Taichung Port Vessel Traffic Service Guidelines

Port of Taichung, Taiwan International Ports Corporation
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Contents

I. Introduction

The Guidelines are provided to uphold the order of vessels navigating in Taichung Port and maintain and improve navigation safety and efficiency. It is strongly recommended for all vessels navigating in and around Taichung Port to keep the Guidelines at the bridge for the reference of navigation planning.

II. General

1. Waters and facilities of Taichung Port

(1) Harbor size: the harbor covers a total area is 11,285 hectares, including 8,381 at sea and 2,904 on land.

(2) Harbor orientation: the harbor is oriented to north-west-north (WNW).

(3) Channel information: the main channels of harbor are 350 m wide; the effective width of south and north main channels is 400 m.

(4) Turning basins: the north basin is 1,000 m in diameter and the south basin is 1,100 m in diameter.

(5) Contour facilities: the south breakwater is 1,397 m and the north breakwater is 2,818 m long. The surrounding sea walls, including north embankment, north sea wall, north and south inner breakwaters and south sea wall, sum up to a total of 21,600 m.

2. Traffic separation scheme

Every vessel shall comply with Traffic Separation Scheme, promulgated by Port Authority, and follow the requirements of COLREG, prescribed in Rule 10, to ensure the safe passage

maneuvering of ships when approaching and navigating within the harbor.

(1) The Separation Zone is within the area defined by connecting the following coordinates:
Point A: 24°17'37".7N, 120°28'58".4E
Point B: 24°17'47".7N, 120°28'04".4E
Point C: 24°17'15".7N, 120°28'04".4E

(2) Inbound vessels should navigate in the inbound lane in the south side of the separation zone. Inbound course: 065°T.

(3) Outbound vessels should navigate in the outbound lane in the north side of the separation zone. Outbound course: 294°T.

(4) The main channel extends from the south breakwater to 300 meters west of the south breakwater has been designated a one-way channel.

3. Harbor Anchorage (see Appendix 4 for map of harbor anchorage range)

(1) The outer anchorage is located 1 to 4 miles southwest of the south breakwater. It covers an area defined by connecting the following coordinates:

Point A: 24°16'51".7 N, 120°29'40".4 E

Point B: 24°16'51".7 N, 120°28'59".4 E

Point C: 24°15'48".7 N, 120°27'01".4 E

Point D: 24°15'48".7 N, 120°26'12".4 E

Point E: 24°13'59".7 N, 120°25'47".4 E

Point F: 24°13'59".7 N, 120°27'59".4 E

(2) It is recommended that small vessels of less than 120 meters in length and less than 7 meters in draft should anchor 1 to 1.5 miles southwest of the south breakwater where the depth is about 8 to 15 meters. This area offers good shelter during a northeast monsoon.

(3) It is recommended that vessels of 120 meters to 200 meters in length and less than 11 meters in draft should anchor 2 to 3 miles southwest of the south breakwater where the depth is about 15 to 20 meters.

(4) It is recommended that vessels of more than 200 meters in length or more than 11 meters in draft should anchor 3 to 4 miles southwest of the south breakwater where the depth is about 20 to 30 meters.

III. Taichung Port Reporting Mechanism

1. Marine VHF Radio Communications (VHF):

Taichung VTS: VHF Channels 14 and 16, 24 hours service.

(1) Location: Lat. 24°17'23".7 N Long. 120°31'01".4 E

(2) Call sign: Taichung VTS

(3) VHF channels:

1. Channel 16 (156.8 MHz) for Distress, Emergency, Safety and Calling.
2. Channel l4 (156.7 MHz) for ETA reporting; for message exchange (Ship-Shore, Ship-Pilot).
3. Channel 12 (156.6MHz) for harbor craft (tugs, pilot boat) and Pilot on duty.

(4) Service Range: About 20 miles.

(5) Message Contents:

1. Ship arrival and departure.
2. Navigational warnings.
3. Emergency matters.

(6) Service Priority:

1. Distress, Emergency and Safety.
2. Ships request for departure.
3. Ships request for entry.
4. Ships at anchor.

(7) Languages:

1. English: According to Standard Marine Communication Phrases (SMCP)
2. Chinese: Mandrin

(8) Remarks: VHF voice communications shall use plain language. Secret codes or private communications are not allowed, unless approved by Port Authority.

(9) Calling Procedures: In accordance with International Radio Communication Procedures.

2. Estimated Time of Arrival (ETA):

Every vessel should report to Taichung VTS on Channel 14 when 20 miles or 2 hours in advance of arrival and should comply with the Regulations prescribed in the IMO Standard Ship Reporting System by stating:

(1) ALFA: Ship's name and call sign.

(2) CHARLIE/DELTA: Ship's position

(3) INDIA: ETA at Pilot station

(4) QUEBEC: Defects, damage, deficiencies and limitations.

3. Reporting Ship's Arrival:

Every vessel should again report to Taichung VTS on Channel 14 when the ship's position is 5 miles off the south breakwater and should comply with the IMO Standard Ship Reporting System by stating:

(1) ALFA: Ship's name

(2) DELTA: Bearing and distance from the south breakwater.

(3) HOTEL: ETA at Pilot Station.

4. Entry Permit:

When entry permit is granted by Taichung VTS, the vessel should proceed to west south west side of the south breakwater, join inbound route in sequence, and approach Pilot Boarding Ground to receive the Pilot, while maintaining a listening watch on Channel 14 and complying with the IMO Standard Ship Reporting System by stating:

(1) ALFA: Ship's name

(2) DELTA: Bearing and distance from the south breakwater.

