

## Taipei Port Vessel Traffic Service Manual (English Version)

I. In order to enhance vessel traffic service of waterways, to ensure safety of vessels' navigation, to protect the marine environment of surrounding waters and to provide Vessel Traffic Service user timely information and necessary assistance within the limits of the Vessel Traffic Service coverage, this manual is compiled and edited by Taiwan International Ports Co. Ltd. (TIPC) – Port of Keelung TIPC, The Commercial Office of Taipei Port.

II. Geographical Position and Survey of Port Area:

### A. Geographical Position

Taipei Port is geographically located between the south coast of *dan shui* River, *ba li* Dist., New Taipei City, the northern of Formosa and offshore area of *ruishu kengxi xikou*, *lin kou* District. It is protected by Mt. *guan yin* and close to Taiwan strait. The east is 34 nautical miles off the Keelung port; the south is 87 nautical miles off the Taichung port; the west is 134 nautical miles off the *Fuzhou* port, China.

### B. Demarcation of Port Area (WGS84)

- 1) The centre of the port area is located at 25°09'49" N and 121°21'29" E.
- 2) The following information is the astronomy coordinates of port area, like attachment Figure.1
  - Position A : 25°09'40.35" N and 121°24'21.35" E.
  - Position B : 25°11'31.10" N and 121°22'36.41" E.
  - Position C : 25°09'30.55" N and 121°19'09.20" E.
  - Position D : 25°07'38.49" N and 121°20'27.89" E.
- 3) The total land area of port is 3,091 ha.

### C. Facilities

- 1) Commercial Docks: there are 22 commercial docks total, consisting of 15 docks in the east (docks #1 ~ #7, docks #10 ~ #17) , 6 docks in the north (docks #1 ~ #6) and 1 dock in the south (docks #9) . For more relevant information, please visit <http://kl.twport.com.tw/tp/>
- 2) Outline Breakwater
  - North breakwater 5,263 m; South breakwater 1,550 m; Logistics & Warehousing breakwater 2,730 m; Sum: 9,543 m.
- 3) The water way and depth of turning basin water, please refer to the webpage.
- 4) Navigation and Warning Light Sign: look the attached chart for more details
- 5) Navigation Light Pole of North Outline Breakwater (25°09'18.5" N and 121°21'30.9" E), set the radar beacon. (Response Code is T).
- 6) **Precautionary area**

Given that the southern ends of traffic lane is the area with high shipping traffic density in which vessels inbound and outbound, ship movements are difficult to predict. Precautionary area is established from breakwater to traffic lane. To recommend vessels to pay close attention to the surrounding situations, especially recommend the inbound vessels must wait for the outbound vessels entering the traffic lane, and be allowed to sail to pilot station by VTS.

Position 1 : 25°10.62' N and 121°20.22' E.

Position 4 : 25°10.08' N and 121°19.00' E.

Position LT7 : 25°08.82' N and 121°19.78' E.

Position SB6 : 25°09.04' N and 121°21.11' E.

Position P4 : 25°09.33' N and 121°20.89' E.

Position P2 : 25°09.58' N and 121°20.76' E.

D. Taipei Port Chart, please refer to the chart code released by Naval METOC Office R.O.C. 04512, 0354B, and 0355

### III. Hydrology and Climate

#### A. Wind

The spring or summer wind speed is less than 10 m/s, about 88.55% ~ 92.8%; the fall or northeast winter wind speed is more than 10 m/s, about 19.2% ~ 24.8%; the fall, winter, and spring seasons are influenced by northeast wind. Wind direction is mainly blowing to the northeast; the wind direction of summer season has changes, blowing to the south.

#### B. Typhoon

Typhoon always comes on July, August, and September, with the most occurrences in August.

#### C. Rainfall

Occurrence of rainfall is mostly in May, June, and September, with over 10 mm/day. Average annual rainfall is about 55.1 days.

#### D. Foggy Day

The visibility of foggy days is less than 1 km. The number of foggy days is more in February and March.

#### E. Tidal

The average tidal range is about 1.93 m.

### IV. Necessary Notice Before Entering The Port

A. Shipowner or Shipping Agent should go online, applying for entering forecast permit to get the ship serial code within 24 hours before entering the port.

B. Shipowner or Shipping Agent should apply for berth application in Taiwan Port Service Net in order to have a good organization and management of the entering schedule.

