

SHIP' S ROUTING SYSTEM FOR DEEP WATER ROUTE OF NINGBO-ZHOUSHAN PORT

Reference Charts:

Charts No. 50311, 52141, 53342, 52142, 53131 and 53132 published by Maritime Safety Administration of the People's Republic of China.

Ship's routing system is composed of traffic separation scheme, roundabout, deep-water routes, precautionary areas and inshore traffic zones.

1. Traffic separation scheme

Traffic separation scheme includes separation line (zone) , borderline, traffic lane.

1.1 No.1 Traffic Separation Scheme (From West Borderline of No. 0 Precautionary Area in Xiazhimen East Estuary to Xialanshan)

1.1.1 Separation Line

The separation line of No.1 traffic separation scheme is bounded by the following two geographical positions:

29°44'49"N,122°19'08"E;

29°48'32.5"N,122°14'12"E.

1.1.2 Borderline

The north borderline of No.1 traffic separation scheme is bounded by the following two geographical positions:

29°45'00"N,122°19'12"E;

29°48'41.5"N,122°14'20.5"E.

The south borderline of No.1 traffic separation scheme is bounded by the following two geographical positions:

29°44'37"N,122°19'03"E;

29°48'24.5"N,122°14'04"E.

1.1.3 Traffic Lane

The inbound lane is the water area between the separation line and north borderline of traffic separation scheme with 0.19 nautical miles in width. The length of the centre line for the traffic lane is 5.62 nautical miles. And its main traffic direction is 310° (True course).

The outbound lane is the water area between the separation line and south borderline of traffic separation scheme with 0.19 nautical miles in width. The length of the centre line for the traffic lane is 5.62 nautical miles. And its main traffic direction is 130° (True course).

1.2 No.2 Traffic Separation Scheme (From Xialanshan to Shangliuwangchong Island)

1.2.1 Separation Line

The separation line of No.2 traffic separation scheme is bounded by the following two geographical positions:

29°48'32.5"N,122°14'12"E;

29°50'06"N,122°12'41"E.

1.2.2 Borderline

The north borderline of No.2 traffic separation scheme is bounded by the following two geographical positions:

29°48'41.5"N,122°14'20.5"E;

29°50'12"N,122°12'54"E;

The south borderline of No.2 traffic separation scheme is bounded by the following two geographical positions:

29°48'24.5"N,122°14'04"E;

29°50'00.5"N,122°12'27.5"E。

1.2.3 Traffic Lane

The inbound lane is the water area between the separation line and north borderline of traffic separation scheme with 0.19 nautical miles in width. The length of the centre line for the traffic lane is 2.08 nautical miles. And its main traffic direction is 320° (True course).

The outbound lane is the water area between the separation line and south borderline of traffic separation scheme with 0.19 nautical miles in width. The length of the centre line for the traffic lane is 2.08 nautical miles. And its main traffic direction is 140° (True course).

1.3 No.3 Traffic Separation Scheme (From Shangliuwangchong Island to East Borderline of No. 1 Precautionary Area)

1.3.1 Separation Line

The separation line of No.3 traffic separation scheme is bounded by the following two geographical positions:

29° 50' 06" N,122° 12' 41" E;

29° 50' 36.5" N,122° 12' 20.5" E.

1.3.2 Borderline

The north borderline of No.3 traffic separation scheme is bounded by the following two geographical positions:

29° 50' 12" N,122° 12' 54" E;

29° 50' 45" N,122° 12' 41" E.

The south borderline of No.3 traffic separation scheme is bounded by the following two geographical positions:

29° 50' 00.5" N,122° 12' 27.5" E;

29° 50' 27.5" N,122° 11' 59" E.

1.3.3 Traffic Lane

The inbound lane is the water area between the separation line and north borderline of traffic separation scheme with 0.19 to 0.32 nautical miles in width. The length of the centre line for the traffic lane is 0.58 nautical miles. And its main traffic direction is 333° (True course).

The outbound lane is the water area between the separation line and south borderline of traffic separation scheme with 0.19 to 0.32 nautical miles in width. The length of the centre line for the traffic lane is 0.58 nautical miles. And its main traffic direction is 153° (True course).

