Annexure - I
Immediate

Government of India
Ministry of Shipping, Road Transport & Highways
Department of Shipping
(Ports Wing)

No. MR-22011/4/2009-TRW (P) New Delhi 04th May, 2009

O R D E R

Sub: - Strengthening of Major Port Statistics- setting up of a Working Group

The Transport Research Wing (TRW) of this Ministry is the nodal agency inter-alia for collection, compilation and publication of data on India Ports. The data is disseminated through the annual publication on Basic Port Statistics (BPS). Besides BPS, the TRW also brings out biannual updates on Indian Port Sector which throw light on the latest developments in the Indian Port Sector. It is proposed that the requirement of data for various publications and policy purposes be identified and built into their data compilation and dissemination/supply system to the users so that timelines of data availability is improved and the respondents' (i.e. Major Ports) load is minimized to the extent feasible.

2. In view of the above, it has been decided to set up a Working Group with the following composition: -

1)	Adviser (Transport Research) Deptt. of Road Transport Highways	:	Chairman
2)	Managing Director, Indian Ports Association	:	Member
3)	Secretary, TAMP	:	Member
4)	Director, IIPM	:	Member
5)	Deputy Chairman, Mormugao Port Trust	:	Member
6)	FA& CAO, New Mangalore Port Trust	:	Member
7)	Director (R/P), Visakhapatnam Port Trust	:	Member
8)	Director (P&R), Kolkata Port Trust	:	Member
9)	Chief Manager (Operations), JNPT	:	Member
10)	Director (TRW-Ports)	:	Convenor

3. The Terms and Reference of the above Working Group shall be as under: -

a) To look into concepts, definitions and methodologies followed by port authorities in compilation of sea-borne cargo & physical performance indicators.
b) To suggest uniform procedures/methods for compilation and dissemination of various physical and financial performance indicators to facilitate comparison and benchmarking productivity and efficiency.

c) To recommend/suggest efficiency/performance indicators relating to port statistics.
d) To suggest time frame for timely compilation and finalization of port statistics.

4. The Working Group will be empowered to co-opt any member if necessary. The TA/DA of the Members of the Group will be borne by their respective organizations.

Sd/-
(R. Srinivasa Naik)
Director(PO&PG)
Tel No. 23739621

Copy to : -

1) Adviser (Transport Research) Deptt. of Road Transport & Highways, New Delhi
2) Managing Director, Indian Ports Association
3) Secretary, TAMP
4) Director, IIPM
5) Deputy Chairman, Mormugao Port Trust
6) FA& CAO, New Mangalore Port Trust
7) Director (R/P), Visakhapatnam Port Trust
8) Director (P&R), Kolkata Port Trust
9) Chief Manager (Operations) JNPT
10) Director (TRW-Ports)

Copy also forwarded for information and necessary action to the Chairmen, All Major Port Trusts.

Data published in Administrative reports of major ports and corresponding data in 'Major Ports of India' & Basic Port Statistics

S.No.	Tables	Statistics published	Chennai	Tuticorin	
1	Topography of the port	Location -latitude and longitude,Entrance Channel-Length , Minimum Depth,Minimum Width, Turning Circle - No. , Diameter , Type of Dock/Port	Table 1(A)	Table 1(A); Entrance Channel-Length , Depth,Width (not min)	
2	Storage Capacity	Dry Storage Accomodation, Liquid Storage tanks, Container capacity owned by ports and others and also seperately categorised as covered and open	Table 1(B)	Table 1(B)	
3	Berth Particulars	Dockwise Berths, Type,Scheduled depth, Quay length	Table 1(C)	Table 1(C), Also Maximum size of vessels that can be accomodated-length,DWT	
4	Floating Craft	Availability by type - dredgers, Tugs, pilot launcher, Mooring launches, Multipurpose habour vessel etc. and their capacity.	Table 1(D)	Table 1(D), Also owned/Hired ; utilisation - Table 15	
5	Cargo Handling Equipments	Description , Number	Table 1(E)	Table 1(E); Also owned/Hired	
6	Total import traffic handled principal commoditywise	Overseas and coastal separately for principle cargo categories i.e. Container, Break Bulk, Dry Bulk, Liquid Bulk	Table 2(A)	Table 2	
7	Total export traffic handled principal commoditywise	Overseas and coastal separately for principle cargo categories i.e. Container, Break Bulk, Dry Bulk, Liquid Bulk	Table 2(B)	Table 2	
8	Flagwise Distribution of cargo handled	Nationality, Import and Export cargo tonnage separately for overseas and coastal traffic	Table 3 Non-Cargo and Cargo vessels	Table 3	
9	Distribution of import cargo handled according to origin	Nationality, Import and Export cargo tonnage separately for overseas and coastal traffic	Table 4 - combined for overseas and coastal	Table 5	
10	Distribution of export cargo handled according to origin	Dry Bulk, Liquid Bulk, Break Bulk, Containers for important countries	Table 5	Table 4	
11	Number and type of containers handled	FCL, LCL, Empty containers categorised as export, import, Trans-shipment and ICD containers moved in and out; separately for 20', 40'and 45' and total TEUs	Table 6 Shifting also included	Table 6	
12	Number and size of ships handled	No of vessels by type of cargo ships and passenger ships - NRT,GRT,DWT	Table 7	Table 7	