C. According to the regulations, should contact VTS on VHF channel 68 when the ship is entering 20 nautical miles off the breakwater center of Taipei port to complete the registration procedures (Ship to Shore Communication Matters No.9)

D. Double check with VTS on VHF channel 68 when the ship is arriving at 5 nautical miles off the port breakwater.

### V. Anchoring instructions

A. Should contact VTS on VHF channel 68 before the ship has anchored.

B. The ship is suggested to anchor to the north breakwater (green light tower) about 1 – 1.5 nautical miles of north anchorage area. The following four connecting lines are the range of anchorage area (WGS84), the rest of the port area is prohibited to anchor:

25°10'13.8" N and 121°20'35.4" E

25°10'58.2" N and 121°22'04.8" E

25°10'38.4" N and 121°22'24.0" E

25°09'52.2" N and 121°20'52.2" E

C. Should report the ship status to the VTS on VHF channel 68 after it has anchored.

### VI. Entering Permit

**A. The inbound vessels must wait for the outbound vessels entering the traffic lane, and be allowed to sail to pilot station by VTS.**

B. It is opened 24 hours to enter/depart to the port. Before entering the port, the ship should apply for entry into the VTS by using VHF channel. Upon permission of the VTS, however, the VTS should be adjusted according to the actual situation and change the order of arrival and departure.

- C. When entering the port, please follow the TSS. The width of the port channel is 400 meters. It extends about 200 meters around the baseline of the North – South Breakwater Connection Center. When passing the northern end of the breakwater, notifies the VTS by using VHF channel. (Notified by the approved captain for non-compulsory pilotage) to be used as a basis for recording the time it took to enter the port.
- D. The ship has entered this port from the red and green beacon spaces at sea port (the width of the port channel is 400 meters and the extension of 200 meter around the baseline of the North – South Breakwater Interchange Center).
- E. The navigation channel of the preceding paragraph adopts the principle of "single entry and single exit" and "first exit and backward entry", and the ship itself should maintain a safe distance from the previous one by virtue of its own ship self-maneuvering performance.
- F. Please pay attention to the announcements issued in this port.

#### VII. Berthing Service

- A. The ship should be berthed at the dock and be moored in the designated dock.
- B. If the same dock has been temporarily berthed for more than two ship to actually reach the Taipei North Harbor Breakwater (Green Beacon), keeping the 10 nautical miles time outside the dock for berthing order.

#### VIII. Departing Permit

- A. 12 hours before leaving the port, the ship should be selected by Shipowner or Shipping Agent to apply for the ship departing permit.
- B. Before departing, the ship should apply with VTS by using VHF channel 68. After approving, the ship may depart in order. However, the VTS should be adjusted in accordance with the actual situation and change the departing order.
- C. When the ship is surpassing the north outline breakwater, the pilot should report to the VTS by using VHF channel 68 to keep it as a record.

#### IX. Communications

- A. There is the VTS set up on the 9<sup>th</sup> floor of the administration building of this port. VTS control system and AIS are set up there. It is under monitor by an operator for 24 hours in order to have a great operation. It is used for the communications of the coast and the vessels during entering/departing.
- B. Radio Channel of port network:
  - 1. VHF Channel 16: 156.8 MHz is the international distress, emergency, safety and communication channel.
  - 2. VHF Channel 68: 156.425 MHz is the working channel of the port operation. It can be used as communication of the coast and registration of the ship.
  - 3. VHF Channel 11: 156.550 MHz is used as pilotage operation.
  - 4. Call Sign: Taipei Port Radio (VTS)
- C. Radio Channel of shift network:  
In order to serve as a communication channel of VTS, pilot, tugboat, and vessel traffic, the frequency is 141.07 MHz
- D. The ship and VTS use VHF channel for communication. Used languages are Chinese and English
- E. The ship should report the following notices to the VTS:
  - 1. Registration: when the ship is entering 20 nautical miles off the outline of the breakwater of the Taipei port.
    - a. Ship name, call sign, surpassing 20 nautical miles time
    - b. Position

- c. Direction and speed
  - d. Estimated time of arrival to pilot station (ETA)
  - e. Other unusual situation
2. Confirmation: when the vessel is arriving 5 nautical miles off the breakwater of the port.
    - a. Ship name, call sign, surpassing 5 nautical miles time
    - b. Position
    - c. Entering or anchoring preparation (anchorage position)
  3. Entering or Departing Application
  4. Anchoring or Heave up anchor
  5. The embark or disembark vessel time of pilot
  6. Move the position to the new anchorage area or dock
  7. Special abnormalities

