



PORT OF RICHARDS BAY BERTHING GUIDELINES

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1. OBJECTIVES

- 1.1 The objective of these guidelines is to ensure safe, efficient and orderly berthing of vessels such that the waiting time of vessels for a berth is minimized whilst optimizing the use of Port Infrastructure and improving vessel loading and unloading productivity.
- 1.2 To ensure that all port stakeholders have a common understanding of the operations in the port. **Where reference is made to the National Ports Act 12, 2005, the Port Rules issued under Section 80(2) and Harbour Master Written Instruction Compliance to these sections are mandatory.**
- 1.3 Ensure safety, the interests of security, good order, protection of the environment and the effective and efficient working of the port as per the Port Rules.
- 1.4 To provide the Port of Richards Bay with berthing guidelines for each port.

2. DEFINITIONS

Act – Ports Act no.12 of 2005

Arrival – For port purposes & key performance measurement - time a vessel crosses the port limits or VTS limits

Berth – any area in the port where a vessel can safely dock

TNPA Berth Planner – An employee of TNPA responsible for safe planning of vessels at designated berths

Departure – time when a vessel crosses the breakwater leaving the port

Terminal Operator – a Licensed Terminal Operator Handling within the port

Terminal Berth Planner – An employee of a Terminal Operator responsible for proper planning or allocation of berths at a designated terminal

Port Manager – TNPA employee responsible for the overall management of the port

PSO – Port Security Officer

Harbour Master – TNPA employee employed as the Harbour Master and mandated by the Ports Act of 2005 to ensure safety of navigation in the interest of safety, security, good order, protection of the environment, effective and efficient working of the port.

Senior Operations Manager – A senior TNPA employee responsible for operations in a port

ISPS – International Ship and Port Security

IPMS - Integrated Port Management System

Mooring – method of securing a vessel to a berth – limiting movement

Shifting – when a vessel moves for more than 20m alongside the quay or from berth to another berth/inner anchorage within the breakwaters

Warping – when a vessel moves a maximum of 20m along the quay

Wind Bound – when the wind conditions are not conducive to either docking or sailing a vessel

Weather Bound – when the weather conditions are not conducive for vessel movements.

UKC – Under Keel Clearance

Liner vessels – Vessels with regular calls at almost regular times

Red Liners – vessel which require special permission and or times for entry due to size or type of cargo

SAMSA – South African Maritime Safety Authority

Key Commodities – Cargo that contributes significantly to the ports revenue

Resource allocation – deployment of Pilots, Tugs and Berthing Staff

Precinct – a collective of terminals

Terminal Operator – licence terminal operator as per section 56 and 57 of the National Ports Act.

Terminal Manager – Any person appointed by a licensed Terminal Operator as a Terminal Manager or in their absence, any person duly appointed to act in that capacity

Tidal Vessel – Vessels with a greater draft than the promulgated draft for the Port which requires additional water which can be obtained at high tides on approval by the office of the Harbour Master

Vessel Agency – It is a licensed port operator appointed by the vessel owner

Vessel Agent – A person appointed by a licensed & registered Agency to represent the vessel

Vessel Movement Interruption – A suspension of vessel movement as a results of adverse weather conditions or marine related delays for a specified period

Port Closure – A total closure of the entire port operation for a specified period.

