

Proposals have been drafted to amend the Traffic Separation Scheme (TSS) No 2.
In the Approaches to the Chornomorsk, Odesa and Pivdennyi Ports

The State Service for Maritime and River Transport of Ukraine and the State Hydrographic Service of Ukraine (SHSU) have conducted the evaluation of efficiency of TSS No 2. Approaches to the Chornomorsk, Odesa and Pivdennyi Ports.

Proposals for making changes to the TSS have been drafted on the basis of work performed with a view to their further submission for adoption by the International Maritime Organization (IMO).

The purpose of the changes is to establish the boundaries of the TSS within the existing scheme of vessel traffic, simplify the vessel traffic by means of this system, increase the safety level, eliminate inconsistencies between the TSS operating at the national level and the TSS adopted by the IMO on 22.04.1981 (COLREG.2/Circ.14), and update the data – such as the name of the TSS, numbers and names of its parts, the nautical charts and the datum involved.

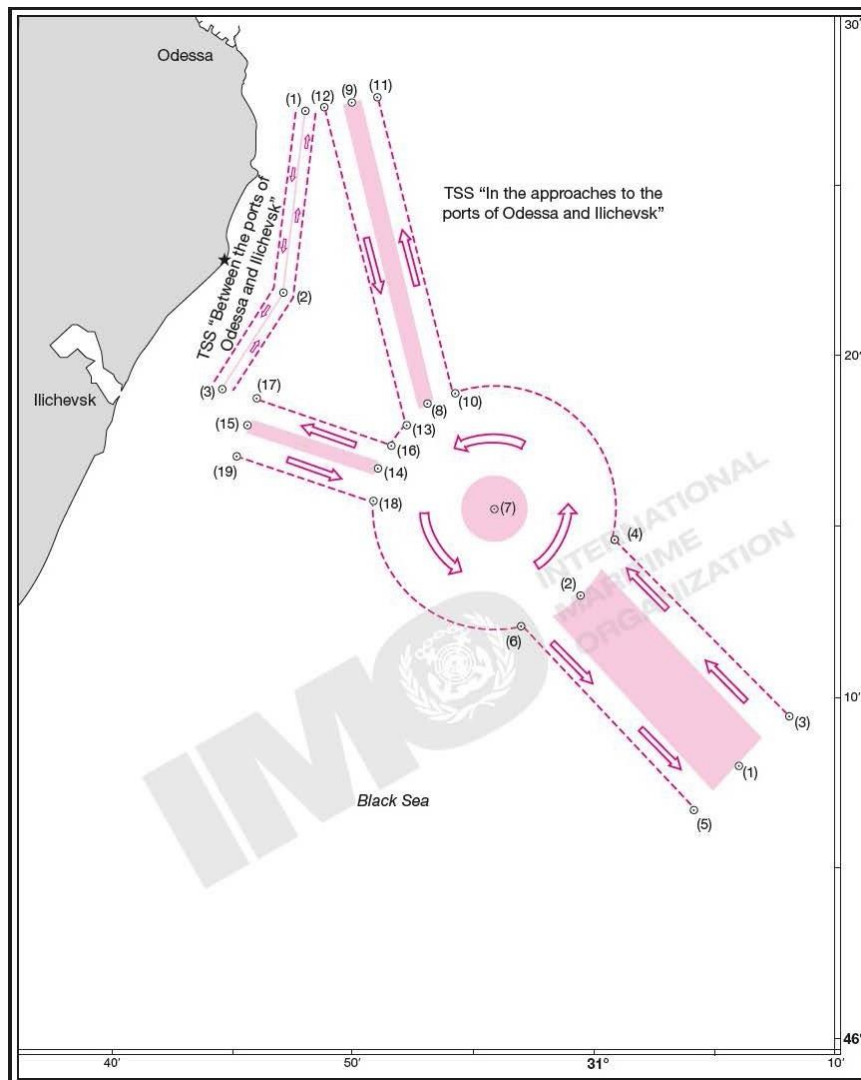


Figure 1. Traffic Separation Schemes In the approaches to the ports of Odessa and Ilichevsk and "Between the ports of Odessa and Ilichevsk " entered into force by the IMO Maritime Safety Committee (MSC) circular letter COLREG.2/Circ.14 on 04.22.1981

