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COLREG.2/Circ.3
6 March 1978

SJÖFARTSVERKET
Sjöfartsinspektionen
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IMCO

Ref: T2/2.07

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DATES OF IMPLEMENTATION OF NEW AND AMENDED
TRAFFIC SEPARATION SCHEMES

Further to COLREG.2/Circ.1 of 2 February 1978, the Secretary-General has the honour to state that after consultation with the Governments concerned the following new and amended traffic separation schemes adopted by Assembly Resolution A.374(X) will be implemented for the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972 on 15 May 1978:

1. Off Falsterborev.
2. In the Southern Approaches to the Kerch Strait.
3. Off Delaware Bay.
4. Off New York.
5. In the Approaches to Portland, Maine.
6. In the Approaches to Chesapeake Bay.
7. In the Approaches to Antofagasta.
8. In the Approaches to Quintero Bay.
9. In the Approaches to Valparaiso.
10. In the Approaches to Concepcion Bay.
11. In the Approaches to San Vicente Bay.
12. In the Gulf of Suez.

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COLREG.2/Circ.4

2 May 1978

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SEAFARTSVERKET
Sjöfartsinspektionen
Ink. 1978-05-30

DATES OF IMPLEMENTATION OF NEW, AMENDED AND
CANCELLED TRAFFIC SEPARATION SCHEMES

(a) New and amended traffic separation schemes

1. Further to COLREG.2/Circ.1 of 2 February 1978 and COLREG.2/Circ.3 of 6 March 1978, the Secretary-General has the honour to state that after consultation with the Governments concerned the following new and amended traffic separation schemes adopted by Assembly Resolution A.374(X) will be implemented for the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972 on 1 October 1978:

- (i) at North Hinder;
- (ii) at West Hinder;
- (iii) in the Strait of Dover and adjacent waters.

2. By Resolution A.376(X) the tenth Assembly decided that the function of adopting traffic separation schemes, assigned to the Organization by Rule 1(d) of the International Regulations for Preventing Collisions at Sea, 1972, shall be performed by the Maritime Safety Committee on behalf of the Organization.

3. Pursuant to this decision, the Maritime Safety Committee at its thirty-eighth session adopted new and amended traffic separation schemes (described in MSC XXXVIII/22, Annex VII) which will be implemented on the following dates:

Immediately:

- (i) In the Approaches to Portland, Maine;
- (ii) in the Approaches to Chesapeake Bay.

Note: The amendments to schemes (i) and (ii) above supersede the information contained in COLREG.2/Circ.3, numbers 5 and 6.

On 21 April 1978:

- (i) In the Approaches to River Jade;
- (ii) off Terschelling and in the German Bight.

On 1 August 1978:

- (i) In the Approaches to the Gulf of Nakhodka;
- (ii) off the Ostrovnoi Point;
- (iii) off the Aniwa Cape;
- (iv) in the Fourth Kuril Strait.

4. With respect to the traffic separation schemes "Off Ushant" and "Off Casquets", the Maritime Safety Committee decided as follows:

Off Ushant

The scheme adopted by the tenth Assembly (Resolution A.374(X)) is cancelled and the scheme adopted by Resolution A.284(VIII) will remain in force pending the implementation of the newly amended scheme.

Off Casquets

The existing traffic separation scheme adopted by Resolution A.284(VIII) will remain in force pending the implementation of the newly amended scheme.

(b) Cancelled traffic separation schemes

5. At its thirty-eighth session, the Maritime Safety Committee cancelled the following traffic separation schemes:

With immediate effect:

- (i) Off Cape Roca;
- (ii) off Cape St. Vincent.

Effective from 1 August 1978:

- (i) Off Lista;
- (ii) off Lindesnes;
- (iii) off Oksøy;
- (iv) off Feistein;
- (v) off the Oslo Fjord.

ANNEX VII

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

OFF THE OSLO FJORD (cancelled)

OFF OKSÖY (cancelled)

OFF LINDESNES (cancelled)

OFF LISTA (cancelled)

OFF FEISTEIN (cancelled)

OFF CAPE ST. VINCENT (cancelled)

OFF CAPE ROCA (cancelled)

The above seven schemes adopted by Assembly Resolution A.284(VIII) are cancelled.

OFF TERSCHELLING AND IN THE GERMAN BIGHT (amended scheme)

(Reference Charts: British Admiralty 1405, 1875, 2593 and 3761;
German Hydrographic Office 50 and 53;
Netherlands Hydrographic Office 1352 and 1353)

Description of the traffic separation scheme:

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

- (1) $53^{\circ}48'.7N.$, $6^{\circ}23'.7E.$
- (2) $53^{\circ}59'.1N.$, $7^{\circ}36'.4E.$
- (3) $53^{\circ}57'.3N.$, $7^{\circ}38'.7E.$
- (4) $53^{\circ}46'.7N.$, $6^{\circ}23'.8E.$

(b) A separation line connects the following geographical positions:

- (5) $53^{\circ}47'.7N.$, $6^{\circ}23'.8E.$
- (6) $53^{\circ}47'.5N.$, $6^{\circ}22'.1E.$
- (7) $53^{\circ}47'.2N.$, $6^{\circ}20'.4E.$

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

- (8) $53^{\circ}29'.7N.$, $4^{\circ}44'.9E.$
- (9) $53^{\circ}48'.2N.$, $6^{\circ}20'.4E.$
- (10) $53^{\circ}46'.1N.$, $6^{\circ}20'.5E.$
- (11) $53^{\circ}27'.8N.$, $4^{\circ}46'.2E.$

(d) A traffic lane for westbound traffic is established between the separation zones/line and a line connecting the following geographical positions:

- (12) $54^{\circ}01'.7N.$, $7^{\circ}33'.0E.$
- (13) $53^{\circ}51'.4N.$, $6^{\circ}20'.3E.$
- (14) $53^{\circ}32'.4N.$, $4^{\circ}42'.8E.$

(e) A traffic lane for eastbound traffic is established between the separation zones/line and a separation line connecting the following geographical positions:

(15) $53^{\circ}25'.1N.$, $4^{\circ}48'.2E.$

(16) $53^{\circ}43'.6N.$, $6^{\circ}23'.9E.$

(17) $53^{\circ}54'.7N.$, $7^{\circ}42'.1E.$

The main traffic directions are:

$072^{\circ} - 252^{\circ}$ and

$077^{\circ} - 257^{\circ}$

Precautionary area

A precautionary area is established bounded by a line connecting the following geographical positions:

(18) $54^{\circ}02'.4N.$, $7^{\circ}38'.1E.$

(19) $53^{\circ}52'.0N.$, $7^{\circ}47'.4E.$

(20) $53^{\circ}52'.0N.$, $7^{\circ}45'.6E.$

(12) $54^{\circ}01'.7N.$, $7^{\circ}33'.0E.$

Inshore traffic zone

The area between the coast and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone.

Note: The separation zones of this scheme are connected by a separation line to indicate the area where a concentration of crossing traffic is likely to be met.

IN THE APPROACH TO RIVER JADE (new scheme)

(Reference Charts: British Admiralty 1405, 1875, 2593 and 3761;
German Hydrographic Office 50 and 53;
Netherlands Hydrographic Office 1352 and 1353)

Description of the traffic separation scheme:

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

- (1) 54°08'.2N., 7°30'.2E.
- (2) 54°02'.1N., 7°36'.5E.
- (3) 54°01'.9N., 7°34'.8E.
- (4) 54°08'.2N., 7°27'.5E.

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

- (5) 54°02'.4N., 7°38'.1E.
- (6) 54°08'.3N., 7°32'.8E.

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

- (7) 54°08'.2N., 7°24'.6E.
- (8) 54°01'.7N., 7°33'.0E.

The main traffic directions are:

144° - 330°

Note: A precautionary area is situated southwards of the scheme (see the traffic separation scheme "Off Terschelling and in the German Bight").

OFF CASQUETS (amended scheme)

(Reference Chart: French 878, edition No.6, December 1953)

(NOTE: This chart is on a local geodetic datum.
The geographical co-ordinates given below can be
adjusted to European Datum by subtracting 0'.10
from the longitudes)

Description of the traffic separation scheme

- (a) A separation zone one mile wide is centred upon the following geographical positions:
- (1) $49^{\circ}51'.25N.$, $2^{\circ}21'.25W.$
 - (2) $49^{\circ}46'.20N.$, $2^{\circ}50'.90W.$
- (b) A separation zone three miles wide is centred upon the following geographical positions:
- (3) $49^{\circ}59'.80N.$, $2^{\circ}24'.75W.$
 - (4) $49^{\circ}54'.75N.$, $2^{\circ}54'.50W.$
- (c) A separation zone one mile wide is centred upon the following geographical positions:
- (5) $50^{\circ}06'.70N.$, $2^{\circ}27'.50W.$
 - (6) $50^{\circ}01'.70N.$, $2^{\circ}57'.30W.$
- (d) A traffic lane for eastbound ships (seven miles wide) is established between the separation zones described in paragraphs (a) and (b) above.
- (e) A traffic lane for westbound ships (five miles wide) is established between the separation zones described in paragraphs (b) and (c) above.
- (f) The main traffic directions are:
- $075^{\circ} - 255^{\circ}$ true.

Special provisions

1. The following ships shall, as far as practicable, keep to the northern half of the eastbound traffic lane:

- (a) tankers carrying oils mentioned in Appendix I, Annex I, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973, with the exception of gasolines, jet fuels and naphtha, mentioned in this Convention; or
- (b) by ships carrying in bulk substances classed in categories A and B mentioned in Appendices I and II, Annex II, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973.

Inshore traffic zone

The area between the Casquets and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone.

OFF USHANT (amended scheme)
(Reference Chart: French 6680 (INT 1708), published in 1977)

(NOTE: This chart is on European Datum)

Description of the traffic separation scheme

- (a) A separation zone eight miles wide is centred upon the following geographical positions:
- (1) $48^{\circ}29'.75N.$, $05^{\circ}26'.50W.$
 - (2) $48^{\circ}35'.40N.$, $05^{\circ}22'.00W.$
 - (3) $48^{\circ}39'.70N.$, $05^{\circ}14'.00W.$

- (b) A separation zone six miles wide is centred upon the following geographical positions:
- (4) $48^{\circ}35'.30N.$, $05^{\circ}42'.50W.$
 - (5) $48^{\circ}43'.20N.$, $05^{\circ}36'.10W.$
 - (6) $48^{\circ}49'.00N.$, $05^{\circ}25'.40W.$

- (c) A traffic lane for north-east bound ships, three miles wide, is established to the landward side of the separation zone, described in paragraph (a) above.

The main traffic directions are:

028° and 051° true.

- (d) A traffic lane for south-west bound ships (five miles wide) is established between the traffic separation zones described in paragraphs (a) and (b) above.

The main traffic directions are:

231° and 208° true.

- (e) A traffic lane, six miles wide for north-east bound ships is established to the seaward side of the separation zone described in paragraph (b) above.

The main traffic directions are:

028° and 051° true.

NOTE: For ships using the traffic lane described in paragraph (e) above and proceeding either to the eastbound lane of the traffic separation scheme "Off Casquets" or to Lyme Bay, a recommended direction of traffic flow (051° true) extends from position

$48^{\circ}53'.65N.$, $5^{\circ}31'.10W.$ to position $49^{\circ}47'.7N.$, $3^{\circ}48'.1W.$

Special Provisions

1. The traffic lane for north-east bound ships described in paragraph (c) above shall not be used by:
 - (a) tankers carrying oils mentioned in Appendix I, Annex I, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973, with the exception of gasolines, jet fuels and naphtha, mentioned in this Convention; or
 - (b) by ships carrying in bulk substances classed in categories A and B mentioned in Appendices I and II, Annex II, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973.
2. Such ships may use the traffic lane described in paragraph (e) above but only if fitted with an electronic position-fixing appliance appropriate to the area. Such ships not so fitted shall avoid the traffic separation scheme by as wide a margin as possible in accordance with Rule 10(h) of the International Regulations for Preventing Collisions at Sea 1972. This lane may also be used by other ships but only if they are fitted with an electronic position-fixing appliance.
3. The traffic lane for south-west bound ships described in paragraph (d) above may be used by all ships. However, the tankers in ballast and ships referred to in sub-paragraphs 1(a) and (b) above shall, so far as practicable, keep within the outer half of the lane.

Inshore traffic zone

The area between Ushant Island and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone.

NOTE: Navigation within the inshore zone is regulated by national rules.

IN THE APPROACHES TO THE GULF OF NAKHODKA (new scheme)
(Reference Chart: USSR 700)

Description of the traffic separation scheme:

The traffic separation scheme consists of two parts:

Part I

- (a) A roundabout consists of a circular traffic separation zone of 2 miles in diameter centred at the following geographical position:

$42^{\circ}38'.3N.$, $132^{\circ}56'.2E.$

and a circular traffic lane of 2 miles in width.

- (b) A separation line connects the following geographical positions:

(1) $42^{\circ}34'.8N.$, $132^{\circ}56'.3E.$

(2) $42^{\circ}27'.0N.$, $132^{\circ}56'.3E.$

- (c) A traffic lane, one mile wide, is established on each side of the separation line.

- (d) A separation zone is bounded by lines, connecting the following geographical positions:

(2) $42^{\circ}27'.0N.$, $132^{\circ}56'.3E.$

(3) $42^{\circ}10'.0N.$, $132^{\circ}52'.8E.$

(4) $42^{\circ}10'.0N.$, $132^{\circ}59'.4E.$

- (e) An outside boundary of the traffic lane east of the separation zone connects the following geographical positions:

(5) $42^{\circ}10'.0N.$, $133^{\circ}02'.2E.$

(6) $42^{\circ}27'.0N.$, $132^{\circ}57'.6E.$

- (f) An outside boundary of the traffic lane west of the separation zone connects the following geographical positions:

(7) $42^{\circ}27'.0N.$, $132^{\circ}55'.0E.$

(8) $42^{\circ}10'.0N.$, $132^{\circ}50'.2E.$

OFF THE OSTROVNOI POINT (new scheme)
(Reference Chart: USSR 700)

Description of the traffic separation scheme:

The traffic separation scheme consists of two parts:

Part I

(a) Two separation zones are bounded by lines, connecting the following geographical positions:

- | | | | |
|------|-----|-------------|-----------------|
| (i) | (1) | 42°35'.2N., | 133°17'.5E. |
| | (2) | 42°36'.0N., | 133°20'.0E. |
| | (3) | 42°35'.2N., | 133°24'.4E. |
| | (4) | 42°33'.4N., | 133°18'.5E. and |
| (ii) | (5) | 42°38'.3N., | 133°26'.5E. |
| | (6) | 42°44'.6N., | 133°45'.7E. |
| | (7) | 42°42'.8N., | 133°46'.8E. |
| | (8) | 42°37'.4N., | 133°30'.8E. |

(b) A traffic lane, two miles wide, is established on each side of the separation zone.

The main traffic directions are:

66° - 246°

Part II

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

- | | | |
|------|-------------|-------------|
| (9) | 42°31'.5N., | 133°20'.0E. |
| (10) | 42°34'.5N., | 133°28'.6E. |
| (11) | 42°32'.1N., | 133°42'.0E. |
| (12) | 42°27'.8N., | 133°40'.4E. |

(b) A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

104° - 284°

Caution: The traffic lane north of the separation zone (lane between points 5 and 6) in Part I is designated for the navigation of Soviet ships only.

Part II

(a) A separation zone, one mile wide, is centred upon the following geographical positions:

- (9) $42^{\circ}36'.2N.$, $132^{\circ}58'.9E.$
- (10) $42^{\circ}33'.5N.$, $133^{\circ}02'.9E.$
- (11) $42^{\circ}33'.5N.$, $133^{\circ}07'.3E.$

(b) A traffic lane, one and a half miles wide, is established south of the separation zone.

(c) An outside boundary of the traffic lane north of the separation zone connects the following geographical positions:

- (12) $42^{\circ}35'.5N.$, $133^{\circ}07'.3E.$
- (13) $42^{\circ}35'.5N.$, $133^{\circ}03'.0E.$
- (14) $42^{\circ}37'.4N.$, $133^{\circ}00'.2E.$

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

- (12) $42^{\circ}35'.5N.$, $133^{\circ}07'.3E.$
- (13) $42^{\circ}35'.5N.$, $133^{\circ}03'.0E.$
- (14) $42^{\circ}37'.4N.$, $133^{\circ}00'.2E.$
- (15) $42^{\circ}39'.0N.$, $133^{\circ}00'.4E.$
- (16) $42^{\circ}39'.0N.$, $133^{\circ}07'.3E.$

Inshore traffic zone

The area between the coast and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone.

Caution: While navigating within the traffic separation scheme ships should strictly keep traffic lanes boundaries.

OFF THE ANIWA CAPE (new scheme)
(Reference Chart: USSR 1177)

Description of the traffic separation scheme:

- (a) A separation zone, four miles wide, is centred upon the following geographical positions:
- (1) $45^{\circ}54'.0N.$, $143^{\circ}20'.0E.$
 - (2) $45^{\circ}54'.9N.$, $143^{\circ}30'.0E.$
 - (3) $45^{\circ}58'.8N.$, $143^{\circ}40'.0E.$
- (b) A traffic lane two miles wide is established south of the separation zone.
- (c) An outside boundary of the traffic lane north of the separation zone connects the following geographical positions:
- (4) $45^{\circ}59'.0N.$, $143^{\circ}20'.0E.$
 - (5) $45^{\circ}58'.5N.$, $143^{\circ}25'.5E.$
 - (6) $46^{\circ}05'.2N.$, $143^{\circ}35'.2E.$

The main traffic directions are:

82° and 62° and
 225° and 271°

Inshore traffic zone

The area between the northern boundary of the traffic separation scheme and the coast of the Sakhalin Island is designated as an inshore traffic zone.

IN THE FOURTH KURIL STRAIT (new scheme)
(Reference Chart: USSR 1177)

Description of the traffic separation scheme:

The traffic separation scheme consists of two parts:

Part I (Off the Makanru Island)

(a) A separation zone, four miles wide, is centred upon the following geographical positions:

(1) $49^{\circ}56'.0N.$, $154^{\circ}14'.0E.$

(2) $49^{\circ}54'.6N.$, $154^{\circ}35'.0E.$

(b) A traffic lane, two miles wide, is established on each side of the separation zone.

The main traffic directions are:

$96^{\circ} - 276^{\circ}$

Part II (Off the Vasilyev Cape)

(a) A separation zone, four miles wide, is centred upon the following geographical positions:

(3) $49^{\circ}52'.4N.$, $155^{\circ}10'.0E.$

(4) $49^{\circ}51'.4N.$, $155^{\circ}24'.5E.$

(5) $49^{\circ}54'.7N.$, $155^{\circ}35'.0E.$

(b) A traffic lane, two miles wide, is established on each side of the separation zone.

The main traffic directions are:

$96^{\circ} - 276^{\circ}$ and

$65^{\circ} - 245^{\circ}$

IN THE APPROACHES TO PORTLAND, MAINE (amended scheme)

(Reference Charts: United States Charts 13006, 13009, 13260, 13286,
13288 and 13290)

Description of the traffic separation scheme

The traffic separation scheme in the approaches to Portland, Maine consists of three parts:

Part I:

Precautionary area

- (a) A precautionary area of radius 5.45 miles is centred upon geographical position $43^{\circ}31'36''$ N, $70^{\circ}05'32''$ W, the areas within separation zones and traffic lanes excluded.

Part II:

Eastern approach

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:
- (1) $43^{\circ}30'11''$ N., $69^{\circ}59'10''$ W.
 - (2) $43^{\circ}24'17''$ N., $69^{\circ}32'42''$ W.
- (b) A traffic lane, one and one-half miles wide, is established on each side of the separation zone.

The main traffic directions are:

107° and 287° .

Part III:

Southern approach

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:
- (3) $43^{\circ}27'00''$ N., $70^{\circ}03'29''$ W.
 - (4) $43^{\circ}07'49''$ N., $69^{\circ}54'57''$ W.
- (b) A traffic lane, one and one-half miles wide, is established on each side of the separation zone.

The main traffic directions are:

162° and 342° .