3. PROCESS FLOWS ON IPMS

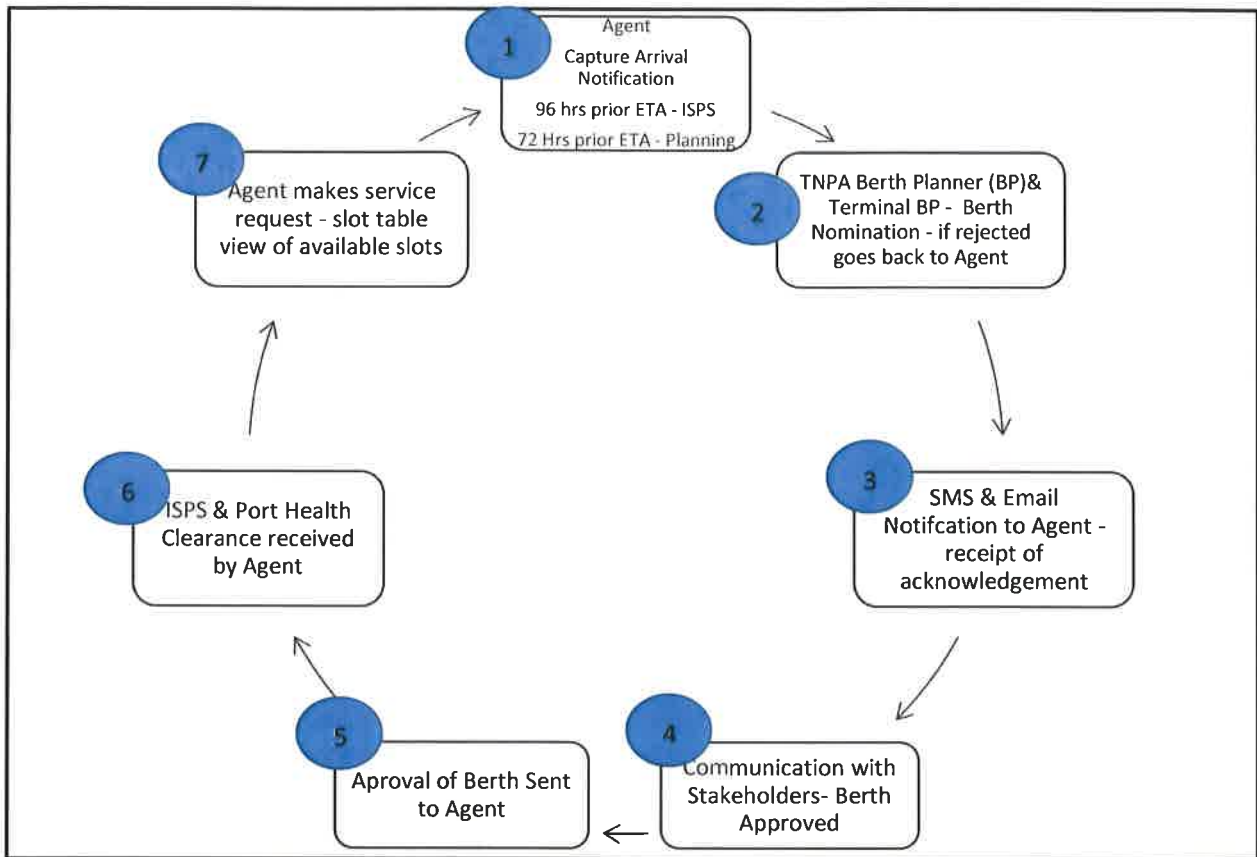


Fig 1: TNPA IPMS Process Flow

Note: Terminal notifications as required by the relevant terminal will also need to be complied with in terms of terminal procedures or systems.

4. ISPS CLEARANCE

All security regulated vessels must be ISPS cleared as per Maritime Security Regulations of 2004 prior to making a request for marine services on IPMS. The Security Office (PSO) will also be required to clear coastal vessels to ensure that no vessels enter that the port without ISPS clearance. This serves as a check for coastal vessels, where they cannot escape clearance due to omission by first port of call.

Off Port Limits Vessels - All vessels arriving off port limits for any services or interaction with any crafts will require ISPS clearance.

5. INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

All shippers, vessel agents and terminal operators must ensure compliance with the IMDG code, the South African Maritime Dangerous Goods Standards, Handling and Transport of Dangerous Cargoes - Procedures Manual.

Special attention shall be paid to the importing and exporting of Class 1 Explosives, which poses a significant risk to the port and port users. Class 1 Explosives will only be handled in designated areas of the port and under strict conditions as specified by the SAPS Explosives inspector, SAMSA and the Harbour Master of the Port.

Class 7 refers to radioactive substances and also requires approval from the National Nuclear Regulator and will require special conditions for its handling.

All persons handling dangerous goods or involved in the administration, planning or movement of dangerous goods must be appropriately trained as specified in the SAMSA Marine Notice no 28 of 2009 or any updated notices & amendments thereto.

All IMDG declaration must be made 72 hours prior to vessel arrival for Harbour Masters' approval.

6. RESOURCE ALLOCATION & ORDER OF WORKING

TNPA implemented Marine Operator Performance Standards (MOPS) in an effort to improve performance within the Marine Services Operations environment. In conjunction with Stakeholders the following measures were agreed to be MOPS key performance indicators. Slot utilization, slot efficiency, adherence to requested time (in relation Marine Services, Terminal Operator, Shipping Lines and Weather delays).

