

TUAS F2 TERMINAL – INTERIM (T201-T216)

| BERTH | DEPTH A/S (m) | APPROACH DEPTH(m) | MAX LOA (m) | REMARKS |
|-------|---------------|-------------------|-------------|--|
| T201 | 23.0 | 22.9 | 378 | |
| T202 | 23.0 | 22.9 | 298 | |
| T203 | 23.0 | 22.9 | 400 | |
| T204 | 23.0 | 22.9 | 400 | |
| T205 | 23.0 | 22.9 | 400 | |
| T206 | 23.0 | 22.9 | 400 | |
| T207 | 23.0 | 22.9 | 400 | |
| T208 | 23.0 | 22.9 | 400 | A high spot of 22.9m exists approx. 80m perpendicular to WM 1935 |
| T209 | 23.0 | 22.9 | 400 | |
| T210 | 23.0 | 22.9 | 206 | |
| T211 | 23.0 | 23.0 | 400 | |
| T212 | 23.0 | 23.0 | 400 | |
| T213 | 23.0 | 23.0 | 400 | |
| T214 | 23.0 | 23.0 | 400 | |
| T215 | 23.0 | 23.0 | 400 | |
| T216 | 23.0 | 23.0 | 400 | |

PILOTAGE GUIDELINES

1 GENERAL INFORMATION

Berthing/Unberthing (Day/Night)

No restrictions.

2 DISTANCES TO DEAD END BERTH

| LOA OF VESSEL (m) | DAY/NIGHT CLEARANCE (m) |
|-------------------|-------------------------|
| ≤ 150 | 15 |
| >150 - 250 | 20 |
| >250 - 300 | 25 |
| >300 – 350 | 30 |
| >350 - 400 | 35 |
| >400 | 40 |

Note: Clearance is measured from the toe of the revetment when the dead end involves a slope revetment. When positioning vessel, the bridge position indicator should be used.

3 COMMUNICATIONS

Communication with the Terminal Wharf Supervisor:

- (a) **T201 to T210:** Walkie-Talkie Channel P08
- (b) **T211 to T216:** Walkie-Talkie Channel P07

BERTHING AND UNBERTHING RECOMMENDATIONS

- 1 All berthing vessels with LOA more than 100m (except to corner berths) are recommended to attain a heading parallel or nearly parallel to the line of wharf when the lateral distance from the berth is either 3 beams or 100m (whichever is lesser).
- 2 All berthing vessels are recommended to make an athwartship approach speed of not more than 0.3 knots when the vessel's lateral distance from the berth is 1 beam.
- 3 All berthing vessels are also recommended to keep the heading of the vessel within ± 2 degrees to the line of wharf, before landing on the fenders. In addition, the vessel's landing speed must not be more than 0.1 knots.
- 4 All unberthing vessels with LOA more than 100m (except from corner berths) are recommended to remain in a heading parallel or nearly parallel to the line of wharf until the lateral distance from the berth is 0.5 beam.

MOORING ARRANGEMENT RECOMMENDATIONS & TUGS ASSIGNMENT GUIDELINES

The following are recommendations for vessels mooring arrangement and guidelines for assigning tugs to vessel's berthing & unberthing:

| LENGTH OVERALL OF VESSEL (LOA) | MOORING ARRANGEMENT | NUMBER OF TUGS | REMARKS |
|--------------------------------|--|----------------|---|
| Up to 100 metres | FWD: 3 Headlines and 2 Spring Lines | 1 small tug | A vessel equipped with a suitable bow/stern thruster(s), in good working condition, may dispense with the |
| 101 to 180 metres | AFT: 3 Stern lines and 2 Spring lines | 2 medium tugs | |

| | | | |
|----------------------|--|------------|---|
| 181 to 299 metres | FWD: 4 Headlines, 2 Spring Lines AFT: 4 Stern lines, 2 Spring lines | 2 big tugs | need for a tug in that position. |
| 300 metres and above | FWD: 4 Headlines, 2 Breast lines, 2 Spring Lines AFT: 4 Stern lines, 2 Breast lines, 2 Spring Lines | 2 big tugs | Pilot in consultation with master, may order an additional tug when bow thruster is confirmed not working, unreliable or not in good working condition. |