1.4 No.4 Traffic Separation Scheme (From West Borderline of No. 1

Precautionary Area to East Borderline of No. 2 Precautionary Area in Yangxiaomao Island)

1.4.1 Separation Zone

The separation zone of No.4 traffic separation scheme, with 0.11 nautical miles in width, is bounded by the following four geographical positions:

- 29° 51' 38.5" N, 122° 11' 43" E;
- 29° 51' 41.5" N, 122° 11' 49.5" E;
- 29° 55' 25.5" N, 122° 09' 42" E;
- 29° 55' 19" N, 122° 09' 37" E.

1.4.2 Borderline

The north borderline of No.4 traffic separation scheme is bounded by the following two geographical positions:

- 29° 51' 49" N, 122° 12' 06.5" E;
- 29° 55' 42" N, 122° 09' 55" E.

The south borderline of No.4 traffic separation scheme is bounded by the following two geographical positions:

- 29° 51' 31" N, 122° 11' 26" E;
- 29° 55' 03" N, 122° 09' 23.5" E.

1.4.3 Traffic Lane

The inbound lane is the water area between the separation zone and north borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 4.20 nautical miles. And its main traffic direction is 333° (True course).

The outbound lane is the water area between the separation zone and south borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 4.00 nautical miles. And its main traffic direction is 153° (True course).

1.5 No.5 Traffic Separation Scheme (From West Borderline of No. 2 Precautionary Area to Liangmao Mountain)

1.5.1 Separation Zone

The separation zone of No.5 traffic separation scheme, with 0.11 nautical miles in width, is bounded by the following four geographical positions:

- 29° 55' 26" N, 122° 07' 12" E;
- 29° 55' 19" N, 122° 07' 12" E;
- 29° 55' 19" N, 122° 01' 33.5" E;
- 29° 55' 26" N, 122° 01' 36.5" E.

1.5.2 Borderline

The north borderline of No.5 traffic separation scheme is bounded by the following two geographical positions:

- 29° 55' 42" N, 122° 07' 12" E;
- 29° 55' 42" N, 122° 01' 49" E.

The south borderline of No.5 traffic separation scheme is bounded by the following two geographical positions:

- 29° 55' 03" N, 122° 07' 12" E;

29° 55' 03" N, 122° 01' 21.5" E.

1.5.3 Traffic Lane

The inbound lane is the water area between the separation zone and north borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 4.70 nautical miles. And its main traffic direction is 270° (True course).

The outbound lane is the water area between the separation zone and south borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 4.95 nautical miles. And its main traffic direction is 090° (True course).

1.6 No.6 Traffic Separation Scheme (From Liangmao Mountain to East Borderline of No. 3 Precautionary Area)

1.6.1 Separation Zone

The separation zone of No.6 traffic separation scheme, with 0.11 nautical miles in width, is bounded by the following four geographical positions:

29° 55' 26" N, 122° 01' 36.5" E ;

29° 55' 19" N, 122° 01' 33.5" E;

29° 55' 59.5" N, 122° 00' 49.5" E;

29° 56' 05" N, 122° 00' 54.5" E.

1.6.2 Borderline

The north borderline of No.6 traffic separation scheme is bounded by the following two geographical positions:

29° 55' 42" N, 122° 01' 49" E;

29° 56' 18.5" N, 122° 01' 07" E.

The south borderline of No.6 traffic separation scheme is bounded by the following two geographical positions:

29° 55' 03" N, 122° 01' 21.5" E;

29° 55' 46" N, 122° 00' 37" E.

1.6.3 Traffic Lane

The inbound lane is the water area between the separation zone and north borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 0.86 nautical miles. And its main traffic direction is 316° (True course).

The outbound lane is the water area between the separation zone and south borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 0.96 nautical miles. And its main traffic direction is 136° (True course).

1.7 No.7 Traffic Separation Scheme (From West Borderline of No. 3 Precautionary Area to Roundabout in Tunizui)

1.7.1 Separation Zone

The separation zone of No.7 traffic separation scheme, with 0.11 nautical miles in width, is bounded by the following four geographical positions:

29° 56' 51.5" N, 122° 00' 05" E;

29° 56' 46.5" N, 122° 00' 00" E;

29° 57' 55" N, 121° 58' 45" E;
29° 57' 59.5" N, 121° 58' 50.5" E.

1.7.2 Borderline

The north borderline of No.7 traffic separation scheme is bounded by the following two geographical positions:

29° 57' 05" N, 122° 00' 17" E;
29° 58' 16" N, 121° 58' 58" E.