(3) FOXTROT: Ship's speed

5. Vessels Intending to Drop Anchor in Outer Anchorage of Taichung Port:

A vessel intending to drop anchor and await berth shall report her intention to Taichung VTS when the ship's position is 5 miles off the south breakwater. The ship shall maintain a listening watch on Channel 14 with particular caution for inbound and outbound vessels proceeding in the fairway. The vessel shall report to Port Radio its anchor time and anchor position immediately after anchoring and shall comply with the IMO Standard Ship Reporting System by stating:

(1) ALFA: Ship's name

(2) BRAVO: Time of anchor

(3) DELTA: Anchor position (bearing and distance from the south breakwater).

6. Application for Departure:

A departing vessel should apply to Taichung VTS on Channel 14 to get permission to depart after the Pilot is on board or before the vessel casts off its berth. When departure permission is granted, the vessel can leave the berth while maintaining a listening watch on Channels 14 and 16 and complying with the outbound Rules of Port Authority.

7. Application for Shifting Berths:

A vessel desiring to shift berths should apply to Taichung VTS on Channel 14 to get shifting permission after the Pilot is on board or before the vessel casts off its berth. When shifting permission is granted, the vessel can be shifted while maintaining a listening watch on Channels 12 and 14 and complying with the shifting Rules of Port Authority.

8. Distress, Emergency and Safety Communications:

When a vessel is in distress, or in case of an emergency, the event should be reported to Taichung VTS as soon as practical on Channel 16. Taichung VTS should be given all relevant information about the event and the message should comply with the Rules and Procedures of ITU.

Remarks:

The positions shown in this booklet longitude and latitude are based on WGS-84 System. Vessel with a harbor chart of GRS-67 System, the latitude should be moved 0'.12 northward and the longitude should be moved 0'.5 westward.

IV. Control Criteria for Entering and Exiting Taichung Port

1. Definition

(1) Normal time: periods other than those of limited visibility and typhoon.

(2) Limited visibility period: fog is frequent at Taichung Port from February to May every year, which creates limited visibility.

1. When the visibility is such that the light at the south inner breakwater lighthouse cannot be seen with the naked eye from the signal station (approximately 740 meters).
2. When the visibility is such that the light at the south inner breakwater lighthouse can be seen but the light at the south breakwater lighthouse cannot be seen with the naked eye from the signal station (approximately 1,650 meters).

(3) Typhoon period: period from the announcement of sea and land typhoon warning by Central Weather Bureau (CWB) (covering the ports and areas operating under Taichung Port) to 24 hours after the land alarm is lifted.

(4) Wind speed determination priority:

1. Average wind speed measured by the anemometer installed on the north and south breakwaters;
2. Average wind speed measured by the anemometer at the Vessel Traffic Service (VTS);
3. Data provided by CWB Wuqi Weather Station.

(5) Average wind speed: wind speed averaged across 10 to 15 minutes of data measured by the anemometer .

(6) Idle load: Ships destined to the port as the unloading port, upon unloading the cargo, are deemed as idle load.

2. Control criteria for entering and exiting Taichung Port

(1) Normal time:

1. Vessel entries may be suspended when the average wind speed is measured at 20m/s or more (approximately level 8 on Beaufort wind force scale) and showing an upward trend after 2 hours of continuous observation or according to forecasts (for vessels of noncompulsory piloting or emergency entry, the criterion is flexible depending on the actual weather conditions); the suspension may be lifted as appropriate provided that the environmental conditions permit and safety is confirmed by the ship master and pilot; for less than 20m/s, the pilot may decide whether to pilot the vessel as appropriate depending on the maneuverability of the piloted vessel, tug boat capacity, tidal levels, sea currents and location of wharf or water.
2. The suspension of vessel entries may be lifted when the average wind speed drops below the control criterion (20m/s) for 2 consecutive hours of observation or the wind speed forecast indicates a downward trend.

3. For Liquid natural gas (LNG) vessels shall apply to the "Operation Directions on the Arrival, Departure, and Mooring of Liquefied Natural Gas Tankers at/from the Port of Taichung" in Appendix 3 shall apply.

(2) Limited visibility period:

1. The movement of all vessels (inbound, outbound, or shifting) will be suspended when the visibility is such that the light at the south inner breakwater lighthouse cannot be seen with the naked eye from the signal station (approximately 740 meters).
2. The movement of all vessels (inbound, outbound, or shifting) with limited marine radar and/or maneuverability will be suspended temporarily when the visibility is such that the light at the south inner breakwater lighthouse can be seen but the light at the south breakwater lighthouse cannot be seen with the naked eye from the signal station (approximately 1,650 meters).
3. During foggy conditions all vessels should comply with the rules of COLREG, keep a sharp lookout, and keep listening watch on Channels 14 and 16.
4. When there is a sudden change in weather conditions and visibility drops below minimums for safe operations, a vessel already entering or departing the harbor may proceed at the master's sole decision, keeping safety paramount at all times and assuring full responsibility for the ship's operation.
5. Vessels movement will be started again when the visibility is such that the light at the south breakwater lighthouse can be seen from the signal station with the naked eye.

