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NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

- 1 The Maritime Safety Committee, at its eighty-seventh session (12 to 21 May 2010) adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routeing measures listed, in annexes 1 to 10, as follows:
 - .1 "Adlergrund" (new scheme);
 - .2 "Slupska Bank" (new scheme);
 - .3 "West Klintehamn" (new scheme);
 - .4 "Midsjöbankarna" and "South Hoburgs Bank" (new schemes);
 - .5 "In the area off south-western coast of the Crimea" (new scheme);
 - .6 "Off Cape Roca" (amended scheme);
 - .7 "Off Cape S. Vicente" (amended scheme);
 - .8 "Off Porkkala Lighthouse" (amended scheme);
 - .9 "Off Kalbådagrund Lighthouse" (amended scheme); and
 - .10 "Off Hankoniemi Peninsula" (amended scheme).
- The new and amended traffic separation schemes listed in subparagraphs 1.1, 1.2 and 1.5 to 1.10 above and detailed in annexes 1, 2, 5, 6, 7, 8, 9 and 10, will be implemented at 0000 hours UTC on 1 December 2010; those listed in subparagraphs 1.3 and 1.4 and detailed in annexes 3 and 4 will be implemented at 0000 hours UTC on 1 January 2011.

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND ASSOCIATED ROUTEING MEASURES

ANNEX 1

NEW TRAFFIC SEPARATION SCHEME "ADLERGRUND"

(Reference chart: German Chart No.40 (INT 1201) published by the German Federal Maritime and Hydrographic Agency (BSH) (7th Edition, 2006).)

Note: This chart is based on World Geodetic System 1984 Datum (WGS 84).

Description of the traffic separation scheme

The traffic separation scheme consists of:

- two traffic lanes 2.0 miles wide;
- one intermediate traffic separation zone 0.5 miles wide.
- (a) A separation zone, half a mile wide, centred upon the following geographical positions:

(1)	54° 38′.00 N	014° 15′.50 E
(2)	54° 36′.50 N	014° 24′.00 E
(3)	54° 37′.00 N	014° 30′.00 E

(b) A traffic lane for eastbound traffic between the separation zone and a line connecting the following geographical positions:

(4)	54° 36′.00 N	014° 14′.50 E
(5)	54° 34′.50 N	014° 24′.00 E
(6)	54° 35′ 00 N	014° 30′ 50 E

(c) A traffic lane for westbound traffic between the separation zone and a line connecting the following geographical positions:

(7)	54° 40′.00 N	014° 16′.50 E
(8)	54° 38′.50 N	014° 24′.30 E
(9)	54° 39′.00 N	014° 29′.50 E

NEW TRAFFIC SEPARATION SCHEME "SLUPSKA BANK"

(Reference chart: Polish Chart No.252 (INT 1219) published by the Hydrographic Office of the Polish Navy (BHMW) (Edition 12/2004).)

Note: This chart is based on World Geodetic System 1984 Datum (WGS 84).

Description of the traffic separation scheme

The traffic separation scheme consists of:

- two traffic lanes 1.75 miles wide in two parts;
- one intermediate traffic separation zone 0.5 miles wide in two parts;
- one inshore traffic zone associated with the eastern part of TSS.

West part:

(a) A separation zone bounded by a line connecting the following geographical positions:

(1)	54° 47′.93 N	016° 29′.41 E
(2)	54° 47′.43 N	016° 29′.53 E
(3)	54° 48′.80 N	016° 45′.90 E
(4)	54° 49′.28 N	016° 45′.78 E

(b) A traffic lane for eastbound traffic between the separation zone and a line connecting the following geographical positions:

(5)	54° 45′.70 N	016° 29′.97 E
(6)	54° 47′.06 N	016° 46′.32 E

(c) A traffic lane for westbound traffic between the separation zone and a line connecting the following geographical positions:

(7)	54° 51′.01 N	016° 45′.35 E
(8)	54° 49′.66 N	016° 28′.97 E

East part:

(d) A separation zone bounded by a line connecting the following geographical positions:

(9)	54° 50′.74 N	016° 56′.58 E
(10)	54° 50′.26 N	016° 56′.79 E
(11)	54° 53′.72 N	017° 21′.59 E
(12)	54° 54′.21 N	017° 21′.39 E

(e) A traffic lane for eastbound traffic between the separation zone and a line connecting the following geographical positions:

(13)	54° 48′.56 N	016° 57′.51 E
(14)	54° 52′.02 N	017° 22′.29 E

(f) A traffic lane for westbound traffic between the separation zone and a line connecting the following geographical positions:

(15)	54° 55′.91 N	017° 20′.68 E
(16)	54° 52′.44 N	016° 55′.86 E

(g) Inshore traffic zone:

The area between the southern boundary of the eastern part of the traffic separation scheme and the Polish coast, which lies between a line drawn from position (13) above in a direction of 158° to the coast and a line drawn from position (14) above in a direction of 135° to the coast, is designated as an inshore traffic zone.