#### X. Pilot Service

- A. According to the law of pilotage, beside the following ships, it should be applied for the pilotage to enter/depart to the port/dock.
  1. Military Naval Vessel
  2. Official Ships
  3. Pilot boat
  4. Taiwan R.O.C. Vessel which is less than 1000 overall tonnage or Foreign Vessel which is less than 500 overall tonnage
  5. Ferryboat
  6. Yacht
  7. Other domestic routes approved by the local administration of navigation administration or harbor projects.
- B. The navigation light pole of north breakwater which has the astronomical position, like 25°09'56.303" N and 121°20'1.822" E, 2.95° 1.5 nautical miles called as a pilot station.
- C. The ship shall be self-employed pilot, and the ship shall be applied by a Shipping Agent in advance for radial pilot in order to arrange the pilot to assist the pilotage operation. In addition, the pilot should be informed on time and place of the diversion to the leading pilot, directly connected with the captain.
- D. Under normal weather conditions, before the ship entering the port, it should waiting for the pilot to lead the boat in the pilot station. If night time waves over 3.5 meters or wind speed over Beaufort 7 and day time waves over 4 meters or wind speed over Beaufort 8, the pilots will suspend the pilotage service. The pilotage service will be resumed, whenever the sea conditions become acceptable. During the suspension period, if the captain considers that it is safe and manageable and safety evaluation has been done by the pilot, then she could follow the pilot's instruction to enter the harbor where the pilot embarks inside the breakwater.
- E. Pilot embark and disembark position:
  1. Embark position: Vessels under 300 meters in length or container ships under 10,000 TEU shall take the pilot at 1.5 nautical miles from breakwater. Vessels within 300 to 350 meters in length or container ships within 10,000 to 14,000 TEU shall take the pilot at 1.5 to 2.2 nautical miles from breakwater. Vessels under 350 meters in length or container ships under 14,000 TEU shall take the pilot at 2.2 nautical miles from breakwater.

2. Disembark position: Generally, vessel should be led out of the breakwater by pilot. Under safety consideration, pilot can disembark at SB5 directional lights under the agreement of the master of the ship. After disembarking, the remote/ shore based pilotage should implemented until the vessel sails out of the breakwater.

#### XI. Port Service

- A. This port has 6000, 5000, 4000, 3200, and 2800 sets of horsepower tugboat each vessel. The ship which is entering/departing is operated by private companies in accordance with “key points of tugboat transfer in Taipei port”, applying for assistance to private tug company.
- B. This port has three pilot boats operated by private companies, if it is a necessary, the company may apply to the radial.
- C. Untying the mooring rope, pumping the water, receiving the waste water oil, kitchen, and crew cabin, garbage collection and transportation services are operated by private companies.

## ATTACHMENT

## Taipei port leading lights ( WGS84 )

No.	Position	Characteristic		Nominal Range
LT5 South Breakwater Light House	N 25 ° 09' 00.00" E 121 ° 21' 39.70"	Fl. R. 5s 18.7m 14.6M Racon(T)	Flash : 1 second Eclipse : 4 seconds Total : 5.0	14.6
LT1 North Breakwater Light House	N 25 ° 09' 18.50" E 121 ° 21' 30.90"	Fl. G. 5s 17.48m 12.2M	Flash : 1 second Eclipse : 4 seconds Total : 5.0	12.2
LT3 North Inner Breakwater Lights	N 25 ° 09' 23.618" E 121 ° 22' 18.478"	Fl.(2) G. 4s 10.0m 10M	Flash : 0.5 second Eclipse : 0.5 seconds Flash : 0.5 second Eclipse : 2.5 seconds Total : 4.0	10
LT7 Directional Lights	N 25 ° 08' 49.45" E 121 ° 19' 46.96"	Fl.(2) W. 5s 18.0m 10M	Flash : 0.4 second Eclipse : 0.6 seconds Flash : 0.4 second Eclipse : 3.6 seconds Total : 5.0	10
SB5 Directional Lights	N 25 ° 09' 15.89" E 121 ° 22' 05.04"	Fl. G. 4s 5.0m 10M	Flash : 1 second Eclipse : 3 seconds Total : 4.0	10
SB6 Directional Lights	N 25 ° 09' 02.28" E 121 ° 21' 06.43"	Fl. R. 4s 5.0m 4M	Flash : 0.5 second Eclipse : 3.5 seconds Total : 4.0	4
SB8 Directional Lights	N 25 ° 09' 02.13" E 121 ° 22' 16.49"	Fl. R. 5s 5.0m 12M	Flash : 0.5 second Eclipse : 4.5 seconds Total : 5.0	12
SB10 Directional Lights	N 25 ° 09' 14.08" E 121 ° 22' 43.61"	Fl. R. 5s 5.0m 12.5M	Flash : 0.5 second Eclipse : 4.5 seconds Total : 5.0	12.5