Annexure-II (Contd.)

Data published in Administrative reports of major ports and corresponding data in 'Major Ports of India' & Basic Port Statistics

S.No.	Tables	Statistics published	Chennai	Tuticorin	
13	Performance of ships	Performance indicators principal cargowise - No. of ships, cargohandled, Average Turnround Time, Average stay at Berth, Average working Time, Average pre-berthing time, Average Non-working Time, Average parcel size, Average output per ship day, Percentage of non working time at berth	Table 8	Table 8	
14	Distribution of pre berthing delay according to reason	Category of shipswise number of vessels and delay according to reasons-Non availability of berth,Tug/Craft,Pilot/Crew , Strike/Stoppage of work, Navigation, Draft Restriction, Ship's account/Agents' option	Table 9	Table 9, Also port and non-port account separately	
15	Distribution of non-working time at berth according to reasons	Category of shipwise no. of vessels and delay according to reasons - Non availability of berth, Absence of workers, Equipment non availability, Equipment breakdown, shed congestion, lack of cargo, strike/stoppage of work, weather conditions, power failure, hatch openine/closing, waiting for sailing, agents's option/ships account	Table 10	Table 10, Also port and non-port account separately	
16	Berth Occupancy	Berthwise days available and occupied, Percent occupancy	Table 11	Table 11	
17	Availability of cargo handling equipments	Number of various equipments, no required to meet the traffic's Average demand per day and Average supply per day; reasons for short supply, no. of units overhauled and units underwent major repairs	Table 12	Table 13	
18	Utilisation of cargo handling equipments	Number of various equipments, total no. of gross hours available, non availability by reasons, Net available working Hours, Actual working time, %age of availability, %age of utilisation - Net and Gross working hour availability	Table 13	Table 14	
19	Shore labour productivity	No. of hooks worked, Hook hours worked, Effective hook hours worked, Man hours worked, Effective man hours worked, Tonnage handled, Average productivity - Per hook, Per hook hour, Per effective hook hour, Per man hour, Per effective man hour for imports and exports by type of cargo	Table 14	Included in Table 18	
20	Dock labour productivity	No. of hooks worked, Hook hours per effective hook hours worked, Man hours per effective man hours worked, Tonnage handled, Average productivity - Per hook, Per hook hour, Per man hour by type of cargo	Table 15	Table 18	
21	Container cargo and tareweight	Container cargo and tareweight separately	Table 16	Table 12	
22	Commoditywise export cargo received by different modes of transport	By Rail, Road, pipeline- tonnage and percentage	Table 17	Table 19	
23	Commoditywise import cargo dispatched by different modes of transport	By Rail, Road, pipeline- tonnage and despatch	Table 18	Table 20	
24	Performance of dredgers	Quantity dredged, Working days and non-working days by reasons, Quantity dredged per working day, Rate per cu.m. of dredging	Table 19	Table 16 , Only Quantity dredged	
25	Employment at ports- Classwise	By No. and Category of officers, Non- cargo employees, Cargo handling workers- shore workers and other than shore workers	Table 20	Table 21	
26	Particulars of accident	Fatal and non fatal by causes- separately for port and non-port area	Table 21	Table 22	
27	Financial indicators	Return on capital - capital employed and Rate of return, Operating ratio - operating income and operating ratio, Ratio of cost to earnings (activitywise)	Table 22	Table 23	
28	Capital expenditure of plan schemes	On Plan and Non-plan works -approved outlay, Internal resources, Budgetary support, Direct loan	Table 23	Table 24	