IN THE APPROACHES TO CHESAPEAKE BAY (amended scheme)

(Reference Charts: United States Charts 12200, 12207 and 12221)

Description of the traffic separation scheme

The traffic separation scheme in the approaches to Chesapeake Bay consists of three parts:

Part I:

Precautionary area

- (a) A precautionary area of radius two miles is centred upon geographical position $36^{\circ}56'08''N.$, $75^{\circ}57'27''W.$

Part II:

Eastern approach

- (a) A separation line connects the following geographical positions:
- (1) $36^{\circ}58'40''N.$, $75^{\circ}48'39''W.$
 - (2) $36^{\circ}56'48''N.$, $75^{\circ}55'06''W.$
- (b) A traffic lane, half a mile wide, is established on each side of the separation line.

The main traffic directions are:

070° and 250° .

Part III:

Southern approach

- (a) A separation line connects the following geographical positions:
- (3) $36^{\circ}51'21''N.$, $75^{\circ}50'56''W.$
 - (4) $36^{\circ}54'47''N.$, $75^{\circ}55'37''W.$
- (b) A traffic lane, half a mile wide, is established on each side of the separation line.

The main traffic directions are:

132° and 312° .

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COLREG.2/Circ.5
10 July 1978

78-07-31:

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Ref: T2/2.07

SJÖFARTSVERKET

Sjöfartsinspektionen

Ink. 1978-07-31

DATE OF IMPLEMENTATION OF THE AMENDED TRAFFIC SEPARATION
SCHEMES "OFF CASQUETS" AND "OFF USHANT"

1. ...With reference to COLREG.2/Circ.4 of 2 May 1978, the Secretary-General has been informed by the Governments of France and the United Kingdom that the amended traffic separation schemes "Off Casquets" and "Off Ushant" which have been adopted by the Maritime Safety Committee at its thirty-eighth session (MSC XXXVIII/22, Annex VII) will be implemented on 1 January 1979 at 0000 hours GMT.
2. Governments are requested to bring this information to the attention of all concerned.

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COLREG.2/Circ.6
6 October 1978

78-10-25

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Ref. T2/2,07
SjFARTSVERKET
SjFferisinspektionen
Ink. 1978-10-25

1. The Secretary-General has the honour to state that pursuant to Resolution A.376(X), the Maritime Safety Committee at its thirty-ninth session adopted the following new and amended traffic separation schemes (MSC XXXIX/22, Annex 9):

1.1 New traffic separation schemes:

- (a) Off Berlenga;
- (b) Off Cape Roca;
- (c) Off Cape S. Vicente; and
- (d) Off Feistein; and

1.2 Amended traffic separation schemes:

- (a) Off Terschelling and in the German Bight;
- (b) Deutsche Bucht Lightvessel Western Approach;
- (c) Off Texel;
- (d) West of the Scilly Isles;
- (e) South of the Scilly Isles;
- (f) Off Land's End, between Seven Stones and Longships;
- (g) Off the Lizard;
- (h) Off Skerries; and
- (i) In the North Channel.

2. The following new and amended traffic separation schemes will become effective on 1 January 1979 for the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972:

2.1 New traffic separation schemes:

- (a) Off Berlenga;
- (b) Off Cape Roca;
- (c) Off Cape S. Vicente;
- (d) Off Feistein;

2.2 Amended traffic separation schemes:

- (a) West of the Scilly Isles;
- (b) South of the Scilly Isles;
- (c) Off Land's End, between Seven Stones and Longships;
- (d) Off the Lizard; and
- (e) Off Skerries.

3. The dates of implementation of the amended traffic separation schemes "Off Terschelling and in the German Bight", "Deutsche Bucht Lightvessel Western Approach", "Off Texel" and "In the North Channel" will be promulgated by the Governments concerned; these dates will not be before 1 April 1979.

ANNEX 9

ADOPTED NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1. OFF FEISTEIN (new scheme)

(Reference chart: British Admiralty 2281, Edition date: 1973, European datum)

Description of the traffic separation scheme

- (a) A separation zone, two miles wide, is centred upon the following geographical positions:
- (1) $58^{\circ} 43'.0$ N., $05^{\circ} 11'.0$ E.
 - (2) $58^{\circ} 32'.0$ N., $05^{\circ} 05'.0$ E.
- (b) A traffic lane, three miles wide, is established on each side of the separation zone.

The main traffic directions are:

$015^{\circ} - 195^{\circ}$

2. OFF WERSCHELLING AND IN THE GERMAN BIGHT (amendment)

Add the following to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Special Provisions

It is recommended that this scheme should not be used by the following ships of 10 000 tons gross tonnage and upwards:

- (i) tankers carrying oils mentioned in Appendix I, Annex I, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973, with the exception of gasolines, jet fuels and naphtha, mentioned in this Convention; and
- (ii) ships carrying in bulk liquid substances classed in categories A and B mentioned in Appendices I and II, Annex II, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973.

These ships are recommended, instead, to use the "Two-Way route for tankers from North Hinder to the German Bight" and the traffic separation scheme "Deutsche Bucht Lightvessel Western Approach".

3. DEUTSCHE BUCHT LIGHTVESSEL WESTERN APPROACH (amendment)

Replace the "notes" to the description of the traffic separation scheme with the following (Res. A.284(VIII), Annex II):

Notes:

The separation zones of this scheme are connected by a separation line to indicate the area where a concentration of crossing traffic is likely to be met.

Least water depth

The area bounded by a line connecting the geographical positions given in paragraphs (d) and (e) above was closely surveyed to a least water depth of 30 metres at LWS in 1972. See also notes pertaining to the "Deep water route from North Hinder to TW/1 and TW/2 lightbuoys via S2 lightbuoy" and the "Deep water route from North Hinder to TW/1 and TW/2 lightbuoys via DRI lightbuoy".

4. OFF TEXEL (amendment)

Add the following to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Special Provisions

It is recommended that this scheme should not be used by the following ships of 10 000 tons gross tonnage and upwards:

- (i) tankers carrying oils mentioned in Appendix I, Annex I, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973, with the exception of gasolines, jet fuels and naphtha, mentioned in this Convention; and
- (ii) ships carrying in bulk liquid substances classed in categories A and B mentioned in Appendices I and II, Annex II, to the International Convention for the Prevention of Pollution of the Sea by Ships (MARPOL) 1973.

These ships are recommended, instead, to use the "Two-Way route for tankers from North Hinder to the German Bight" and the traffic separation scheme "Deutsche Bucht Lightvessel Western Approach".

5. OFF THE LIZARD (amendment)

Add the following note to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Note:

Laden tankers should avoid the area between the northern boundary of the scheme and the coast.

6. OFF LAND'S END, BETWEEN SEVEN STONES AND LONGSHIPS (amendment)

Add the following note to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Note:

Laden tankers should avoid the area between the eastern boundary of the scheme and the coast, and between the western boundary of the scheme and the Scilly Isles.

7. SOUTH OF THE SCILLY ISLES (amendment)

Add the following note to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Note:

Laden tankers should avoid the area between the northern boundary of the scheme and the Scilly Isles.

8. WEST OF THE SCILLY ISLES (amendment)

Add the following note to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Note:

Laden tankers should avoid the area between the eastern boundary of the scheme and the Scilly Isles.

9. OFF SKERRIES (amendment)

Add the following note to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Note:

Laden tankers should avoid the area between the south-eastern boundary of the scheme and the coast.

10. IN THE NORTH CHANNEL (amended scheme)

Add the following inshore traffic zone to the description of the traffic separation scheme (Res. A.284(VIII), Annex II):

Inshore traffic zones

The areas between the outer boundaries of the traffic separation scheme and the adjacent coasts are designated as inshore traffic zones.

11. OFF BERLENGA (new scheme)

(Reference chart: Portuguese chart No. 4, Edition date: 1966)

Description of the traffic separation scheme

(a) A separation zone, four miles wide, is centred upon the following geographical positions:

(1) $39^{\circ} 20'.0$ N., $09^{\circ} 50'.0$ W.

(2) $39^{\circ} 30'.0$ N., $09^{\circ} 50'.0$ W.

(b) A traffic lane, three miles wide, is established on each side of the separation zone. The northbound traffic lane is bounded by a separation zone, one mile wide, on its eastern boundary.

The main traffic directions are:

$000^{\circ} - 180^{\circ}$

Inshore traffic zone

The area between the inshore separation zone and the adjacent coast is designated as an inshore traffic zone.

12. OFF CAPE ROCA (new scheme)

(Reference chart: Portuguese charts Nos. 4 and 5, Edition date: 1966 and 1964 respectively)

Description of the traffic separation scheme

(a) A separation zone, two miles wide, is centred upon the following geographical positions:

(1) $38^{\circ} 42'.0$ N., $09^{\circ} 48'.3$ W.

(2) $38^{\circ} 47'.0$ N., $09^{\circ} 50'.0$ W.

(3) $38^{\circ} 52'.0$ N., $09^{\circ} 50'.0$ W.

- (b) A traffic lane, four miles wide, is established on each side of the separation zone. The northbound traffic lane is bounded by a separation zone, one mile wide, on its eastern boundary.

The main directions of traffic flow are:

164° - 344°

000° - 180°

Inshore traffic zone

The area between the inshore separation zone and the adjacent coast is designated as an inshore traffic zone.

13. OFF CAPE S. VICENTE (new scheme)

(Reference chart: Portuguese chart No. 13, Edition date: 1964)

Description of the traffic separation scheme

- (a) A separation zone, two miles wide, is centred upon the following geographical positions:

(1) 36° 49'.0 N., 08° 56'.5 W.

(2) 36° 51'.0 N., 09° 02'.7 W.

(3) 36° 55'.9 N., 09° 10'.5 W.

(4) 37° 00'.0 N., 09° 12'.0 W.

- (b) A traffic lane, three miles wide, is established on each side of the separation zone. The north-westbound traffic lane is bounded by a separation zone, one mile wide, on its north-eastern boundary.

The main directions of traffic flow are:

292° - 112°

308° - 128°

344° - 164°

Inshore traffic zone

The area between the inshore separation zone and the adjacent coast is designated as an inshore traffic zone.

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COLREG.2/Circ.10

14 March 1979

79-04-04

Se COLREG/circ. 9

Ref. T2/2.07

IMCO

SJÖFARTSVERKET
Sjöfartsinspektionen
Ink. 1979-04-04

DATE OF IMPLEMENTATION OF AMENDED
TRAFFIC SEPARATION SCHEMES

1 With reference to COLREG.2/Circ.6 of 6 October 1978, the Secretary-General has been informed by the Government of the Federal Republic of Germany that the new two-way route for tankers from North Hinder to the German Bight will be implemented from 1 April 1979.

2 Consequently the following amendments to traffic separation schemes will be implemented for the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972 on 1 April 1979:

- .1 Off Terschelling and in the German Bight;
- .2 Deutsche Bucht Lightvessel Western Approach;
- .3 Off Texel.

11 724/79

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COLREG.2/Circ.11
7 June 1979

Original: ENGLISH

79-07-04:

Se COLREG Circ 9.

Sjöfartsinspektionen

Ref: T2/2.07 ink 1979

IMCO

AMENDED TRAFFIC SEPARATION SCHEME
IN THE STRAIT OF HORMUZ

1 The Secretary-General has the honour to state that pursuant to Resolution A.376(X), the Maritime Safety Committee at its fortieth session adopted the amended traffic separation scheme "In the Strait of Hormuz" (MSC XL/26, Annex 15).

2 The amended traffic separation scheme will become effective for the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972, at 08.00 Greenwich Mean Time on 1 November 1979.



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COLREG.2/Circ.12
19 November 1979

79-12-17

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SFAF S'pass.

Ref: T2/2.07

SVERKET
Sjofartsinspektionen
Ink. 978 1-17,

NEW TRAFFIC SEPARATION SCHEME
OFF RAS AL HADD

- 1 The Secretary-General has the honour to state that the Maritime Safety Committee at its forty-first session adopted the new traffic separation scheme "Off Ras al Hadd" (NAV XXIII/13, Annex 4).
- 2 The new traffic separation scheme will become effective for the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972 on 15 February 1980.

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Ink. 1981-05-26



COLREG.2/Circ.14
22 April 1981

81-05-26

CI CD CDT CDE
CIS Edenies

Carlqvist Heivold
Hageby Arvedson
Marinist Fiskeristyr.

IMCO

Ref. T2/2.07

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES
SAAF SZF
SFZF SSF
Sjöass

1 The Secretary-General has the honour to state that pursuant to resolution A.376(X), the Maritime Safety Committee at its forty-second and forty-fourth sessions adopted the following new and amended traffic separation schemes (MSC XLIII/21, Annex 6 and MSC XLIV/21, Annex 15):

1.1 New traffic separation schemes:

- .1 off Dondra Head;
- .2 between the ports of Odessa and Ilichevsk;
- .3 in the approaches to the ports of Odessa and Ilichevsk;
- .4 in the Bass Strait;
- .5 in the Strait of Juan de Fuca and its approaches; and

1.2 Amended traffic separation schemes:

- .1 south of the Wilson Promontory in the Bass Strait;
- .2 at West Hinder;
- .3 in the Dover Strait and adjacent waters;
- .4 off Casquets;
- .5 south of the Scilly Isles;
- .6 west of the Scilly isles;
- .7 off Lands End, between Seven Stones and Longships; and
- .8 off Ushant.

2 For the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972:

2.1 The new and amended traffic separation schemes:

- .1 off Dondra Head;
- .2 in the Bass Strait; and
- .3 south of the Wilson Promontory in the Bass Strait;

will become effective 120 days after notification by the Governments concerned.

ANNEX 6

NEW TRAFFIC SEPARATION SCHEME

OFF DONDRA HEAD

(Reference Chart: British Admiralty 3265)

Description of the traffic separation scheme

- (a) A separation zone, two miles wide, is centred upon the following geographical positions:

(1)	05°	51.00'N	80°	32.50'E
(2)	05°	51.00'N	80°	38.66'E

- (b) A separation zone, three miles wide, is centred upon the following geographical positions:

(3)	05°	45.50'N	80°	32.50'E
(4)	05°	45.50'N	80°	38.66'E

- (c) A traffic lane for west bound ships, three miles wide, is established between the separation zones described in paragraphs (a) and (b) above.

The main traffic direction is 270°.

- (d) A traffic lane for east bound ships, three miles wide, is established to the seaward side of the separation zone described in paragraph (b) above.

The main traffic direction is 090°.

Inshore traffic zone

The area between the coast and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone.

ANNEX 15

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1. BETWEEN THE PORTS OF ODESSA AND ILICHEVSK (new scheme)

(Reference chart: USSR 508, November 1974 Edition)

Note: This chart is based on the system of co-ordinates used in Soviet marine navigational charts.Description of the traffic separation scheme

(a) A separation line connects the following geographical positions:

(1) $46^{\circ}27'.3$ N., $30^{\circ}48'.5$ E.(2) $46^{\circ}21'.9$ N., $30^{\circ}47'.4$ E.(3) $46^{\circ}19'.1$ N., $30^{\circ}44'.8$ E.

(b) A traffic lane, one quarter of a mile wide, is established on each side of the separation line.

The main traffic directions are:

 $188^{\circ} - 8^{\circ}$ and $213^{\circ} - 033^{\circ}$

2. IN THE APPROACHES TO THE PORTS OF ODESSA AND ILICHEVSK (new scheme)

(Reference chart: USSR 508, November 1974 edition)

Note: This chart is based on the system of co-ordinates used in Soviet marine navigational charts.Description of the traffic separation scheme

The traffic separation scheme consists of four parts:

Part I

(a) A separation zone, two miles wide, is centred upon the following geographical positions:

(1) $46^{\circ}08'.2$ N., $31^{\circ}06'.1$ E.(2) $46^{\circ}13'.0$ N., $30^{\circ}59'.6$ E.

(b) An outside boundary of an inbound traffic lane connects the following geographical positions:

(3) $46^{\circ}09'.6$ N., $31^{\circ}08'.1$ E.(4) $46^{\circ}14'.7$ N., $31^{\circ}01'.0$ E.

- (c) An outside boundary of an outbound traffic lane connects the following geographical positions:

- (5) $46^{\circ}06'.9$ N., $31^{\circ}04'.1$ E.
(6) $46^{\circ}12'.1$ N., $30^{\circ}57'.1$ E.

The main traffic directions are:

$316^{\circ}.5 - 136^{\circ}.5$

Part II

- (a) A roundabout consists of a circular separation zone of two miles in diameter with a centre at the point:

- (7) $46^{\circ}15'.6$ N., $30^{\circ}56'.1$ E.

and a circular traffic lane, two-and-a-half miles wide, around the zone indicated.

Caution: The roundabout may be entered and left by ships going from the arm of Prorva to the Bugsko-Dneprovsko-Limanskiy Channel and back.

Part III: Approaches to the Port of Odessa

- (a) A separation zone, half a mile wide, is centred upon the following geographical positions:

- (8) $46^{\circ}18'.5$ N., $30^{\circ}53'.5$ E.
(9) $46^{\circ}27'.5$ N., $30^{\circ}50'.4$ E.

- (b) An outside boundary of the inbound traffic lane connects the following geographical positions:

- (10) $46^{\circ}18'.9$ N., $30^{\circ}54'.6$ E.
(11) $46^{\circ}27'.7$ N., $30^{\circ}51'.6$ E.

- (c) An outside boundary of the outbound traffic lane connects the following geographical positions:

- (12) $46^{\circ}27'.5$ N., $30^{\circ}49'.2$ E.
(13) $46^{\circ}18'.0$ N., $30^{\circ}52'.5$ E.

The main traffic directions are:

$346^{\circ}.5 - 166^{\circ}.5$

Part IV: Approaches to the Port of Ilichevsk

- (a) A separation zone, half a mile wide, is centred upon the following geographical positions:

(14) $46^{\circ}16'.7$ N., $30^{\circ}51'.4$ E.
(15) $46^{\circ}18'.0$ N., $30^{\circ}45'.8$ E.

- (b) An outside boundary of the inbound traffic lane connects the following geographical positions:

(16) $46^{\circ}17'.5$ N., $30^{\circ}51'.8$ E.
(17) $46^{\circ}18'.8$ N., $30^{\circ}46'.4$ E.

- (c) An outside boundary of the outbound traffic lane connects the following geographical positions:

(18) $46^{\circ}15'.9$ N., $30^{\circ}51'.5$ E.
(19) $46^{\circ}17'.2$ N., $30^{\circ}45'.3$ E.

The main traffic directions are:

$288^{\circ} - 108^{\circ}$

3. SOUTH OF THE WILSON PROMONTORY IN THE BASS STRAIT (amended scheme)

Amend main traffic directions to read:

" $090^{\circ} - 270^{\circ}$ and
 $069^{\circ} - 252^{\circ}$ "

4. IN THE BASS STRAIT (new scheme)

(Reference chart: Australian AUS 422, April 1971 edition)

Note: This is based on the Australian geodetic datum, 1966.

Description of the traffic separation scheme

- (a) A separation zone one mile wide is centred on the following geographical positions:

(1) $38^{\circ}44'$ S., $148^{\circ}15'$ E.
(2) $38^{\circ}48'$ S., $148^{\circ}02'$ E.

- (b) A traffic lane for westbound shipping is established between the separation zone and a line connecting the following geographical positions:

(3) $38^{\circ}41'$ S., $148^{\circ}13'$ E.
(4) $38^{\circ}45'$ S., $148^{\circ}00'$ E.