※Institute of Transportation. MOTC's Oceanographical observation pile position :

N 25 ° 10' 54"  
E 121 ° 22' 32.7"

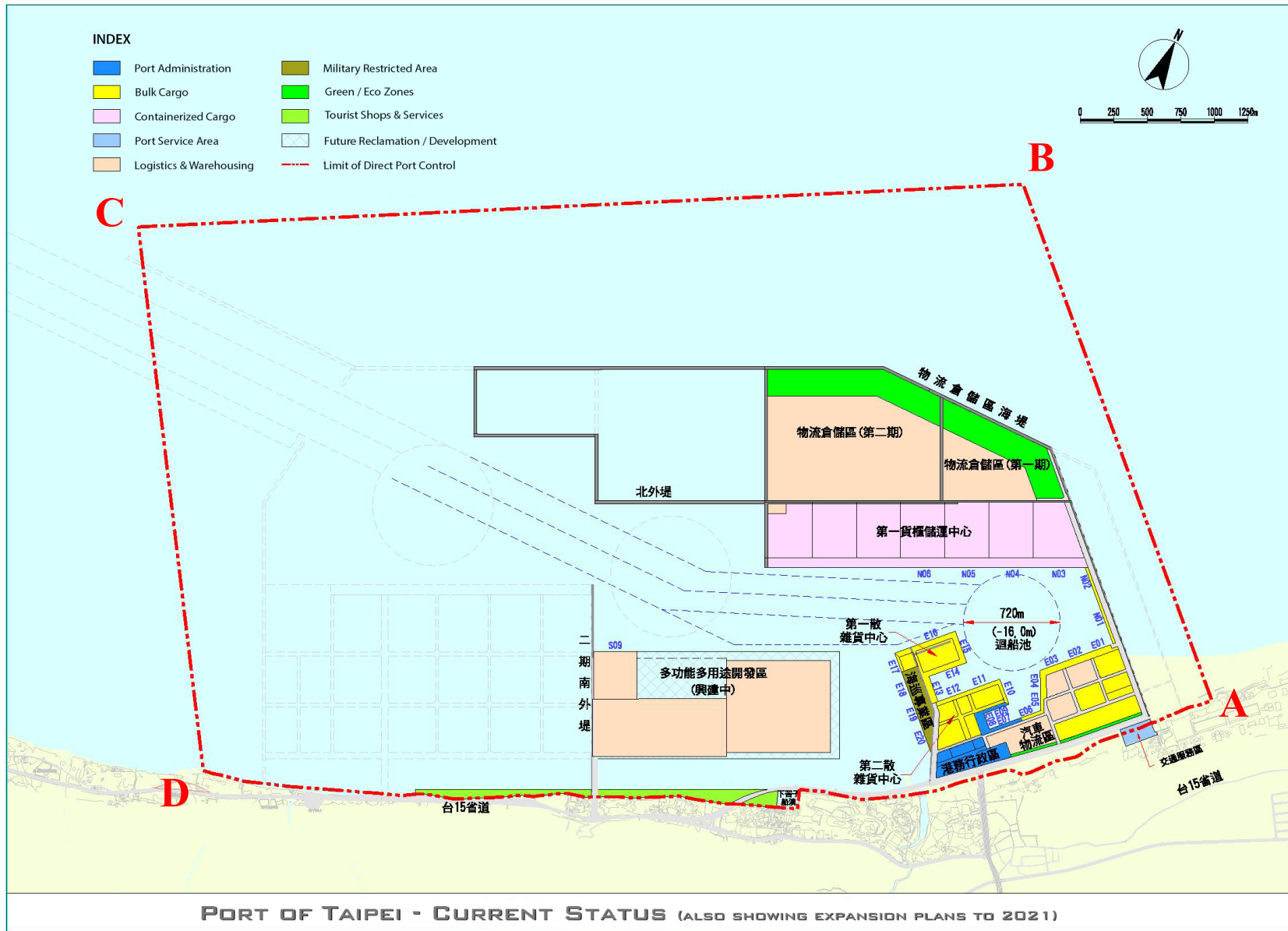


Figure.1 Taipei port



Coordination (WGS84) :