6.1 In line with Marine Operator Performance Standards (MOPS), which aims to offer an equitable, efficient, reliable and predictable Marine Services to all Shipping Lines, the port declared number of available Slots per day. These slots are based on available resources and port configuration.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	06h00	07h30	09h00	10h30	12h00	13h30	15h00	16h30	18h00	19h30	21h00	22h30	00h00	01h30	03h00	04h30
Slot	07h30	09h00	10h30	12h00	13h30	15h00	16h30	18h00	19h30	21h00	22h30	00h00	01h30	03h00	04h30	06h00

Fig 2: Port of Richards Bay – 1 Vessel move per 1.5 hours

6.2 As a general principle, all vessels will be serviced based on bookings made on Integrated Port Management System (IPMS) slot booking system and subject to the provisions of this policy, in compliance with the Ports Act and Port Rules.

6.3 A vessel, shall forfeit its booked slot, if it has not complied with all the normal and ordinary requirements for its berthing as prescribed by the Port Rules and the standard operating procedures of the Terminal Operator.

6.4 Under normal circumstances, first vessel to book a slot on IPMS will be served first. In the interest of safety, security, good order, protection of the environment and orderly working of the port, the Harbour Master will decide on how resources will be allocated taking into consideration the following:

- 6.4.1 Vessels with emergencies
- 6.4.2 Shipping back log recovery
- 6.4.3 Tidal vessels
- 6.4.4 Liner type vessels – time sensitive
- 6.4.5 Key commodities that contribute to the revenue of the port
- 6.4.6 Cargo sensitive vessels – e.g. passengers
- 6.4.7 Weather conditions

6.5 Harbour Masters also reserves the right to prioritize the vessels according to key commodities provided there are no competition issues. The order of priority will be as follows;

- 6.5.1 Passengers
- 6.5.2 Foreign Navy
- 6.5.3 Jobs of Special Nature (including Tug and Tow)
- 6.5.4 Bulk Carriers - Coal
- 6.5.5 Tankers – Chemical, products, Gas carriers
- 6.5.6 Draft Restricted Vessels
- 6.5.7 General Cargo vessels
- 6.5.8 Other – non cargo working vessels

6.6 The following key commodities have been identified in the port:

- 6.6.1 Coal – Port of Richards Bay
- 6.6.2 Liquid Bulk

6.7 The movement must only be booked at the start of a slot. The IPMS will only provide agent with selected start times of slot as per port designated slot table. This is to ensure that there is order in managing vessel movements throughout the day and to also avoid inconsistent service bookings.

6.8 Thirty Minutes will be allowed for Marine Services resources to be at the vessel and for the vessel to be ready. All Marine delay calculation will only commence after thirty minutes from the requested time. The TNPA Tariff book is to be consulted for additional charges and application thereof

6.9 The Vessel Traffic Controller (VTC) / Senior Vessel Traffic Controller (SVTC) will be able to drag a vessel back if a move can be accommodated and there is spare time and this will not impact negatively or cause misalignment for future slots.

Start and end of cargo times as well as cargo volumes will be required at the completion of every vessel to complete vessel visit on IPMS

7. ORDER OF PRIORITY BY BERTHS

Berths operated by Licensed Terminal Operators will have rights to prioritize cargo working vessel calls to these berths. Any substitution must be approved by the TNPA Berth Planner or Deputy Harbour Master. Cargo working vessels will take priority over other vessels – e.g. lay bye, bunkers, repairs, etc.

In the interest of safety, security, good order, protection of the environment and orderly working of the port, the Harbour Master may berth another vessel at the berth allocated to a Licensed Terminal Operator in consultation with the terminal operator. Conditions of lease agreements and terminal license must be consulted to ensure that the terminal operator's rights are maintained.

7.1 Vessels will be berthed in order of their seniority subject to;

7.1.1 The vessel being ready to commence cargo handling operations.

7.1.2 Sufficient cargo and / or cargo storage space being available to permit efficient cargo handling operations. For general cargo exports 80 % of the cargo must be on the ground and the remainder of the cargo must be enroute and such that the productivity of the berth is not affected. In the case of direct shipment, 100% of the cargo shall be in the port.

7.1.3 For vessels discharging and loading cargo, the 80 % rule for cargo availability will only be applied once the discharge operation has been completed. If 80 % of the export cargo is not available the vessel will be required to vacate the berth.