The south borderline of No.7 traffic separation scheme is bounded by the following two geographical positions:

29° 56' 33" N, 121° 59' 48" E;
29° 57' 49" N, 121° 58' 26" E.

1.7.3 Traffic Lane

The inbound lane is the water area between the separation zone and north borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 1.52 nautical miles. And its main traffic direction is 316° (True course).

The outbound lane is the water area between the separation zone and south borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 1.60 nautical miles. And its main traffic direction is 136° (True course).

1.8 No.8 Traffic Separation Scheme (From West of Roundabout in Tunizui to North of Wanhua in Daxie)

1.8.1 Separation Zone

The separation zone of No.8 traffic separation scheme, with 0.11 nautical miles in width, is bounded by the following four geographical positions:

29° 58' 11.5" N, 121° 57' 50.5" E;
29° 58' 05.5" N, 121° 57' 53" E;
29° 57' 56.8" N, 121° 57' 20.5" E;
29° 58' 03.0" N, 121° 57' 18.2" E.

1.8.2 Borderline

The north borderline of No.8 traffic separation scheme is bounded by the following two geographical positions:

29° 58' 27" N, 121° 57' 51" E;
29° 58' 17.2" N, 121° 57' 12.9" E.

The south borderline of No.8 traffic separation scheme is bounded by the following two geographical positions:

29° 57' 54" N, 121° 58' 06" E;
29° 57' 42.8" N, 121° 57' 25.7" E.

1.8.3 Traffic Lane

The west bound lane is the water area between the separation zone and north borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 0.5 nautical miles. And its main traffic direction is 252° (True course).

The east bound lane is the water area between the separation zone and south

borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 0.5 nautical miles. And its main traffic direction is 072° (True course).

1.9 No.9 Traffic Separation Scheme (From North of e-jiao to South of Main Navigation Span for Jintang Bridge)

1.9.1 Separation Line

The separation line of No.9 traffic separation scheme is bounded by the following two geographical positions:

$29^{\circ}59'47.5''$ N, $121^{\circ}48'26.4''$ E

$30^{\circ}02'25.8''$ N, $121^{\circ}48'19.5''$ E.

1.9.2 Borderline

The east borderline of No.9 traffic separation scheme is bounded by the following two geographical positions:

$29^{\circ}59'47.5''$ N, $121^{\circ}48'42''$ E;

$30^{\circ}02'26.4''$ N, $121^{\circ}48'32.2''$ E.

The west borderline of No.9 traffic separation scheme is bounded by the following two geographical positions:

$29^{\circ}59'47.5''$ N, $121^{\circ}48'11''$ E;

$30^{\circ}02'25.2''$ N, $121^{\circ}48'06.8''$ E.

1.9.3 Traffic Lane

The north bound lane, with 0.22 nautical miles from the linear transition to the 0.15 nautical miles in width, is the water area between the separation line and east borderline of traffic separation scheme. The length of the centre line for the traffic lane is 2.60 nautical miles. And its main traffic direction is 358° (True course).

The south bound lane, with 0.15 nautical miles from the linear transition to the 0.22 nautical miles in width, is the water area between the separation line and west borderline of traffic separation scheme. The length of the centre line for the traffic lane is 2.63 nautical miles. And its main traffic direction is 178° (True course).

1.10 No.10 Traffic Separation Scheme (From South of Main Navigation Span for Jintang Bridge to North of Main Navigation Span for Jintang Bridge)

1.10.1 Separation Line

The separation line of No.10 traffic separation scheme is bounded by the following four geographical positions:

$30^{\circ}02'25.8''$ N, $121^{\circ}48'19.5''$ E;

$30^{\circ}03'08.6''$ N, $121^{\circ}48'18''$ E;

$30^{\circ}04'09''$ N, $121^{\circ}48'15.7''$ E;

$30^{\circ}05'09.2''$ N, $121^{\circ}48'13.5''$ E.

1.10.2 Borderline

The east borderline of No.10 traffic separation scheme is bounded by the following four geographical positions:

$30^{\circ}02'26.4''$ N, $121^{\circ}48'32.2''$ E;

$30^{\circ}03'09.5''$ N, $121^{\circ}48'29.2''$ E;

$30^{\circ}04'09.7''$ N, $121^{\circ}48'27''$ E;

$30^{\circ}05'10''$ N, $121^{\circ}48'26''$ E.