(3) Typhoon period (according to the "Table of Summary on Operating Regulations governing Vessels Entering and Exiting and Mooring/Berthing at the Port of Taichung"):

1. When CWB announcing the sea and land typhoon warning which are encompassing the Taichung area (including all levels of typhoon), and the measured average wind speed has reached Beaufort wind force Scale level-8 (with wind speed being at17.2m/s~20.7m/s) or stronger at the north breakwater, all vessels entering and exiting the port operation may be temporarily suspended.
2. Liquid natural gas (LNG) Tankers:
   (1) Following a land typhoon alert is announced, indicating it might invade the port in the next 12 hours, all LNG vessel entering the port would be suspended.
   (2) Following a sea typhoon warning has been announced, LNG vessels shall swiftly exit the port; following a land typhoon warning has been announced, when the typhoon critical areas encompass the harbor, LNG vessels shall exit the port for sheltering against the wind within 4 hours.
3. Following a land typhoon alert has been announced, and when the Central Weather Bureau forecasting the typhoon paths are likely to encompass the port of Taichung

area in the next 8 hours, vessels mandated to exit the port for sheltering against the wind or to move the berth are as follows:

(1) Passenger ships and vehicles carrier with a gross tonnage are more than 30,000 metric tons.;
(2) All container ships;
(3) Idling bulk carriers with a gross tonnage are more than 25,000 metric tons;
(4) Vessels moored at the port's east/west diaphragm walls and the west docks shall all coordinate the branch company's instructions to move and berth at other docks.
(5) Dangerous goods carrier (including tankers, chemical goods carrier and the like):
   i. Idling dangerous goods carrier and Non-idle dangerous goods carrier with a gross tonnage more than 5,000 metric tons shall exit the port for sheltering against the wind.
   ii. Non-idle dangerous goods carrier with a gross tonnage are 5,000 metric tons or less , if not exiting the port, the ship master or the agent shall sign the "Affidavit for Voluntary Lingering in the Harbor for Vessels that are Supposed to Exit Port during a Typhoon" and is also to adhere to the Commercial Port Law and the Regulations on Port Services at Commercial Ports and related regulations to devise proper pollution prevention and stepped-up mooring lines and related typhoon-prevention safety measures, to be eligible to linger in the port for wind sheltering.
(6) Offshore wind farm work vessels:
   i. Vessels carrying large wind turbine components (non-idle), the large wind turbine component carried shall be unloaded to shore and the vessel stay in port unloaded. .
   ii. In case that a vessel carries a large wind turbine component that is unable to be unloaded to shore shall exit port for wind sheltering if refuses to exit port, the ship owner or the agent is to sign the "Affidavit for Voluntary Lingering in the Harbor for Vessels that are Supposed to Exit Port during a Typhoon" and is also to adhere to the Commercial Port Law and the Regulations on Port Services at Commercial Ports and related regulations to devise proper pollution prevention and stepped-up mooring lines and related typhoon-prevention safety measures, to be eligible to linger in the port for wind sheltering.
   iii. For the vessel berthing sequence, check the "Table of Summary on Operating Regulations governing Vessels Entering and Exiting and Mooring/Berthing at the Port of Taichung. When the assigned berth is not available, the unassigned offshore wind farm work vessel shall prepare as early as possible to exit the harbor to seek shelter against the wind.

4. The vessels that have arrived at outside the port area's perimeters shall all exit the harbor to seek shelter against the wind.
5. Of vessels not mandated to exit the port for sheltering against the wind, if the onsite judgment or signs indicating there are certain hazards, the branch company may request said vessel to exit the port for sheltering against the wind.

6. Vessels permitted to linger within the port area are still urged to stringently inspect the ship conditions, cargo loading and related situations, and where deemed necessary are best to exit the port for sheltering against the wind as early as possible. If determined to exit the port for sheltering against the wind, shall ready the preparations as early, and also need to exit the port at the specified schedule.
7. Upon implementing a temporarily suspension work on vessels entering and exiting the port, and when the typhoon storm perimeters leave the harbor area, also with average wind to be lower than the control baseline figure (level-8 wind) and lasts for 2 hours, the port entering and exiting operation may resume.

V. General Information and Sailing Direction for Ships Calling at Taichung Port

1. General Information for Vessels inbound, outbound and shifting berth:

(1) Information for entry, exit and berth shift:

1. Inbound Vessels

(1) Every vessel should make contact with Taichung VTS on Channel 14 when 5 miles from the south breakwater lighthouse, so as to receive a full appraisal of the traffic situation and of the risk of collision with inbound and outbound vessels. All vessels shall proceed with particular caution in areas near the separation zone and the inbound lane.

(2) Inbound Vessels shall wait for outbound vessel to clear the one-way channel and shall not impede the safe passage of outbound vessels by as sufficient sea room as possible. Vessels entering or departing the harbor are not allowed to pass or overtake each other in one-way channel.

(3) Inbound vessels from the north and west shall stay 1.5 nautical miles or more away from the north breakwater lighthouse according to the traffic separation scheme. Passing through the separation zone is not allowed. Instead, vessels shall go around and enter the harbor from the southwest inbound lane and approach the pilot boarding ground heading 065°(T).

(4) Inbound vessels from the south or anchorage shall enter the port from the south navigation lane according to the traffic separation scheme and approach the pilot boarding ground heading 065°(T) and toward the port approach sector light.