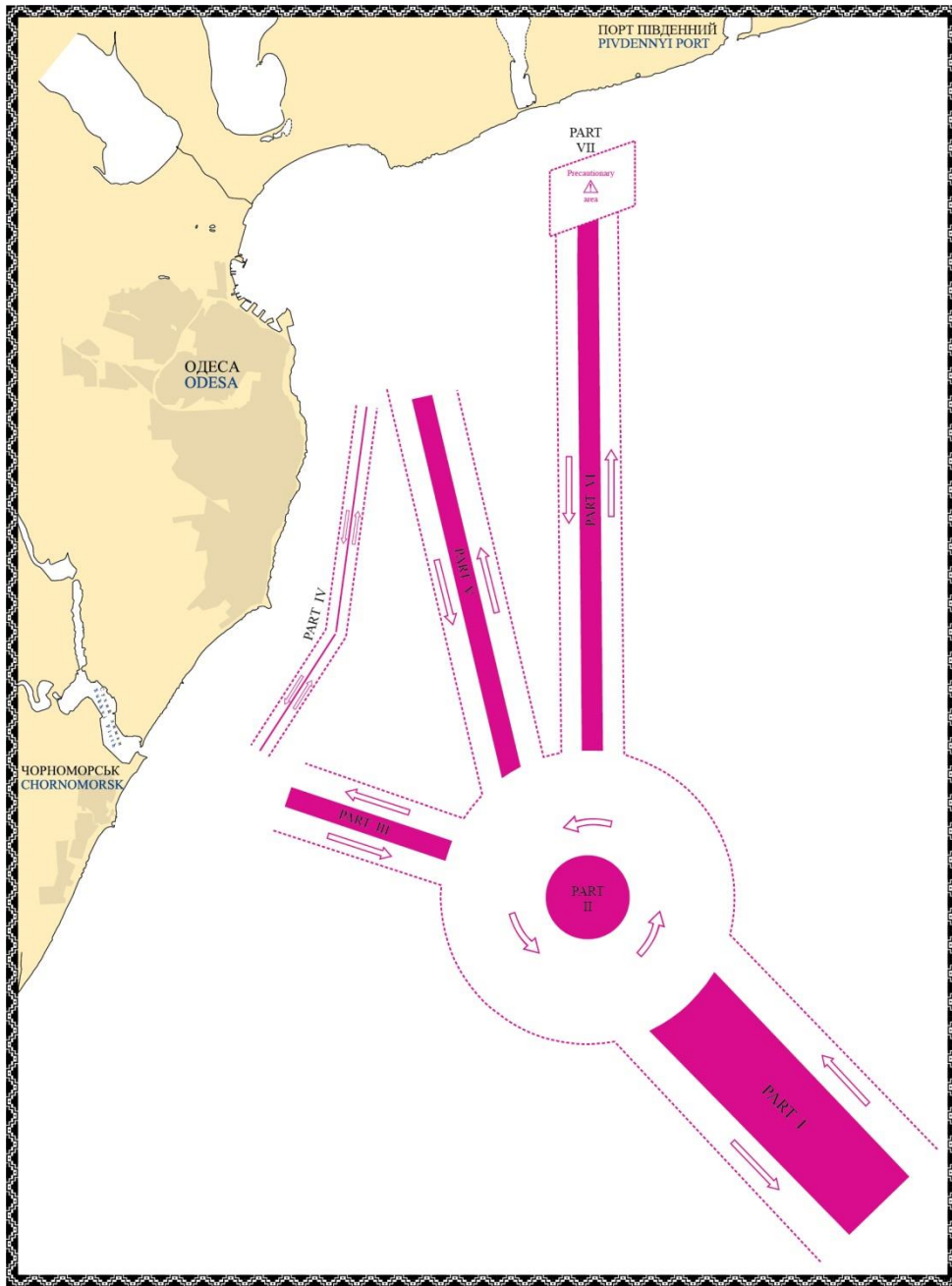


Figure 2. Traffic Separation Scheme No 2. Approaches to the Chornomorsk, Odesa and Pivdennyi Ports, which is currently in force at the national level

