sl. No. | Cargo Group                            | Handling Method (Handling by ship gears) | Ship Day output Norms by ship gears | Method 1: Cargo unloaded onto truck for direct delivery to consignees premises or vice versa  | Method 2: Cargo unloaded onto wharf and loaded onto trucks and going to consignee premises or vice versa | Method 3: Cargo unloaded onto truck and transported to storage yard within the port premises or vice versa | Method 4: Cargo unloaded onto wharf and loaded onto trucks and transported to storage yard within the port premises or vice versa | Remarks |  |
|---------|--|--|-------------------------------------|---|--|--|---|---------|--|
| 6       | Timber Logs - hard                     | By ship cranes using log grabs           | 3600                                | Not Applicable  | Log Grabbers 10 T - 5 nos at berth   | Not Applicable   | Log Grabbers 10 T - 5 nos at berth and 2 nos at yard, Tractor Trailers - 40T - 12 nos   |         |  |
| 7       | Granite and Marbles                    | By ship cranes using slings              | 3000                                | No Equipment  | Not Applicable   | Mobile Cranes 30T - 2 nos , Trucks 40 T - 12 nos.  | Not Applicable  |         |  |
| 8       | Containers Empty                       | By ship cranes using manual spreaders    | 500                                 | No Equipment  | Fork Lift Truck 10 T - 1 no at berth   | Fork Lift Truck 10 T - 1 no, Tractor trailers 40 T-12 nos  | Fork Lift Truck 10 T - 1 no at berth and 1 no at yard, Tractor trailers 40 T-12 nos   |         |  |
| 9       | Containers Laden                       | By ship cranes using manual spreaders    | 400                                 | No Equipment  | 1 Top Lifter at berth  | Top Lifter 1 no., Tractor trailers 40 T - 12 nos.  | Top Lifter 1 at berth and 1 at yard, Tractor trailers 40 T - 12 nos.  |         |  |
| 10      | Project cargo                          | By ship cranes using slings              | NA                                  | This Cargo are not homogeneous coming in difference size and volume. Time taken and productivity will vary widely. Hence in these cases no shore equipment is considered and cargo will be loaded on to consignee truck directly to consignee premises or to storage yard |  |  |   |         |  |
| 11      | Motor vehicles other than through RORO | By ship cranes using slings              |                                     |   |  |  |   |         |  |
| 12      | Machinery and machinery products       | By ship cranes using slings              |                                     |   |  |  |   |         |  |

**Illustration of Performance Linked Tariff**

Assumed Upfront Tariff (2015-16): ₹100 / tonne

Indexed Tariff (Assumed inflation of WPI @ 10% per annum)

| <b>Year</b> | <b>Indexed Upfront Tariff<br/>– 60% of WPI</b> | <b>Performance linked tariff at 100% of<br/>the WPI indexation on the achievement<br/>of Performance Standards</b> |
|-------------|--|--|
| 2016-2017   | 106.00   | 110.00   |
| 2017-2018   | 112.36   | 121.00   |
| 2018-2019   | 119.10   | 133.10   |

**Note:**

If in any financial year the Licensed Operator does not achieve the Performance Standards as incorporated in the License Agreement, he will be entitled to charge only the indexed Upfront Tariff and not eligible to apply for Performance Linked Tariff for the ensuing financial year.