(c) A traffic lane for eastbound shipping is established between the separation zone and a line connecting the following geographical positions:

(5) $38^{\circ}47' S.$, $148^{\circ}17' E.$

(6) $38^{\circ}51' S.$, $148^{\circ}04' E.$

The main traffic directions are:

$070^{\circ} - 250^{\circ}$

5. IN THE STRAIT OF JUAN DE FUCA AND ITS APPROACHES (new scheme)

(Reference charts: United States National Ocean Survey 18400, 18421, 18440, 18460, 18465, 18480, and 18485; Canadian Hydrographic Service 3440, 3448, 3449, 3460, and L/C-3602; North American 1927 geodetic datum)

Description of the traffic separation schemes

Part I: In the Approaches to the Strait of Juan de Fuca there are two traffic separation schemes and a precautionary area:

WESTERN APPROACH

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

(1) $48^{\circ}30'.5 N.$, $124^{\circ}58'.5 W.$

(2) $48^{\circ}30'.2 N.$, $124^{\circ}54'.0 W.$

(3) $48^{\circ}28'.9 N.$, $124^{\circ}54'.1 W.$

(4) $48^{\circ}28'.8 N.$, $124^{\circ}58'.6 W.$

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

(5) $48^{\circ}31'.9 N.$, $124^{\circ}53'.3 W.$

(6) $48^{\circ}32'.4 N.$, $124^{\circ}57'.8 W.$

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

(7) $48^{\circ}27'.3 N.$, $124^{\circ}58'.3 W.$

(8) $48^{\circ}27'.5 N.$, $124^{\circ}53'.8 W.$

SOUTH-WESTERN APPROACH

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

(9) $48^{\circ}23'.2 N.$, $124^{\circ}55'.5 W.$

(10) $48^{\circ}25'.0 N.$, $124^{\circ}52'.0 W.$

(11) $48^{\circ}23'.7 N.$, $124^{\circ}50'.1 W.$

(12) $48^{\circ}21'.4 N.$, $124^{\circ}52'.9 W.$

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

(13) $48^{\circ}20'.6$ N., $124^{\circ}51'.0$ W.
 (14) $48^{\circ}23'.2$ N., $124^{\circ}48'.8$ W.

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

(15) $48^{\circ}26'.1$ N., $124^{\circ}53'.0$ W.
 (16) $48^{\circ}24'.4$ N., $124^{\circ}56'.7$ W.

PRECAUTIONARY AREA

A precautionary area is bounded as follows: from

(5) $48^{\circ}31'.9$ N., $124^{\circ}53'.3$ W. thence south-easterly to
 (17) $48^{\circ}30'.7$ N., $124^{\circ}43'.5$ W. thence southerly to
 (18) $48^{\circ}27'.1$ N., $124^{\circ}43'.8$ W. thence westerly to
 (19) $48^{\circ}27'.1$ N., $124^{\circ}45'.4$ W. thence south-westerly to
 (14) $48^{\circ}23'.2$ N., $124^{\circ}48'.8$ W. thence north-westerly and
 northerly by an arc of 7 nautical
 miles radius, centred at
 (20) $48^{\circ}29'.2$ N., $124^{\circ}43'.6$ W. thence to the point of origin
 at (5)

Part II: In the Strait of Juan de Fuca there are three traffic separation schemes and a precautionary area:

WESTERN LANES

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

(21) $48^{\circ}28'.8$ N., $124^{\circ}43'.6$ W.
 (22) $48^{\circ}13'.4$ N., $123^{\circ}56'.9$ W.
 (23) $48^{\circ}13'.4$ N., $123^{\circ}31'.7$ W.
 (24) $48^{\circ}14'.7$ N., $123^{\circ}31'.8$ W.
 (25) $48^{\circ}17'.8$ N., $124^{\circ}00'.6$ W.
 (26) $48^{\circ}29'.6$ N., $124^{\circ}43'.6$ W.

- (b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(27) $48^{\circ}15'.6$ N., $123^{\circ}31'.0$ W.
 (28) $48^{\circ}18'.8$ N., $124^{\circ}00'.2$ W.
 (17) $48^{\circ}30'.7$ N., $124^{\circ}43'.5$ W.

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | |
|------|--------------|--------------|
| (18) | 48°27'.1 N., | 124°43'.8 W. |
| (29) | 48°27'.1 N., | 124°41'.8 W. |
| (30) | 48°12'.4 N., | 123°57'.2 W. |
| (31) | 48°12'.4 N., | 123°30'.2 W. |

SOUTHERN LANES

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

- | | | |
|------|--------------|--------------|
| (32) | 48°10'.4 N., | 123°26'.5 W. |
| (33) | 48°12'.3 N., | 123°27'.9 W. |
| (34) | 48°12'.5 N., | 123°27'.3 W. |
| (35) | 48°10'.6 N., | 123°25'.8 W. |

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

- | | | |
|------|--------------|--------------|
| (36) | 48°10'.9 N., | 123°25'.0 W. |
| (37) | 48°13'.6 N., | 123°26'.1 W. |

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

- | | | |
|------|--------------|--------------|
| (31) | 48°12'.4 N., | 123°30'.2 W. |
| (38) | 48°10'.1 N., | 123°27'.3 W. |

NORTHERN LANES

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

- | | | |
|------|--------------|--------------|
| (39) | 48°20'.7 N., | 123°25'.1 W. |
| (40) | 48°16'.2 N., | 123°28'.5 W. |
| (41) | 48°15'.8 N., | 123°27'.1 W. |
| (42) | 48°20'.5 N., | 123°24'.4 W. |

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

- | | | |
|------|--------------|--------------|
| (43) | 48°20'.9 N., | 123°26'.1 W. |
| (27) | 48°15'.6 N., | 123°31'.0 W. |

(c) A traffic lane for northbound traffic is established between the separation zone and the following geographical positions:

(37) $48^{\circ}13'.6$ N., $123^{\circ}26'.1$ W.

(44) $48^{\circ}20'.2$ N., $123^{\circ}23'.4$ W.

PRECAUTIONARY AREA

A precautionary area of radius two miles is centred upon geographical position:

(45) $48^{\circ}14'.2$ N., $123^{\circ}28'.9$ W.

6. AT WEST HINDER^{*/} (amended scheme)
7. IN THE STRAIT OF DOVER AND ADJACENT WATERS^{*/} (amended scheme)
8. OFF CASQUETS^{*/} (amended scheme)
9. OFF USHANT^{*/} (amended scheme)
10. SOUTH OF THE SCILLY ISLES^{*/} (amended scheme)
11. WEST OF THE SCILLY ISLES^{*/} (amended scheme)
12. OFF LANDS END, BETWEEN SEVEN STONES AND LONGSHIPS^{*/} (amended scheme)
13. OFF THE LIZARD (the scheme is cancelled).

^{*/} Note: The full description of this amended scheme is given in MSC XLIV/21, Annex 17, "Recommendation on routeing systems and safe navigation in the English Channel and the Dover Strait".

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6 April 1982

82-05-13

SE COLREG.2/Circ.1

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SJÖFARTSVERKET
Sjöfartsinspektionen
Ink. 1982-05-13

IMCO

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to resolution A.376(X), the Maritime Safety Committee at its forty-sixth session adopted the following new and amended traffic separation schemes (MSC 46/19, Annex 11):

1.1 New traffic separation schemes

- .1 "Between Zaqqum and Umm Shaif oilfields"
- .2 "In the Bay of Fundy and approaches"

1.2 Amended traffic separation schemes

- .1 "In the Gulf of Suez"
- .2 "Off Casquets" (additional Note to the description of the traffic separation scheme (MSC XLIV/21, Annex 17 to Part 1(3)))
- .3 "Off Texel"
- .4 "In the approaches to Hook of Holland and at North Hinder"

2 For the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972:

- 2.1 The amendment to the traffic separation scheme "Off Casquets" will become effective on 1 July 1982 at 0001 GMT.
- 2.2 The amended traffic separation scheme "Off Texel" will become effective on 16 September 1982 at 1200 GMT.
- 2.3 The amended traffic separation schemes "In the approaches to Hook of Holland and at North Hinder" will become effective on 11 May 1983 at 1200 GMT.
- 2.4 The new traffic separation scheme "Between Zaqqum and Umm Shaif oilfields" and the amended traffic separation scheme "In the Gulf of Suez" will not become effective before 31 December 1982 and until notification has been received from the Government concerned.
- 2.5 The new traffic separation scheme "In the Bay of Fundy and approaches" will not become effective before 1 June 1983, an agreed navigational aid has been installed and notification has been received from the Canadian Government.

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1059/83
1983-10-17
IMO

COLREG.2/Circ.20
5 August 1983

831017
encl. COLREG, 2/Circ.1

Ref. T2/2.07

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES
AND OTHER ROUTEING MEASURES

1 Traffic separation schemes

1.1 The Secretary-General has the honour to state that pursuant to resolution A.376(X), the Maritime Safety Committee at its forty-eighth session adopted the following new and amended traffic separation schemes (MSC 48/25, Annex 25):

New traffic separation schemes

- .1 At Hatter Barn;
- .2 In the approaches to Galveston Bay;
- .3 Off Cabo San Antonio;
- .4 Off La Tabla;
- .5 Off Costa de Matanzas;
- .6 In the Old Bahama Channel;
- .7 Off Punta Maternillos;
- .8 Off Punta Lucrecia; and
- .9 Off Cabo Maysi.

Amended traffic separation schemes

- .10 In the approaches to Los Angeles - Long Beach;
- .11 In the approach to Boston, Massachusetts;
- .12 Off New York; and
- .13 In the approaches to Narragansett Bay, Rhode Island and Buzzards Bay, Massachusetts.

1.2 For the purposes of Rule 10 of the International Regulations for Preventing Collisions at Sea, 1972:

- .1 the new scheme "At Hatter Barn" will be implemented on 1 April 1984, subject to the establishment of certain aids to navigation;

- .2 the new scheme "In the approaches to Galveston Bay" will not be implemented before 17 December 1983 and only after adequate centre line marking of the separation zone by buoys has been established;
- .3 the new schemes off Cuba referred to in paragraphs 1.3 to 1.9 will not be implemented before 17 March 1984;
- .4 the amended schemes referred to in paragraphs 1.10 to 1.13 will not be implemented before 17 December 1983.

2 Routeing measures other than traffic separation schemes

2.1 Pursuant to resolution A.377(X), the Committee also adopted (MSC 48/25, Annex 26), subject to confirmation by the thirteenth Assembly, the following other new and amended routeing measures:

- .1 an amended deep water route "between Hatter Barn and Hatter Rev"; the route will be implemented at the same time as the traffic separation scheme "At Hatter Barn";
 - .2 two areas to be avoided, six recommended tracks and two precautionary areas "in the Gulf of Campeche". These routeing measures will not be implemented before 17 December 1983.
-

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IMO

COLREG.2/Circ.21
15 November 1983

12 1299/83
831215

2
encl. COLREG.2/Circ 16

Ref. T2/2.07

SJÖFARTSVERKET

Sjöfartsinspektionen

Ink. 1983-12-15

TRAFFIC SEPARATION SCHEME
IN THE GULF OF SUEZ

- 1 The Secretary-General has been informed by the Government of Egypt that in accordance with paragraph 3.8 of the General Provisions on ships' Routing it has temporarily suspended part of the traffic separation scheme in the southern part of the Strait of Gubal as from 17 November 1983.
- 2 Details of the temporary suspension have been circulated in Egyptian Navigational Warning 145/1983 as follows:

Red Sea - Gulf of Suez.

Charts: British Admiralty 8, 757, 2374 and 2375.

With reference to our Notice to Mariners No.22/1982, notice is hereby given that as from 17 November 1983 the traffic separation scheme "In the Gulf of Suez" is temporarily suspended in the southern part of the Strait of Gubal in the area between Shaker lighthouse and Ashrafi lighthouse. The southern extremity of the traffic separation scheme temporarily starts at a line connecting the following geographical positions:

- | | | |
|-----|-------------------|--------------------|
| A - | Lat: 27° 48.1' N. | Long: 33° 43.4' E. |
| B - | Lat: 27° 49.0' N. | Long: 33° 44.4' E. |
| C - | Lat: 27° 49.5' N. | Long: 33° 45.0' E. |
| D - | Lat: 27° 50.2' N. | Long: 33° 45.8' E. |

All ships are to take safety measures when navigating near this area until further notice.

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INTERNATIONAL MARITIME ORGANIZATION



COLREG.2/Circ.22
30 May 1984

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840709
encl. COLREG. 2/Circ 14

IMO

Ref. T2/2.07

SjÖPARTSVERKET
Sjöfartsinspektionen

Int. 1984-07-09

AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to resolution A.376(X) the Maritime Safety Committee at its forty-ninth session adopted the following amended traffic separation schemes (MSC 49/19, Annex 5):

- .1 At West Hinder
- .2 Off the Smalls
- .3 In the Santa Barbara Channel
- .4 Off San Francisco

2 The amended traffic separation scheme "Off the Smalls" will become effective on 6 October 1984 at 0001 GMT.

3 The amended traffic separation schemes "At West Hinder", "In the Santa Barbara Channel" and "Off San Francisco" will be implemented on a date to be determined by the Governments concerned but not earlier than 6 October 1984.

INTERNATIONAL MARITIME ORGANIZATION

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IMO

COLREG.2/Circ.24
24 June 1985

*CD, CD1, CD2, CIS, Edin
Caulgron, Hageby, Hovik
Maurist Fristeist SADF 812
SFBF, SSF, SFBSS*

ORIGINAL

AMENDED TRAFFIC SEPARATION SCHEMES

Ink. 1985-07-29

Sjöfartsverket
Internat. sekretariatet

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(X) the Maritime Safety Committee at its fifty-first session adopted the attached amended traffic separation schemes (MSC 51/21, annex 4):

- .1 Off San Francisco.
- .2 In the Santa Barbara Channel.
- .3 In the Bass Strait.

2. The amended traffic separation schemes will be implemented on a date to be determined by the Governments concerned as prescribed in new Section 3.5 of the amendments to the General Provisions on Ships' Routing (Assembly resolution A.378(X)) adopted by the fifty-first session of the Maritime Safety Committee (MSC 51/21, annex 3) subject to confirmation by the fourteenth regular session of the Assembly.

AMENDED TRAFFIC SEPARATION SCHEMES

1 OFF SAN FRANCISCO (amended scheme)

(Reference Charts: United States National Ocean Service 18680 and 18645;
North American 1927 geodetic datum).

Description of the traffic separation scheme

The traffic separation scheme off San Francisco consists of four parts:

PART I

Northern approach

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

- | | | | |
|-----------------|-------------|-----------------|-------------|
| (1) 37°48'.4N., | 122°47'.6W. | (3) 37°55'.2N., | 123°04'.9W. |
| (2) 37°56'.7N., | 123°03'.7W. | (4) 37°47'.7N., | 122°48'.2W. |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|-----------------|-------------|-----------------|-------------|
| (5) 37°49'.2N., | 122°46'.7W. | (6) 37°58'.0N., | 123°02'.7W. |
|-----------------|-------------|-----------------|-------------|

(c) A traffic lane for south-eastbound traffic is established between the separation zone and line connecting the following geographical positions:

- | | | | |
|-----------------|-------------|-----------------|-------------|
| (7) 37°53'.9N., | 123°06'.1W. | (8) 37°46'.7N., | 122°48'.7W. |
|-----------------|-------------|-----------------|-------------|

PART II

Southern approach

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

- | | | | |
|------------------|-------------|------------------|-------------|
| (9) 37°39'.0N., | 122°41'.4W. | (11) 37°00'.0N., | 122°32'.1W. |
| (10) 37°00'.0N., | 122°34'.7W. | (12) 37°39'.2N., | 122°39'.8W. |

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

- | | | | |
|------------------|-------------|------------------|-------------|
| (13) 37°00'.0N., | 122°30'.9W. | (14) 37°39'.3N., | 122°38'.7W. |
|------------------|-------------|------------------|-------------|

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

- | | | | |
|------------------|-------------|------------------|-------------|
| (15) 37°39'.0N., | 122°42'.5W. | (16) 37°00'.0N., | 122°36'.0W. |
|------------------|-------------|------------------|-------------|

PART III

Western approach

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

- | | | | |
|------------------|-------------|------------------|-------------|
| (17) 37°41'.9N., | 122°48'.0W. | (19) 37°36'.5N., | 122°57'.3W. |
| (18) 37°38'.1N., | 122°58'.1W. | (20) 37°41'.1N., | 122°47'.2W. |

(b) A traffic lane for south-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|------------------|-------------|------------------|-------------|
| (21) 37°42'.8N., | 122°48'.5W. | (22) 37°39'.6N., | 122°58'.8W. |
|------------------|-------------|------------------|-------------|

(c) A traffic lane for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|------------------|-------------|------------------|-------------|
| (23) 37°35'.0N., | 122°56'.5W. | (24) 37°40'.4N., | 122°46'.3W. |
|------------------|-------------|------------------|-------------|

PART IV

Main ship channel

(a) A separation line connects the following geographical positions:

(25) 37°45'.9N., 122°38'.0W. (27) 37°48'.1N., 122°31'.0W.
 (26) 37°47'.0N., 122°34'.3W.

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

(28) 37°45'.8N., 122°37'.7W. (29) 37°47'.8N., 122°30'.8W.

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

(30) 37°46'.2N., 122°37'.9W. (32) 37°48'.5N., 122°31'.3W.
 (31) 37°46'.9N., 122°35'.3W.

Area to be avoided

A circular area to be avoided of radius half a mile is centred upon geographical position:

(33) 37°45'.0N., 122°41'.5W.

Precautionary area

A precautionary area is established bounded to the west by an arc of a circle radius 6 miles centres upon geographical position (33) 37°45'.0N., 122°41'.5W. and connecting the following geographical positions:

(34) 37°42'.7N., 122°34'.6W. (35) 37°50'.3N., 122°38'.0W.

The precautionary area is bounded to the east by a line connecting the following geographical positions:

(34) 37°42'.7N., 122°34'.6W. (35) 37°50'.3N., 122°38'.0W.
 (25) 37°45'.9N., 122°38'.0W.

2 IN THE SANTA BARBARA CHANNEL (amended scheme)
(Reference Charts: United States National Ocean Service 18700 and 18720;
North American 1927 geodetic datum).

Description of the traffic separation scheme

The traffic separation scheme in the Santa Barbara Channel consists of two parts:

PART I

Between Point Vicente and Point Conception

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

- | | | | |
|------------------|--------------|------------------|--------------|
| (1) 34°20'.90N., | 120°30'.10W. | (4) 33°43'.20N., | 118°36'.90W. |
| (2) 34°04'.00N., | 119°15'.90W. | (5) 34°02'.20N., | 119°17'.40W. |
| (3) 33°44'.90N., | 118°35'.70W. | (6) 34°18'.90N., | 120°30'.90W. |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|------------------|--------------|------------------|--------------|
| (7) 34°21'.80N., | 120°29'.90W. | (9) 33°45'.80N., | 118°35'.10W. |
| (8) 34°04'.80N., | 119°15'.10W. | | |

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|-------------------|--------------|-------------------|--------------|
| (10) 33°42'.30N., | 118°37'.50W. | (12) 34°18'.00N., | 120°31'.10W. |
| (11) 34°01'.40N., | 119°18'.20W. | | |

Note:

Port Hueneme Fairway

A safety fairway is established in the approach to Port Hueneme.

PART II

Between Point Conception and Point Arguello

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

- (1) 34°20'.90N., 120°30'.10W. (13) 34°25'.70N., 120°51'.75W.
(6) 34°18'.90N., 120°30'.90W. (14) 34°23'.75N., 120°52'.45W.

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

- (7) 34°21'.80N., 120°29'.90W. (15) 34°26'.60N., 120°51'.45W.

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

- (12) 34°18'.0N., 120°31'.10W. (16) 34°22'.80N., 120°52'.70W.

3 IN THE BASS STRAIT (amended scheme)

(Reference Chart: Australia AUS 422).

Description of the traffic separation scheme

(a) A separation zone 1.5 miles wide is centred on the following geographical positions:

- (1) 38°41'.5S., 148°20'.2E. (3) 38°46'.3S., 148°09'.0E.
(2) 38°44'.5S., 148°14'.9E.

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

- (4) 38°38'.5S., 148°17'.5E. (6) 38°42'.8S., 148°07'.3E.
(5) 38°41'.0S., 148°13'.2E.

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

- (7) 38°49'.8S., 148°10'.8E. (9) 38°44'.6S., 148°23'.0E.
(8) 38°48'.0S., 148°16'.7E.