Summary

In accordance with the drafted proposals, it is suggested to adopt at the international level the TSS 'Approaches to the Chornomorsk, Odesa and Pivdennyi Ports' consisting of 7 parts, and thereby to combine 2 previously adopted by the IMO systems into one system and approve at the international level Part VI towards the Pivdennyi Port and Part VII, which is a precautionary area on the approaches to the Pivdennyi Port. Assuming such measures will allow to segregate the opposing flows of the vessel traffic on the approaches to the Chornomorsk, Odesa and Pivdennyi Ports, as well as to the ports of the Mykolaiv Region (applicable to the vessels navigating by Part VI and Part VII of the TSS), aiming to decrease the probability of

vessels collisions. The introduction of Part VII – the precautionary area on the approaches to the Pivdennyi Port, is essential, as the traffic flows of vessels cruising from the Odesa Port to the ports of the Mykolaiv Region converge in this area.

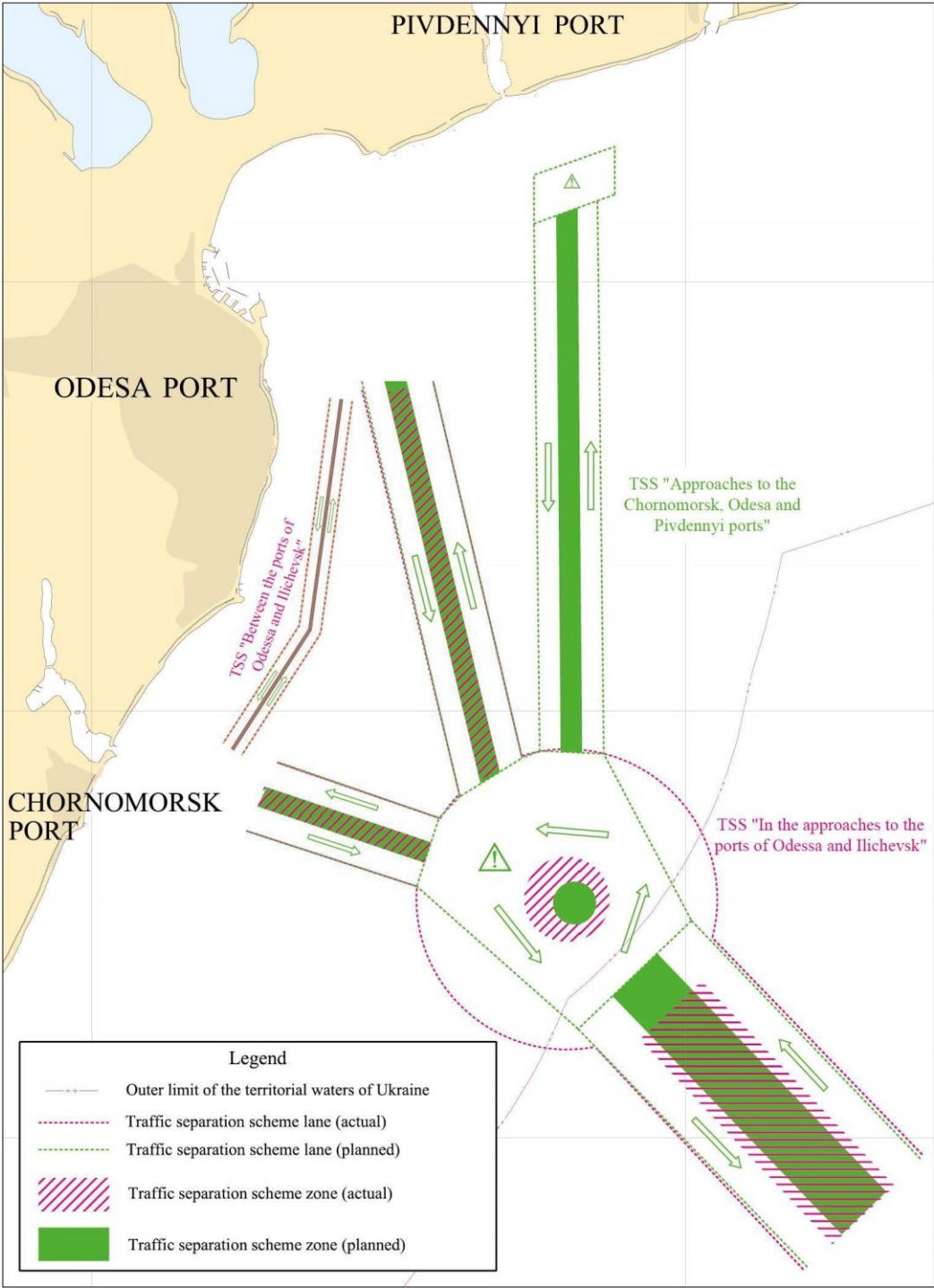


Figure 3. The scheme shows the proposed changes to TSS No 2. Approaches to the Chornomorsk, Odesa and Pivdennyi Ports

Part II of the TSS is also proposed to be amended by changing the roundabout traffic zone by the precautionary area within defined end limits. The analysis of vessel traffic density according to the AIS data shows that the roundabout traffic zone within its existing boundaries is not used by vessels in full, while the roundabout traffic zone with a radius of 1 m in the centre is too large and creates

certain obstacles for the traffic. The introduction of the precautionary area and shortening of the roundabout traffic zone radius to 0.5 miles will make it possible to simplify the vessels' course and establish the boundaries of Part II of the TSS within the existing traffic pattern.