NEW TRAFFIC SEPARATION SCHEME "WEST KLINTEHAMN"

(Reference chart: Swedish chart number SE72 edition 19/3-2008 in WGS 84.)

Description of the traffic separation scheme

- (a) A traffic separation zone is established upon the following geographical positions:
 - (1) 57° 28′.00 N 017° 45′.67 E
- (2) 57° 27′.09 N 017° 44′.75 E
- (3) 57° 26′.10 N 017° 43′.97 E
- (4) 57° 26′.49 N 017° 42′.26 E
- (5) 57° 27′.49 N 017° 43′.06 E
- (6) 57° 28′.49 N 017° 44′.05 E
- (b) A traffic lane for the northbound traffic is established between the traffic separation zone and a traffic separation line connecting the following geographical positions:
 - (7) 57° 26′.55 N 017° 50′.52 E
- (8) 57° 25′.87 N 017° 49′.82 E
- (9) 57° 24′.95 N 017° 49′.09 E
- (c) A traffic lane for the southbound traffic is established between the traffic separation zone and a line connecting the following geographical positions:
 - (10) 57° 29′.93 N 017° 39′.18 E
- (11) 57° 28′.71 N 017° 37′.98 E
- (12) 57° 27′.63 N 017° 37′.13 E
- (d) The limits of an inshore traffic zone along the Gotland Island coastline lies between the following positions:
 - (7) 57° 26′.55 N 017° 50′.52 E
- (8) 57° 25′.87 N 017° 49′.82 E
- (9) 57° 24′.95 N 017° 49′.09 E
- (13) 57° 26′.46 N 018° 07′.15 E
- (14) 57° 20′.07 N 018° 10′.49 E

NEW TRAFFIC SEPARATION SCHEMES "MIDSJÖBANKARNA" AND "SOUTH HOBURGS BANK"

(Reference chart: Swedish chart number SE7 edition 5/6-2008 in WGS 84.)

Description of the traffic separation schemes

"Midsjöbankarna"

- (g) A traffic separation zone is established upon the following geographical positions:
 - (19) 55° 56′.16 N 017° 32′.41 E
- (20) 55° 57′.45 N 017° 41′.68 E
- (21) 55° 56′.68 N 017° 42′.13 E
- (22) 55° 55′.38 N 017° 32′.71 E
- (h) A traffic lane for the southbound traffic is established between the traffic separation zone and a line connecting the following geographical positions:
 - (23) 55° 59′.07 N 017° 31′.27 E
- (24) 56° 00′.30 N 017° 40′.04 E
- (i) A traffic lane for the northbound traffic is established between the traffic separation zone and a line connecting the following geographical positions:
 - (25) 55° 52′.47 N 017°33′.85 E (26) 55° 53′.85 N 017° 43′.75 E

"South Hoburgs bank"

- (i) A traffic separation zone is established upon the following geographical positions:
 - (27) 56° 17′.57 N 018° 39′.09 E
- (28) 56° 20′.23 N 018° 46′.82 E
- (29) 56° 24′.58 N 018° 51′.02 E
- (30) 56° 24′.20 N 018° 52′.31 E
- (31) 56° 19′.64 N 018° 47′.81 E
- (32) 56° 16′.89 N 018° 39′.88 E
- A traffic lane for the southbound traffic is established between the traffic separation (k) zone and a line connecting the following geographical positions:
 - (33) 56° 20′.23 N 018° 36′.02 E
- (35) 56° 26′.04 N 018° 46′.14 E
- (34) 56° 22′.64 N 018° 42′.82 E
- (l) A traffic lane for the northbound traffic is established between the traffic separation zone and a line connecting the following geographical positions:
 - (36) 56° 14′.21 N 018° 42′.96 E
- (38) 56° 22′.74 N 018° 57′.19 E
- (37) 56° 17′.23 N 018° 51′.80 E

NEW TRAFFIC SEPARATION SCHEME "IN THE AREA OFF THE SOUTH-WESTERN COAST OF THE CRIMEA"

(Reference Chart: State Hydrographic Service of Ukraine No.3301 (published 03/2009)).