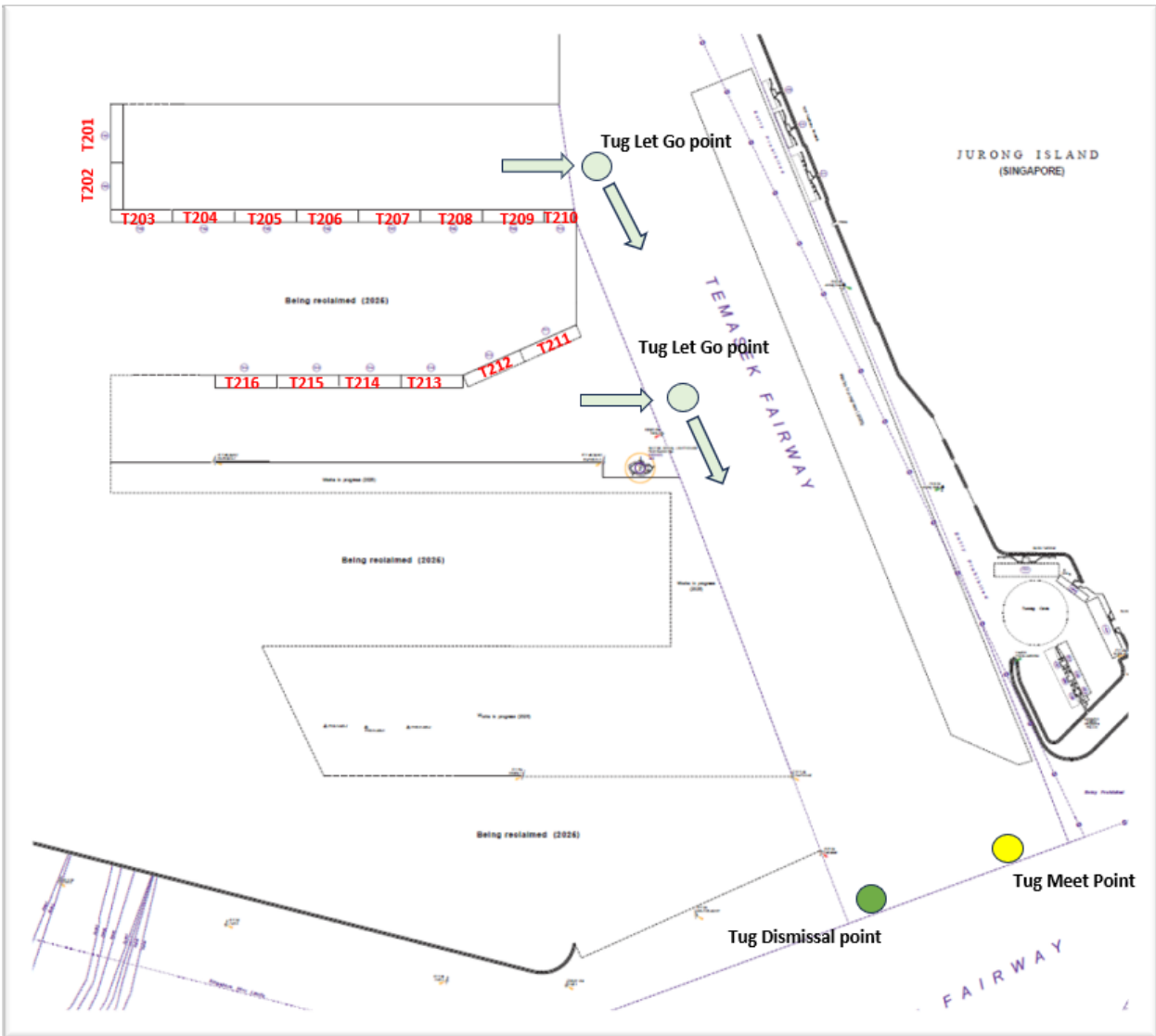
BERTHING & UNBERTHING PROCEDURES

| SEQUENCE | BERTHING PROCEDURES | ACTION BY |
|----------|---|----------------------------------|
| 1 | Pilot to check that the vessel's whistle is in working order. | Pilot |
| 2 | Pilot to confirm tug requirements with tug service provider when passing Rasu buoy (approaching from PWBGB) or TVE5 buoy (approaching from PWBGA) | Pilot/ Tug service provider |
| 3 | Tug service provider to respond with names of attending tugs | Tug service provider |
| 4 | Pilot to notify Jurong Control (JC) when passing abeam of Rasu buoy or TVE5 buoy on Hague plan VHF Channel 22 | Pilot/ MPA (JC) |
| 5 | Pilot to check with TT Control Room (TT CR) when passing Rasu buoy or TVE5 buoy to ensure that the berth is ready to receive the vessel. | Pilot/ TT CR |
| 6 | Pilot may call MCC for assistance in alerting TT CR. | Pilot/ MCC/ TT CR |
| 7 | Pilot to call Wharf Supervisor (WS) on Walkie-Talkie (WT) channel P08 to check bridge bow distances, berth readiness and confirm side to wharf | Pilot/ WS |
| 8 | To be done before vessel approaches the berth: - <ul style="list-style-type: none"> • Placement of bridge marker • QC to be parked in correct position and boomed up • Mooring men to be ready | WS |
| SEQUENCE | UNBERTHING PROCEDURES | ACTION BY |
| 1 | Pilot to check whistle is in operational condition | Pilot |
| 2 | Pilot to contact WS and tug(s). If unable; contact MCC to alert TT Control Room MCC will contact TT CR to alert Wharf Supervisor | Pilot / Tug(s)/ MCC/ WS |
| 3 | Pilot to call Jurong Control (JC) to notify vessel's departure on Hague plan VHF Channel 22 | Pilot/ MPA (JC) |




| SEQUENCE | POSITIONING OF QUAY CRANES | ACTION BY |
|-----------------|---|--|
| 1 | Shift Duty Manager shall ensure that quay cranes (QC) not working over any vessel must be boomed up during un/berthing operations in the area | SDM |
| 2 | <p>QC at the allocated berth where a vessel is to be un/berthed must be boomed up. The positioning of the QC is to be carried out in the following order of priority: -</p> <ol style="list-style-type: none"> 1. All QC to be positioned at least 30 m away from the bow and stern, i.e. outside the vessel's wharf marks or 2. All QC within the ship's length to be position near amidships; or 3. Pilots to be informed if (1) and (2) above could not be met. If required, pilot may order additional tug to assist in the un/berthing. 