(5) Inbound vessels shall gradually make a turn into the main channel after passing by the pilot boarding ground, heading 065°(T) to 114°(T). A 3-stage turn should allow the vessel to align with the center of main channel. Observe the main channel sector light and directional light in the neighborhood of Dock 8A to correct the vessel's position and stay centered in the channel.

(6) While waiting for entry, vessels shall drift beyond 4 nautical miles from the north breakwater lighthouse without hindering any inbound or outbound vessel. Start the approach into the inbound channel only when instructed by Taichung VTS.

(7) A non-compulsory piloted vessel applying to enter the harbor should comply with the Rules of TSS, and abide by directives issued by Taichung VTS.

2. Vessels shifting berth and exiting port

(1) The master of a outbound vessel should consider the following factors before sailing in the strong monsoon season: the prevailing wind direction and force, the sea and current conditions, main engine capacity, ballast condition, draft,

and other relevant factors which affecting the safety departure of the vessel. In order to avoid any extra expense for tugs, linemen or pilotage, etc., the pilot should be arranged by the agent after Master confirms that the vessel is ready to sail safely.

(2) A vessel which employs a pilot to shift berth or to depart should apply for permission from Taichung VTS. A non-compulsory piloted vessel planning to shift berths or depart should first apply for permission from Taichung VTS after being ready to sail. Such vessel shall keep in touch with Taichung VTS at all times. All vessels are prohibited from moving without first obtaining permission.

(3) Sailing vessels should fill all ballast tanks to minimize the freeboard and reduce the effects of a strong wind. A panamax vessel should have heavy ballast condition in her No.4 cargo hold to make fore draft about 6 meters and aft draft about 8 meters. A cape-size vessel should have heavy ballast in her No.6 cargo hold to make fore draft about 8 meters and aft draft about 11 meters. Main engine should be warmed up in excellent condition prior to sailing in order to facilitate a quick speed up.

(4) If a departing vessel is delayed from casting off for more than 30 minutes, it must reapply for permission before casting off.

(5) The outbound vessel shall not start the exit until an inbound vessel arrives at the first turning basin. As the vessel clears the main channel and passes by the south breakwater, it shall start the exit heading 294° (T) according to the traffic separation scheme and keep a safe distance of approximately a nautical mile from the north breakwater lighthouse. Once leaving the separation zone, the vessel shall turn north or southwest and steer away from the harbor.

(6) The Pilot will bring a departing vessel to the fairway near the inner breakwater after the Master fully understand the prevailing circumstances and traffic conditions, the pilot will disembark the vessel. As soon as the Pilot has left the outbound vessel, the Master should speed up his vessel immediately to avoid strong winds from affecting steering, and he should apply proper leeway as necessary.

(7) The departing vessel shall keep a sharp lookout for arriving vessels and/or through traffic when the vessel is navigating near the north breakwater. Those vessels should maintain a good listening watch on Channel 14 and keep in touch with Taichung VTS if it is in doubt of the risks of collision.

(2) Special precautions for monsoon seasons:

1. Northeastern monsoon: The NE monsoon season generally starts in September and

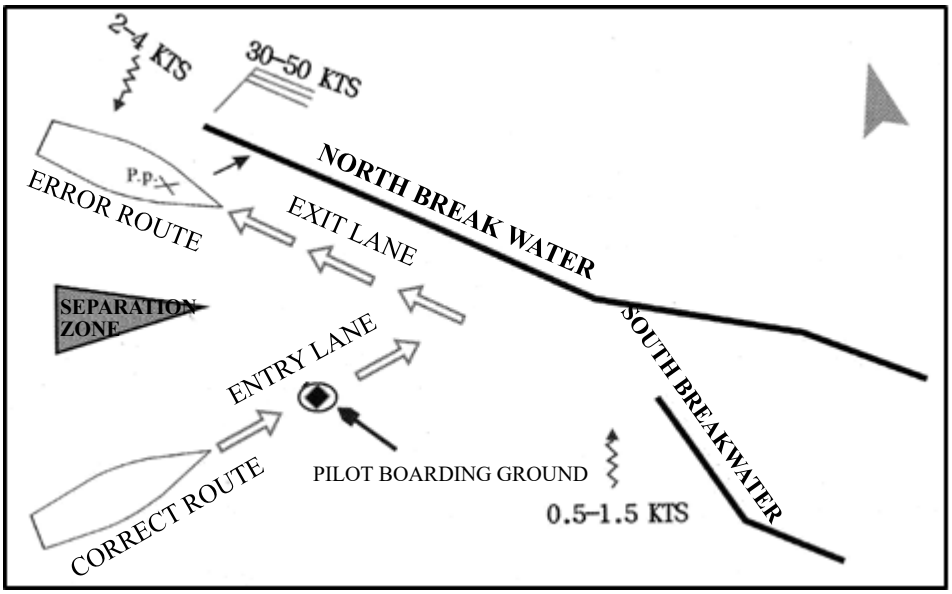
continues thru March next year. During this period, the wind direction is mostly NNE with wind forces up to 30 to 50.

(1) Knots which produce strong SW currents near the end of the north breakwater, drifting 2 to 4 knots. When an inbound vessel has approximately 1/4 of her length inside the north breakwater, the strong cross current, aided by a strong wind on her port side, will push her port quarter and veer her bow drastically to the north. This tendency will be exacerbated by the wind effect.