7.1.4 Should berth 804 be vacant a General Cargo vessel can choose to use the berth if a woodchip vessel is not expected within the next 12 hours.

7.1.5 Berth 609 to be used as an opportunity berth for phosphoric acid vessels.

7.1.6 Passenger vessels have preferential use of the following berths;

- Vessel draught of 7,5m and -190m LOA - Repair Quay
- For all vessels greater than the above - Berths 606, 607 & 708

7.1.7 The provisions of the Terminal Operator Guidelines are to be applied as per designated berths.

7.1.8 Vessels discharging bunkers to the Richards Bay Bunker Terminal and loading / discharging liquid chemicals to / from the leased sites in South Dunes will have preferential use of berth 209/208.

8. VACATING OF BERTH

- 8.1 Should a vessel be required to vacate a berth due to poor cargo performance and non-productiveness, the costs associated therewith shall be for the vessel's account, this will exclude situations arising from inclement weather.
- 8.2 In the case of inclement weather, the terminal requesting the vessel to vacate the berth for productivity reasons, shall bear the costs of the move.
- 8.3 Should a vessel waiting to berth, request a vessel to move off the berth and the request is accepted by both the Terminal Manager and all the senior vessels concerned, the cost of the moves on and off the berth will be to the account of the requesting vessel.
- 8.4 Should a vessel be required to vacate a berth due to a reason other than its own requirement, it will be berthed at the first opportunity after the reason for having to vacate the berth has fallen away.
- 8.5 Should a woodchip vessel require berth 804, vessels other than woodchip vessels will be required to vacate the said berth under the following conditions;
 - 8.5.1 At least 2 hours prior to the arrival of woodchip vessel at the anchorage,
 - 8.5.2 Within 12 hours of notification for such usage in the case of a woodchip vessel already in port,
 - 8.5.3 The cost of vacating the berth will be for the occupying vessel's account.
- 8.6 Should a phosphoric acid vessel occupy berth 609, it shall be required to vacate the berth at own cost, within 15 hours of arrival of the South 32 vessel.
- 8.7 Should a phosphoric acid vessel require berth 608, a definite 72 hour notice of arrival shall be given to the Berth Planner and the MPT Central Planning Office.
- 8.8 Should a general cargo vessel occupy berth 608 and a phosphoric acid vessel arrives, the General Cargo vessel will upon request, move to the next available MPT berth. In such an event the cost of the move will be borne by the phosphoric acid vessel. Such costs to be limited to TNPA's marine services charges only. Should no such berth become available, the General Cargo vessel may complete loading at berth 608 before the phosphoric acid vessel is berthed.
- 8.9 Should a vessel take up berth 608 within the 72 hours' notice of arrival of the phosphoric acid vessel, such vessel will be required to vacate the berth 15 hours after the arrival time of the phosphoric acid vessel. The cost of vacating the berth will be to the account of the occupying vessel.

9. WEATHER OPERATIONAL LIMITS

	Port Area	Maximum Limits
Wind Speed	Port Entrance	Approx. 35KTS
Swell Height	Port Entrance	Approx. 3.5M
Visibility	Outside Breakwater	Approx. 1 mile

Safe weather operating parameters for vessel types are approximate guidelines due to the variables in the maritime environment and subjected to the prevailing weather conditions and pilot's discretion.

10. PORT AND BERTH DRAFT LIMITATIONS

The list of all the berth depths and the maximum permissible draft of the berths – channels and basins are only good for the time at which the soundings were taken. The Harbour Master's office must be contacted for verification of berth depths & maximum permissible drafts.