Data published in Administrative reports of major ports and corresponding data in 'Major Ports of India' & Basic Port Statistics

S.No.	Kolkata	Paradip	Vishakhapatnam	Cochin	New mangalore	Mormugao	Mumbai	JNPT	Kandla	IPA	BPS
1	Table I(A)	Table I(A)	Annexure 1	Table XLII	Table I(A), Only land area & port area-water spread	Table I(A)	Table I(A)	Table I(A)	Table 1(A)	Page 2	Table 1.3
2	Table I(B)	Table I(B)	Annexure 2		Table I(B)	Table I(B)	Table I(B)	Table I(B)	Table 1(F)	Page24-29	Table 1.5
3	Table I(C)	Table I(C)	Annexure 3	Table XLIII	Table I(C)	Table I(C)	Table I(C)	Table I(C)	Table 1(B)	Page 3 Commodity wise no. of Berths	Table 1.4
4	Table I(D)	Table I(D)	Annexure 4	Table XXIX	Table I(D)	Table I(D)	Table I(D)	Table I(D)	Table 1(E)	Page 4-12	
5	Table I(E)	Table I(E)	Annexure 5	Table XXII	Table I(E)	Table I(E)	Table I(E)	Table I(E)	Table 1(D)	Page21-23	Table 1.8
6	Table II	Table II	Annexure 7	Table I	Table II, Transhipment separately	Table II	Table II	Table II	Table 13	Page 30-41 in different	Table 2.1.8 overseas by
7	Table II	Table II	Annexure 7	Table I	Table II, Transhipment separately	Table II	Table II	Table II	Table 13	Page 30-41 in different tables	Table 2.1.9 overseas by countries
8	Table III	Table III	Annexure 8	Table VI	Table III, Transhipment separately	Table III	Table III	Table III	Table 31, commodi tywise		
9	Table V	Table V	Annexure 10& 11 -Commodity wise & countrywise	Table VII	Table V	Table V	Table V	Table V	Table 32, commodi tywise		
10	Table IV	Table IV	Annexure 12 & 13 - Commoditywise & countrywise	Table VIII	Table IV	Table IV	Table IV	Table IV			
11	Table VI	Table VI	Annexure 9	Table XI	Table VI	Table VI	Table VI	Table VI (a,b,c)	Table 6	page 42-46	Table 2.1.5
12	Table VII	Table VII	Annexure 19	Table XIV	Table VII	Table VII	Table VII	Table VII	Table 17	Page 50-58	Table 2.1.17 No.of vessels by category

Annexure-II (Contd.)

Data published in Administrative reports of major ports and corresponding data in 'Major Ports of India' & Basic Port Statistics

S.No.	Kolkata	Paradip	Vishakhapatnam	Cochin	New mangalore	Mormugao	Mumbai	JNPT	Kandla	IPA	BPS
13	Table VIII	Table VIII	Annexure 21	Table XVI	Table VIII	Table VIII	Table VIII	Table VIII	Table 18	Page 59-72 category and commodit	Table 2.2.15 & 2.2.16
14	Table IX	Table IX	Annexure 22	Table XIX	Table IX	Table IX	Table IX	Table IX	Table 14		Table 2.1. 27
15	Table X	Table X	Annexure 23	Table XX	Table X	Table X	Table X	Table X	Table 15		
16	Table XI	Table XI	Annexure 20	Table XXI	Table XI	Table XI	Table XI	Table XI	Table 19	Page 4-12	Table 2.1.28
17	Table XII	Table XII	Annexure 32	TableX XII	Table XII		Table XII	Table XII	Table 27		Table 2.1.29 & 2.1.30
18	Table XIII	Table XIII	Annexure 33	Table XXIII	Table XIII	Table XIII	Table XIII	Table XIII	Table 28		Table 2.1.29 & 2.1.30
19	Table XIV	Table XIV & XV combined	Annexure 24	Table XVIII	Table XIV	Table XIV	Table XIV	Table XV	Table 5		
20	Table XV		Annexure 25		Table XV	Table XV	Table XV	Table XIV			
21	Table XVI	Table XVI			Table XVI	Table XVI	Table XVI	Table XVI	Table 18		Table 2.1.10
22	Table XVII	Table XVII	Annexure 17		Table XVII	Table XVII	Table XVII	Table XVII	Table 20		
23	Table XVIII	Table XVIII	Annexure 18		Table XVIII	Table XVIII	Table XVIII	Table XVIII	Table 21		
24	Table XIX	Table XIX	Annexure 34&35	Table XXIV	Table XIX	Table XIX, only quantity dredged	Table XIX	Table XIX, only quantity dredged			
25	Table XX	Table XX	Annexure 57	Table XXXVI	Table XX	Table XX	Table XX	Table XX	Table 3&22	Page 87-88	Table 2.1.33 & 2.1.34
26	Table XXI	Table XXI	Annexure 62	Table XLI	Table XXI	Table XXI	Table XXI	Table XXI			
27	Table XXII	Table XXII	Annexure36		Table XXII	Table XXII	Table XXII	Table XXII	Table 25	Page 73-83	Table 2.1.36 to 2.1.38
28	Table XXIII	Table XXIII	Annexures 46	Table XXXIV	Table XXIII	Table XXIII	Table XXIII	Table XXIII	Table 24		