(2) It is possible for an inbound vessel to touch the north breakwater on her port bow if the ship's position is too close to the breakwater. Also, there is a counter current of about 0.5 to 1.5 knots near the south breakwater.

(3) Inbound vessels shall maintain an approach speed about 6 to 10 knots in order to steer effectively.

(4) Refer to the following drawing:



2. The SW monsoon: The SW monsoon season generally starts in April and continues thru September. During this period, wind direction is SW to SSW, with wind force of 15 to 30 knots.

(1) The currents set in the NNE, drifting 0.5 to 2 knots near the north breakwater. An inbound vessel should keep well clear of the north breakwater.

(2) There is a northward current at high tide, which easily pushes outbound vessels toward the north breakwater. Therefore, it is necessary to maintain proper leeway and good speed.

(3) Other information:

1. Vessels proceeding in the designated lane shall maintain a safe distance. Anchoring in the traffic lane is prohibited.
2. When the length of the tow, measured from the stern of the towing vessel to the after

end of the tow, exceeds 200 meters or the breadth exceeds 45 meters, permission to engage in towing operation within the harbor area should be obtained from Port Authority not less than 2 hours in advance.

3. A ship carrying dangerous cargo, when maneuvering, anchoring, berthing/unberthing, or handling cargo, shall display international code flag “B” or exhibit a red flashing light.

2. **Notes for anchorage:**

(1) A vessel intending to drop anchor shall navigate with particular caution and shall avoid the separation zone by as wide a margin as is practical. An anchor position is normally recommended by Taichung VTS.

(2) Avoiding Separation Zone: Vessels entering or leaving anchorage shall, so far as practical, pass west of the separation zone while proceeding from or to the north and avoid crossing the separation zone.

(3) Anchored Vessels: Harbor has a depth of 8 to 25 meters with a sand ground. During a northeast monsoon, especially when the wind force is over 7 on the Beaufort scale, anchor dragging often occurs. All anchored vessels are required to maintain a proper anchor watch at all times, a listening watch on Channels 14 and 16, and main engines at standby.

(4) Prohibited Anchoring: Anchoring is prohibited in the area east of longitude 120°25' E, west of the harbor entrance, and north of the line formed by connecting coordinates a, b, c, and d stated in Part II item C. (Also shown on Chinese Navy Chart No.0357). This area is designated as the inbound and outbound fairway under the Rules of Traffic Separation Scheme. Vessels are not allowed to anchor or stay in this area or to impede the safe passage of inbound and outbound vessels.

(5) Quarantine Anchorage: All vessels from infected areas, and those which have not been granted radio free pratique, shall temporarily anchor at the turning basin or as directed by the Pilot for quarantine purposes.

(6) Additional Prohibited Anchoring: Anchoring is also prohibited in the main channel, turning basin, and separation zone, except in case of an emergency.

VI. Vessel Traffic Service (VTS) Operations Rules

The main tasks of the vessel traffic service (VTS) center of Taichung Port, call sign Taichung VTS, are port control, vessel-shore communications and vessel traffic services. The center is on watch 24-7 for service.

The center:

1. Processes forecasts and check-ins for vessels making entry, exit and berth shift;
2. Keeps listening to VHF Ch 14 and 16;
3. Provides information of vessel traffic in the port;
4. Assigns berth, and
5. Manages vessel entries and exits, vessel traffic service and navigation safety.

VII. Annexes

1. General Information for Ship's Mooring

(1) The assignment of tugs to assist vessels alongside berth, shifting berth, or departing. Tugs should be arranged according to "the rule for the operation of tug's assistance in Taichung Port ". If a vessel is fitted with a bow thruster, the Pilot may consider the use of one or two tugs depending on the weather conditions and other relevant factors.

(2) The tide range in the port of Taichung is larger than the general prevailing tide range. There is no mooring boat service for vessels while docking and undocking. Mooring ropes are brought ashore by a vessel's heaving line. The bollards on berths 33, 34, 44, 45, 101, 102 and 103 are bigger and require the proper size rope-eyes.

(3) All vessels should have sufficient UKC (Under Keel Clearance) while going alongside or shifting berths. The deepest draft of the vessel cannot be over the limitation draft for each berth which is declared by the Port Authority.

(4) Alongside docking of vessels

1. Only one vessel is allowed to dock alongside next to another vessel. In principle, the outer(seaside) vessel shall not be longer than the LOA of the inner(shore side) vessel. The width of alongside docking should not compromise navigation safety in principle. A request shall be proposed to Port of Taichung for any special need.
2. If a vessel carrying liquid chemicals requests to dock alongside another vessel for offloading to the latter shall comply with " the rule of ship to ship transfer for chemical vessel."
3. No docking, except for work boats, is allowed when a land typhoon warning has announced and covers Taichung Port.

(5) Due to the strong wind effects for high freeboard vessels while alongside berth Nos.1, 2, 3,4, 4A, 9, 10, 11, 44, and 45,it is suggested that in the winter monsoon such vessels should be made fast with 5 pieces of head line (stern line), 2 pieces of breast line, and 2 pieces of spring line. The breast line of vessels alongside berth Nos.1, 2, 3, 4 and 4A should be made fast to the storm bollards on shore.

(6) For the safety of crew, if the tug line is provided by the tugboat, the tug line should be slacked easily by the heaving line while letting go.

(7) The maximum tide range is about 5 meters in Taichung Port. Gangways should be rigged properly for safe boarding and leaving. Mooring ropes should be checked and adjusted at all times.