BERTH	TYPE	LENGTH	DEPTH	DRAFT (MAX)	COPE LEVEL	LOA	DISP-T
Die Duine							
208	Chemical/Bunkers	300,0m	-16,0m	14,0m	+4,8m	225	90000t
209	Chemical/Bunkers	300,0m	-14,0m	12,5m	+4,8m	225	67000t
301	Coal/Bunkers	350,0m	-19,0m	17,5m	+5,2M	300	195000t
302	Coal/Bunkers	350,0m	-19,0m	17,5m	+5,2M	300	195000t
303	Coal	350,0m	-19,0m	17,5m	+5,2M	300	195000t
304	Coal	350,0m	-19,0m	17,5m	+5,2M	300	195000t
305	Coal	184,0m	-19,0m	17,5m	+5,2M	300	195000t
306	Coal	280,0m	-19,0m	17,5m	+5,2M		195000t
uMhlatuzi							
606	General	220,0m	-14,5m	13,5m	+5,2m	200	65000t
607	General	220,0m	-14,5m	13,5m	+5,2m	200	65000t
608	General	204,0m	-14,5m	13,5m	+5,2m	190	65000t
609	Bulk	300,0m	-14,5m	14,0m	+5,2m	230	65000t
Bayview							
701	Bulk	240,0m	-14,5m	14,0m	+5,2m	200	65000t
702	Bulk	300,0m	-19,0m	17,5m	+5,2m	270	150000t
703	Bulk	240,0m	-19,0m	17,5m	+5,2m	200	150000t
704	Bulk	220,0m	-19,0m	17,5m	+5,2m	200	150000t
705	Bulk / General	200,0m	-19,0m	17,5m	+5,2m	180	65000t
706	General	200,0m	-14,5m	13,5m	+5,2m	180	65000t
707	General	200,0m	-14,5m	13,5m	+5,2m	190	65000t
708	General	200,0m	-14,5m	13,5m	+5,2m	180	65000t
801	Bulk / General	260,0m	-19,0m	17,5m	+5,2m	230	85000t
804	Bulk / General	260,0m	-19,0m	17,5m	+5,2m	230	85000t
Small Craft Harbour							
Repair Berth		300,0m	-8,0m	7,5m	+4,3m	180	65000t
Dredger Berth		150,0m	-6,7m	N/A	+4,3m		
Tug Berth		180,0m	-6,7m	N/A	+4,3m		
Pilot Boat Berth		165,0m	-3,7m	n/A	+3,4m		
Harbour Craft Berth		150,0m	-3,7m	N/A	+3,4m		
Launch Jetty		170,0m	-3,7m	N/A	+3,0m		
Note: Datums CD = MSL- 1.205m : MSL = CD + 1,205mF							
<p>General notices & regulations: Vessels must arrive with the following minimum draughts, with the propeller submerged for safe navigation:</p> <p>Vessels with LOA up to 250m: Forward - 2% of LOA; Aft - 3% of LOA</p> <p>Vessels with LOA over 250m: Forward - 2,5% of LOA; Aft - 3,5% of LOA</p> <p>Maximum Permissible draft in channel 17.5m</p> <p>Maximum width restriction of 50m for vessels loading Coal</p> <p>Tidal vessels are approved up to 18m draft for Coal vessel subjected to the available window as indicated by the DMAX</p>							

Berth	Min. Distance between vessels	Remarks
Tankers, High risk & end of quay	30m	PIANC recommends 0.15 x LOA
General cargo Vessels	20m	PIANC recommends 0.1 x LOA
Coal Vessels (Cape Size)	40m	PIANC recommends 0.1 x LOA

11. DAYLIGHT ONLY MOVEMENTS

- 11.1 Vessels exceeding a particular length or breadth as per limitations.
- 11.2 Fishing vessels presenting language and or forward visibility problems
- 11.3 Double banking/de-coupling
- 11.4 No-main-engine movements
- 11.5 Towing immobilized vessels entering the port
- 11.6 Buoy Mooring- docking/undocking – as per port requirements
- 11.7 Dry dock movement in & out, Floating dock & synchro-lift movements
- 11.8 Any vessel over 370m and beam greater than 50m
- 11.9 Vessel of Special Nature

12. TIDAL VESSELS

There is increasing commercial pressure on the port to accommodate bigger and deeper ships. Obviously the operating limits for the port gives the limit of these vessels at chart datum and an allowance given for tide. Vessels wishing to berth shift or sail at a draft above the maximum permissible draft of the berth are allowed to do so only under the following conditions:

- 12.1 Vessel movement to be carried out at rising tide.
- 12.2 The vessel owner or designated representative to sign a letter of indemnity.
- 12.3 Submission of a tidal calculation to the Harbour Master's office for approval.
- 12.4 The under keel clearance at all states of tide must be not less than the Ports prescribed UKC.