Annexure-III

Parameters and Indicators for Collection of Port Statistics

A. Vital Port Statistics

Parameters

(a)	Topography of the Port	:	Location (Latitude & Longitude), Entrance channel (Length, Minimum Depth and Minimum width), Turning Circle (No. and Diameter), Type of Dock/Port
(b)	Berth Particulars	:	Berth Name/No., Type of Berth, Designed Depth (Mtrs), Permissible Draft, Quay Length,
(c)	Floating Craft	:	Type of Craft, No., Type and Capacity.
(d)	Cargo Handling Equipment	:	Type of Equipment, No. and Rated Capacity.
(e)	Storage Capacity at Port	:	No. of Area and Location (inside/ outside Port) for (i) Dry Storage Accommodation (ii) Containers (iii) Liquid Storage tanks (iv) CFS (v) Reefer points

B. (i) Cargo Traffic (excluding Container Traffic)

Parameters

The following data will be collected for each cargo ship handled:

i. Commodity Loaded / Unloaded / Transshipped
ii. Quantity
iii. Overseas / Coastal traffic
iv. Cargo Category – Container / Break Bulk / Liquid Bulk/ Dry Bulk – Mechanical / Conventional
v. Country & Port of Origin / Destination
vi. Flag of Ship
vii. Mode of Despatch / Receipt of Cargo – Rail, Road, Pipeline, Inland Waterways alongwith Quantity

Indicators

i. Share of Coastal and Overseas traffic
ii. Share of Import Cargo to Overseas cargo

iii. Percentage share of Indian Flag Vessel in the Overseas and Coastal Cargo Traffic Handled
iv. Parcel Size (Cargo handled/No. of Cargo Ships Handled)
v. Cargo Handled per Employee

B. (ii) Container traffic

Parameters

i. No. of Containers Imported / Exported / Transshipped – categorized as stuffed/empty, 20'/40'/others (Total in TEUs), Container Traffic Loaded/Unloaded/Transshipped (separately for Indian lines & Foreign lines)
ii. Commodity - wise break up of Container Cargo – Loaded/Unloaded / Transshipped.
iii. Tare Weight & Container Cargo Weight separately.
iv. Reefer Container Traffic – Import/export in TEUs & Tonnage
v. Inland Container Movement – Incoming/Outgoing to Port by Rail/Road in TEUs & Tonnage.
vi. ICD Container Movement – In & Out (in TEUs) by Mode(Rail/Road/IWT)
vii. Country-wise Origin and Destination of Containers

Indicators

(i) Level of Containerization - Percentage of Container Cargo to General Cargo (Container + Break Bulk)

C. Performance / Efficiency Parameters

The following parameters may be compiled for each ship according to category of vessels, important commodity wise and separately on Port & Non-port account.