Ref. T2/2.07

COLREG.2/Circ.24/Add.1
10 March 2000

**IMPLEMENTATION OF THE AMENDMENT TO THE TRAFFIC SEPARATION
SCHEME "IN THE SANTA BARBARA CHANNEL"**

1 In 1985, the Maritime Safety Committee, at its fifty-first session (MSC 51/21, annex 4), adopted the amended traffic separation scheme "In the Santa Barbara Channel". The implementation of this scheme was pending notification of the implementation date by the Government of the United States. COLREG.2/Circ.24 of 24 June 1985 refers.

2 The Government of the United States has now informed the Organization that:

.1 the amendments to the traffic separation scheme "In the Santa Barbara Channel" will be implemented at 0000 hours UTC on 15 July 2000.

3 The geographic co-ordinates for the TSS "In the Santa Barbara Channel" remain the same; however, because the charts have been converted from NAD 27 to NAD 83, the nominal longitudes of the positions have changed several hundredths of a minute. The corrected longitudes of the positions based on NAD 83 datum are given at annex.

4 Member Governments are invited to bring this information to the attention of all concerned.

ANNEX
IN THE SANTA BARBARA CHANNEL

(Reference charts: United States National Ocean Survey 18700, 1988 edition; 18720, 1987 edition.
Note: These charts are based on North American 1983 Geodetic Datum.)

Description of the traffic separation scheme

The traffic separation scheme in the Santa Barbara Channel consists of two parts:

Part I:

Between Point Vicente and Point Conception

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

- | | |
|-------------------------------|-------------------------------|
| (1) 34°20'.90 N, 120°30'.16 W | (4) 33°43'.20 N, 118°36'.95 W |
| (2) 34°04'.00 N, 119°15'.96 W | (5) 34°02'.20 N, 119°17'.46 W |
| (3) 33°44'.90 N, 118°35'.75 W | (6) 34°18'.90 N, 120°30'.96 W |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|-------------------------------|-------------------------------|
| (7) 34°21'.80 N, 120°29'.96 W | (9) 33°45'.80 N, 118°35'.15 W |
| (8) 34°04'.80 N, 119°15'.16 W | |

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (10) 33°42'.30 N, 118°37'.55 W | (12) 34°18'.00 N, 120°31'.16 W |
| (11) 34°01'.40 N, 119°18'.26 W | |

Note:

Port Hueneme Fairway

A safety fairway is established in the approach to Port Hueneme.

Part II:

Between Point Conception and Point Arguello

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

- | | |
|-------------------------------|--------------------------------|
| (1) 34°20'.90 N, 120°30'.16 W | (13) 34°23'.75 N, 120°51'.81 W |
| (6) 34°18'.90 N, 120°30'.96 W | (14) 34°25'.70 N, 120°52'.51 W |

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(7) 34°21'.80 N, 120°29'.96 W (15) 34°26'.60 N, 120°51'.51 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(12) 34°18'.00 N, 120°31'.16 W (16) 34°22'.80 N, 120°52'.76 W

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Ref. T2/2.07



IMO

28
COLREG.2/Circ.27
1 April 1986

and Sanef lista

ORIGINAL

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Ink. 1986-05-07

Sjöfartsverket

Internat. sekretariatet

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(X) the Maritime Safety Committee at its fifty-second session adopted the attached new and amended traffic separation schemes (MSC 52/28, paragraph 8.3):

- .1 At West Hinder (amended scheme)
- .2 In the Proliv Bussol (new scheme)
- .3 In the Fourth Kuril Strait (amended scheme).

2 In accordance with section 3.5 of the General Provisions on Ships' Routeing (Assembly resolution A.572(14)) the Secretary-General has been informed by the Government of:

- .1 Belgium that the amended traffic separation scheme "At West Hinder" will come into effect at 0001 UTC on 1 September 1986.
- .2 the USSR that the new traffic separation scheme "In the Proliv Bussol" and the amended traffic separation scheme "In the Fourth Kuril Strait" will come into effect at 1400 UTC on 4 August 1986.

* * *

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 AT WEST HINDER (amended scheme)

Note: See "Recommendations on navigation through the English Channel and the Dover Strait" in part F.

(Reference charts: Belgian D11, 1982 edition, French 6735 D (INT 1512), 1978 edition with 1982 Large Correction; British Admiralty 1872, 1977 edition.

Note:

These charts are based on European Datum.

Description of the traffic separation scheme

(a) A separation line connects the following geographical positions:

- | | | | |
|------------------|------------|------------------|------------|
| (1) 51°22'.50N., | 2°43'.00E. | (3) 51°19'.20N., | 2°16'.70E. |
| (2) 51°22'.50N., | 2°30'.00E. | | |

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

- | | | | |
|------------------|------------|------------------|------------|
| (4) 51°19'.20N., | 2°16'.70E. | (6) 51°19'.68N., | 2°10'.09E. |
| (5) 51°20'.88N., | 2°10'.99E. | | |

(c) A traffic lane for westbound traffic is established between the separation line/zone described in paragraphs (a) and (b) above and a line connecting the following geographical positions:

- | | | | |
|------------------|------------|-------------------|------------|
| (7) 51°23'.50N., | 2°43'.00E. | (10) 51°22'.80N., | 2°26'.50E. |
| (8) 51°23'.50N., | 2°37'.00E. | (11) 51°21'.30N., | 2°17'.70E. |
| (9) 51°23'.50N., | 2°30'.00E. | (12) 51°22'.88N., | 2°12'.37E. |

(d) A traffic lane for eastbound traffic is established between the separation line/zone described in paragraphs (a) and (b) above and:

(i) a line connecting the following geographical positions:

- | | | | |
|-------------------|------------|-------------------|------------|
| (13) 51°21'.75N., | 2°43'.00E. | (15) 51°21'.50N., | 2°30'.00E. |
| (14) 51°21'.50N., | 2°37'.00E. | (16) 51°20'.00N., | 2°24'.60E. |

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

- | | | | |
|-------------------|------------|-------------------|------------|
| (17) 51°20'.00N., | 2°24'.60E. | (20) 51°11'.29N., | 2°04'.17E. |
| (18) 51°12'.55N., | 2°11'.40E. | (21) 51°13'.20N., | 2°10'.30E. |
| (19) 51°09'.90N., | 2°03'.20E. | | |

Notes:

- 1 Positions (12), (19) and (20) form part of both the scheme "AT WEST HINDER" and the scheme "IN THE STRAIT OF DOVER AND ADJACENT WATERS". The small differences in values of these common points are due to the difference of geodetic datum of the reference charts on which these two schemes are based.

- 2 An anchorage is established north of the scheme and is bounded by a line connecting the following geographical positions:

(i) 51°23'.50N.,	2°33'.00E.	(iii) 51°26'.00N.,	2°41'.00E.
(ii) 51°26'.00N.,	2°35'.00E.	(iv) 51°23'.50N.,	2°41'.00E.

- 2 IN THE PROLIV BUSSOL (new scheme)
(Reference chart: USSR 1075)

Description of the traffic separation scheme

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

1. 47°02'.2 N., 151°03'.9 E.
2. 46°27'.0 N., 151°33'.5 E.
3. 46°25'.0 N., 151°28'.5 E.
4. 47°00'.3 N., 150°58'.8 E.

A traffic lane, four miles wide, is established on each side of the separation zone.

- 3 IN THE FOURTH KURIL STRAIT (amended scheme)
(Reference chart: USSR 1083)

Description of the traffic separation scheme

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

1. 50°05'.3 N., 154°34'.0 E.
2. 49°45'.5 N., 155°16'.1 E.
3. 49°43'.8 N., 155°14'.2 E.
4. 50°03'.7 N., 154°32'.1 E.

A traffic lane, two miles wide, is established on each side of the separation zone.



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Ref. T2/2.07

ORIGINAL

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Ink. 1986-12-01

Sjöfartsverket

Internat. sekretariatet

1 The Secretary-General has the honour to state that, pursuant to Assembly resolution A.376(X), the Maritime Safety Committee at its fifty-third session adopted the attached new and amended traffic separation schemes:

.1 Off Terschelling and in the German Bight (amended scheme); and

.2 Off Vlieland and Vlieland North (new schemes), including an associated new precautionary area "Vlieland Junction" (MSC 53/24, annex 3).

2 The Committee considered that the proposed new major floating aid to navigation "VL Centre", to be laid in position 53°27.00'N., 4°40.00'E., was an essential additional aid for position-fixing within the limits of the new traffic separation schemes and must be established before their implementation.

3 Subject to the condition referred to above, the new and amended traffic separation schemes will be implemented on 1 April 1987 at 1200 UTC.

ANNEX 3

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

OFF TERSCHELLING AND IN THE GERMAN BIGHT (amended scheme)

(Reference charts: German Hydrografic Office 84 and 87
Netherlands Hydrografic Office 1352 and 1353)

Note: These charts are based on European datum.

Description of the traffic separation scheme

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

(1) 53°48'.7N	6°23'.7E	(3) 53°57'.3N	7°38'.7E
(2) 53°59'.1N	7°36'.4E	(5) 53°46'.7N	6°23'.8E

(b) A separation line connects the following geographical positions:

(5) 53°47'.7N	6°23'.8E	(7) 53°47'.2N	6°20'.4E
(6) 53°47'.5N	6°22'.1E		

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

(8) 53°34'.3N	05°08'.6E	(10) 53°46'.1N	6°20'.5E
(9) 53°48'.2N	6°20'.4E	(11) 53°32'.4N	05°09'.7E

(d) A traffic lane for westbound traffic is established between the separation zones/line and a line connecting the following geographical positions:

(12) 54°01'.7N	7°33'.0E	(14) 53°37'.1N	05°07'.0E
(13) 53°51'.4N	6°20'.3E		

- (e) A traffic lane for eastbound traffic is established between the separation zones/line and a separation line connecting the following geographical positions:

(15)	53°29'.6N	05°11'.3E	(17)	53°54'.7N	7°42'.1E
(16)	53°43'.6N	6°23'.9E			

Precautionary area

A precautionary area is established bounded by a line connecting the following geographical positions:

(18)	54°02'.4N	7°38'.1E	(20)	53°52'.0N	7°45'.6E
(19)	53°52'.0N	7°47'.4E	(21)	54°01'.7N	7°33'.0E

Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and the coast, which lies between an uncharted line drawn from position 53°29'.57N, 05°11'.28E (position 15 above) to Brandaris Lighthouse (53°21'.66N, 5°12'.93E) and a line drawn from position 53°54'.70N, 07°42'.10E (position 17) to Wangerooge Lighthouse (53°47'.45N, 07°51'.50E), is designated as an inshore traffic zone.

Note: The separation zones of this scheme are connected by a separation line to indicate the area where a concentration of crossing traffic is likely to be met.

Special provisions

It is recommended that this scheme should not be used by the following ships of 10,000 tons gross tonnage and upwards:

- (a) tankers carrying oils mentioned in appendix I, Annex I, to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), with the exception of gasolines, jet fuels and naphtha, mentioned in this Convention; and

- (b) ships carrying in bulk liquid substances classed in categories A and B mentioned in appendices I and II, Annex II, to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

These ships are recommended, instead, to use the "Two-way route for tankers from North Hinder to the German Bight" and the traffic separation scheme "Deutsche Bucht Lichtvessel Western Approach".

OFF VLIELAND, VLIELAND NORTH AND VLIELAND JUNCTION (new routing systems)

(Reference charts: German Hydrographic Office 84
Netherlands Hydrographic Office 1352)

Note: These charts are based on European datum.

A Description of the traffic separation scheme off Vlieland

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

(1) 53°34'.30N 05°08'.60E	(4) 53°30'.97N 05°02'.21E
(2) 53°29'.07N 04°46'.66E	(5) 53°32'.37N 05°09'.70E
(3) 53°26'.35N 04°44'.68E	

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

(6) 53°28'.02N 04°42'.25E	(10) 53°06'.53N 04°20'.87E
(7) 53°27'.03N 04°38'.10E	(11) 53°05'.47N 04°23'.68E
(8) 53°17'.27N 04°32'.28E	(12) 53°12'.40N 04°30'.97E
(9) 53°09'.13N 04°26'.08E	

(c) A traffic lane for northbound and eastbound traffic is established between the separation zones described in paragraphs (a) and (b) above, the southern boundary of the precautionary area described in section B below and the following line and separation zone:

(i) a line connecting the following geographical positions:

(13) 53°03'.87N 04°27'.88E	(14) 53°11'.00N 04°35'.39E
----------------------------	----------------------------

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

(14)	53°11'.00N	04°35'.39E	(18)	53°29'.07N	05°11'.38E
(15)	53°22'.90N	04°44'.00E	(19)	53°27'.70N	05°04'.30E
(16)	53°28'.16N	05°04'.00E	(20)	53°25'.99N	04°57'.80E
(17)	53°29'.57N	05°11'.28E	(21)	53°15'.00N	04°39'.60E

(d) A traffic lane for westbound traffic is established between the separation zone described in paragraph (a) above and a separation zone bounded by lines connecting the following geographical positions:

(22)	53°37'.13N	05°07'.00E	(24)	53°36'.32N	04°51'.93E
(23)	53°32'.97N	04°49'.49E			

(e) A traffic lane for westbound and southbound traffic is established between the separation zone described in paragraph (b) above, the western boundary of the precautionary area described in section B below and the following lines and separation zone:

(i) an uncharted line representing the junction of the scheme with the adjacent scheme "Vlieland North" and connecting the following geographical positions:

(25)	53°29'.21N	04°33'.69E	(30)	53°31'.92N	04°45'.07E
------	------------	------------	------	------------	------------

(ii) a line connecting the following geographical positions:

(25)	53°29'.21N	04°33'.69E	(26)	53°22'.62N	04°30'.00E
------	------------	------------	------	------------	------------

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

(26)	53°22'.62N	04°30'.00E	(28)	53°11'.00N	04°22'.02E
(27)	53°18'.37N	04°27'.63E	(29)	53°08'.22N	04°16'.43E

Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and the coast between an uncharted line drawn from position (18) 53°29'.07N, 05°11'.38E to Brandaris lighthouse (53°21'.66N, 05°12'.93E) and a line drawn from position (14) 53°11'.00N, 04°35'.39E to Eierland lighthouse (53°10'.97N, 04°51'.39E) is designated as an inshore traffic zone.

Special provisions

It is recommended that this scheme should not be used by the following ships of 10,000 tons gross tonnage and upwards:

- (a) tankers carrying oils mentioned in appendix I, Annex I, to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), with the exception of gasolines, jet fuels and naphtha, mentioned in this Convention; and
- (b) ships carrying in bulk liquid substances classed in categories A and B, mentioned in appendices I and II, Annex II, to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

These ships are recommended, instead, to use the "Two-way route for tankers from North Hinder to the German Bight" and the traffic separation scheme "Deutsche Bucht Lightvesel Western Approach".

Precautionary area "Vlieland Junction"

A precautionary area is established off Vlieland. The area is bounded by a line connecting the following geographical positions:

- | | | | |
|----------------|------------|-----------------|------------|
| (2) 53°29'.07N | 04°46'.66E | (30) 53°31'.92N | 04°45'.07E |
| (6) 53°28'.02N | 04°42'.25E | (23) 53°32'.97N | 04°49'.49E |

B Description of the traffic separation scheme Vlieland North

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

(30) 53°31'.92N 04°45'.07E (32) 53°35'.69N 04°40'.16E
(31) 53°29'.99N 04°36'.96E (33) 53°36'.11N 04°48'.12E

- (b) A traffic lane for northbound traffic is established between the separation zone described in paragraph (a) above and a line (coinciding with the western boundary of the separation zone described in section A, paragraph (d)(i)) connecting the following geographical positions:

(23) 53°32'.97N 04°49'.49E (24) 53°36'.32N 04°51'.93E

- (c) A traffic lane for southbound traffic is established between the separation zone described in paragraph (a) above and a line connecting the following geographical positions:

(25) 53°29'.21N 04°33'.69E (34) 53°35'.53N 04°37'.24E

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AMENDED TRAFFIC SEPARATION SCHEME

1 The Secretary-General has the honour to state that, pursuant to Assembly resolution A.376(X), the Maritime Safety Committee at its fifty-fourth session adopted the attached amended traffic separation scheme "In the Gulf of Suez".

2 The amended traffic separation scheme will be implemented on 1 January 1988 at 0000 hours UTC.

* * *

ANNEX 10AMENDMENTS TO THE TRAFFIC SEPARATION SCHEME
"IN THE GULF OF SUEZ"IN THE GULF OF SUEZ*

Note: See Rules for ships navigating in the Gulf of Suez (MSC 46/19, annex 14) (Reference charts: British Admiralty 2373 (edition 10 December 1982); 2374 (edition 7 February 1986); 2375 (edition 21 February 1986); 757 (published 10 December 1982)).

Note: These charts are based on European datum.

Description of the traffic separation scheme

Part A:

Northern Scheme

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

- | | |
|--------------------------------|--------------------------------|
| (1) 29°46'.60 N., 32°31'.90 E. | (3) 29°38'.00 N., 32°32'.40 E. |
| (2) 29°37'.85 N., 32°31'.65 E. | (4) 29°46'.60 N., 32°32'.30 E. |

(b) A separation line connecting the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (5) 29°37'.92 N., 32°32'.05 E. | (6) 29°35'.25 N., 32°32'.30 E. |
|--------------------------------|--------------------------------|

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

- | | |
|--------------------------------|---------------------------------|
| (7) 29°35'.27 N., 32°31'.83 E. | (9) 29°29'.00 N., 32°35'.85 E. |
| (8) 29°29'.45 N., 32°34'.80 E. | (10) 29°35'.23 N., 32°32'.80 E. |

* This scheme will be implemented on 1 January 1988 at 00.00 hours UTC.

(d) A separation line connecting the following geographical positions:

(11) 29°29'.20 N., 32°35'.35 E. (12) 29°24'.90 N., 32°37'.55 E.

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

(13) 29°25'.20 N., 32°37'.00 E. (17) 28°11'.30 N., 33°19'.70 E.
(14) 28°32'.55 N., 33°03'.65 E. (18) 28°33'.00 N., 33°04'.10 E.
(15) 28°15'.00 N., 33°14'.60 E. (19) 29°24'.60 N., 32°38'.00 E.
(16) 28°10'.45 N., 33°18'.20 E.

(f) A traffic lane for southbound traffic is established between:

(i) The separation zone and a line connecting the following geographical positions:

(20) 29°46'.60 N., 32°30'.75 E. (21) 29°37'.50 N., 32°30'.00 E.

(ii) The separation line and an imaginary line connecting the following geographical positions:

(22) 29°37'.50 N., 32°30'.00 E. (23) 29°35'.31 N., 32°30'.00 E.

(iii) The separation zone and a line connecting the following geographical positions:

(24) 29°35'.31 N., 32°30'.00 E. (25) 29°30'.42 N., 32° 32'.53E.

(iv) The separation line and an imaginary line connecting the following geographical positions:

(26) 29°30'.42 N., 32° 32'.53E. (27) 29°26'.90 N., 32°34'.30 E.

(v) The separation zone and a line connecting the following geographical positions:

(28) 29°26'.90 N., 32° 34'.30 E. (30) 28°15'.00 N., 33°12'.60 E.
(29) 28°31'.25 N., 33°02'.40 E. (31) 28°09'.90 N., 33°17'.10 E.

- (g) A traffic lane for northbound traffic is established between separation zone/line and a line connecting the following geographical positions:

(32) 28°11'.95 N., 33°20'.95 E. (34) 29°35'.20 N., 32°34'.55 E.
(33) 28°34'.25 N., 33°05'.30 E. (35) 29°46'.60 N., 32°33'.40 E.

Part B:

Southern scheme

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

(36) 28°07'.92 N., 33°21'.50 E. (41) 27°31'.10 N., 34°06'.43 E.
(37) 27°54'.60 N., 33°38'.02 E. (42) 27°43'.68 N., 33°50'.81 E.
(38) 27°49'.92 N., 33°43'.21 E. (43) 27°50'.45 N., 33°43'.90 E.
(39) 27°42'.80 N., 33°50'.82 E. (44) 27°55'.08 N., 33°38'.13 E.
(40) 27°30'.22 N., 34°05'.50 E. (45) 28°08'.58 N., 33°22'.48 E.