Note: This chart is based on World Geodetic System 1984 Datum (WGS 84)

Description of the traffic separation scheme

The traffic separation scheme consists of two parts:

Part one, Routeing System No.9 "Sevastopol Harbour Approach"; and

Part two, Routeing System No.3 "From Cape Khersones to Cape Aitodor".

Note: All geographical positions are referred to WGS 84 datum.

Part one, Routeing System No.9 "Sevastopol Harbour Approach"

Scheme consists of five elements.

Element I (Western) for entering (leaving) the roundabout area which includes two traffic lanes and a traffic separation zone limited by lines connecting the following geographical positions:

(1)	44° 40′.44 N	033° 08′.91 E
(2)	44° 39′.79 N	033° 13′.31 E
(3)	44° 38′.59 N	033° 13′.31 E
(4)	44° 38′ 84 N	033° 08′.91 E

The outer limit of the traffic lane for entering the roundabout area passes through the following geographical positions:

(5)	44° 38′.04 N,	033° 08′.91 E;
(6)	44° 37′.79 N	033° 13′.31 E

The established direction of the traffic flow – 094.5°.

The outer limit of the traffic lane for leaving the roundabout area passes through the following geographical positions:

(7)	44° 40′.44 N	033° 13′.31 E
(8)	44° 41′.09 N	033° 08′.91 E

The established direction of the traffic flow – 281°.

Element II (Northern) for entering (leaving) the roundabout area includes two traffic lanes and a traffic separation zone limited by lines connecting the following geographical positions:

(9)	44° 43′.34 N	033° 14′.71 E
(10)	44° 40′.29 N	033° 16′.71 E
(10A)	44° 40′.11 N	033° 15′.87 E
(11)	44° 40′.19 N	033° 15′.21 E
(12)	44° 40′.89 N	033° 14′.71 E

The outer limit of the traffic lane for entering the roundabout area passes through the following geographical positions:

(13)	44° 43′.34 N	033° 13′.31 E
(7)	44° 40′.44 N	033° 13′.31 E

The established direction of the traffic flow – 180°.

The outer limit of the traffic lane for leaving the roundabout area passes through the following geographical positions:

(14)	44° 40′.11 N	033° 17′.83 E
(15)	44° 43′.34 N	033° 15′.73 E

The established direction of the traffic flow – 335°.

Element III (Southern) for entering (leaving) the roundabout area includes two traffic lanes and a traffic separation zone limited by lines connecting the following geographical positions:

(16)	44° 37′.55 N	033° 15′.41 E
(17)	44° 37′.28 N	033° 16′.81 E
(18)	44° 30′.73 N	033° 13′.29 E
(19)	44° 31′.64 N	033° 12′.19 E

The outer limit of the traffic lane for entering the roundabout area passes through the following geographical positions:

(20)	44° 30′.09 N	033° 14′.06 E
(21)	44° 37′.59 N	033° 18′.13 E

The established direction of the traffic flow – 021°.

The outer limit of the traffic lane for leaving the roundabout area passes through the following geographical positions:

(6)	44° 37′.79 N	033° 13′.31 E
(22)	44° 32′.84 N	033° 10′.63 E

The established direction of the traffic flow – 201°.

Element IV (roundabout area) includes the circular separation zone of the routeing system with a radius of 5 cables which centre is situated in the geographical position 44° 38′.8 N 033° 16′.9 E and a circular traffic lane 1.0 mile wide.

The established direction of the traffic flow – counter-clockwise around the circular separation zone.

Element V (Eastern) includes four traffic lanes and two separation zones.

Separation zones are limited by lines connecting the following geographical positions:

Α	(24) 44° 38′.26 N	033° 18′.88 E	В	(28)	44° 37′.97 N	033° 23′.91 E
	(25) 44° 38′ 99 N	033° 18′.96 E		(29)	44° 38′.29 N	033° 23′.91 E
	(26) 44° 38′.69 N	033° 21′.41 E		(30)	44° 37′.99 N	033° 25′.91 E
	(27) 44° 38′.12 N	033° 21′.41 E		(31)	44° 37′.89 N	033° 25′.91 E

The outer limit of the traffic lane for entering Sevastopol's'ka Bay passes through the following geographical positions:

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(32) 44° 37′.79 N 033° 18′.44 E
(32A) 44° 37′.63 N 033° 21′.41 E
(33A) 44° 37′.49 N 033° 23′.93 E
(33) 44° 37′.29 N 033° 27′.71 E
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The established direction of the traffic flow – 094.5° (Inkermans'kyi leading line).