(a) Vessel Traffic

Parameters	Indicators
For each cargo ship sailed - Pre-Berthing Waiting Time - Inward Movement Time - Stay at Working Berth and Non-working Berth) - Non-working Time at Working Berth - Shifting Time - Outward Movement Time	- Average Ship-Berth-day Output - Percentage of Non-working Time at Working Berth - Average Stay at Working Berth - Average Non-working Time - Average Turn Round Time - Average Pre-Berthing Waiting Time - Average Inward Movement Time - Average Outward Movement Time - Average Shifting Time - Parcel size

(b) Container Traffic

Parameters	Indicators
- Containers Handled (No.) - TEUs Handled - Time of Container Stay at Port - Cranes(No.) - Crane Moves (Total) - Crane Hours(Total) - Berth Hours (Total) - Crane Idle Time(hours) - Berth Idle Time (hours) Yard productivity - Area of Yard - Cranes Used (No.) - TEUs Handled - Effective Crane Handling Time (hours) - Crane Idle Time	- Average Dwell Time (Time of Container Stay at Port/ No. of Containers Handled) - Moves per Crane Hour(Total No. of Crane Moves / Total Crane Hours) - Effective Moves per Crane Hour (Total No. of Crane Moves/ Effective Crane Hours) - Moves/Berth Hour (Total Moves/Total Berth Hours) - Effective Moves/Berth Hour (Total Moves/ Effective Berth Hours) -TEU per Meter Quay (Total TEUs Handled / Total Length of Quay)

(b) Shore and Dock Labour Productivity

The following parameters may be compiled for each ship, according to type of Cargo and for important commodities.

Parameters	Indicators
- No. of Hooks Worked. - Hook-hours Worked - Effective Hook-hours Worked - Man-hours Worked - Effective Man-hours Worked - Tonnage Handled - Gang Shifts(No.)	- Average Productivity per Hook (Tonnes) - Average Productivity per Hook-hour (Tonnes) - Average Productivity per Effective Hook-hour (Tonnes) - Average Productivity per Man-hour (Tonnes) - Average Productivity per Effective Man-hour (Tonnes) - Output per Gang Shift

(d) Availability and Utilization of Equipment

Cargo equipments (i) Wharf Crane (ii) Mobile Crane (iii) Fork Lift Truck

Parameters	Indicators
- No. of Equipment -Possible Gross Equipment Available Hours - Non-available Equipment Hours - Net Available Equipment Hours - Actual Equipment Working Time (hours)	- Percent Availability of equipment (Actual equipment available hours / Possible Gross equipment available hours x 100) - Percent Utilization of Equipment i. Net Available Working Hours (Actual Equipment Working Time/ Net Available Equipment hours x 100) ii. Gross Available Working Hours (Actual Equipment working time / Gross Available Equipment Hours x 100)

(e) Berth Performance

Parameters	Indicators
Berth Availability (days) Berth Occupancy (days)	-Percentage Occupancy of Berth

D. Vessel Traffic

Parameters

i. No. of vessels handled by type of vessel category (Cargo & Non Cargo)
ii. Flag wise Distribution of Ships Handled
iii. Size of ships handled (DWT, GRT, NRT)

E. Financial Parameters

1. **Income**
   (a) Operating income
      (i) Cargo Handling & Storage Income
      (ii) Vessel Related Income
      (iii) Railway Income
      (iv) Estate
      (v) Other Income
   (b) Non-operating Income

2. **Expenditure**

(a) Operating Expenditure
  (i) Cargo Handling & Storage Expenditure
  (ii) Vessel related Expenditure
  (iii) Railway Expenditure
  (iv) Estate
  (v) Other Expenditure
(b) Non-operating Expenditure

3. **Classification of Assets (Capital Employed)**
  (i) Cargo Handling and Storage
  (ii) Port and Dock Facilities
  (iii) Railway
  (iv) Estate
  (v) Others

4. **Operating Ratio**

(a) Cargo Handling Operating Ratio = $\frac{\text{Cargo Handling Expenditure}}{\text{Cargo Handling Income}}$

Note : The raito may be calculated for each cargo commodity comprising more than 15% of cargo handled at a major port

(b) Vessel Related operating ratio = $\frac{\text{Vessel Relating Expenditure}}{\text{Vessel Related Income}}$

(c) Railway related operating ratio = $\frac{\text{Railway Related Expenditure}}{\text{Railway Related Income}}$

(c) Estate related Operating ratio = $\frac{\text{Estate related Expenditure}}{\text{Estate related Income}}$

(d) Operating Ratio = $\frac{\text{Total Operating Expenditure}}{\text{Total Operating Income}}$

5. **Capital Expenditure**
  (i) Plan Schemes
  (ii) Non-Plan(Capital)