(8) A vessel requires a fixed point berthing. Before she comes alongside, the ship's agent shall notify the Pilot of the bridge sign to assure berthing at the exact proper position.

2. General information for pilotage application

(1) Taichung Port is classified as a compulsory pilot district.

(2) For vessels registered in the Republic of China with more than 1,000 GRT, except for those which not compulsory pilotage, and those foreign flag vessels of more than 500 GRT, a pilot shall be hired in order to navigate a compulsory pilotage area or enter/exit a port of compulsory pilotage. For the boarding of pilot, the shipping agent or ship master shall submit the request to the Taichung Port Pilot Office in advance and confirm over telephone an hour before exit or berth shifting.

(3) An inbound vessel should call Taichung VTS on Channel 14 at least 2 hours in advance of its arrival at the Pilot Boarding Ground and report its ETA. The vessel should call again when it is 5 miles off the south breakwater in order to arrange Pilot boarding.

(4) Pilot boarding ground: the pilot boarding ground is located 0.6 ~1 nautical mile west of the south breakwater at 274° (T), close to 24°17 '30"N and 120°29 '24"E. The boarding ground may be relocated by the pilot depending on the type and maneuverability of vessel, sea states and weathers.

(5) The Pilot will bring a departing vessel to the fairway near the inner breakwater, steady her course on 294° (T), and then leave the ship. If the Master desires the Pilot to remain with his vessel until it reaches the outer breakwater, such request should be submitted to Pilot Office in advance. The Pilot shall not refuse to render this service unless it is during the night, during adverse weather, or under other special circumstances. The Master should note this service on the certificate of pilotage for extra fees.

(6) When the pilot requests boarding or disembarking, the vessel shall comply with "International Convention for the Safety of Life at Sea."(SOLAS) regulations prescribed in Article 17, Chapter 5, and rig a pilot ladder 1 meter above water surface on the ship's lee side. The pilot ladder shall be located at:

1. The starboard side for inbound vessels during the northeastern monsoon season; the pilot or VTS shall be consulted for the location of pilot ladder during the southwestern monsoon season.
2. The port side for outbound vessels regardless of the season.
3. The outboard side for vessels docking at west wharves for pilot's boarding and disembarking.

(7) When a laden ship with low freeboard is receiving a Pilot in heavy weather, it is recommended that the pilot ladder should be rigged on a deck level higher than the main deck for the safe transfer of the Pilot.

Appendix 1 The IMO Standard Ship Reporting System(SRS)

All ship reports should be sent in the standard reporting coded format. This format complies with IMO resolution A.851(20). Following table gives all the components of the GEOREP （Georgian Ships Reporting System -"GEOREP"）reports.

This system is used throughout the Guide. An abbreviated version of the full system is shown below.

Telegraphy	Telephone	Function	Information required
A	Ship	Ship	Name and call sign, MMSI, flag of the ship
B	Time	Date and time of event	A 6 digit group event giving day of month and hours and minutes in Universal Co-ordinated Time (UTC). If other than UTC, state time zone used.
C	Position	Position	A 5-digit group giving latitude in degrees and minutes, decimal, suffixed with N/ and a 6-digit group giving longitude in degrees and minutes, decimal, suffixed with E.
D	Position	Position	True bearing (first 3 digits) and distance (state distance) in nautical miles from a clearly identified landmark (state landmark)
E	Course(s)	True course	A 3 digit group
F	Ship's speed	Speed in knots and tenths of knots	A 3 digit group
G	Departure Port	Port of departure	Name of the last port of call. e.g. Marseilles
H	Entry	Date, time and point of entry into system	Entry date and time expressed as in (B) and entry position expressed as in (C). [e.g. vessel entering GEOREP
I	Destination & ETA	Destination and expected time of arrival	Name of the destination port and the expected date and time of arrival at the port. Time group expressed as in (B).
J	Pilot	Pilot	State whether a deep-sea or local pilot is on board
K	ETD from GEOREP	Date, time and point of exit from	Estimated date, time and position the vessel exits from GEOREP coverage. Date & time

Telegraphy	Telephone	Function	Information required
		system or arrival at the ship's destination	expressed as in (B) and exit position expressed as in (C).
L	Route Information	Route Information	Route information in Latitude and Longitude should be given for each way point (WP) in the GEOREP area expressed as in (C).
M	Communication	Radio communications	State full name of station/ and frequencies guarded. [e.g. radio-telephony (RT), radio-telegraphy (WT), Radio telex, INMARSAT etc
N	Time of next report	Time of next report	Time of next report. Time the next position or deviation report will be sent. Date/time group expressed as in (B)
O	Draught	Maximum present static draught in meters	Draught in meters and centimeters (e.g. 8.0m = 8.0).
P	Cargo	Cargo on board	A brief indication of cargo carried on board [e.g. . Bulk coal, General, Chemicals etc]. IMDC No. for dangerous cargo.
Q	Defects, damage, deficiency, limitations	Defects /damage/ deficiencies/ other limitations	Brief details of defects, damages or other deficiencies (e.g. radio equipment)
R	Pollution /dangerous goods lost overboard	Description of pollution / dangerous goods lost overboard	Brief details of type of pollution (oil, chemicals etc.) or dangerous goods lost overboard; position expressed as in (C) or (D) (See detailed reporting requirements)
S	Weather	Weather conditions	Brief details of weather and sea conditions prevailing
T	Ship's owner and agent	Ship's representative and / or owner	Name and contract number of the owner and ship's agent who could be contracted for information about the Ship's whereabouts and crew details.
U	Size and Type	Ship size and Type	Details of length, breadth, tonnage and type,