The outer limit of the traffic lane for leaving Sevastopol's'ka Bay passes through the following geographical positions:

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(34) 44° 38′.47 N 033° 27′.71 E
(34A) 44° 38′.99 N 033° 23′.93 E
(35A) 44° 39′.34 N 033° 21′.41 E
(35) 44° 39′.72 N 033° 18′.52 E
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The established direction of the traffic flow – 280.9° (Kostiantynivs'kyi leading line).

Crossing northbound and southbound traffic should follow appropriate lanes on either side of a line which passes through the following geographical positions:

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(36) 44° 38′.52 N 033° 22′.91 E (37) 44° 38′.04 N 033° 22′.91 E
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Lanes on both sides of the line are limited by separation zones.

The established directions of the traffic flow: 000° (eastward of the separation line) and 180° (westward of the traffic separation line).

Notes:

1 In the centre of the circular separation zone of the Routeing System (44° 38'.8 N 033° 16'.9 E) a special light buoy is positioned, light-yellow, flashing, 5s 5M. (Y FI 5s 5M).

- 2 Going out on Kostiantynivs'kyi leading lights should be followed:
 - for all vessels: from geographical position 44° 37′.44 N 033° 29′.61 E (crossing Inkermans'kyi and Lukul's'kyi leading lines);
 - for vessels with actual draught over 10 m: from geographical position 44° 37′.49 N 033° 28′.56 E.
- 3 Separation of traffic at crossing for northbound and southbound traffic is established by vessels following to/from Kozacha, Komysheva and Kruhla Bays and also vessels using anchorage point No.386 and degaussing range near Khersones Cape may enter/leave the Scheme and cross Part V of the Scheme.
- 4 Between meridians 33° 26'.0 E and 033° 28'.4 E vessels following to/from Striletz'ka Bay and also vessels using anchorage points No.384 and No.386 and degaussing ranges northward from Kruhla Bay may enter/leave the System and cross Part V of the System.

Part two, Routeing System No.3 "From Cape Khersones to Cape Aitodor" Scheme consists of two elements.

Element I (North-Western) includes a junction area, where the Traffic Separation Scheme and local routes merge, associated separation zones and two traffic lines, limited by lines connecting the following geographical positions:

Route junction and separation of traffic at crossing:

Α	(38)	44° 30′.62 N	033° 11′.64 E
	(39)	44° 29′.73 N	033° 12′.75 E
	(40)	44° 28′.72 N	033° 12′.21 E
	(41)	44° 29′.61 N	033° 11′.08 E

with the associated route junction border line passing through the following geographical positions:

Α	(47)	44° 28′.59 N	033° 10′.55 E
	(48)	44° 27′.74 N	033° 11′.63 E

Separation zone:

В	(42)	44° 29′.12 N	033° 13′.52 E
	(43)	44° 17′.99 N	033° 27′.21 E
	(44)	44° 17′.99 N	033° 25′.46 E
	(45)	44° 28′.09 N	033° 12′.99 E

North-eastern border of the north-westbound traffic lane is limited by the separation zone and by the line, passing through the following geographical positions:

(46)	44° 17′.99 N	033° 29′.11 E
(20)	44° 30′.09 N	033° 14′.06 E

The established direction of the traffic flow – 318°.

South-Western borders of zone for separation of traffic at a crossing are limited by the separation zone and by the line passing through the following geographical positions:

B (49) 44° 27′.09 N 033° 12′.46 E (50) 44° 17′.99 N 033° 23′.71 E

The established direction of the traffic flow – 138°.

Element II (Eastern) includes a junction area, where the Traffic Separation Scheme and local routes merge, associated separation zones, four traffic lanes and a line limited by lines connecting the following geographical positions:

Route junction and separation of traffic at crossing:

A (53) 44° 16′.99 N 033° 26′.71 E (54) 44° 16′.99 N 033° 28′.51 E (55) 44° 15′.99 N 033° 29′.81 E (56) 44° 15′.99 N 033° 28′.01 E

with the associated route junction border lines passing through the following geographical positions:

South-western

(51) 44° 16′.99 N 033° 24′.91 E (52) 44° 15′.99 N 033° 26′.21 E

Southern

(68) 44° 14′.99 N 033° 29′.31 E (69) 44° 14′.99 N 033° 31′.11 E

Two separation zones:

В	(57)	44° 16′.99 N	033° 30′.31 E	С	(61) 44° 16′.99 N	034° 06′.81 E
	(58)	44° 16′.99 N	034° 03′.61 E		(62) 44° 16′.99 N	034° 14′.91 E
	(59)	44° 15′.99 N	034° 03′.11 E		(63) 44° 15′.99 N	034° 14′.91 E
	(60)	44° 15′.99 N	033° 31′.61 E		(64) 44° 15′.99 N	034° 06′.31 E

Traffic lanes

Northern border of the westbound traffic lane is limited by the separation zones and by the lines passing through the following geographical positions:

Α	(65)	44° 17′.99 N	034° 14′.91 E	В	(67) 44° 17′.99 N	034° 04′.11 E
	(66)	44° 17′.99 N	034° 07′.31 E		(46) 44° 17′.99 N	033° 29′.11 E

The established direction of the traffic flow – 270°.