6. **Total Investment in PPP Projects (by port and concessionaire separately)**
  (i) Investment in land
  (ii) Other Investment excluding Investment in Land
    (a) Civil works
    (b) Equipments
    (c) Other investments

Efficiency Parameters/Indicators
  (i) Return on Capital Employed
    (a) Operating Surplus to Net Operating Assets
    (b) Net Income to Total Capital Employed
  (ii) Working Capital

(iii) Current Ratio
(iv) Asset Turnover Ratio
(v) Management & GA Expenditure to Operating Expenditure
(vi) Percentage of Salaries and Wages to Total Operating Expenditure

F. Other Port Statistics

Parameters

i. Manpower Employed category - wise at Major Ports & by Dock Labour Board.
ii. Mandays Lost.
iii. Accidents by type – categorized into fatal and Non fatal in Ports & Non-port area.
iv. Passenger traffic – embarkation and disembarkation.
v. Dredging carried out & expenditure incurred –Routine maintenance and Capital dredging by Dredging Corporation of India and Private dredgers separately.

Indicators

i. Cost per Tonne of Cargo Handled
ii. Tonnage Handled per Employee

Annexure-IV

Other Statistics to be Compiled by Ports for Internal Use

(i) Port user - wise Quantity of Important Commodities Loaded/Unloaded
(ii) Trains, Vehicles Received and Dispatched
(iii) Type-wise no. of wagons received/ dispatched - Total and for Important Commodities
(iv) Average Indent and Supply of Wagons (daily average) for the clearance of Imported Cargo from Port area.
(v) Commodity-wise Percent of Import and Export of major items to the Total Traffic.
(vi) Value of Trade - Import & Export separately for Overseas & Coastal.
(vii) Commodity - wise distribution of Import & Export on Stream and Wharf separately.
(viii) Cargo Handled by Shipping Lines.
(ix) Dry Docking Statistics.
(x) Traffic Handled to & from Trunk Railway.
(xi) Training Programmes attended by Port officials and Skills Imparted.
(xii) Maintainence of Port Equipment Statistics
(xiii) Congestion in Port Area – for each type of cargo- quay & transit shed disposition of ware housing stock & distribution.
(xiv) Pilot - wise Movements
(xv) No. of cycles of each Crane and Quantity handled (commodity wise)
(xvi) Power/Fuel Consumption per Tonne of Cranes
(xvii) Efficiency of Barges and Other Daughter Vessels Efficiency
(xviii) Harbour Mobile Crane Efficiency
(xix) Floating Craft Efficiency
(xx) Stores Statistics – Balance of stores in transit (cash values), stores issued, Material Returned, Stores Purchased, Stores for Reorder etc.
Also data on slow moving balances of stores e.g. Items which are in stores for more than
    (i) 3 months since last moved
    (ii) 6 months since last moved
    (iii) 12 months since last moved
(xxi) Housing Related information.

Annexure-V

Other Important Definitions of Terms used in Port Statistics

Sr. No.	Term	Definition
1	**Ballast**	Any material intended to provide stability to the ship when it is otherwise empty.
2	**Barge**	A term applied to a flag officer's boat in naval usage, or to an elegantly fitted boat, or craft of ceremony propelled by oars or mechanically and reserved for the use of high officials when transported in State. In a legal sense a barge is usually held to be a boat or vessel and hence within the letter of the laws relating to such craft.
3	**Berth-Day**	A day of occupation of a berth (quay or mooring) by a ship.
4	**Bunker**	Ship-space for storing fuel (Coal, Oil etc.).
5	**Coastal Ship**	A ship exclusively employed in trading between any port or place in India and any other port or place in the subcontinent of India or between ports or places in India and port or places in Sri Lanka, Bangladesh or Myanmar.
6	**Craft**	A term in marine parlance applied to every kind of vessel but more especially to small vessels when referred to collectively. For marine insurance purposes, a craft is any barge, lighter, river trades or any other boat or vessel employed in carrying, shipping or discharging the goods insured.
7	**Cranage**	The hire charges for providing a port crane for cargo handling.
8	**Dead Weight Tonnage (DWT)**	It is the number of tons of (2240 pounds) stores, fuel and cargo that a ship can transport. This presents the actual carrying capacity of a ship.
9	**Draft**	The depth necessary to submerge a ship to their load line.
10	**Dumb Barge**	A barge which has no means of self propulsion in the way of sails or engine power and which has to be towed or is allowed to drift under the influence of the tide or current.