Telegraphy	Telephone	Function	Information required
			etc., as required
V	Medic	Medical personnel	Doctor, Physician's assistant, nurse, personnel without medical training.
W	Persons	No of POB	State the total number of persons on board. [e.g. 28 crew =W.28].
X	Remarks	Miscellaneous	Any other useful information . including , as appropriate, brief description of incident and of other ships involved either in incident, assistance of salvage
Y	Relay	Request to relay report to another system	Content of report
Z	End of report	End of report	No further information required

Appendix 2 Leading Light

A. Taichung Harbor Light House:

Position: 24°17'16".9 N 120°31'23".6 E

Characteristic: Fl. (3) 30s 62m 26.8M

Nominal Range: 26.8 N.Miles

B. North Breakwater Light House:

Position: 24°17'58".9 N 120°29'11".4E

Characteristic: Fl.G.4s 21.9m17.5M Racon(M)

Nominal Range: 17.5 N.Miles

Racon(M): Frequency (every 40 seconds); Range (15 N.Miles)

C. South Breakwater Light House:

Position: 24°17'24".6 N 120°30'02".2 E

Characteristic: Fl.R.2s 21m 14M Racon(F)

Nominal Range: 14 N.Miles

Racon(F): Frequency (every 75 seconds); Range (15 N.Miles)

D. North Inner Breakwater Light House:

Position: 24°17'18".7 N 120°30'49".1 E

Characteristic: Fl.G.3s 13.4m10.3M

Nominal Range: 10.3 N.Miles

E. South Inner Breakwater Light House:

Position: 24°17'06".4 N 120°30'42".8 E

Characteristic: Fl. R. 3s 13.6m10M

Nominal Range: 10 N.Miles

F. Port Approach Sector Light:

Position: 24˚17'41".5 N 120˚29'54" E

Characteristic: F. GWR11m 11- 14M

Red sector: 057˚.5 – 062˚.5 11M

White sector: 062˚.5 – 067˚.5 14M

Green sector: 067˚.5 – 072˚.5 11M

Nominal Range:11-14 N.Miles

G. Main Channel Directional Light (front):

Position: 24˚16'57".2 N 120˚31'25".2 E

Characteristic: F. GWR 45m17M

Nominal Range: 17 N.Miles

H. Main Channel Directional Light (rear):

Position: 24˚16'46".6 N 120˚31'51" E

Characteristic: F. 70m9.6M

Nominal Range: 9.6 N.Miles

Appendix 3 Operation Directions on the Arrival, Departure, and Mooring of Liquefied Natural Gas Tankers at/from the Port of Taichung

Amended on July 5th, 2019

I. For the best utilization of berths, and enhancements in the safety of harbors and operational efficiency, the Directions are hereby enacted pursuant to Article 23 of 'The Commercial Port Law' and Article 6 of 'The Regulations on Port Services at Commercial Ports.'

II. Declaration and Application for Liquefied Natural Gas (LNG) Tankers upon Arrival at and Departure from the Port

A. To ensure the operational safety of LNG tankers arriving at and departing from the Port, the ship owner or his/her agents shall submit a copy of the Safety Pledge Letter each to the Port of Taichung, Taiwan International Ports Corporation, Ltd. and to The Chinese Marine Pilot Association, Taichung Office for recordation before the ship arrives at the Port for the first time or after the ship is docked for repair. The content of the Safety Pledge Letter shall include:

1. General Arrangement
2. Ship's Particular
3. General Equipment
4. Voyage Schedule
5. Accident Management

B. The ship owner or his/her agents of the LNG tanker shall go through the port arrival and departure formalities 24 hours before the tanker arrives at or 12 hours before the tanker departs from the Port.

C. Before the LNG tanker arrives at or departs from the Port, the shipmaster/vessel representative onboard shall first confirm that the navigation is safe and secure upon arriving at and departing from the Port before faxing (Fax No. 04-2656-9267) the "LNG Tanker Check List for the Arrival at/Departure from Taichung Port" (as in Attachment 1) to the Port Control Unit (i.e. Vessel Traffic Service (VTS), similarly hereinafter).

III. Operations of, Conditions for, and Restrictions on LNG Tankers in the Arrival at and Departure from the Port

A. All LNG tankers, which have the intention of arriving at the port, shall contact and notify the Port Control Unit of its arrival time when the vessel is about 20 nautical miles from the Port of Taichung, or two hours prior to arriving at the Port.

B. When the LNG tanker is arriving at or departing from the Port, the tugboat shall act as a fireboat, and the guard ship shall lead and alert others and shall standby for action the whole way. While the LNG tanker is sailing, no other ships may sail within two nautical miles in front, one nautical mile behind, and 150 meters from either side of the tanker.

C. Weather Conditions for and Restrictions on the Arrival of LNG Tankers at the Port

1. When the average wind speed exceeds 15 m/sec.(Wind speed observation sequence: wind speed of North breakwater set up by CPC Corporation, wind speed of North breakwater set up by Harbor and marine technology center, Pilot obtain trustworthy data on their own, or sea weather data publish on Central Weather Bureau website blue way item)
2. When the daytime visibility is within two nautical miles.
3. When the ocean current velocity is greater than 2.5 knots.
4. When the significant wave height (H 1/3) within the northern breakwater sheltered area is higher than 2.5meters.
5. When after a thunderstorm, storm, and land warning for typhoon are issued and may hit the Port in the following 12 hours.