Southern borders of the eastbound traffic lane are limited by the separation zones and by the lines passing through the following geographical positions:

С	(70)	44° 14′.99 N	033° 32′.91 E	D	(72) 44° 14′.99 N	034° 05′.81 E
	(71)	44° 14′.99 N	034° 02′.61 E		(73) 44° 14′.99 N	034° 14′.91 E

The established direction of the traffic flow – 090°.

Crossing north-eastbound and south-westbound traffic should follow appropriate lanes on either side of a line, which passes through the following geographical positions:

(74)	44° 16′.99 N	034° 05′.21 E
(75)	44° 15′.99 N	034° 04′.71 E

Lanes from both sides of the line are limited by the separation zones.

The established directions of the traffic flow: 020° (eastward from the separation line) and 200° (westward from the separation line).

Notes:

- 1 Traffic lanes along the traffic separation line are used by vessels following from south to the port of Yalta and in the opposite direction.
- While proceeding from TSS No.3 to the port of Yalta and in the opposite direction it is necessary to follow the recommended track No.8.

AMENDED TRAFFIC SEPARATION SCHEME "OFF CAPE ROCA"

(Reference chart: Portuguese Hydrographic Office 21101 (INT 1081), 4th impression, April 2002) **Note**: All positions are given in World Geodetic System 1984 Datum (WGS 84)

Description of the amended traffic separation scheme

- (a) A separation zone bounded by lines connecting the following geographical positions:
 - (1) 38° 39′.17 N 009° 43′.12 W
- (3) 38° 51′.91 N 009° 49′.48 W
- (4) 38° 43′.20 N 009° 49′.48 W
- (2) 38° 51′.91 N 009° 44′.43 W
- (5) 38° 38′.27 N 009° 48′.02 W
- (b) A northbound traffic lane between the separation zone described in (a) and a separation zone by lines connecting the following geographical positions, for ships not carrying dangerous or pollutant cargoes in bulk:
 - (6) 38° 37′.56 N 009° 51′.86 W
- (9) 38° 51′.91 N 009° 54′.88 W
- (7) 38° 42′.85 N 009° 53′.43 W
- (10) 38° 42′.71 N 009° 54′.88 W
- (8) 38° 51′.91 N 009° 53′.43 W
- (11) 38° 37′.30 N 009° 53′.28 W
- (c) A northbound traffic lane between the separation zone described in (b) and a central separation zone bounded by lines connecting the following geographical positions, for ships carrying dangerous or pollutant cargoes in bulk (see note):
 - (12) 38° 36′.55 N 009° 57′.37 W
- (15) 38° 51′.91 N 010° 04′.33 W
- (13) 38° 42′.31 N 009° 59′.08 W
- (16) 38° 41′.83 N 010° 04′.33 W
- (14) 38° 51′.91 N 009° 59′.08 W
- (17) 38° 35′.61 N 010° 02′.49 W
- (d) A southbound traffic lane between the separation zone described in (c) and a separation zone bounded by lines connecting the following geographical positions, for ships not carrying dangerous or pollutant cargoes in bulk:
 - (18) 38° 34′.88 N 010° 06′.43 W
- (21) 38° 51′.91 N 010° 09′.83 W
- (19) 38° 41′.45 N 010° 08′.38 W
- (22) 38° 41′.32 N 010° 09′.83 W
- (20) 38° 51′.91 N 010° 08′.38 W
- (23) 38° 34′.62 N 010° 07′.84 W
- (e) A southbound traffic lane between the separation zone described in (d) and a line connecting the following geographical positions, for ships carrying dangerous or pollutant cargoes in bulk (see note):
 - (24) 38° 33′.92 N 010° 11′.69 W
- (26) 38° 51′.91 N 010° 13′.78 W
- (25) 38° 40′.96 N 010° 13′.77 W
- (f) A two-way traffic route 2 miles wide established between the separation zone described in (a) and a separation zone bounded by the lines connecting the following geographical positions, for ships sailing between ports situated between Cape Finisterre and Punta del Perro and southbound ships bound to the port of Lisbon or northbound ships leaving the port of Lisbon, except for ships carrying oils listed in Appendix I of Annex I of the International Convention for the Prevention of Pollution

from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78) and ships carrying in bulk the substances listed in categories A and B in appendices I and II of Annex II of that same Convention:

(27) 38° 39′.63 N 009° 40′.63 W (29) 38° 51′.91 N 009° 41′.23 W (28) 38° 51′.91 N 009° 41′.87 W (30) 38° 39′.74 N 009° 39′.99 W

(g) The area between the separation zone described in paragraph (f) and the Portuguese coast, bounded on the north by the parallel of 38° 51′.91 N and on the south by the line connecting point with position 38° 39′.74 N, 009° 39′.99 W and Cape Raso lighthouse (38° 42′.56 N, 009° 29′.14 W), is designated as an inshore traffic zone.

Note: Dangerous cargoes in bulk refers to the IMDG Code and Annexes I and II of MARPOL.

AMENDED TRAFFIC SEPARATION SCHEME "OFF CAPE S. VICENTE"

(Reference chart: Portuguese Hydrographic Office 21101 (INT 1081), 4th impression, April 2002) **Note:** All positions are given in World Geodetic System 1984 Datum (WGS 84)

Description of the amended traffic separation scheme

(a) A separation zone bounded by lines connecting the following geographical positions:

(1)	36° 47′.73 N 00	8° 58′.09 W	(5)	37° 01′.06 N	009° 19′.56 W
(2)	36° 49′.36 N 00	9° 05′.96 W	(6)	36° 53′.79 N	009° 17′.46 W
(3)	36° 55′.58 N 00	9° 13′.12 W	(7)	36° 45′.98 N	009° 08′.40 W
(4)	37° 01′.94 N 00	9° 14′.78 W	(8)	36° 43′.96 N	008° 59′.40 W

(b) A northbound traffic lane between the separation zone described in (a) and a separation zone by lines connecting the following geographical positions, for ships not carrying dangerous or pollutant cargoes in bulk:

(9)	36° 40′.89 N	009° 00′.47 W	(13)	37° 00′.08 N	009° 24′.82 W
(10)	36° 43′.16 N	009° 10′.53 W	(14)	36° 51′.68 N	009° 22′.40 W
(11)	36° 52′.25 N	009° 21′.07 W	(15)	36° 42′.13 N	009° 11′.32 W
(12)	37° 00′.34 N	009° 23′.41 W	(16)	36° 39′.77 N	009° 00′.86 W

(c) A northbound traffic lane between the separation zone described in (b) and a central separation zone bounded by lines connecting the following geographical positions, for ships carrying dangerous or pollutant cargoes in bulk (see note):

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(17) 36° 36′.49 N 009° 02′.00 W (21) 36° 58′.35 N 009° 34′.07 W (18) 36° 39′.11 N 009° 13′.60 W (22) 36° 47′.98 N 009° 31′.07 W (19) 36° 50′.04 N 009° 26′.26 W (23) 36° 35′.34 N 009° 16′.44 W (20) 36° 59′.31 N 009° 28′.94 W (24) 36° 32′.40 N 009° 03′.41 W
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(d) A southbound traffic lane between the separation zone described in (c) and a separation zone bounded by lines connecting the following geographical positions, for ships not carrying dangerous or pollutant cargoes in bulk:

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(25) 36° 29′.28 N 009° 04′.49 W (29) 36° 57′.36 N 009° 39′.40 W (26) 36° 32′.47 N 009° 18′.61 W (30) 36° 45′.83 N 009° 36′.07 W (27) 36° 46′.40 N 009° 34′.74 W (31) 36° 31′.42 N 009° 19′.40 W (28) 36° 57′.62 N 009° 37′.98 W (32) 36° 28′.14 N 009° 04′.88 W
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(e) A southbound traffic lane between the separation zone described in (d) and a line connecting the following geographical positions, for ships carrying dangerous or pollutant cargoes in bulk (see note):