The west borderline of No.10 traffic separation scheme is bounded by the following four geographical positions:

30°02′25.2″ N,121°48′06.8″ E;

30°03′08.6″ N,121°48′06.6″ E;

30°04′08.7″ N,121°48′04.4″ E;

30°05′08.7″ N,121°48′01″ E.

1.10.3 Traffic Lane

The north bound lane is the water area between the separation line and east borderline of traffic separation scheme with 0.15 nautical miles in width. The length of the centre line for the traffic lane is 2.70 nautical miles. And its main traffic direction is 358° (True course).

The south bound lane is the water area between the separation line and west borderline of traffic separation scheme with 0.15 nautical miles in width. The length of the centre line for the traffic lane is 2.70 nautical miles. And its main traffic direction is 178° (True course).

1.11 No.11 Traffic Separation Scheme (From North of Main Navigation Span for Jintang Bridge to North of Traffic Separation Scheme)

1.11.1 Separation Line

The separation line of No.11 traffic separation scheme is bounded by the following two geographical positions:

30°05′09.2″ N,121°48′13.5″ E;

30°05′36.8″ N,121°48′12.4″ E.

1.11.2 Borderline

The east borderline of No.11 traffic separation scheme is bounded by the following two geographical positions:

30°05′10″ N,121°48′26″ E;

30°05′37″ N,121°48′25″ E.

The west borderline of No.11 traffic separation scheme is bounded by the following two geographical positions:

30°05′08.7″ N,121°48′01″ E;

30°05′36.4″ N,121°47′59.8″ E.

1.11.3 Traffic Lane

The north bound lane is the water area between the separation line and east borderline of traffic separation scheme with 0.15 nautical miles in width. The length of the centre line for the traffic lane is 0.46 nautical miles. And its main traffic direction is 358° (True course).

The south bound lane is the water area between the separation line and west borderline of traffic separation scheme with 0.15 nautical miles in width. The length of the centre line for the traffic lane is 0.46 nautical miles. And its main traffic direction is 178° (True course).

1.12 No.12 Traffic Separation Scheme (From Roundabout in Tunizui to West of Diaojiao)

1.12.1 Separation Zone

The separation zone of No.12 traffic separation scheme, with 0.11 nautical miles

in width, is bounded by the following four geographical positions:

29° 58' 47" N, 121° 58' 12" E;
29° 58' 44.5" N, 121° 58' 05.5" E;
30° 02' 15" N, 121° 56' 18" E;
30° 02' 18.4" N, 121° 56' 24.6" E.

1.12.2 Borderline

The east borderline of No.12 traffic separation scheme is bounded by the following two geographical positions:

29° 58' 48" N, 121° 58' 33" E;
30° 02' 24.5" N, 121° 56' 42" E.

The west borderline of No.12 traffic separation scheme is bounded by the following two geographical positions:

29° 58' 29.5" N, 121° 57' 52" E;
30° 02' 09" N, 121° 56' 00.5" E.

1.12.3 Traffic Lane

The north bound lane is the water area between the separation zone and east borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 3.82 nautical miles. And its main traffic direction is 336° (True course).

The south bound lane is the water area between the separation zone and west borderline of traffic separation scheme with 0.27 nautical miles in width. The length of the centre line for the traffic lane is 3.82 nautical miles. And its main traffic direction is 156° (True course).

1.13 No.13 Traffic Separation Scheme (From West of Diaojiao to South of Main Navigation Span for Xihoumen Bridge)

1.13.1 Separation Zone

The separation zone of No.13 traffic separation scheme, with 0.11 nautical miles from the linear transition to the 0 nautical miles in width, is bounded by the following three geographical positions:

30° 02' 18.4" N, 121° 56' 24.6" E;
30° 02' 15" N, 121° 56' 18" E;
30° 03' 22.7" N, 121° 55' 28" E.

1.13.2 Borderline

The east borderline of No.13 traffic separation scheme is bounded by the following two geographical positions:

30° 02' 24.5" N, 121° 56' 42" E;
30° 03' 30.5" N, 121° 55' 37" E.

The west borderline of No.13 traffic separation scheme is bounded by the following two geographical positions:

30° 02' 09" N, 121° 56' 00.5" E;
30° 03' 15" N, 121° 55' 19" E.

1.13.3 Traffic Lane

The north bound lane, with 0.27 nautical miles from the linear transition to the 0.17 nautical miles in width, is the water area between the separation zone and east

borderline of traffic separation scheme. The length of the centre line for the traffic lane is 1.40 nautical miles. And its main traffic direction is 321° (True course).