11	**Export**	Loaded overseas traffic.
12	**Gang**	Gang is a group of workers formed as one unit for the purpose of handling cargo in the act of discharging from or loading on to the ship, inside the ship, inside the hatch-hold of the vessel or in the deck as per necessity.
13	**Gang hours**	Number of hours per shift multiplied by number of gang shift.
14	**Gang shift**	Refers to a gang (irrespective of number of persons in the gang) working in one shift.
15	**Gross Registered Tonnage (GRT)**	It applies to the vessels and not to cargo. It is the weight of the volume occupied by the closed-in-spaces of a ship taking 100 cubic feet of such closed-in-spaces as equivalent to one vessels ton. It thus refers to the cubic capacity of the vessels.
16	**Home-Trade Ship**	A ship not exceeding three thousand tons gross which is employed in trading between any port or place in India and any other port or place in the subcontinent of India or between ports or places in India and ports or places in Sri Lanka, Maldive Islands, Federation of Malaysia, Singapore, Bangladesh or Myanmar.
17	**Hopper Barge**	A steel or wooden barge of very full-mid-ship section employed in harbours and used for the disposal of mud, gravel, sand etc., taken from a dredger and then conveyed to a dumping ground where the cargo is discharged through the bottom; also called ‘dump scow’.
18	**Idle Time**	Non-working time of a ship (without loading or unloading of cargo) at berth.
19	**Import**	Unloaded overseas traffic.
20	**Lash**	Lighter aboard ship.
21	**Launch**	A large, heavy and beamy ship’s boat with flat floors and rather shallow draft, formerly used and designed for carrying stores and men.
22	**Lighterage**	Loading into and discharging out of lighters.

23	**Load Line**	The outer line on the body of a ship upto which ship submerges in water with safety. It varies according to the seasons and waters in which she plies.
24	**Man-days Lost**	The total number of days lost due to unscheduled stoppages of work.
25	**Mooring Vessel**	A vessel which is secured by moorings.
26	**Net Registered Tonnage (NRT)**	It refers to the earning space capacity of a ship available for the storage of cargo and accommodation of passengers. It is obtained by deducting from GRT the cubic capacity space (taking 100 cubic feet = 1 ton) occupied by stores, fuel, machinery, crew etc. which does not represent the earning capacity of the ship.
27	**Ore/Oil and Bulk Carrier**	A bulk cargo ship designed to carry ore and oil enabling thereby to be loaded in both directions.
28	**Passenger Ship**	A ship carrying more than twelve passengers.
29	**Pilotage**	A port charge for guiding a ship in or out of a harbour through channels, passages or other waters by an authorized pilot.
30	**Port Dues**	A charge levied by Ports on the vessel.
31	**Reefer Vessel**	A vessel with refrigerating facilities.
32	**Roll-on/Roll-off Vessel**	It is frequently called a vehicle ferry. It is designed for the conveyance of road vehicles and private cars. At each terminal port, a tramp of link span is provided enabling the vehicles to drive on or off the vessels, thereby eliminating cranage and cargo handling (and also pilferage) and permitting a quick turn round of the ships.
33	**Sailing Vessel**	Any description of vessel provided with sufficient sail area for navigation under sails along whether or not fitted with mechanical means of propulsion and includes a rowing boat or crane but does not include a pleasure craft.
34	**Ship-Day**	A day spent in harbour by a ship.
35	**Survey Vessel**	Mechanically propelled sea-going vessel, specially built and equipped to carry out hydrographic and other nautical

surveys in coastal waters and on the high seas. Surveying vessels are in most instance Government owned.

36	**Tankers**	Cargo ships constructed or adopted for the carriage in bulk of liquid cargoes of an inflammable nature.
37	**Traffic**	A scalar with only magnitude but no direction such as the total of exports and imports or loaded and unloaded cargo.
38	**Traffic flows**	A vector with magnitude and direction such as passengers embarked/disembarked or cargo exports/imports.
39	**Tug Boat**	A mechanically propelled vessel of small tonnage with little or no cargo capacity, used for towing or assisting vessels at sea, in or out of harbour, rivers and docks also for coastal or harbour towage of barges, lighters and other small craft; also called tow boat, tug.
40	**Wharfage**	A charge levied by ports on cargo for use of port surface over which cargo moves.