- (i) A traffic lane southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(46) 28°07'.38 N., 33°20'.37 E. (49) 27°42'.00 N., 33°49'.82 E.
(47) 27°53'.42 N., 33°37'.67 E. (50) 27°29'.10 N., 34°04'.35 E.
(48) 27°49'.37 N., 33°42'.60 E.

- (j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(51) 27°33'.17 N., 34°08'.60 E. (54) 27°56'.07 N., 33°38'.38 E.
(52) 27°44'.50 N., 33°51'.50 E. (55) 28°09'.28 N., 33°23'.63 E.
(53) 27°51'.22 N., 33°44'.52 E.

Part C:

Junction Scheme Off Ain-Sukhna

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

(56) 29°31'.95 N., 32°28'.97 E. (58) 29°35'.31 N., 32°30'.00 E.
(57) 29°30'.42 N., 32°32'.53 E. (59) 29°35'.40 N., 32°27'.70 E.

(l) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(60) 29°30'.00 N., 32°29'.35 E. (61) 29°26'.90 N., 32°34'.30 E.

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

(62) 29°37'.50 N., 32°30'.00 E. (63) 29°36'.88 N., 32°26'.90 E.

Part D:

Precautionary area

(n) A precautionary area is established by a line connecting the following geographical positions:

(64) 28°09'.90 N., 33°17'.10 E. (66) 28°09'.30 N., 33°23'.70 E.
(65) 28°06'.80 N., 33°19'.40 E. (67) 28°12'.20 N., 33°21'.45 E.

Note: Recommended directions of traffic flow off Ras-Shukheir.
Recommended directions of traffic flow are established in the approaches to Ras-Shukheir Oil Terminal, July, Ramadan and Morgan oilfields.

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(X) the Maritime Safety Committee, at its fifty-fifth session, adopted the following new and amended traffic separation schemes (MSC 55/25, paragraph 12.2.1) details of which are attached:

- "In the approaches to Arica" (new scheme);
- "In the approaches to Iquique" (new scheme);
- "In the approaches to Punta Arenas" (new scheme);
- "In the North Channel" (amended scheme);
- "Off Casquets" (amended scheme);
- "Off Terschelling and in the German Bight" (amended scheme)
- "In the approaches to Antofagasta" (amended scheme);
- "In the approaches to Quintero Bay" (amended scheme);
- "In the approaches to Valparaiso" (amended scheme);
- "In the approaches to Concepcion Bay" (amended scheme);
- "In the approaches to San Vicente Bay" (amended scheme); and
- "Off Chicken Rock, Galf of Man" (cancelled scheme).

2 The new and amended TSSs and cancellation of the scheme "Off Chicken Rock, Galf of Man" will be implemented on 15 October 1988 at 0000 hours UTC.

THE INTERNATIONAL
CONFERENCE ON
SAFETY OF LIFE AT SEA
1978

3 The Committee agreed to retain the existing TSS "Off Ushant" which was adopted at its thirty-eighth session and implemented on 1 January 1979, and cancelled the amended TSS, which it had adopted at its forty-fourth session (MSC XLIV/21, paragraph 13.9), and has never been implemented.

* * *

4 OFF TERSCHELLING AND IN THE GERMAN BIGHT (amended scheme)

Amend the details of the inshore traffic zone to read as follows:

"The area between the coast and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone. The eastern limit of the inshore traffic zone is bounded by a line connecting geographic positions 53°54'.7 N/07°42'.1 E (17) and 53°47' 5 N/07°51'.5 E (Wangerooge Lighthouse)."

5 IN THE APPROACHES TO ARICA (new scheme)

(Reference chart: Chilean Hydrographic Office 101, 1973 edition)

Description of the traffic separation scheme

(a) A separation zone, half a mile wide, is centred upon the following geographic positions:

- (1) 18°27'.53 S 70°21'.00 W
- (2) 18°27'.53 S 70°25'.42 W

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

- (3) 18°26'.80 S 70°21'.00 W
- (4) 18°25'.28 S 70°25'.42 W

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

- (5) 18°28'.30 S 70°21'.00 W
- (6) 18°29'.78 S 70°25'.42 W

6 APPROACHES TO IQUIQUE (new scheme)

(Reference chart: Chilean Hydrographic Office 104, 1979 edition)

Description of the traffic separation scheme

- (a) A separation zone, 0.4 miles wide, is centred upon the following geographical positions:

(1) 20°11'.28 S 70°10'.00 W

(2) 20°11'.28 S 70°12'.00 W

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(3) 20°10'.73 S 70°10'.00 W

(4) 20°10'.08 S 70°12'.00 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 20°11'.83 S 70°10'.00 W

(6) 20°12'.48 S 70°12'.00 W

7 IN THE APPROACHES TO PUNTA ARENAS (new scheme)

(Reference chart: Chilean Hydrographic Office 1124, 1965 edition)

Description of the traffic separation scheme

- (a) A separation zone, half a mile wide, is centred upon the following geographical positions:

(1) 53°12'.03 S 70°52'.30 W

(2) 53°13'.47 S 70°49'.97 W

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

(3) 53°12'.55 S 70°53'.20 W

(4) 53°14'.35 S 70°51'.50 W

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

(5) 53°11'.50 S 70°51'.40 W

(6) 53°12'.60 S 70°48'.43 W

8 IN THE APPROACHES TO ANTOFAGASTA (amended scheme)

(Reference chart: Chilean Hydrographic Office 212, 1982 edition)

Description of the traffic separation scheme

(a) A separation zone, one mile wide, is centred upon the following geographical positions:

(1) 23°38'.53 S 70°25'.52 W

(2) 23°38'.53 S 70°29'.60 W

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

(3) 23°37'.03 S 70°25'.52 W

(4) 23°36'.03 S 70°29'.60 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 23°40'.03 S 70°25'.52 W

(6) 23°41'.03 S 70°29'.60 W

9 IN THE APPROACHES TO QUINTERO BAY (amended scheme)

(Reference charts: Chilean Hydrographic Office 424, 1983 edition and 501, 1956 edition)

Description of the traffic separation scheme

- (a) A separation zone, half a mile wide, is centred upon the following geographical positions:

(1) 32°44'.43 S 71°32'.00 W

(2) 32°44'.43 S 71°36'.43 W

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(3) 32°43'.43 S 71°32'.00 W

(4) 32°42'.93 S 71°36'.43 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 32°45'.43 S 71°32'.00 W

(6) 32°45'.93 S 71°36'.43 W

10 IN THE APPROACHES TO VALPARAISO (amended scheme)
(Reference chart: Chilean Hydrographic Office 511, 1985 edition)

Description of the traffic separation scheme

- (a) A separation zone, half a mile wide, is centred upon the following geographical positions:

(1) 32°57'.62 S 71°37'.27 W
(2) 33°00'.53 S 71°36'.52 W

- (b) A traffic lane for traffic sailing towards Valparaiso is established between the separation zone and a line connecting the following geographical positions:

(3) 32°57'.87 S 71°38'.70 W
(4) 33°00'.70 S 71°37'.38 W

- (c) A traffic lane for traffic sailing from Valparaiso is established between the separation zone and a line connecting the following geographical positions:

(5) 32°57'.33 S 71°35'.82 W
(6) 33°00'.35 S 71°35'.65 W

11 IN THE APPROACHES TO CONCEPCION BAY (amended scheme)
(Reference chart: Chilean Hydrographic Office 611, 1985 edition)

Description of the traffic separation scheme

- (a) A separation zone, a quarter of a mile wide, is centred upon the following geographical positions:

(1) 36°33'.85 S 73°01'.95 W
(2) 36°35'.87 S 73°01'.55 W
(3) 36°38'.27 S 73°01'.55 W

- (b) A traffic lane, half a mile wide, is established on each side of the separation zone.

12 IN THE APPROACHES TO SAN VICENTE BAY (amended scheme)
(Reference chart: Chilean Hydrographic Office 611, 1985 edition)

Description of the traffic separation scheme

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

(1) 36°40'.63 S	73°13'.22 W
(2) 36°43'.77 S	73°10'.12 W
(3) 36°43'.70 S	73°10'.00 W
(4) 36°40'.37 S	73°12'.73 W

- (b) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 36°41'.37 S	73°14'.67 W
(6) 36°44'.07 S	73°10'.50 W

- (c) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(7) 36°39'.75 S	73°11'.50 W
(8) 36°43'.42 S	73°09'.55 W

13 OFF USHANT (retention of existing TSS)

Cancel the TSS adopted by the forty-fourth session of the Committee (MSC XLIV/21, paragraph 13.9). The existing TSS "Off Ushant", adopted at the Committee's thirty-eighth session, is therefore retained.

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

The attached page, which is page 1 of annex 13 to MSC 55/25, was omitted from COLREG/Circ.32 and should be inserted between pages 2 and 3 of the circular.

W/4851y/ETP

THE MARITIME
COMMUNITY

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 OFF CHICKEN ROCK, CALF OF MAN (cancelled scheme)

Cancel the existing scheme.

2 IN THE NORTH CHANNEL (amended scheme)

Replace the details of the "Inshore traffic zone" with the following note:

"Note:

Laden tankers of over 10,000 grt should avoid the areas between the traffic separation scheme and the Mull of Kintyre and between the traffic separation scheme and Rathlin Island."

3 OFF CASQUETS (amended scheme)

Replace the description of the inshore traffic zone by the following:

"Inshore traffic zone

The area between the southern boundary of the traffic separation scheme and the Channel Islands bounded by lines drawn from the south-west corner of the scheme to Les Hanois lighthouse, from St. Martin's Point light to the southern extremity of Sark, from the eastern extremity of Sark to Quenard Point and from Quenard Point to the south-east corner of the scheme is designated as an inshore traffic zone."

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TRAFFIC SEPARATION SCHEME "IN THE STRAIT OF HORMUZ"
CHANGE OF REFERENCE CHART AND CHART DATUM

- 1 The United Kingdom Hydrographic Office has informed the Organization that:
 - .1 the reference chart quoted for the traffic separation scheme "In the Strait of Hormuz" (BA 3956, 1979 edition) will be replaced by new chart BA 3172 in mid-1994. BA 3172 will be on WGS84 datum;
 - .2 the editorial amendments attached at annex are required to align the traffic separation scheme (Ships' Routeing B-IV/3) and the limits of the inshore traffic zone (NAV 39/31/Add.1, annex) with the new chart datum.
- 2 The editorial amendments will be included in the next amendment of the IMO publication "Ships' Routeing".
- 3 Member Governments are invited to bring this information to the attention of all concerned.

ANNEX

IN THE STRAIT OF HORMUZ

(Reference chart: British Admiralty 3172, 1994 edition)

Note: This chart is based on WGS 84 datum.

Description of the traffic separation scheme

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

- | | |
|----------------------------|----------------------------|
| (1) 26°34'.80N, 56°21'.05E | (5) 26°28'.60N, 56°37'.55E |
| (2) 26°36'.50N, 56°28'.05E | (6) 26°34'.50N, 56°33'.60E |
| (3) 26°36'.50N, 56°34'.90E | (7) 26°34'.50N, 56°28'.55E |
| (4) 26°29'.65N, 56°39'.45E | (8) 26°32'.00N, 56°22'.40E |

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

- | | |
|-----------------------------|-----------------------------|
| (9) 26°30'.20N, 56°23'.25E | (11) 26°32'.50N, 56°32'.35E |
| (10) 26°32'.50N, 56°28'.95E | (12) 26°27'.60N, 56°35'.65E |

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

- | | |
|-----------------------------|-----------------------------|
| (13) 26°30'.70N, 56°41'.35E | (15) 26°38'.50N, 56°27'.70E |
| (14) 26°38'.50N, 56°36'.15E | (16) 26°36'.70N, 56°20'.15E |

Inshore traffic zone

The area between the Musandam Peninsula coast and the landward boundary of the traffic separation scheme is designated an inshore traffic zone, bounded by a line connecting the following geographical positions:

- | | |
|------------------------|------|
| 26°15'.35N, 56°12'.92E | |
| 26°30'.20N, 56°23'.25E | (9) |
| 26°32'.50N, 56°28'.95E | (10) |
| 26°32'.50N, 56°32'.35E | (11) |
| 26°27'.60N, 56°35'.65E | (12) |
| 26°19'.05N, 56°31'.25E | |

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SÖDARTSBERGET Internat. sekretariatet	
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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that, pursuant to Assembly resolution A.376(X), the Maritime Safety Committee, at its fifty-eighth session, adopted the following new and amended traffic separation schemes (MSC 58/25, paragraphs 24.4, 24.9 and 24.12), attached hereto:

- "In the East Lamma and Tathong Channels" (new schemes);
- "In the Gulf of Suez" (amended scheme); and
- "Off Friesland" (new scheme).

2 The traffic separation schemes "In East Lamma and Tathong Channels" will be implemented as IMO schemes on 25 November 1990 at 0000 hours UTC.

3 The new traffic separation schemes of the routing system "Off Friesland" will be implemented on 1 December 1990 at 0000 hours UTC.

4 The amended traffic separation scheme "In the Gulf of Suez" has already been implemented and published on charts.

5457X/fd

ANNEX

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 IN THE EAST LAMMA AND TATHONG CHANNELS (new schemes)

(Reference charts: British Admiralty 1917, 1988 edition and 1918, 1988 edition)

Note: These charts are based on Hong Kong 1963 Datum.

Description of the traffic separation schemes.

The traffic separation schemes in the approaches to Hong Kong consist of two parts:

Part I

Eastern approaches to Victoria Port (Tathong Channel)

- (a) A separation zone is bounded by lines connecting the following geographical positions:
- | | |
|-------------------------------|-------------------------------|
| (1) 22°13'.42N., 114°20'.00E. | (3) 22°13'.25N., 114°17'.47E. |
| (2) 22°13'.07N., 114°20'.00E. | (4) 22°13'.42N., 114°20'.00E. |
- (b) A separation line connects the following geographical positions:
- | | |
|-------------------------------|-------------------------------|
| (5) 22°42'.25N., 114°17'.47E. | (7) 22°16'.33N., 114°15'.50E. |
| (6) 22°07'.12N., 114°16'.42E. | (8) 22°17'.05N., 114°14'.33E. |
- (c) A traffic lane for inbound traffic is established between the separation zone/line and a line connecting the following geographical positions:
- | | |
|--------------------------------|--------------------------------|
| (9) 22°14'.08N., 114°20'.00E. | (12) 22°16'.38N., 114°15'.78E. |
| (10) 22°13'.93N., 114°17'.27E. | (13) 22°17'.15N., 114°14'.40E. |
| (11) 22°14'.23N., 114°16'.67E. | |
- (d) A traffic lane for outbound traffic is established between the separation zone/line and a line connecting the following geographical positions:
- | | |
|--------------------------------|--------------------------------|
| (14) 22°12'.30N., 114°20'.00E. | (17) 22°16'.30N., 114°15'.22E. |
| (15) 22°12'.47N., 114°17'.67E. | (18) 22°16'.97N., 114°14'.27E. |
| (16) 22°14'.02N., 114°16'.13E. | |

Inshore traffic zones

The area enclosed by the outer limit of the inbound traffic lane and the adjacent coast, and a line drawn from position (13) 22°17'.15N., 114°14'.40E in the direction 034°T to the shore and a line drawn from position 22°13'.95N., 114°17'.75E in the direction 360°T to the shore, is designated as an inshore traffic zone.

The area enclosed by the outer limit of the outbound traffic lane and the adjacent coast, and a line drawn from position (18) 22°16.'97N., 114°14'.27E. in the direction 214°T to the shore, and a line drawn from position (15) 22°12'.47N., 114°17'.67E in the direction 270°T to the shore is designated as an inshore traffic zone.

Part II

Western approaches to Victoria Port (East Lamma Channel)

(a) A separation line connects the following geographical positions:

- (1) 22°12'.65N., 114°10'.23E. (3) 22°16'.37N., 114°06'.40E.
(2) 22°14'.92N., 114°07'.18E.

(b) A traffic lane for inbound traffic is established between the separation line and a line connecting the following geographical positions:

- (4) 22°12'.87N., 114°10'.42E. (6) 22°16'.47N., 114°06'.67E.
(5) 22°15'.10N., 114°07'.43E.

(c) A traffic lane for outbound traffic is established between the separation line and a line connecting the following geographical positions:

- (7) 22°12'.45N., 114°10'.07E. (9) 22°16'.23N., 114°06'.13E.
(8) 22°14'.73N., 114°06'.97E.

Inshore traffic zones

The area enclosed by the outer limit of the inbound traffic lane and the adjacent coast, and a line drawn from position (4) 22°12'.52N., 114°10'.42E., in the direction 038.5° T to the shore, and a line drawn from position (6) 22°16'.47N., 114°06'.67E., in the direction 063°T to the shore is designated as an inshore traffic zone.

The area enclosed by the outer limit of the outbound traffic lane and the adjacent coast, and a line drawn from position (7) 22°12'.45N., 114°10'.07E., in the direction 218.5° T to the shore, and a line drawn from position (8) 22°14'.73N., 114°06'.97E., in the direction 231°T to the shore is designated as an inshore traffic zone.

2 IN THE GULF OF SUEZ (amended scheme)

Note: See Rules for ships navigating in the Gulf of Suez (Part F)

(Reference charts: British Admiralty 2373 (edition October 1988); 2374 (edition October 1988); 2375 (edition October 1988); 3215 (edition September 1988); 753 (edition September 1988); 8 (edition November 1988), and 5501 (mariner's routing guide).

Note: These charts are based on European Datum (1950) (ED 50).

Description of the traffic separation scheme

Part A:

Northern Scheme

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

(1)	29°46'.60 N.,	32°31'.90 E.
(2)	29°37'.89 N.,	32°31'.65 E.
(3)	29°38'.00 N.,	32°32'.40 E.
(4)	29°46'.60 N.,	32°32'.30 E.

(b) A separation line connecting the following geographical positions:

(5)	29°37'.95 N.,	32°32'.05 E.
(6)	29°35'.65 N.,	32°32'.19 E.

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

(7)	29°35'.69 N.,	32°31'.61 E.
(8)	29°29'.59 N.,	32°34'.71 E.
(9)	29°29'.07 N.,	32°35'.82 E.
(10)	29°35'.63 N.,	32°32'.55 E.

(d) A separation line connecting the following geographical positions:

(11)	29°29'.30 N.,	32°35'.32 E.
(12)	29°25'.57 N.,	32°37'.21 E.

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

(13)	29°25'.91 N.,	32°36'.67 E.
(14)	29°00'.00 N.,	32°49'.80 E.

(15)	28°45'.80 N.,	32°54'.80 E.
(16)	28°40'.60 N.,	32°59'.60 E.
(17)	28°32'.55 N.,	33°03'.65 E.
(18)	28°15'.00 N.,	33°14'.60 E.
(19)	28°10'.45 N.,	33°18'.20 E.
(20)	28°11'.30 N.,	33°19'.70 E.
(21)	28°33'.00 N.,	33°04'.10 E.
(22)	29°25'.29 N.,	32°37'.64 E.

(f) A traffic lane for southbound traffic is established between:

(i) The separation zone and a line connecting the following geographical positions:

(23)	29°46'.60 N.,	32°30'.75 E.
(24)	29°37'.65 N.,	32°30'.00 E.

(ii) The separation line and an imaginary line connecting the following geographical positions:

(25)	29°37'.65 N.,	32°30'.00 E.
(26)	29°35'.77 N.,	32°29'.77 E.

(iii) The separation zone and a line connecting the following geographical positions:

(27)	29°35'.77 N.,	32°29'.77 E.
(28)	29°30'.67 N.,	32°32'.42 E.

(iv) The separation line and an imaginary line connecting the following geographical positions:

(29)	29°30'.67 N.,	32°32'.42 E.
(30)	29°27'.67 N.,	32°33'.92 E.

(v) The separation zone and a line connecting the following geographical positions:

(31)	29°27'.67 N.,	32°33'.92 E.
(32)	29°00'.00 N.,	32°48'.00 E.
(33)	28°46'.00 N.,	32°52'.80 E.
(34)	28°40'.40 N.,	32°57'.80 E.
(35)	28°31'.25 N.,	33°02'.40 E.
(36)	28°15'.00 N.,	33°12'.60 E.
(37)	28°09'.90 N.,	33°17'.10 E.