The south bound lane, with 0.17 nautical miles from the linear transition to the 0.27 nautical miles in width, is the water area between the separation zone and west borderline of traffic separation scheme. The length of the centre line for the traffic lane is 1.32 nautical miles. And its main traffic direction is 149° (True course).

1.14 No.14 Traffic Separation Scheme (From South of Xihoumen Bridge to North of Xihoumen Bridge)

1.14.1 Separation Line

The separation line of No.14 traffic separation scheme is bounded by the following two geographical positions:

30° 03' 22.7" N, 121° 55' 28" E;

30° 04' 10.8" N, 121° 54' 40" E.

1.14.2 Borderline

The east borderline of No.14 traffic separation scheme is bounded by the following two geographical positions:

30° 03' 30.5" N, 121° 55' 37" E;

30° 04' 21" N, 121° 54' 49" E.

The west borderline of No.14 traffic separation scheme is bounded by the following two geographical positions:

30° 03' 15" N, 121° 55' 19" E;

30° 04' 00.5" N, 121° 54' 31" E.

1.14.3 Traffic Lane

The north bound lane is the water area between the separation line and east borderline of traffic separation scheme with 0.17 nautical miles in width. The length of the centre line for the traffic lane is 1.10 nautical miles. And its main traffic direction is 320° (True course).

The south bound lane is the water area between the separation line and west borderline of traffic separation scheme with 0.17 nautical miles in width. The length of the centre line for the traffic lane is 1.10 nautical miles. And its main traffic direction is 140° (True course).

1.15 No.15 Traffic Separation Scheme (From North of Xihoumen Bridge to Jindongzui)

1.15.1 Separation Line

The separation line of No.15 traffic separation scheme is bounded by the following two geographical positions:

30° 04' 10.8" N, 121° 54' 40" E;

30° 05' 06" N, 121° 53' 59" E.

1.15.2 Borderline

The east borderline of No.15 traffic separation scheme is bounded by the following two geographical positions:

30° 04' 21" N, 121° 54' 49" E;

30° 05' 17.5" N, 121° 54' 13" E.

The west borderline of No.15 traffic separation scheme is bounded by the

following two geographical positions:

30° 04' 00.5" N, 121° 54' 31" E。

30° 04' 54.5" N, 121° 53' 45" E.

1.15.3 Traffic Lane

The north bound lane, with 0.17 nautical miles from the linear transition to the 0.27 nautical miles in width, is the water area between the separation line and east borderline of traffic separation scheme. The length of the centre line for the traffic lane is 1.07 nautical miles. And its main traffic direction is 326° (True course).

The south bound lane, with 0.27 nautical miles from the linear transition to the 0.17 nautical miles in width, is the water area between the separation line and west borderline of traffic separation scheme. The length of the centre line for the traffic lane is 1.05 nautical miles. And its main traffic direction is 146° (True course).

2. Roundabout

Set the roundabout in the north of Tunizui water area. The in-partition of the roundabout is: 29°58'19"N, 121°58'24" and 0.1 nautical miles as the radius. The centre of the roundabout is: 29°58'19"N, 121°58'24"E and 0.5 nautical miles as the radius of the roundabout. Ships should counter-clockwise circumambulate along the roundabout.

3. Deep-water routes

The route is bounded by the lines connecting the following four points as the axis-line:

(1)29°41'15.9"N, 122°31'21.5"E; (2)29°41'33.3"N, 122°30'15.6"E; (3)29°43'52.7"N, 122°21'26.7"E; (4)29°44'17.6"N, 122°19'52.2"E and 195 meters wide on both sides at the outside of Xiazhimen Estuary. Its traffic bottom marker is -22.1 meters high (theoretical depth datum plane) and 10.5 nautical miles long overall.

4. Precautionary Areas

No.0 precautionary area is bounded by the following four points:

29°45'21.5"N, 122°19'21"E;

29°44'51"N, 122°20'06"E;

29°43'41"N, 122°19'37"E;

29°44'12"N, 122°18'54"E.

No.1 precautionary area is bounded by the following four points:

29°50'27.5"N, 122°11'59"E;

29°50'45"N, 122°12'41"E;

29°51'49"N, 122°12'06.5"E;

29°51'31"N, 122°11'26"E.