The VTS of the State Enterprise 'Ukrainian Sea Ports Authority' (SE USPA) Pilotage Branch – Delta Pilot has suggested to expand the traffic lanes in Part I of the TSS by reducing the separation zone width. Thus, the width of the traffic separation zone decreases from 2 miles to 1.4 miles, and the width of traffic lanes increases from 0.9 miles to 1.2 miles. Such changes increase the manoeuvring space for the vessels steering with different speeds (from 10 to 22 knots) in directions to/from the Chornomorsk, Odesa and Pivdennyi Ports. At the same time, the amendments to Part I will correspond to the amendments proposed to Part II of the TSS, namely, the reduction of the roundabout traffic zone.

Information about the name of the TSS, its parts' numbers, ports' names, datum will be also updated.

TSS No 2. Approaches to the Chornomorsk, Odesa and Pivdennyi Ports is designed for all types of vessels and cargoes.

Thus, the proposed changes to the TSS will actualize the outdated information on the existing routing system in the region, as adopted by the IMO Maritime Safety Committee on 22.04.1981. The amendments will modernize the TSS by establishing its boundaries within the existing traffic flows limits and simplify the navigation within the system, as it will lessen the number of changes of course by the vessels steering within the system. Therefore, the safety of navigation and protection of environment levels will be boosted.

Detailed description and geographical coordinates of the proposed TSS No 2. - Approaches to the Chornomorsk, Odesa and Pivdennyi Ports

Note: The used datum is the World Geodetic System 1984 (WGS84)

Description of the amended traffic separation system

The system consists of seven parts.

Part I (seaward)

The traffic separation zone is limited by lines connecting the following geographical positions, –

- 1) 46°07.74'N, 031°05.27'E;
- 2) 46°13.32'N, 030°57.55'E;
- 3) 46°14.32'N, 030°59.05'E;
- 4) 46°08.74'N, 031°06.77'E.

Traffic separation zone width – 1.4 miles.

The outer edge of the traffic lane to the Chornomorsk, Odesa and Pivdennyi Ports passes through the geographical positions, –

- 5) 46°09.51'N, 031°07.92'E;
- 6) 46°15.09'N; 031°00.21'E.

The established traffic flow direction – 316.5°.

The outer edge of the traffic lane from the Chornomorsk, Odesa and Pivdennyi Ports passes through the geographical positions, –

7) 46°12.55'N, 030°56.39'E;

8) 46°06.97'N, 031°04.11'E.

Established traffic flow direction – 136.5°.