(g) A traffic lane for northbound traffic is established between the separation zone line and a line connecting the following geographical positions:

(38)	28°11'.95 N.,	33°20'.95 E.
(39)	28°34'.25 N.,	33°05'.30 E.
(40)	29°35'.20 N.,	32°34'.55 E.
(41)	29°46'.60 N.,	32°33'.40 E.

Part B:

Southern Scheme

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

(42)	28°07'.92 N.,	33°21'.50 E.
(43)	27°54'.60 N.,	33°38'.02 E.
(44)	27°49'.92 N.,	33°43'.21 E.
(45)	27°42'.80 N.,	33°50'.82 E.
(46)	27°30'.22 N.,	34°05'.50 E.
(47)	27°31'.10 N.,	34°06'.43 E.
(48)	27°43'.68 N.,	33°50'.81 E.
(49)	27°50'.45 N.,	33°43'.90 E.
(50)	27°55'.08 N.,	33°38'.13 E.
(51)	28°08'.58 N.,	33°22'.48 E.

- (i) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(52)	28°07'.38 N.,	33°20'.37 E.
(53)	27°53'.42 N.,	33°37'.67 E.
(54)	27°49'.37 N.,	33°42'.60 E.
(55)	27°42'.00 N.,	33°49'.82 E.
(56)	27°29'.10 N.,	34°04'.35 E.

- (j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(57)	27°33'.17 N.,	34°08'.60 E.
(58)	27°44'.50 N.,	33°51'.50 E.
(59)	27°51'.22 N.,	33°44'.52 E.
(60)	27°56'.07 N.,	33°38'.38 E.
(61)	28°09'.28 N.,	33°23'.63 E.

Part C:

Junction Scheme off Ain-Sukhna

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

(62)	29°32'.35 N.,	32°28'.81 E.
(63)	29°30'.67 N.,	32°32'.42 E.
(64)	29°35'.77 N.,	32°29'.77 E.
(65)	29°35'.87 N.,	32°27'.48 E.

- (l) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(66)	29°30'.59 N.,	32°29'.35 E.
(67)	29°27'.67 N.,	32°33'.92 E.

- (m) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(68)	29°37'.65 N.,	32°30'.00 E.
(69)	29°37'.17 N.,	32°26'.90 E.

Part D:

Precautionary area

- (n) A precautionary area is established by a line connecting the following geographical positions:

(70)	28°09'.90 N.,	33°17'.10 E.
(71)	28°06'.80 N.,	33°19'.40 E.
(72)	28°09'.30 N.,	33°23'.70 E.
(73)	28°12'.20 N.,	33°21'.45 E.

Note: Recommended directions of traffic flow off Ras-Shukheir. Recommended directions of traffic flow are established in the approaches to Ras-Shukheir Oil Terminal, July, Ramadan and Morgan oilfields.

(3 "OFF FRIESLAND" (new schemes)

Reference charts:

British Admiralty 1405, 1406, 1408, 1505, and 2182 A.

Netherlands Hydrographic Office 1014, 1035, 1037 (INT 1043, 1046, 1045)

German Hydrographic Office 50, 53 (INT 1045)

Note: These charts are based on European Datum (1950) (ED 50)

The following traffic separation schemes form part of the routing system "Off Friesland".

Description of the traffic separation schemes

- (a) Geographical positions (1) to (6) form the deep water route "From North Hinder to the traffic separation scheme "Off Brown Ridge".

"Off Brown Ridge" scheme

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

(7) 53°03'.14 N., 3°21'.85 E. (9) 52°54'.81 N., 3°18'.87 E.
 (8) 52°55'.11 N., 3°17'.38 E. (10) 53°02'.84 N., 3°23'.34 E.

- (c) A traffic lane for northbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(6) 52°54'.17 N., 3°22'.00 E. (11) 53°2'.20 N., 3°26'.48 E.

- (d) A traffic lane for southbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(12) 53°03'.78 N., 3°18'.71 E. (1) 52°55'.75 N., 3°14'.25 E.

- (e) Geographical positions (11) to (14) form the deep water route "From the traffic separation scheme "Off Brown Ridge" to the traffic separation scheme "West Friesland".

"West Friesland" scheme

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

(15) 53°42'.99 N., 3°42'.12 E. (19) 53°46'.73 N., 4°20'.00 E.
 (16) 53°22'.12 N., 3°31'.47 E. (20) 53°56'.69 N., 4°36'.00 E.
 (17) 53°20'.67 N., 3°36'.85 E. (21) 53°59'.22 N., 4°36'.00 E.
 (18) 53°31'.12 N., 3°44'.72 E. (22) 53°57'.60 N., 4°15'.17 E.

- (g) A traffic lane for northeast bound traffic is established between the separation zone in paragraph (f) above and a line connecting the following geographical positions:

(14) 53°19'.89 N., 3°39'.74 E. (24) 53°45'.90 N., 4°23'.32 E.
 (23) 53°30'.00 N., 3°47'.37 E. (25) 54°00'.00 N., 4°46'.00 E.

- (h) A traffic lane for southwest bound traffic is established between the separation zone in paragraph (f) above and a line connecting the following geographical positions:

(26) 53°57'.20 N., 4°10'.02 E. (13) 53°22'.94 N., 3°28'.40 E.
(27) 53°43'.39 N., 3°38'.81 E.

"Friesland Junction" precautionary area

- (i) A precautionary area is established directly to the north of the "West Friesland" traffic separation scheme. The area is bounded by a line connecting the following geographical positions:

(26) 53°57'.20 N., 4°10'.02 E. (29) 54°5'.59 N., 4°59'.32 E.
(25) 54°00'.00 N., 4°46'.00 E. (30) 54°2'.57 N., 4°20'.92 E.
(28) 54°01'.14 N., 5°00'.34 E. (31) 54°1'.91 N., 4°08'.96 E.

"East Friesland" scheme

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

(32) 54°2'.62 N., 5°00'.00 E. (35) 54°8'.97 N., 6°01'.33 E.
(33) 54°4'.21 N., 5°20'.00 E. (36) 54°5'.69 N., 5°19'.66 E.
(34) 54°8'.00 N., 6°01'.90 E. (37) 54°4'.11 N., 4°59'.66 E.

- (k) A traffic lane for eastbound traffic is established between the separation zone in paragraph (j) above and a line connecting the following geographical positions:

(28) 54°1',14 N., 5°00'.34 E. (38) 54°6',10 N., 6°3'.00 E,

- (l) A traffic lane for westbound traffic is established between the separation zone in paragraph (j) above and a line connecting the following geographical positions:

(39) 54°10'.90 N., 6°00'.20 E. (29) 54°5'.59 N., 4°59'.32 E.
(40) 54°07'.17 N., 5°19'.32 E.

Note: The positions (38), (34), (35) and (39) coincide with the positions (15), (11), (8) and (14) of the "Deutsche Bucht Lightvessel, Western Approach" traffic separation scheme.

- (m) Geographical positions (26) (43) (44) and (31) form the deep water route from traffic separation scheme "Off Botney Grounds" to the precautionary area "Friesland Junction".

"Off Botney Grounds" scheme

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

(43) 53°57'.19 N., 3°44'.18 E. (47) 53°36'.28 N., 2°58'.85 E.
(44) 53°55'.10 N., 3°27'.47 E. (48) 53°43'.71 N., 3°03'.66 E.
(45) 53°41'.57 N., 3°08'.91 E. (49) 53°56'.66 N., 3°18'.18 E.
(46) 53°35'.30 N., 3°03'.12 E. (50) 53°58'.50 N., 3°43'.71 E.

(o) A traffic lane for west, southwest and southbound traffic is established between the separation zone in paragraph (n) above and a line connecting the following geographical positions:

(42) 54°00'.46 N., 3°43'.01 E. (52) 53°44'.40 N., 3°01'.40 E.
(51) 53°58'.61 N., 3°17'.32 E. (53) 53°36'.81 N., 2°56'.50 E.

(p) A traffic lane for north, northeast and eastbound traffic is established between the separation zone in paragraph (n) above and a line connecting the following geographical positions:

(54) 53°34'.76 N., 3°05'.49 E. (56) 53°53'.13 N., 3°28'.02 E.
(55) 53°40'.71 N., 3°11'.00 E. (41) 53°55'.24 N., 3°44'.88 E.

(r) Geographical positions (53), (57) (58), (3), (4), (59), (60), (61), and (54) form the deep water route "From North Hinder to Indefatigable Bank" via DRI lightbuoy.

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(X) the Maritime Safety Committee, at its fifty-seventh session, adopted the following new and amended traffic separation schemes (MSC 57/27, paragraph 10.2.1) details of which are attached:

- "Off Finisterre (new scheme)";
- "In the Gulf of Suez (amended scheme)".

2 The Committee adopted the new traffic separation scheme "Off Finisterre" subject to racons being installed on the lighthouses at Cabo Villano, Torinana and Finisterre and the satisfactory demonstration of their effectiveness for position-fixing within the TSS and its immediate approaches before the scheme is implemented on a date to be determined by the Spanish Administration. The Government of Spain expects the trials of the racons to be completed by late September 1989 and, if successful, intends to implement the traffic separation scheme on 1 February 1990. Information in this regard will be circulated by the Secretariat in due course.

3 Subsequent to the adoption by the Committee of the attached amendments to the traffic separation scheme "In the Gulf of Suez", the Secretariat was informed of a further amendment made to the traffic separation scheme in the region of the Ain Sukhna Oil Terminal by the Government of Egypt for reasons of navigational expediency and promulgated by Egyptian Notice to Mariners No.21/1988. The Government of Egypt will bring the further amendment to the attention of NAV 36 for consideration and MSC 58 for information.

* * *

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 IN THE GULF OF SUEZ (amended scheme)

Note: See "Rules for ships navigating in the Gulf of Suez" (MSC 46/19, annex 14) (Reference charts: British Admiralty 2373 (edition 10 December 1982); 2374 (edition 7 February 1986); 2375 (edition 21 February 1986); 757 (published 10 December 1982))

These charts are based on European Datum.

Description of the traffic separation scheme

Part A:

Northern Scheme

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

- | | | | | | |
|-----|---------------|--------------|-----|---------------|--------------|
| (1) | 29°46'.60 N., | 32°31'.90 E. | (3) | 29°38'.00 N., | 32°32'.40 E. |
| (2) | 29°37'.85 N., | 32°31'.65*E. | (4) | 29°46'.60 N., | 32°32'.30 E. |

(b) A separation line connecting the following geographical positions:

- | | | | | | |
|-----|---------------|--------------|-----|---------------|--------------|
| (5) | 29°37'.92*N., | 32°32'.05 E. | (6) | 29°35'.25*N., | 32°32'.30*E. |
|-----|---------------|--------------|-----|---------------|--------------|

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

- | | | | | | |
|-----|---------------|--------------|------|---------------|--------------|
| (7) | 29°35'.27*N., | 32°31'.83*E. | (9) | 29°29'.00*N., | 32°35'.85*E. |
| (8) | 29°29'.45*N., | 32°34'.80*E. | (10) | 29°35'.23*N., | 32°32'.80*E. |

(d) A separation line connecting the following geographical positions:

- | | | | | | |
|------|---------------|--------------|------|---------------|--------------|
| (11) | 29°29'.20*N., | 32°35'.35*E. | (12) | 29°24'.90*N., | 32°37'.55*E. |
|------|---------------|--------------|------|---------------|--------------|

* Amended by Egyptian Notices to Mariners No.21/1988

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

- | | |
|---------------------------------|---------------------------------|
| (13) 29°25'.20*N., 32°37'.00*E. | (18) 28°15'.00 N., 33°14'.60 E. |
| (14) 29°00'.00 N., 32°49'.80 E. | (19) 28°10'.45 N., 33°18'.20 E. |
| (15) 28°45'.80 N., 32°54'.80 E. | (20) 28°11'.30 N., 33°19'.70 E. |
| (16) 28°40'.60 N., 32°59'.60 E. | (21) 28°33'.00 N., 33°04'.10 E. |
| (17) 28°32'.55 N., 33°03'.65 E. | (22) 29°24'.60*N., 32°38'.00*E. |

(f) A traffic lane for southbound traffic is established between:

(i) The separation zone and a line connecting the following geographical positions:

- (23) 29°46'.60 N., 32°30'.75 E. (24) 29°37'.50*N., 32°30'.00 E.

(ii) The separation line and an imaginary line connecting the following geographical positions:

- (25) 29°37'.50*N., 32°30'.00 E. (26) 29°35'.31*N., 32°30'.00*E.

(iii) The separation zone and a line connecting the following geographical positions:

- (27) 29°35'.31*N., 32°30'.00*E. (28) 29°30'.42*N., 32°32'.53*E.

(iv) The separation line and an imaginary line connecting the following geographical positions:

- (29) 29°30'.42*N., 32°32'.53*E. (30) 29°26'.90*N., 32°34'.30*E.

(v) The separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (31) 29°26'.90*N., 32°34'.30*E. | (35) 28°31'.25 N., 33°02'.40 E. |
| (32) 29°00'.00 N., 32°48'.00 E. | (36) 28°15'.00 N., 33°12'.60 E. |
| (33) 28°46'.00 N., 32°52'.80 E. | (37) 28°09'.90 N., 33°17'.10 E. |
| (34) 28°40'.40 N., 32°57'.80 E. | |

* Amended by Egyptian Notices to Mariners No.21/1988

(g) A traffic lane for northbound traffic is established between separation zone/line and a line connecting the following geographical positions:

- (38) 28°11'.95 N., 33°20'.95 E. (40) 29°35'.20 N., 32°34'.55 E.
(39) 28°34'.25 N., 33°05'.30 E. (41) 29°46'.60 N., 32°33'.40 E.

Part B:

Southern scheme

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

- (42) 28°07'.92 N., 33°21'.50 E. (47) 27°31'.10 N., 34°06'.43 E.
(43) 27°54'.60 N., 33°38'.02 E. (48) 27°43'.68 N., 33°50'.81 E.
(44) 27°49'.92 N., 33°43'.21 E. (49) 27°50'.45 N., 33°43'.90 E.
(45) 27°42'.80 N., 33°50'.82 E. (50) 27°55'.08 N., 33°38'.13 E.
(46) 27°30'.22 N., 34°05'.50 E. (51) 28°08'.58 N., 33°22'.48 E.

(i) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (52) 28°07'.38 N., 33°20'.37 E. (55) 27°42'.00 N., 33°49'.82 E.
(53) 27°53'.42 N., 33°37'.67 E. (56) 27°29'.10 N., 34°04'.35 E.
(54) 27°49'.37 N., 33°42'.60 E.

(j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (57) 27°33'.17 N., 34°08'.60 E. (60) 27°56'.07 N., 33°38'.38 E.
(58) 27°44'.50 N., 33°51'.50 E. (61) 28°09'.28 N., 33°23'.63 E.
(59) 27°51'.22 N., 33°44'.52 E.

Part C:

Junction Scheme Off Ain-Sukhna

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

(62) 29°31'.95 N., 32°28'.97 E. (64) 29°35'.31 N., 32°30'.00 E.
(63) 29°30'.42 N., 32°32'.53 E. (65) 29°35'.40 N., 32°27'.70 E.

(l) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(66) 29°30'.00 N., 32°29'.35 E. (67) 29°26'.90 N., 32°34'.30 E.

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

(68) 29°37'.50 N., 32°30'.00 E. (69) 29°36'.88 N., 32°26'.90 E.

Part D:

Precautionary area

(n) A precautionary area is established by a line connecting the following geographical positions:

(70) 28°09'.90 N., 33°17'.10 E. (72) 28°09'.30 N., 33°23'.70 E.
(71) 28°06'.80 N., 33°19'.40 E. (73) 28°12'.20 N., 33°21'.45 E.

Note:

Recommended directions of traffic flow off Ras-Shukheir.
Recommended directions of traffic flow are established in the approaches to Ras-Shukheir Oil Terminal, July, Ramadan and Morgan oilfields.

9500y/ta

OFF FINISTERRE (new scheme)

Reference chart: Instituto Hidrografico De La Marina-Cadiz (España)
No.41, (1978 edition)

Note:

This chart is based on European Datum (Potsdam)

Description of the traffic separation scheme

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

- | | |
|--------------------------------|--------------------------------|
| (1) 42° 52'.90N., 09° 29'.00W. | (4) 43° 17'.20N., 09° 26'.40W. |
| (2) 43° 06'.40N., 09° 29'.00W. | (5) 43° 07'.60N., 09° 33'.20W. |
| (3) 43° 15'.75N., 09° 22'.40W. | (6) 42° 52'.90N., 09° 33'.20W. |

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

- | | |
|--------------------------------|---------------------------------|
| (7) 42° 52'.90N., 09° 38'.80W. | (10) 43° 21'.15N., 09° 36'.60W. |
| (8) 43° 09'.20N., 09° 38'.80W. | (11) 43° 10'.60N., 09° 44'.35W. |
| (9) 43° 19'.20N., 09° 31'.55W. | (12) 42° 52'.90N., 09° 44'.35W. |

(c) A traffic lane for northbound traffic is established between the separation zones described in paragraphs (a) and (b).

(d) A traffic lane for southbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (13) 42° 52'.90N., 09° 49'.70W. | (15) 43° 23'.10N., 09° 42'.00W. |
| (14) 43° 12'.10N., 09° 49'.70W. | |

INTERNATIONAL MARITIME ORGANIZATION

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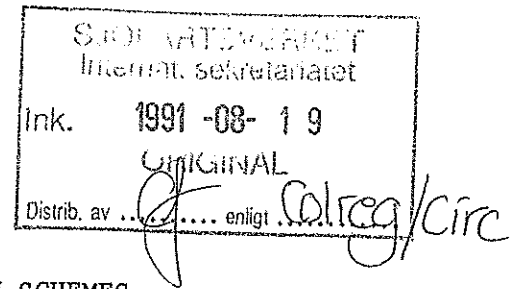
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IMO

COLREG.2/Circ.37
19 June 1991

Ref. T2/2.07



NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(x) the Maritime Safety Committee, at its fifty-ninth session, adopted the following new and amended traffic separation schemes (MSC 59/33, paragraph 10.2) details of which are (MSC 59/33, annex 20) attached:

- "Between the Zuluf and Marjan oil fields" (new scheme);
- "In the Approaches to Chesapeake Bay" (amended scheme);
- "Off San Francisco" (amended scheme);
- "Off Falsterborev" (amended scheme);
- "In the Sound" (adopted delineations of inshore traffic zones (ITZ));
- "Off Oland Island" (adopted delineations of ITZ);
- "Off Gotland Island" (adopted delineations of ITZ); and
- "Saronicos Gulf" (cancelled ITZ).

2 The new and amended traffic separation schemes and adopted delineation of inshore traffic zones in adopted traffic separation schemes will be implemented on 16 November 1991 at 0000 hours UTC.

3 The cancellation of inshore traffic zone of the TSS "Saronicos Gulf" has been implemented on 19 April 1991.

ANNEX 20

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

BETWEEN THE ZULUF AND MARJAN OIL FIELDS (New scheme)

(Reference chart: British Admiralty 3774, 1986 edition)

Note: This chart is based on Nahwan Datum, Clarke 1880 Spheroid

Description of the traffic separation scheme

(a) A separation zone of 0.54 miles (1,000 metres) wide is centred upon the following geographical positions:

- | | | |
|-----|----------------|---------------|
| (1) | 28° 29'.98 N., | 49° 30'.02 E. |
| (2) | 28° 26'.18 N., | 49° 29'.89 E. |
| (3) | 28° 19'.61 N., | 49° 22'.73 E. |
| (4) | 28° 14'.46 N., | 49° 22'.81 E. |

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

- | | | |
|------|----------------|---------------|
| (5) | 28° 14'.46 N., | 49° 21'.37 E. |
| (6) | 28° 16'.83 N., | 49° 21'.32 E. |
| (7) | 28° 20'.13 N., | 49° 21'.30 E. |
| (8) | 28° 23'.40 N., | 49° 24'.92 E. |
| (9) | 28° 26'.69 N., | 49° 28'.41 E. |
| (10) | 28° 30'.00 N., | 49° 28'.52 E. |

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

- | | | |
|------|----------------|---------------|
| (11) | 28° 14'.46 N., | 49° 24'.20 E. |
| (12) | 28° 19'.14 N., | 49° 24'.14 E. |
| (13) | 28° 22'.37 N., | 49° 27'.74 E. |
| (14) | 28° 25'.66 N., | 49° 31'.27 E. |
| (15) | 28° 30'.00 N., | 49° 31'.32 E. |

IN THE APPROACHES TO CHESAPEAKE BAY (Amended scheme)

(Reference chart: United States 12221, 1989 edition)

Note: These co-ordinates are based on North American 1983 datum.