13. SOME FACTORS TO BE INCLUDE IN THE PASSAGE PLANNING OF TIDAL VESSELS ARE LISTED BELOW (THIS LIST IS NOT EXHAUSTIVE):

- 13.1 Type of vessel / maneuvering characteristics
- 13.2 Size of vessel
- 13.3 Wind conditions
- 13.4 Current at the bar
- 13.5 Visibility
- 13.6 Speed
- 13.7 Squat
- 13.8 Increased draft due to list/rolling/heave
- 13.9 Type of bottom – sand, clay, mud or rock
- 13.10 Available tug assistance and bollard pull

14. MOORINGS

Mooring requirements will depend on the type of vessel, LOA, breadth, freeboard prevailing weather conditions, berth, bollard configuration - distance between bollards, bollard SWL.

The minimum mooring lines to secure a vessel under 200m, is 3 headlines, 2 spring lines forward, 3 stern lines and 2 spring lines aft. Alternatively 4 headlines, 2 breast lines, 2 springs, 4 stern lines, 2 breast lines and 2 springs for bigger vessels.

Additional mooring lines will be required to secure a vessel under special conditions i.e. surge, high swells, strong winds, etc. This is Subject to Master requirements and storm surge lines may be used only if safe to do so.

Special mooring arrangements need to be made with the Harbour Master of the port for unconventional vessels. A mooring plan needs to be submitted to the Harbour Master for approval. Ports will indicate minimum mooring requirements – especially for high risk berths and request for mooring plan for approval by Harbour Master for high risk vessels – prone to wind or swell, surge conditions and also passing vessel traffic.

It is the master’s responsibility to ensure that his vessel is secured & safe for cargo operations and the mooring lines are tendered to during loading and discharge operations.

The recommended Maximum speed in harbour to prevent breaking of vessel’s mooring lines is 6 Knots.

15. PILOTS BOARDING ARRANGEMENTS

All Pilots boarding arrangements must comply with IMO and local port legislations taking into account marine notices issued by SAMSA. Pilot ladder to be 2m above water, with two good manropes, for Marine Pilot boarding by a pilot boat. Pilot Boarding position for incoming vessels is 4NM South East of the South Breakwater. For a Marine Pilot boarding by a Helicopter, the Master of the vessel must make sure the deck is clear for obstructions.

Port Control may advise the vessel for a different pilot boarding position – this may vary due to vessel type or size, weather conditions and preferably distance from Breakwater subjected to the Marine Pilot discretion.

Limitation	Pilot Boat	Helicopter
Wind Speed	Approx. 35knots	Approx. 35 knots
Swell Height	Approx. +/-4m	Approx. +/-6m

**These limitations guidelines are subjected to prevailing weather conditions and Pilots discretion*

16. ASSOCIATED COSTS FOR VACATING BERTH

Should a vessel make use of a berth to which another vessel has preference, such vessel shall vacate that berth, as required, at its own cost.

Should a non-working or unproductive vessel be required to vacate a berth due to circumstances beyond the control of TNPA, the costs associated therewith will be for the vessel’s account.

Any surcharge applicable to the movement of such a vessel will be for the account of terminal or vessel requesting that service.

If the Harbour Master, for safety reasons, deems a shift to be necessary, the cost thereof will be for that vessel's account - this is subject to consultation with the relevant parties.

17. DISPUTE RESOLUTION

Should a dispute arise in the order of the berthing of a vessel, the involved parties will submit their reasons, in writing to the Harbour Master. The Harbour Master will give his/her decision, in writing, based on these written reasons together with any information gathered during any consultation that he/she may deem necessary, as soon as practicable.

18. AVAILABLE RESOURCES

Port	Tugs	Work Boats	Pilot Boats	Launches	Helicopter
Richards Bay	5	1	1	0	1

**The tugs in the port bollard pull range from 40 – 70 tons bollard*

19. PRECINCTS

PRECINCT	BERTH	COMMODITIES
RICHARDS BAY	301-306	COAL
	606-608	MPT-BREAK BULK
	706-708	MPT-BREAK BULK
	609, 701-705	DBT- DRY BULK
	801,804	DBT- DRY BULK
	208-208	LIQUID BULK
	REPAIR QUAY	PASSENGER & REPAIRS AND LAY-BAY
	TUG JETTY (Small Craft)	TNPA CRAFT (TUGS)
	YACHTS JETTY (Small Craft)	FOREIGN AND LOCAL YACHTS
	606,607	Used as an alternate for passenger vessels with draft over 7.5m and LOA greater than 190m