D. LNG tankers are restricted to arriving at and departing from the Port only during the daytime and under good weather conditions and, in principle, are arranged to arrive at and depart from the Port in the time periods from after sunrise to 7 AM and from 10 AM to before sunset.

E. The ETA of the LNG tanker to the Port shall, as much as possible, be adjusted so that it arrives at an appropriate time in order to, in principle, avoid anchoring. The LNG tanker is only allowed to wait in the territorial waters four nautical miles away from the southern breakwater lighthouse and shall maintain a safe distance of at least one nautical mile away from other anchored ships.

IV. Safety Inspection of LNG Tankers in Arriving at and Departing from the Territorial Waters of the Port

A. To ensure smooth and safe operations of the LNG tanker in arriving at and departing from the Port, the Port Control Unit shall observe and record the territorial waters, wind force, and sea state of the Port, and conduct inspection and confirmation of guidance ship (also guard ship) and tug boat (also fireboat) to their locations and situations of pilots to the ships.

B. The Port Control Unit fills in “Safety Inspection List of LNG Tankers in the Arrival at/Departure from the Territorial Waters of the Port of Taichung” in accordance with the actual observation and situation.

V. Permit of LNG Tanker’s Arrival at and Departure from the Port

A. The LNG tanker shall go through and complete the port arrival and departure formalities in accordance with regulations and fax the “LNG Tanker Check List for the Arrival at/Departure from Taichung Port” to the Port Control Unit.

B. After the LNG tanker, which is 20 nautical miles away from the Port’s southern breakwater lighthouse, has completed the arrival report to the Port Control Unit, the LNG tanker shall apply for the arrival permission to Port Control Unit by VHF separately, once at 10 nautical miles away and once at 5 nautical miles away from the southern breakwater lighthouse, and shall wait for the pilot boarding at an appropriate location 2 nautical miles away from the Port’s southern breakwater lighthouse. Any LNG vessel which is without either the permission from the Port Control Unit or the guidance of the pilot is not allowed to arrive at the Port.

C. Before departing from the Port, the tanker shall apply for the departure permission from the Port Control Unit after the pilot has boarded the ship and may cast off the mooring line only after receiving the approval of departure from the Port Control Unit.

VI. Emergency Notification and Contingency Operations

A. During the operational process of arriving at and departing from the Port, the LNG tanker shall keep close contact with the Port Control Unit. When emergency or abnormal conditions occur, the shipmaster/vessel representative onboard shall notify the Port Control Unit using the VHF.

B. When emergency or abnormal conditions occur, the LNG tanker shall immediately adopt necessary emergency contingency measures in accordance with the accident disposal method of the Safety Pledge Letter to prevent the accident from expanding.

C. If disaster occurs to the ship, depending on the actual situation, the Port of Taichung, Taiwan International Ports Corporation, Ltd. will tow the ship away from the berth or tow the ship out of the Port.

VII. Relevant Regulations in Mooring the LNG Tanker in the Berth

A. The LNG tanker shall hang the “B” flag of the International Maritime Signal Flags during the daytime and display a red light during the nighttime at the most obvious and easy-to-see location. During the period that the LNG tanker is moored at the dock, it shall be configured with one tugboat with firefighting equipment near the amidships to act as an alert, warning other ships to not get close, and shall, in addition, be configured with one tugboat of a considerable level on standby near the West 15 dock.

B. When the LNG tanker is docked at the berth, the bow shall face away from the Port (port side alongside) and the tanker may not be anchored. If the anchor must be dropped due to the affects of wind force and current velocity, the anchor shall be immediately pulled up after having moored properly. If too much of the anchor chain is released and cannot be completely recovered, one of the shackles shall be exposed on the deck, so that it can be taken apart at anytime.

C. After the LNG tanker is docked, two 40-fathom tow ropes with enough strength to tow the tanker shall be prepared, the grommets of the tow ropes shall be vertically hung separately at the outboards of the bow and stern to the surface of the water. One end of the rope is attached tightly to the bollard inside the tanker.

D. During the period the LNG tanker is docked to unload cargo, enough duty crew shall remain and the main engine, navigation instruments, and other important navigation equipment shall be maintained at a normal standby mode to ensure that said ship can sail away from the dock in a short period of time when receiving a notice.

E. During the period the LNG tanker is docked, the shipmaster is responsible to order the crew on duty that they shall adjust the length of the ship’s mooring line according to the ship draft and tide fluctuation.

F. After the sea warning for typhoon is issued, the LNG tanker shall, in principle, adopt quick unload/quick load, and shall sail away from the Port as soon as possible after completing the loading/unloading operations. After the land warning for typhoon is issued and the warning zone of the typhoon covers the Port, the LNG tanker shall depart from the Port within four hours to take shelter.

VIII. Other precautions related to the operations of LNG tankers arriving at and departing from the Port, these shall be handled in accordance with 'The Commercial Port Law,' 'The Regulations on Port Services at Commercial Ports," and "Operating Instructions on Ships Arriving at, Entering, and Departing from the Port of Taichung."

IX. Those violating these rules shall be penalized in accordance with relevant laws and regulations.