Description of the traffic separation scheme

The traffic separation scheme In the Approaches to Chesapeake Bay consists of three parts:

Part I: Precautionary area (Remains unchanged)

Part II: Eastern approach with separation line connecting geographical positions (1) and (2) (Remains unchanged)

Part III: Southern approach

(a) A separation line connects the following geographical positions:

- (3) 36°50'.33 N., 75°46'.29 W.
- (4) 36°52'.90 N., 75°51'.52 W.
- (5) 36°55'.96 N., 75°54'.97 W.

(b) A separation line connects the following geographical positions:

- (6) 36°55'.11 N., 75°55'.23 W.
- (7) 36°52'.35 N., 75°52'.12 W.
- (8) 36°49'.70 N., 75°46'.80 W.

(c) A separation line connects the following geographical positions:

- (9) 36°49'.52 N., 75°46'.94 W.
- (10) 36°52'.18 N., 75°52'.29 W.
- (11) 36°54'.97 N., 75°55'.43 W.

(d) A separation line connects the following geographical positions:

- (12) 36°54'.44 N., 75°56'.09 W.
- (13) 36°51'.59 N., 75°52'.92 W.
- (14) 36°48'.87 N., 75°47'.42 W.

(e) A traffic lane for inbound traffic is established between the separation lines described in paragraphs (a) and (b).

(f) A traffic lane for outbound traffic is established between the separation lines described in paragraphs (c) and (d).

(g) A deep-water route is established between the separation lines described in paragraphs (b) and (c). The types of ships which are recommended to use the deep-water route are given in the description of the deep-water route (annex 21). All other ships using the southern approach traffic separation scheme should use the appropriate inbound or outbound traffic lane.

OFF SAN FRANCISCO (Amended scheme)

(Reference chart: United States 18680, 1990 edition)

Note: These co-ordinates are based on North American 1983 datum.Part II: Southern approachDescription of the traffic separation scheme

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

(9)	37°39'.10 N.,	122°40'.40 W.	(11)	37°27'.00	122°43'.00 W.
(10)	37°27'.00 N.,	122°40'.40 W.	(12)	37°39'.10	122°43'.00 W.

- (b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(13)	37°39'.30 N.,	122°39'.20 W.	(14)	37°27'.00	122°39'.20 W.
------	---------------	---------------	------	-----------	---------------

- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(15)	37°27'.00 N.,	122°44'.30 W.	(16)	37°39'.40	122°44'.30 W.
------	---------------	---------------	------	-----------	---------------

OFF FALSTERBOREVI (Amended scheme)

(Reference charts: Swedish Administration of Shipping and Navigation 921 and 929, both 1980 edition)

Note: These charts are based on Swedish national datum.Description of the traffic separation schemePart II

- (a) A separation line connects the following geographical positions:

(2)	55°15'.5 N.,	12°52'.2 E.
(3)	55°17'.5 N.,	12°42'.5 E.

- (b) A traffic lane, 1.1 mile wide, is established on each side of the separation line and the outside limits of the traffic are extended to intersect with the outside limit of the roundabout.

Inshore traffic zone

The area between the eastern landward boundaries of the roundabout and the traffic separation scheme and the Swedish coast, and lying between a line drawn from position (2) to Falsterbokanalén No.2 lighthouse (approximate position 55°23'.6 N., 12°57'.0 E.) and a line drawn from position (7) to Skanör lighthouse, (approximate position 55°25'.0 N., 12°49'.7 E) is designated as an inshore traffic zone.

IN THE SOUND

Replace the description of the inshore traffic zones by the following:

"Western inshore traffic zone

The area between the western landward boundary of the traffic separation scheme and the Danish coast and between a line drawn in the direction of 223° from position (8) and a line drawn in the direction of 257° from position (11) is designated as an inshore traffic zone.

Eastern inshore traffic zone

The area between the eastern landward boundary of the traffic separation scheme and the Swedish coast and between a line drawn in a direction of 046° from position (4) and a line drawn in a direction of 062° from position (6) is designated as an inshore traffic zone".

OFF OLAND ISLAND

Replace the description of the inshore traffic zone by the following:

"Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and the Oland Island and between a line drawn in an approximate direction of 328° from position (1) to Oland S Udde lighthouse and a line drawn in a direction of 323° from position (3) to the shore-line is designated as an inshore traffic zone".

OFF GOTLAND ISLAND

Replace the description of the inshore traffic zone by the following:

"Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and the Gotland Island and between a line drawn in a direction of 324° from positions (1) and (2) is designated as an inshore traffic zone".

SARONICOS GULF

Delete from the description of the traffic separation scheme:

"Inshore traffic zone

The area between the coast and the eastern boundary of the traffic separation scheme is designated as an inshore traffic zone".

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4 November 1991

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Sjöfartsverket Internat. sekretariatet	
Ink.	1991-11-28
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Distrib. av ...	Enligt ...

Colreg/Circ

DELAY OF THE IMPLEMENTATION OF THE AMENDMENT TO
THE TRAFFIC SEPARATION SCHEME "OFF SAN FRANCISCO"

- 1 The Government of the United States has informed the Organization that:
 - .1 Implementation of the amendment to the traffic separation scheme "Off San Francisco" adopted by the IMO Maritime Safety Committee at its fifty-ninth session (13 to 24 May 1991) (MSC 59/33, paragraph 10.2 and COLREG.2/Circ.37 of 19 June 1991) will be delayed pending a tanker movement study and designation of a national marine sanctuary in the Monterey, California area;
 - .2 A study is underway to evaluate whether areas of navigable waters and the exclusive economic zone should be designated as zones where the movement of tankers should be limited or prohibited; and
 - .3 Upon completion of the study and the sanctuary designation, the TSS "Off San Francisco" will be reviewed to determine the impact of the actions noted above. Additional information will be provided upon completion of the review.

- 2 Member Governments are invited to bring this information to the attention of all concerned.

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Ref. T2/2.07

SJUNDPARTSVERKET
Internat. sekretariatet

Ink. 2000 -03- 31

ORIGINAL

Distrib. av enligt *Colreg 2/Doc*

COLREG.2/Circ.37/Add.2
10 March 2000

IMPLEMENTATION OF THE AMENDMENT TO THE TRAFFIC SEPARATION SCHEME "OFF SAN FRANCISCO"

- 1 In November 1991, the Government of the United States had informed the Organization that implementation of the amendment to the traffic separation scheme (TSS) "Off San Francisco" adopted by the Maritime Safety Committee, at its fifty-ninth session (13 to 24 May 1991) (MSC 59/33, paragraph 10.2 and COLREG.2/Circ.37 of 19 June 1991), would be delayed pending a tanker movement study and designation of a national marine sanctuary in the Monterey, California area.
- 2 Member Governments were informed of this vide COLREG.2/Circ.37/Add.1 dated 4 November 1991.
- 3 The study and the sanctuary designation has now been completed, the TSS "Off San Francisco" has been reviewed and found to be consistent with the findings of the study and the requirements of the sanctuary. The reviewing body has supported the schemes as amended.
- 4 Accordingly, the Government of the United States has now informed the Organization that the amended traffic separation scheme (TSS) "Off San Francisco" will be implemented at 0000 hours UTC on 15 July 2000.
- 5 Member Governments are invited to bring this information to the attention of all concerned.

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Ref. T2/2.07

AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(X), the Maritime Safety Committee, at its sixtieth session adopted the following amended traffic separation schemes details of which (MSC 60/21, annex 4) are attached:

- "Off Kalbadagrund Lighthouse";
- "Off Porkkala Lighthouse";
- "Off Hankoniemi Peninsula".
- "Between Korsoer and Sprogoe";
- "In the Approaches to River Elbe" ("Elbe Approach");
- "Off Terschelling and in the German Bight" ("Terschelling - German Bight");
- "In the Approach to River Jade" ("Jade Approach");
- "Deutsche Bucht Lightvessel Western Approach" ("German Bight Western Approach");
- "Off Berlenga";
- "Off Cape Roca";
- "Off Cape S. Vicente";
- "South of Wilson Promontory in the Bass Strait";
- "Off the Aniwa Cape";
- "In the approaches to the Gulf of Nakhodka";

2 The amended traffic separation schemes will be implemented as follows:

- "Between Korsoer and Sprogoe" on 8 January 1993 at 0000 hours UTC,
- Other amended traffic separation schemes on 8 October 1992 at 0000 hours UTC.

ANNEX

AMENDED TRAFFIC SEPARATION SCHEMES

OFF KALBADAGRUND LIGHTHOUSE (Amended scheme)

Delete from the description of the traffic separation scheme:

"Inshore traffic zone

The area between the Kalbadagrund Lighthouse and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone."

OFF PORKKALA LIGHTHOUSE (Amended scheme)

Delete from the description of the traffic separation scheme:

"Inshore traffic zone

The area between Porkkala Lighthouse and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone."

OFF HANKONIEMI PENINSULA (Amended scheme)

Delete from the description of the traffic separation scheme:

"Inshore traffic zone

The areas between the outer boundaries of the traffic separation scheme and the adjacent coast are designated as inshore traffic zones."

BETWEEN KORSOER AND SPROGOE (Amended scheme)

Replace the existing traffic separation scheme by the following:

"(Reference chart: Danish Chart 143, 1991 edition.

Note: This chart is based on European Datum.)

Description of the traffic separation scheme

(a) A separation line connects the following geographical positions:

(1) 55°21'.79 N, 11°02'.20 E (2) 55°19'.31 N, 11°02'.24 E

(b) A traffic lane for northbound traffic is established between the separation line and a line connecting the following geographical positions:

(3) 55°21'.74 N, 11°02'.84 E (4) 55°19'.53 N, 11°02'.87 E

(c) A traffic lane for southbound traffic is established between the separation lane and a line connecting the following geographical positions:

(5) 55°21'.85 N, 11°01'.42 E (7) 55°20'.47 N, 11°01'.58 E
(6) 55°21'.06 N, 11°01'.66 E (8) 55°18'.95 N, 11°01'.49 E

Note:

- 1 The minimum free water depth in the northbound traffic lane is 17 m and in the southbound traffic lane 19 m.
- 2 Cross channel traffic.
Immediately south of the traffic separation scheme there is a heavy east- and westbound ferry traffic.
- 3 When participating in the ship reporting system (SHIPPOS), the following shall apply for ships with a deadweight tonnage of more than 40,000 tons: upon receipt of notification of passage through the area, the ferries will endeavour to navigate in such a way that risk of collision does not arise. If, however, risk of collision does arise, the Steering and Sailing Rules (Part B) of the International Regulations for Preventing Collisions at Sea, 1972, must be applied."

IN THE APPROACHES TO RIVER ELBE (Amended scheme)

Replace the existing name of the traffic separation scheme by the following: "ELBE APPROACH".

OFF TERSCHELLING AND IN THE GERMAN BIGHT (Amended scheme)

Replace existing traffic separation scheme by the following:

"TERSCHELLING-GERMAN BIGHT

(Reference charts: German Federal Maritime and Hydrographic Agency 84, 1987, edition and 87, (INT 1413), 1991 edition)
Netherlands Hydrographic Office 1352, 1988 edition and 1353, 1988 edition.

Note: These charts are based on European Datum.)

Description of the traffic separation scheme

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

(1) 54°00'.55 N,	7°39'.77 E	(3) 53°58'.17 N,	7°44'.85 E
(2) 54°01'.0 N,	7°43'.08 E	(4) 53°57'.82 N,	7°42'.23 E

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

(5) 53°58'.78 N,	7°37'.53 E	(7) 53°57'.58 N,	7°40'.53 E
(6) 53°58'.90 N,	7°39'.33 E	(8) 53°57'.35 N,	7°38'.82 E

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

(9) 53°48'.77 N,	6°23'.72 E	(12) 53°57'.12 N,	7°37'.10 E
(10) 53°58'.27 N,	7°30'.52 E	(13) 53°46'.73 N,	6°23'.83 E
(11) 53°58'.65 N,	7°35'.73 E		

(d) A separation line connects the following geographical positions:

(14) 53°47'.75 N,	6°23'.78 E	(16) 53°47'.26 N,	6°20'.43 E
(15) 53°47'.50 N,	6°22'.10 E		

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

(17) 53°34'.30 N,	5°08'.60 E	(19) 53°46'.22 N,	6°20'.48 E
(18) 53°48'.29 N,	6°20'.37 E	(20) 53°32'.37 N,	5°09'.70 E

(f) A traffic lane for westbound traffic is established between the separation zones/line described in paragraphs (a), (b), (c), (d) and (e) and a line connecting the following geographical positions:

(21) 54°02'.89 N,	7°41'.89 E	(24) 53°51'.58 N,	6°21'.87 E
(22) 54°02'.38 N,	7°38'.13 E	(25) 53°37'.13 N,	5°07'.00 E
(23) 54°01'.68 N,	7°33'.00 E		

(g) A traffic lane for eastbound traffic is established between the separation zones/line described in paragraphs (a), (b), (c), (d) and (e) and a separation line connecting the following geographical positions:

(26) 53°29'.57 N,	5°11'.28 E	(28) 53°53'.51 N,	7°33'.20 E
(27) 53°43'.42 N,	6°22'.33 E	(29) 53°55'.33 N,	7°46'.61 E

Inshore traffic zone

The area between the coast and the landward boundary of the traffic separation scheme is designated as an inshore traffic zone. The eastern limit of the inshore traffic zone is bounded by a line connecting geographical positions 53°53'.51 N, 7°33'.20 E (28) and 53°47'.45 N, 7°51'.51 E (Wangerooe Lighthouse).

Note: The gaps in the separation zones of this scheme indicate the areas where a concentration of crossing traffic is likely to be met.

Special provisions

It is recommended that this scheme should not be used by the following classes of ships of 10,000 tons gross tonnage and upwards:

- (a) tankers carrying oils specified in appendix I, Annex I, to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (b) ships carrying in bulk liquid substances classed in categories A and B referred to in appendices I and II, Annex II to the International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

These ships are recommended, instead, to use the Recommended Route for Tankers from North Hinder to the German Bight and vice versa."

IN THE APPROACH TO RIVER JADE (Amended scheme)

Replace the existing traffic separation scheme by the following:

"JADE APPROACH

(Reference charts: German Federal Maritime and Hydrographic Agency 87 (INT 1413), 1991 edition;
Netherlands Hydrographic Office 1352 and 1353 (INT 1413), 1988 edition.

Note: These charts are based on European Datum.)

Description of the traffic separation scheme

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

- | | |
|-----------------------------|-----------------------------|
| (1) 54°08'.34 N, 7°30'.81 E | (3) 54°01'.92 N, 7°34'.71 E |
| (2) 54°02'.15 N, 7°36'.42 E | (4) 54°08'.33 N, 7°28'.89 E |

(b) A traffic lane for northbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

- | | |
|-----------------------------|-----------------------------|
| (5) 54°02'.38 N, 7°38'.13 E | (6) 54°08'.35 N, 7°32'.72 E |
|-----------------------------|-----------------------------|

(c) A traffic lane for southbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

- | | |
|-----------------------------|------------------------------|
| (7) 54°08'.31 N, 7°26'.98 E | (8) 54°01'.68 N, 7°33'.00 E" |
|-----------------------------|------------------------------|

DEUTSCHE BUCHT LIGHTVESSEL WESTERN APPROACH (Amended scheme)

Replace the existing traffic separation scheme by the following:

"GERMAN BIGHT WESTERN APPROACH

(Reference chart: German Federal Maritime and Hydrographic Agency 87 (INT 1413), 1991 edition.

Note: This chart is based on European Datum.)

Description of the traffic separation scheme

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

- | | |
|-----------------------------|-----------------------------|
| (1) 54°10'.53 N, 6°22'.47 E | (3) 54°10'.29 N, 7°25'.17 E |
| (2) 54°11'.28 N, 7°24'.27 E | (4) 54°09'.53 N, 6°22'.53 E |

(b) A separation line connects the following geographical positions:

- | | |
|-----------------------------|-----------------------------|
| (5) 54°10'.03 N, 6°22'.50 E | (7) 54°09'.87 N, 6°19'.11 E |
| (6) 54°10'.00 N, 6°20'.80 E | |

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

- | | |
|-----------------------------|------------------------------|
| (8) 54°08'.97 N, 6°01'.33 E | (10) 54°09'.37 N, 6°19'.14 E |
| (9) 54°10'.37 N, 6°19'.08 E | (11) 54°08'.00 N, 6°01'.90 E |

(d) A traffic lane for westbound traffic is established between the separation zones/line described in paragraphs (a), (b) and (c) and a line connecting the following geographical positions:

- | | |
|------------------------------|------------------------------|
| (12) 54°13'.27 N, 7°22'.46 E | (14) 54°10'.90 N, 6°00'.20 E |
| (13) 54°12'.50 N, 6°20'.65 E | |

(e) A traffic lane for eastbound traffic is established between the separation zones/line described in paragraphs (a), (b) and (c) and a line connecting the following geographical positions:

- | | |
|------------------------------|-------------------------------|
| (15) 54°06'.10 N, 6°03'.00 E | (17) 54°08'.31 N, 7°26'.98 E" |
| (16) 54°07'.51 N, 6°20'.95 E | |

Notes:

1 This traffic separation scheme forms part of the Recommended Route for Tankers from North Hinder to the German Bight, and vice versa.

Application of the Route

The route is recommended for use by the following classes of ships of 10.000 tons gross tonnage and upwards:

- (a) tankers carrying oils specified in appendix I, Annex I to the International Convention for the Prevention of Pollution from Ships (MARPOL), 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and

- (b) ships carrying in bulk liquid substances classed in categories A and B referred to in appendices I and II, Annex II to the International Convention for the Prevention of Pollution from Ships (MARPOL), 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

Use of the Route

- (a) The classes of ships referred to above are recommended to use the route or part of it:
 - (i) when sailing from North Hinder to North Sea ports of the Federal Republic of Germany and of the Netherlands northwards of latitude 53° N. and vice-versa;
 - (ii) when sailing between North Sea ports of the Netherlands and/or the Federal Republic of Germany, except in the case of adjacent port areas;
- (b) Ships should use the appropriate traffic lanes of the traffic separation schemes forming part of the route; ships should follow the recommended direction of traffic flow in the precautionary areas (indicated by dashed open-outlined arrows in the charts) and ships should, as far as practicable, keep to the starboard side of the deep water routes forming part of the route.

Joining and leaving the Route

The classes of ships referred to above when joining or leaving the route:

- (a) should do so at the nearest point of the Route to the port of destination or departure which permits a safe passage to or from that port;
- (b) should be aware that oil and gas production facilities and mobile off-shore drilling units may be encountered in the proximity of the Route; safety zones of 500 m (0.27 M) diameter are established around all offshore structures;
- (c) must adhere to the appropriate rules of the 1972 Collision Regulations.

2 It is recommended that an efficient electronic position-fixing device appropriate for the area should be carried on board. Numerous offshore structures situated within the limits of the separation zones and/or situated in the proximity of the Route are equipped with X- and S-band RACONS.

3 Least water depth

The area of this scheme is surveyed to a least water depth of 30 m at LWS once every 5 years.

4 The gap in the separation zone of this scheme indicates the area where a concentration of crossing traffic is likely to be met."

OFF BERLENGA (Amended scheme)

Replace the existing traffic separation scheme by the following:

"(Reference chart: Marinha - Instituto Hidrográfico de Lisboa (Portugal) No.22
(INT 1810) - 1990 Edition.

Note: This chart is based on European Datum.)