Part II. Precautionary area

The precautionary area includes the roundabout traffic separation zone, 0.5 miles radius, centre in position 9) 46°15.50' N, 030°56.27' E, and is limited by lines connecting the following geographical positions, –

6) 46°15.09'N; 031°00.21'E.

7) 46°12.55'N, 030°56.39'E;

17) 46°15.89'N; 030°50.95'E;

14) 46°17.49'N, 030°51.70'E;

28) 46°17.99'N, 030°52.40'E;

25) 46°18.89'N; 030°54.50'E;

36) 46°19.06'N; 030°55.09'E;

33) 46°18.99'N; 030°57.25'E.

The established traffic flow direction is counter-clockwise, around the roundabout traffic separation zone.

Part III. Approaches to the Chornomorsk Port

The traffic separation zone is limited by lines connecting the following geographical positions, –

10) 46°16.45'N; 030°51.21'E;

11) 46°17.76'N; 030°45.59'E;

12) 46°18.21'N; 030°45.90'E;

13) 46°16.92'N; 030°51.43'E.

Traffic separation zone width – 0.5 miles.

The outer edge of the traffic lane to the Chornomorsk Port passes through the geographical positions, –

14) 46°17.49'N, 030°51.70'E;

15) 46°18.79'N; 030°46.30'E.

The established traffic flow direction – 288°.

The outer edge of the traffic lane from the Chornomorsk Port passes through the geographical positions, –

16) 46°17.19'N; 030°45.20'E;

17) 46°15.89'N; 030°50.95'E.

The established traffic flow direction – 108°.

Part IV. From the Odesa Port to the Chornomorsk Port

It includes two traffic lanes with a traffic separation line in between, its axis passes through the geographical positions, –

18) 46°27.27'N; 030°48.41'E;

19) 46°21.89'N; 030°47.35'E;

20) 46°19.09'N; 030°44.74'E.

Traffic lanes width – 2.5 cables from each side of the traffic separation line.

The established traffic flows direction – 188° and 212.8° (from Odesa to Chornomorsk); 32.8° and 8° (from Chornomorsk to Odesa).

Part V. Approach to the Odesa Port

It includes two traffic lanes with a traffic separation zone that is limited by lines connecting the following geographical positions, –

21) 46°18.29'N; 030°53.10'E;

22) 46°27.69'N; 030°49.86'E;

23) 46°27.69'N; 030°50.61'E;

24) 46°18.57'N; 030°53.75'E.

Traffic separation zone width – 5 cables.

The outer edge of the traffic lane to the Odesa Port passes through the geographical positions, –

25) 46°18.89'N; 030°54.50'E;

26) 46°27.69'N; 030°51.50'E.

The established traffic flow direction – 346.5°.

The outer edge of the traffic lane from the Odesa Port passes through the geographical positions, –

27) 46°27.69'N; 030°49.10'E;

28) 46°17.99'N, 030°52.40'E.

The established traffic flow direction – 166.5°.

Part VI. Approaches to the Pivdennyi Port

It includes two traffic lanes with a traffic separation zone that is limited by lines connecting the following geographical positions –

29) 46°19.04'N; 030°55.80'E;

30) 46°31.55'N; 030°55.65'E;

31) 46°31.73'N; 030°56.37'E;

32) 46°19.02'N; 030°56.52'E.

Traffic separation zone width – 5 cables.

The outer edge of the traffic lane passes northwards through the geographical positions, –

33) 46°18.99'N; 030°57.25'E;

34) 46°31.89'N; 030°57.04'E.

The established traffic flow direction – 359.5°.

The outer edge of the traffic lane passes southwards through the geographical positions, –

35) 46°31.36' N, 030°54.90' E

36) 46°19.06'N; 030°55.09' E.

The established traffic flow direction – 179.5°.

Part VII. Precautionary area

The area is limited by lines connecting the following geographical positions, –

35) 46°31.36' N, 030°54.90' E

37) 46°32.50' N, 030°54.90' E

38) 46°33.16' N, 030°57.62' E

39) 46°32.04' N, 030°57.62' E.

СХЕМА СИСТЕМИ РОЗПОДІЛУ РУХУ №2 SCHEME OF TRAFFIC SEPARATION SYSTEM No 2