4. Master/Pilot could request that selective cranes be boomed up due to inclement weather conditions, strong winds, vessels with poor manoeuvring qualities or cranes which detrimentally affect the angle of approach/departure of the vessel. 5. SDM to notify MCC and pilot of any QC which cannot be boomed up or under repair with the boom down. In the event of breakdown, the Emergency Procedures would be initiated. The safety distance from the boom down QC would generally be as follows: i) for vessels having to pass the QC - 100m ii) for vessels which do not have to pass the QC (i.e. QC ahead or astern and away from the direction of the movement of the vessel) - 50m. 6. During berthing operations, QC should not be lowered until vessels are properly secured to the wharf marks and in position with 3 lines and a spring at each end. If this practice is not being observed by TT, pilots are to inform Wharf Supervisor immediately and on returning to the office, inform the Duty Manager for follow-up action. | <p>TT</p> <p>Pilot</p> <p>SDM/ WS/ Pilot</p> <p>Duty Manager</p> |
| SEQUENCE | EMERGENCY PROCEDURES | ACTION BY |
| 1 | Container Equipment Specialist (CES) should keep a sharp lookout and boom up their respective cranes should they observe that a vessel is closing in towards them and creating a dangerous situation. | CES |
| 2 | In an emergency, Master/Pilot would sound the vessel's whistle comprising one prolonged blast followed by the two short blasts (-..) to alert the crane operator to take evasive action accordingly. The WS should also be informed that the vessel is experiencing an emergency the times of the sounding the signal and informing the Berthing supervisor should be logged in the vessel's logbook. | <p>Pilot</p> <p>WS</p> |

CHARTLET:

Chartlet is for illustration purposes only, not to be used for navigation. For navigation, mariners are advised to use the appropriate BA nautical charts.



Legend:

| | | |
|---|----------------------------|---|
|  | Tug meet Point | - |
|  | Tug Dismissal Point | - |
|  | Tug Let Go Point | Tug's line must not be released earlier than this point. However, if the pilot deems it necessary to keep the tug until the Tug dismissal point, he may do so. |