No.2 precautionary area is bounded by the following four points:

29°55'42"N, 122°09'55"E;

29°55'03"N, 122°09'23.5"E;

29°55'03"N, 122°07'12"E;

29°55'42"N, 122°07'12"E.

No.3 precautionary area is bounded by the following four points:

29°55'46"N, 122°00'37"E;

29°56'18.5"N, 122°01'07"E;

29°57'05"N, 122°00'17"E;

29°56'33"N, 121°59'48"E.

5. Inshore Traffic Zones

The navigable water area between borderlines and near shore should be used in accordance with the <Convention on the International Regulations for Preventing Collisions at Sea, 1972>.

6. Special Regulations

6.1 Ships inapplicable to the system shall keep far away from the water area of ship's routing system.

6.2 Ships entering into or departing from the precautionary area should pay great attention and keep good seamanship.

6.3 Overtaking is prohibited in the navigation area 500 meters both in the front and after the Xialanshan light pole in the Xiazhimen traffic lane. Ships of 20000 gross tonnage or above should avoid rendezvousing while navigating in the area mentioned above.

6.4 Ships navigating in the water area of ship's routing system must keep restricted speed. The high-speed for passenger ships couldn't exceed 22 knots during fair-current and 20 knots during counter-current. Other ships couldn't exceed 16 knots during fair-current and 14 knots during counter-current.

6.5 Anchoring, aquatics cultivating and fishing are prohibited for all ships in traffic lanes, precautionary areas and areas near its terminations. Other operations of ships shall be performed with permission of the competent authority in the water area of the ship's routing system.

6.6 All of the ships navigating in the water area of ship's routing system must abide by the regulations of ship's routing system..

6.7 The rule with the deep-water route of the Xiazhimen Estuary is executed by Safety Manage Regulation in the deep-water route of Xiazhimen Estuary.

6.8 Any ship violating the ship's routing system would be punished by maritime administration in accordance with relevant laws and regulations.

THE SHIP REPORTING SYSTEM IN DEEP WATER ROUTE OF NINGBO-ZHOUSHAN PORT

1. Applicable Ships

The Ship Reporting System is compulsory and applicable to the following types of ships which implement the “Ships’ Routeing System in Ningbo-Zhoushan Core Area”:

- 1.1 Passenger ships;
- 1.2 Ships and facilities in foreign nationality;
- 1.3 Dangerous cargo ships;
- 1.4 Ships and facilities restricted in maneuverability such as towing fleet;
- 1.5 Other Chinese ships of 300GT and above.

2. Applicable Geographical Area, the Number and Editions of Relevant Charts

2.1 The geographical area covered by the Ship Reporting System is the water area covering the outside door of deep-water route in Xiazhimen, Xiazhimen, Zhitouyang, Luotou waterways, Jintang waterways, Hengshuiyang, Cezi waterways, Xihoumen and so on.

2.2 The relevant charts

Nautical Charts published by Maritime Safety Administration of the People’s Republic of China published, with No. of 50311, 52141, 53342, 52142, 53131 and 53132.

3. Format of Report, Content of Report and Reporting Lines

3.1 Format of Report

The format for report is in accordance with the requirements by the annex of IMO Resolution A.851 (20).

3.2 Content of Report

3.2.1 General report

A Ship’s name, Call Sign and IMO code (if applicable)

C or D Position (latitude and longitude or position relative to the landmark)

E Course

F Speed

G Last port of call

I Port of destination

O Draft

Q Deficiencies and limitations (towing vessels shall report of the towing length and the name of the object being towed)

DG Dangerous goods

U Length Overall and Gross Tonnage

3.2.2 Ships equipped with AIS in good working condition may only need to report the following contents:

A Ship's name, Call Sign

G Last port of call

I Port of destination

O Draft

Q Deficiencies and limitations

DG Dangerous goods

3.3 Reporting lines

3.3.1 Report line L1: the line connecting the Taohua Island Lighthouse and Xiazhi Island East point.

3.3.2 Report line L2: the line connecting the Shangliuwangzhong Island Lighthouse and southwest end of Taohua Island.

3.3.3 Report line L3: the line connecting Temple Hill south-east end of the Jintang Island and Tunizui Lighthouse.

3.3.4 Report line L4: the line connecting two points, of which geographical positions are $30^{\circ} 05' .20N/121^{\circ} 35' .90 E$ and $30^{\circ} 07' .05N/121^{\circ} 49' .25 E$.