Position	Long.	Lat.
*SB5	121°22'5.04"	25°9'15.89"
*SB6	121°21'6.43"	25°9'2.28"
*SB8	121°22'16.49"	25°9'2.13"
*SB10	121°22'43.61"	25°9'14.08"
*LT1	121°21'30.90"	25°9'18.50"
*LT3	121°22'18.478"	25°9'23.618"
*LT5	121°21'39.70"	25°9'00.00"
*LT7	121°19'46.96"	25°8'49.45"

\* 新增自動識別系統導航標 ( AIS AtoN )

LT7



No Traffic Separation Scheme

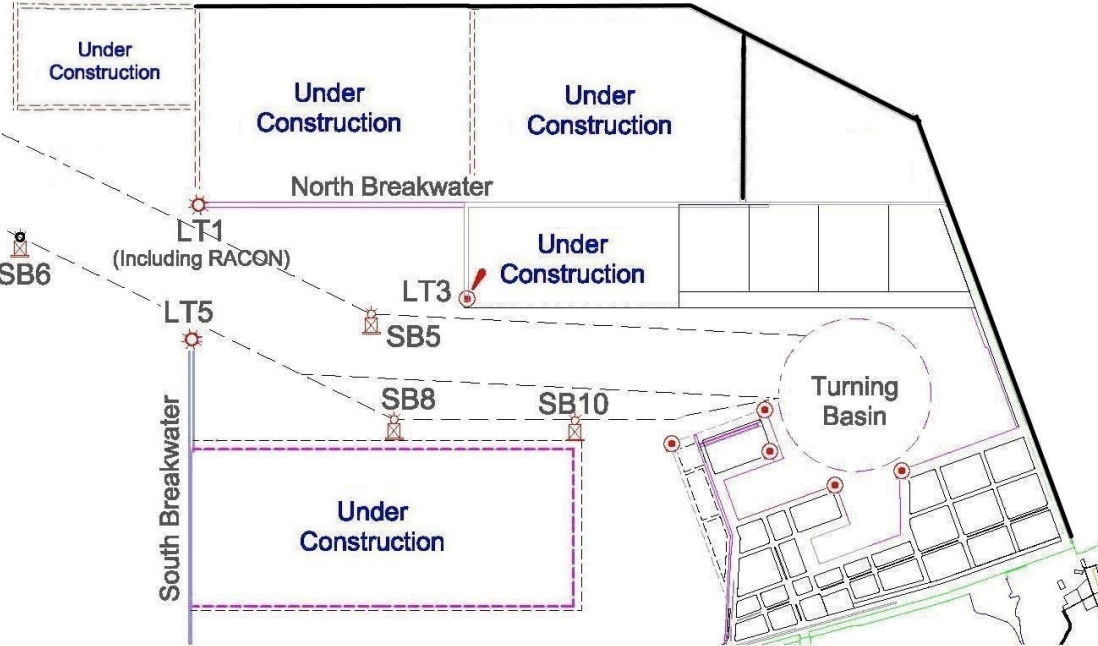


Figure.2  
Taipei port leading lights

NOT TO BE USED FOR NAVIGATION



**Figure.3  
Taipei port fairway chart**

AIS AtoN have been added at the following positions (WGS84)

Position	Longitude	Latitude
PILOT ST.	E121° 20' 01.822"	N25° 09' 56.303"
A	E121° 20' 35.40"	N25° 10' 13.80"
B	E121° 22' 04.80"	N25° 10' 58.20"
C	E121° 22' 24.00"	N25° 10' 38.40"
D	E121° 20' 52.20"	N25° 09' 52.20"
1	E121° 20.22'	N25° 10.62'
2	E121° 16.33'	N25° 14.80'
3	E121° 15.18'	N25° 14.25'
4	E121° 19.00'	N25° 10.08'
LT7	E121° 19.78'	N25° 08.82'
SB6	E121° 21.11'	N25° 09.04'
P4	E121° 20.89'	N25° 09.33'
P2	E121° 20.76'	N25° 09.58'
N05	E121° 20.68'	N25° 09.61'
N07	E121° 20.87'	N25° 09.26'