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(33) 36° 25′.07 N 009° 05′.95 W (35) 36° 44′.29 N 009° 39′.67 W (34) 36° 28′.60 N 009° 21′.53 W (36) 36° 56′.64 N 009° 43′.24 W
```

(f) A one-way traffic route 2 miles wide established between the separation zone described in (a) and a separation zone bounded by the lines connecting the following geographical positions, for southbound ships sailing between ports situated between Cape Finisterre and Punta del Perro and southbound ships bound to the port of Portimão, except for ships carrying oils listed in appendix I of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the protocol of 1978 (MARPOL 73/78) and ships carrying in bulk the substances listed in categories A and B in appendices I and II of Annex II of that same Convention:

(37)	36° 49′.65 N 008° 57′.43 W	(41)	37° 02′.50 N	009° 11′.72 W
(38)	36° 51′.05 N 009° 04′.68 W	(42)	36° 56′.74 N	009° 10′.36 W
(39)	36° 56′.51 N 009° 10′.91 W	(43)	36° 51′.51 N	009° 04′.34 W
(40)	37° 02′.39 N 009° 12′.34 W	(44)	36° 50′.14 N	008° 57′.25 W

(g) The area between the separation zone described in paragraph (f) and the Portuguese coast, bounded on the north by the line connecting point with position 37° 02′.50 N 009° 11′.72 W and Cape S. Vicente lighthouse (37° 01′.37 N 008° 59′.79 W) and on the east by the line connecting point with position 36° 50′.14 N 008° 57′.25 W and Ponta de Sagres lighthouse (36° 59′.67 N 008° 56′.95 W), is designated as an inshore traffic zone.

Note: Dangerous cargoes in bulk refers to the IMDG Code and Annexes I and II of MARPOL.

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF PORKKALA LIGHTHOUSE"

(Reference Chart: Estonian charts number 300 (Edition 2006-15-12) and 302 (Edition 2004-24-11); Finnish charts number 952 (Edition 2008-11-10) and 953 (2008-06-10), and Russian chart number 23068 (Edition 2001))

Note: Finnish and Estonian charts are based on World Geodetic System 1984 Datum (WGS 84); Russian chart is based on Geodetic datum of the year 1942 (Pulkovo). For obtaining position in WGS datum such position should be moved 0.13' westward.

Description of the amended traffic separation scheme

Note: All positions are referred to WGS 84 datum

(a) A separation zone, 0.7 nautical miles wide, is bounded by lines connecting the following geographical positions:

(1)	59° 43′.51 N	024° 18′.16 E
(2)	59° 44′.08 N	024° 21′.96 E
(3)	59° 44′.94 N	024° 29′.64 E
(4)	59° 45′.47 N	024° 27′.97 E
(5)	59° 44′.76 N	024° 21′.61 E
(6)	59° 44′.19 N	024° 17′.77 E

(b) A separation zone is bounded by lines connecting the following geographical positions:

```
(7)
        59° 47′.33 N
                             024° 35′.39 E
                             024° 21′.11 E
(8)
        59° 45′.74 N
                             024° 21′.21 E
        59° 45′.54 N
(9)
(10)
        59° 46′.48 N
                             024° 29′.65 E
        59° 45′.34 N
                             024° 33′.21 E
(11)
                             024° 36′.13 E
(12)
        59° 45′.67 N
```

(c) A separation zone, 1.7 nautical miles wide, is bounded by lines connecting the following geographical positions:

(20)	59° 49′.14 N	025° 07′.23 E
(21)	59° 49′.58 N	025° 11′.12 E
(22)	59° 51′.24 N	025° 10′.39 E
(23)	59° 50′.80 N	025° 06′.50 E

(d) A traffic lane for eastbound traffic, 2.0 nautical miles wide, is bounded a line connecting the following geographical positions:

(1)	59° 43′.51 N	024° 18′.16 E
(2)	59° 44′.08 N	024° 21′.96 E
(3)	59° 44′.94 N	024° 29′.64 E
(15)	59° 42′.98 N	024° 30′.50 E
(14)	59 °42′.13 N	024° 22′.96 E
(13)	59° 41′.58 N	024° 19′.29 E

(e) A traffic lane for westbound traffic, 1.0 nautical mile wide, is bounded by a line connecting the following geographical positions:

(3)	59° 44′.94 N	024° 29′.64 E
(4)	59° 45′.47 N	024° 27′.97 E
(5)	59° 44′.76 N	024° 21′.61 E
(6)	59° 44′.19 N	024° 17′.77 E
(9)	59° 45′.54 N	024° 21′.21 E
(10)	59° 46′.48 N	024° 29′.65 E
(11)	59° 45′.34 N	024° 33′.21 E

(f) A traffic lane for westbound traffic, 2.0 nautical miles wide, is bounded by lines connecting the following geographical positions:

```
      (7)
      59° 47′.33 N
      024° 35′.39 E

      (8)
      59° 45′.74 N
      024° 21′.11 E

      (19)
      59° 47′.08 N
      024° 16′.07 E

      (18)
      59° 47′.68 N
      024° 20′.11 E

      (17)
      59° 49′.29 N
      024° 34′.53 E
```

(g) A traffic lane for eastbound traffic, 2.0 nautical miles wide, is bounded by lines connecting the following geographical positions:

(20)	59° 49′.14 N	025° 07′.23 E
(21)	59° 49′.58 N	025° 11′.12 E
(25)	59° 47′.62 N	025° 11′.99 E
(24)	59° 47′.18 N	025° 08′.10 E

(h) A traffic lane for westbound traffic, 2.0 nautical miles wide, is bounded by lines connecting the following geographical positions:

(22)	59° 51′.24 N	025° 10′.39 E
(23)	59° 50′.80 N	025° 06′.50 E
(27)	59° 52′.76 N	025° 05′.64 E
(26)	59° 53′.19 N	025° 09′.53 E

(i) An amended precautionary area with recommended direction of traffic flow is established connecting the following geographical positions:

59° 42′.98 N	024° 30′.50 E
59° 43′.70 N	024° 36′.99 E
59° 47′.18 N	025° 08′.10 E
59° 49′.14 N	025° 07′.23 E
59° 50′.80 N	025° 06′.50 E
59° 52′.76 N	025° 05′.64 E
59° 49′.29 N	024° 34′.53 E
59° 47′.33 N	024° 35′.39 E
59° 45′.67 N	024° 36′.13 E
59° 45′.34 N	024° 33′.21 E
59° 44′.94 N	024° 29′.64 E
	59° 43′.70 N 59° 47′.18 N 59° 49′.14 N 59° 50′.80 N 59° 52′.76 N 59° 49′.29 N 59° 47′.33 N 59° 45′.67 N 59° 45′.34 N

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF KALBÅDAGRUND LIGHTHOUSE"

(Reference Chart: Estonian charts number 300 (Edition 2006-15-12) and 302 (Edition 2004-24-11); Finnish charts number 952 (Edition 2008-11-10) and 953 (2008-06-10), and Russian chart number 23069 (Edition 2005))

Note: Finnish and Estonian charts are based on World Geodetic System 1984 Datum (WGS 84); Russian chart is based on Geodetic datum of the year 1942 (Pulkovo). For obtaining position in WGS datum such position should be moved 0.13' westward.

Description of the amended traffic separation scheme

Note: All positions are referred to WGS 84 datum

(a) A separation zone is bounded by lines connecting the following geographical positions:

(28)	59° 52′.35 N	025° 40′.06 E
(29)	59° 52′.84 N	025° 46′.03 E
(30)	59° 53′.81 N	025° 51′.77 E
(31)	59° 54′.75 N	025° 51′.14 E
(32)	59° 53′.81 N	025° 45′.55 E
(33)	59° 53′.34 N	025° 39′.73 E

(b) A traffic lane for eastbound traffic, 2.0 nautical miles wide, is established between the separation zone described in paragraph (a) above and a line connecting the following geographical positions:

(34)	59° 50′.37 N	025° 40′.70 E
(35)	59° 50′.89 N	025° 46′.99 E
(36)	59° 51′.91 N	025° 53′.04 E

(c) A traffic lane for westbound traffic, 2.0 nautical miles wide, is established between the separation zone described in paragraph (a) above and a line connecting the following geographical positions:

(37)	59° 56′.65 N	025° 49′.88 E
(38)	59° 55′.76 N	025° 44′.59 E
(39)	59° 55′.31 N	025° 39′.09 E

AMENDED TRAFFIC SEPARATION SCHEME "OFF HANKONIEMI PENINSULA"

(Reference Chart: Estonian chart number 302 (Edition 2004-24-11); Finnish charts number 952 (Edition 2008-11-10) and 953 (2008-06-10), and Russian chart number 23067 (Edition 2001).) **Note:** Finnish and Estonian charts are based on World Geodetic System 1984 Datum (WGS 84); Russian chart is based on Geodetic datum of the year 1942 (Pulkovo). For obtaining position in WGS datum such position should be moved 0.13' westward.

Description of the amended traffic separation scheme

Note: All positions are referred to WGS 84 datum.

(a) A new precautionary area adjacent to the traffic separation scheme is established connecting the following geographical positions:

(40)	59° 40′.99 N	023° 32′.98 E
(41)	59° 34′.24 N	023° 37′.70 E
(42)	59° 25′.31 N	022° 48′.07 E
(43)	59° 34′.71 N	022° 41′.52 E
(44)	59° 39′.31 N	023° 21′.16 E