3.3.5 Report line L5: the line connecting Yongriver estuary north diversion dike lighthouse and Changtiaozi lighthouse.

3.3.6 Report line L6: Chuanshan west estuary-the line connecting Daxie No.1 light buoy and XieheNo.1 lighthouse.

3.3.7 Report line L7: Chuanshan north estuary-the line connecting Daxie Island Lighthouse and Chuanbi Island Light buoy.

3.3.8 Report line L8: Chuanshan east estuary-south segment of Liangmao Hill from longitude 122 °01.4 'E.

3.3.9 Report line L9: the line connecting Daochu Hill south segment along 30 ° 03 TS[line and Jintang Island.

3.3.10 Report line C1: the line connecting Xiaocaihua Lighthouse and the western end of Zhoushan Island (30。 10 '.ON/121 ° 56' .0 E).

3.3.11 Report line C2: the line connecting Xiaocaihua Lighthouse and the northern end of Jintang Island (30 ° 05 '.2N/121 ° 5T A E).

3.3.12 Report line C3: the line connecting Jintang Island Temple Hill light pile and west end of Damao Island (29 ° 57 f.2N/122 ° 01, A E).

3.3.13 Report line C4: the line connecting west end of Damao Island (29 ° 57 f.2N/122 ° 01, A E) and Luotou(30 ° 00 '.ON/122 ° 01, .4 E).

4. Reporting Requirements

4.1 Applicable ships are required to report the Ship's Nationality and Type of Ship to Ningbo or Zhoushan Vessel Traffic Service Center in addition to the information required in paragraph 3.2.

4.2 For ships or facilities passing the main or west navigating arches of Jintang Bridge, before entering the bridge water area, the reports containing the ship's movement, maximum height above the water and the name of navigating arches to pass are required to be sent to the Ningbo VTS Center. For ships or facilities passing the east navigating arch of Jintang Bridge, Xihoumen Bridge and the Taoyaomen Bridge, before entering the bridge water area, the reports containing the ship's movement, maximum height above the water and the name of navigating arches to pass are required to be sent to the Zhoushan VTS Center.

4.3 When ships and facilities are abeam of the Yangxiaomao light piles, they should use Channel VHF8 to report the name and movement to Ningbo VTS Center.

4.4 When leaving a port located within the reporting water area, applicable ships

shall report the name and port of destination.

4.5 When being involved in any traffic incident or a pollution incident within the reporting area, the ship(s) shall immediately report the nature, time and location of the incident, extent of damage or pollution, and whether assistance is needed, to the Administration. The ship(s) shall provide any additional information related to the incident, as required by the Administration.

4.6 If applicable ships have reported as required when passing the report line L1, they may not report again when passing other report lines within this routing system water area.

5. The Administration and the Report Reception Authority

5.1 The Administration is Zhejiang Maritime Safety Administration of the People's Republic of China.

5.2 The report reception authorities are Ningbo VTS Center and Zhoushan VTS Center.

6. Information to be Provided to Ships

The Ningbo VTS Center and Zhoushan VTS Center will provide applicable ships with information such as vessel traffic, adverse weather conditions and maritime safety information as appropriate.

7. Radio Communications Channel Required for the System and the Languages for the Reporting

7.1 In Ningbo VTS Center, the working channel is VHF06/08. In Zhoushan VTS center, the working channel is VHF11. When passing the report line L1, L2, L7, L8, ships and facilities shall report to the Ningbo VTS Center by VHF08. When passing the report line L3, L4, L5, L6, L9, they shall report to the Ningbo VTS Center by VHF06. When passing the report line C1, C2, C3, C4, they shall report to the Zhoushan VTS center by VHF11.

7.2 The language used for reports in the system shall be Mandarin Chinese or English. The radio communications shall follow the format of IMO Standard Marine

Communication Phrases (SMCP).

8. Shore-based facilities to support operation of the system

8.1 Ningbo VTS Center and Zhoushan VTS Center composed of radar, VHF communication, information processing and display, information recording and replaying, meteorological sensors and AIS. Its functions include data collection, data evaluation and processing, information service, traffic organization service, navigational assistance service and allied services.

8.2 Ningbo VTS Center and Zhoushan VTS Center maintain 24-hours listening watch.

9. Special regulations

9.1 Applicable ships which have to deviate from traffic separation lanes to the inshore traffic zone shall report the movement and intention to the VTS.

9.2 Any ship violating rules of the system shall be punished by the Administration in accordance with relevant laws and regulations.