Description of the traffic separation scheme

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

(1)	39°20'.0 N,	9°42'.2 W
(2)	39°30'.0 N,	9°42'.2 W
(3)	39°30'.0 N,	9°43'.5 W
(4)	39°20'.0 N,	9°43'.5 W

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

(5)	39°20'.0 N,	9°47'.4 W
(6)	39°30'.0 N,	9°47'.4 W
(7)	39°30'.0 N,	9°52'.6 W
(8)	39°20'.0 N,	9°52'.6 W

- (c) A traffic lane for northbound traffic is established between the separation zones described in paragraphs (a) and (b) above.

- (d) A traffic lane for southbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

(9)	39°20'.0 N,	9°56'.5 W
(10)	39°30'.0 N,	9°56'.5 W

Inshore traffic zone

The area between the separation zone described in paragraph (a) and the Portuguese coast and bounded on the north by the parallel of 39° 30'.0 N and on the south by the parallel of 39° 20'.0 N is designated as an inshore traffic zone."

OFF CAPE ROCA (amended scheme)

Replace the existing traffic separation scheme by the following:

"(Reference chart: Marinha - Instituto Hidrográfico de Lisboa (Portugal) No.22
(INT 1810) - 1990 Edition.

Note: This chart is based on European Datum.)

Description of the traffic separation scheme

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

- | | | |
|-----|--------------|------------|
| (1) | 38°43'.55 N, | 9°40'.9 W. |
| (2) | 38°47'.7 N, | 9°42'.3 W |
| (3) | 38°52'.0 N, | 9°42'.3 W |
| (4) | 38°52'.0 N, | 9°43'.6 W |
| (5) | 38°47'.65 N, | 9°43'.6 W |
| (6) | 38°43'.3 N., | 9°42'.1 W |

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

- | | | |
|------|--------------|-----------|
| (7) | 38°42'.25 N, | 9°47'.1 W |
| (8) | 38°47'.15 N, | 9°48'.7 W |
| (9) | 38°52'.0 N, | 9°48'.7 W |
| (10) | 38°52'.0 N, | 9°51'.3 W |
| (11) | 38°46'.85 N, | 9°51'.3 W |
| (12) | 38°41'.75 N, | 9°49'.5 W |

(c) A traffic lane for northbound traffic is established between the separation zones described in paragraphs (a) and (b) above.

(d) A traffic lane for southbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

- | | | |
|------|-------------|-----------|
| (13) | 38°40'.7 N, | 9°54'.5 W |
| (14) | 38°46'.3 N, | 9°56'.4 W |
| (15) | 38°52'.0 N, | 9°56'.4 W |

Inshore traffic zone

The area between the separation zone described in paragraph (a) and the Portuguese coast and bounded on the north by the parallel of 38° 52'.0 N and on the south by the parallel of 38° 43'.55 N is designated as an inshore traffic zone."

OFF CAPE S. VICENTE (Amended scheme)

Replace the existing traffic separation scheme by the following:

(Reference chart: Marinha - Instituto Hidrográfico de Lisboa (Portugal) No.23
(INT 1811) - 1987 Edition.

Note: This chart is based on European Datum.)

Description of the traffic separation scheme

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

(1)	36°53'.6 N,	8°54'.2 W
(2)	36°55'.4 N,	8°59'.7 W
(3)	36°58'.8 N,	9°05'.1 W
(4)	37°01'.4 N,	9°06'.0 W
(5)	37°01'.1 N,	9°07'.2 W
(6)	36°58'.3 N,	9°06'.2 W
(7)	36°54'.6 N,	9°00'.3 W
(8)	36°52'.7 N,	8°54'.6 W

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

(9)	36°49'.9 N,	8°56'.1 W
(10)	36°51'.9 N,	9°02'.3 W
(11)	36°56'.4 N,	9°09'.4 W
(12)	37°00'.3 N,	9°10'.8 W
(13)	36°59'.7 N,	9°13'.2 W
(14)	36°55'.4 N,	9°11'.6 W
(15)	36°50'.1 N,	9°03'.3 W
(16)	36°48'.1 N,	8°57'.0 W

(c) A traffic lane for northbound traffic is established between the separation zones described in paragraphs (a) and (b) above.

(d) A traffic lane for southbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

(17)	36°45'.3 N,	8°58'.4 W
(18)	36°47'.4 N,	9°05'.0 W
(19)	36°53'.6 N,	9°14'.9 W
(20)	36°58'.9 N,	9°16'.8 W

Inshore traffic zone

The area between the separation zone described in paragraph (a) and the Portuguese coast and bounded on the north by the parallel of 37°01'.4 N and on the east by the meridian of 8° 54'.2 W is designated as an inshore traffic zone."

SOUTH OF WILSON PROMONTORY IN THE BASS STRAIT (Amended scheme)

Replace the description of the inshore traffic zone by the following:

"Inshore traffic zone

The area between Wilson Promontory and the landward boundary of the traffic separation scheme and lying between a line drawn from position 39°02'.0 S, 146°45'.0 E to position 39°04'.1 S, 146°28'.7 E (Cape Wellington) (South head) (Northeastern limit) and a line drawn from position 39°10'.8 S, 146°15'.0 E to position 39°04'.8 S, 146°19'.2 E (Oberon Point) (Western Limit) is designated as an inshore traffic zone."

OFF THE ANIWA CAPE (Amended scheme)

Replace the description of the inshore traffic zone by the following:

"Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and the Sakhalin Island and lying between a line drawn from position 46°03'.5 N, 143°24'.3 E to position 45°59'.0 N, 143°20'.0 E (Western limit) and a line drawn from position 46°03'.2 N, 143°32'.0 E to position 46°06'.0 N, 143°28'.0 E (Eastern limit) is designated as an inshore traffic zone."

IN THE APPROACHES TO THE GULF OF NAKHODKA (Amended scheme)

Replace the description of the inshore traffic zone by the following:

"Inshore traffic zone

The area between the north-eastern landward boundary of the roundabout and the northern boundary of the separation zone and the Russian Federation coast, and lying between a line drawn from position 42° 41'.3 N, 133°7'.3 E to position 42°39'.0 N, 133°07'.3 E (Eastern limit) and a line drawn from position 42°40'.8 N, 132°58'.5 E to position 42°43'.5 N, 132 57'.2 E and then to position 42°42'.8 N, 132°59'.9 E (Northwestern limit) is designated as an inshore traffic zone."

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SJÖFARTSVERKET internat. sekretariatet	
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**AMENDMENT TO THE TRAFFIC SEPARATION SCHEME (TSS)
"GERMAN BIGHT WESTERN APPROACH"**

1 The Maritime Safety Committee, at its sixtieth session (6 to 10 April 1992), adopted the traffic separation scheme "German Bight Western Approach" vide COLREG.2/Circ.38 of 29 April 1992. At its sixty-seventh session (2 to 6 December 1997), the Committee adopted the "Mandatory route for tankers from North Hinder to the German Bight" (SN/Circ.184) which will be implemented at 0000 hours UTC on 3 June 1997.

2 The above mandatory route for tankers coincides with the eastern route of the routing system "Off Friesland" and the traffic separation scheme "German Bight Western Approach" and replaces the "Recommended route for tankers from North Hinder to the German Bight and vice versa."

3 Following consultations between the Government of Germany, the Chairman of the Ships' Routing Working Group and the Secretariat, COLREG.2/Circ.38 should be amended to reflect that the traffic separation scheme "German Bight Western Approach" is part of the mandatory route for tankers and that the provisions on the application and use of the mandatory route for tankers have to be observed in this traffic separation scheme. The description of the TSS and the amended provision on the "application and use of the route" are attached at annex.

4 Member Governments are requested to bring this information to the attention of all concerned.

ANNEX

"GERMAN BIGHT WESTERN APPROACH"

(Reference chart: German Federal Maritime and Hydrographic Agency 87 (INT 1413), 1991 edition.)

Note: This chart is based on European Datum.)

Description of the traffic separation scheme

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

- | | | | | | |
|-----|--------------|------------|-----|--------------|------------|
| (1) | 54°10'.53 N, | 6°22'.47 E | (3) | 54°10'.29 N, | 7°25'.17 E |
| (2) | 54°11'.28 N, | 7°24'.27 E | (4) | 54°09'.53 N, | 6°22'.53 E |

(b) A separation line connects the following geographical positions:

- | | | | | | |
|-----|--------------|------------|-----|--------------|------------|
| (5) | 54°10'.03 N, | 6°22'.50 E | (7) | 54°09'.87 N, | 6°19'.11 E |
| (6) | 54°10'.00 N, | 6°20'.80 E | | | |

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

- | | | | | | |
|-----|--------------|------------|------|--------------|------------|
| (8) | 54°08'.97 N, | 6°01'.33 E | (10) | 54°09'.37 N, | 6°19'.14 E |
| (9) | 54°10'.37 N, | 6°19'.08 E | (11) | 54°08'.00 N, | 6°01'.90 E |

(d) A traffic lane for westbound traffic is established between the separation zones/line described in paragraphs (a), (b) and (c) and a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|------------|------|--------------|------------|
| (12) | 54°13'.27 N, | 7°22'.46 E | (14) | 54°10'.90 N, | 6°00'.20 E |
| (13) | 54°12'.50 N, | 6°20'.65 E | | | |

(e) A traffic lane for eastbound traffic is established between the separation zones/line described in paragraphs (a), (b) and (c) and a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|------------|------|--------------|------------|
| (15) | 54°06'.10 N, | 6°03'.00 E | (17) | 54°08'.31 N, | 7°26'.98 E |
| (16) | 54°07'.51 N, | 6°20'.95 E | | | |

Notes:

1 This traffic separation scheme forms part of the Mandatory Route for Tankers from North Hinder to the German Bight and vice versa.

Application and use of the route

2 The following classes of ships are obliged to use the route:

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oils as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);

- (b) ships of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories A or B of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) Ships of 10,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories C or D of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquified gases in bulk.

These ships shall avoid the sea area between the mandatory route and the adjacent Frisian Islands' coast, except when joining or leaving the route at the nearest point of the route to the port of departure or destination which permits a safe passage to or from that port.

The classes of ships referred to above shall use the mandatory route or part of it:

- (i) when sailing from North Hinder to the Baltic or to North Sea ports of Norway, Sweden, Denmark, Germany or the Netherlands north of latitude 53° North and vice versa;
- (ii) when sailing between North Sea ports of the Netherlands and/or Germany, except in cases of adjacent port areas;
- (iii) when sailing between United Kingdom or Continental North Sea ports south of 53° North and Scandinavian or Baltic ports; and
- (iv) when sailing between North Hinder, United Kingdom or Continental North Sea ports south of 53° North and offshore and shore-based oil-loading facilities in the North Sea area.

These ships shall use the appropriate traffic lanes of the traffic separation schemes forming part of the route, should follow the recommended direction of traffic flow in the precautionary area (indicated by dashed open-outlined arrows in the charts) and shall, as far as practicable, keep to the starboard side of the deep-water routes forming part of the mandatory route.

Joining or leaving the route

3 The classes of ships referred to above, when joining or leaving the route:

- (a) shall do so at the nearest point of the route to the port of departure or destination which permits a safe passage to or from that port; and
- (b) should be aware that oil and gas production facilities and mobile offshore drilling units may be encountered in the proximity of the route; safety zones of 500 metres (0.27 nautical miles) radius are established around all offshore structures.

Pilotage

4 Ships required to use the "mandatory route for tankers from North Hinder to the German Bight and vice versa" are referred to resolution A.486(XII), adopted on 19 November 1981, concerning the "Recommendation on the use of adequately qualified Deep-Sea Pilots in the North Sea, English Channel and Skagerrak".

Notes:

5 It is recommended that an efficient electronic position-fixing device appropriate for the area should be carried on board.

6 Numerous offshore structures situated within the limits of the separation zones and/or situated in the proximity of the route are equipped with X- and S-band RACONS.

Least water depth

7 The area of this scheme is surveyed to a least water depth of 30m at LWS once every 5 years.

8 The gap in the separation zone of this scheme indicates the area where a concentration of crossing traffic is likely to be met.

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IMO

COLREG.2/Circ.39
21 January 1993

SjÖFARTSVESEN Internat. sekretariatet	
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NEW TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that, pursuant to Assembly resolution A.376(X), the Maritime Safety Committee, at its sixty-first session (7 to 11 December 1992), adopted the following new traffic separation schemes (MSC 61/21, annex 13) details of which are attached:

- "In the entrance to the Gulf of Aqaba";
- "In Prince William Sound, Alaska"; and
- "In Puget Sound and its Approaches".

2 The TSS "In the entrance to the Gulf of Aqaba" will be implemented on a date to be established in accordance with section 3.5 of the General Provisions on Ships' Routeing following:

- .1 an appropriate hydrographic survey being carried out in the Grafton Passage in accordance with IHO criteria; and
- .2 the establishment of the navigational aids prescribed in the annex to the description of the scheme.

The TSS "In Puget Sound and its Approaches" and "In Prince William Sound, Alaska" will be implemented at 0000 hours UTC on 10 June 1993.

* * *

ANNEXIN THE ENTRANCE TO THE GULF OF AQABA

(Reference chart: British Admiralty 3595, 1986 edition)

Note: This chart is based on European Datum)

Description of the traffic separation scheme

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

(1)	28°01'.00 N,	34°27'.38 E	(3)	27°57'.00 N,	34°27'.75 E
(2)	27°57'.00 N,	34°26'.45 E	(4)	28°01'.00 N,	34°28'.69 E

(b) A traffic lane for southbound traffic is established between the separation zone and the line joining the following geographical positions:

(5)	28°01'.00 N,	34°26'.81 E
(6)	27°57'.00 N,	34°25'.88 E

(c) A traffic lane for northbound traffic is established between the separation zone and the line joining the following geographical positions:

(7)	27°57'.00 N,	34°28'.22 E
(8)	28°01'.00 N,	34°29'.15 E

AIDS TO NAVIGATION FOR THE ENTRANCE TO THE GULF OF AQABA

Station		Co-ordinates		Light Characteristics		Range (N.M.) T=0.74	RACON Radio Mon.	Tower-Daymark
		LAT.(N)	Long(E)	Colour	Rythm			
Northbound channel	Chisholm Point	27°57'.00	34°30'.20	White	F1(2+1)20s	9	Racon Mo.(C) + Rad.Mon.	10m GRP-Pigmented White
	Reef west of Johnson Point	28°00'.00	34°29'.02	Green	F1.10s	5	Rad.Mon.	5m GRP-Pigmented Green
	Reef NW of Johnson Point	28°00'.94	34°29'.20	Green	F1(2)20s	5	Rad.Mon.	5m GRP-Pigmented Upper half green, lower white
	Jackson Reef (East)	28°00'.58	34°28'.55	Red	F1.10s	5	Rad.Mon.	5m GRP-Pigmented Red. Synchronized with W.Johnson
Southbound channel	Ras Nusrani	27°58'.89	34°26'.16	White Green	F1.10s Occ.5+2	15 5	Racon Mo(Y) + Rad.Mon	10m.GRP-Pigmented Green
	Gordon(West)	27°59'.25	34°26'.99	Red	Occ.5+2	5	Racon Mo(G) + Rad.+Mon.	10m GRP-Pigmented Red over white. Light synchronized with G.Light of Ras Nusrani

IN PRINCE WILLIAM SOUND, ALASKA

(Reference Chart: United States 16700, 1992 edition

Note: This chart is based on North American 1983 Geodetic Datum)

Description of the traffic separation scheme

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

- (1) 60°58'.68 N, 146°47'.95 W
- (2) 60°49'.75 N, 147°02'.22 W
- (3) 60°34'.67 N, 147°05'.38 W
- (4) 60°17'.03 N, 146°49'.42 W
- (5) 60°16'.28 N, 146°46'.58 W
- (6) 60°34'.85 N, 147°03'.35 W
- (7) 60°49'.35 N, 147°00'.25 W
- (8) 60°58'.40 N, 146°47'.15 W

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

- (9) 60°58'.12 N, 146°46'.38 W
- (10) 60°49'.08 N, 146°58'.82 W
- (11) 60°34'.95 N, 147°01'.82 W
- (12) 60°15'.70 N, 146°44'.45 W

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

- (13) 60°17'.58 N, 146°51'.45 W
- (14) 60°34'.55 N, 146°06'.92 W
- (15) 60°50'.03 N, 147°03'.70 W
- (16) 60°58'.98 N, 146°48'.73 W

IN PUGET SOUND AND ITS APPROACHES

(Reference Charts: United States 18421, 1991 edition; 18440, 1991 edition

Note: These charts are based on North American 1983 Geodetic Datum)

The traffic separation scheme in Puget Sound and its Approaches consists of a series of traffic separation schemes and precautionary areas broken into three geographical designations as follows:

- Part I: Rosario Strait
- Part II: Approaches to Puget Sound
- Part III: Puget Sound

Description of the traffic separation schemes

Part I: Traffic Separation Scheme in Rosario Strait

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

- | | |
|-------------------------------|-------------------------------|
| (1) 48°47'.10 N, 122°51'.37 W | (4) 48°45'.72 N, 122°48'.27 W |
| (2) 48°46'.50 N, 122°49'.98 W | (5) 48°46'.27 N, 122°50'.08 W |
| (3) 48°45'.97 N, 122°48'.12 W | (6) 48°46'.90 N, 122°51'.40 W |

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

- | | |
|-------------------------------|-------------------------------|
| (7) 48°50'.33 N, 122°53'.57 W | (9) 48°46'.35 N, 122°47'.50 W |
| (8) 48°47'.13 N, 122°50'.08 W | |

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

- | | |
|--------------------------------|--------------------------------|
| (10) 48°44'.95 N, 122°48'.28 W | (12) 48°47'.78 N, 122°56'.60 W |
| (11) 48°46'.83 N, 122°53'.42 W | |

(d) Connecting with precautionary area "CA". The waters contained within a circle of radius 1.24 miles centred at geographical position 48°45'.30 N, 122°46'.50 W

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

- | | |
|--------------------------------|--------------------------------|
| (13) 48°44'.27 N, 122°45'.53 W | (15) 48°41'.60 N, 122°43'.82 W |
| (14) 48°41'.72 N, 122°43'.50 W | (16) 48°44'.17 N, 122°45'.87 W |

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

- | | |
|--------------------------------|--------------------------------|
| (17) 48°44'.62 N, 122°44'.62 W | (18) 48°41'.80 N, 122°42'.70 W |
|--------------------------------|--------------------------------|

(g) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (19) 48°44'.08 N, 122°46'.65 W | (20) 48°41'.25 N, 122°44'.37 W |
|--------------------------------|--------------------------------|

(h) Connecting with precautionary area "C". The waters contained within a circle of radius 1.24 miles centred at geographical position 48°40'.55 N, 122°42'.80 W

(i) A two-way traffic lane is established between the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (21) 48°39'.33 N, 122°42'.73 W | (25) 48°29'.48 N, 122°44'.77 W |
| (22) 48°36'.08 N, 122°45'.00 W | (26) 48°36'.13 N, 122°45'.80 W |
| (23) 48°26'.70 N, 122°43'.53 W | (27) 48°38'.38 N, 122°44'.20 W |
| (24) 48°27'.62 N, 122°45'.53 W | (28) 48°39'.63 N, 122°44'.03 W |

(j) Connecting with precautionary area "RB". The waters contained within a circle of radius 1.24 miles centred at geographical position 48°26'.38 N, 122°45'.27 W

Part II: Traffic Separation Scheme in the Approaches to Puget Sound

The traffic separation scheme in the Approaches to Puget Sound consists of a northeast/southwest approach, a northwest/southeast approach, a north/south approach and an east/west approach connecting with the precautionary areas, as follows:

Northeast/Southwest Approach

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

(29) 48°25'.37 N, 122°46'.35 W	(32) 48°20'.53 N, 122°57'.22 W
(30) 48°24'.13 N, 122°47'.97 W	(33) 48°24'.32 N, 122°48'.22 W
(31) 48°20'.32 N, 122°57'.02 W	(34) 48°25'.53 N, 122°46'.63 W

Connecting with precautionary area "RA", the waters contained within a circle of radius 1.24 miles centred at 48°19'.77 N, 122°58'.57 W, and thence to:

(35) 48°16'.25 N, 123°06'.58 W	(37) 48°19'.00 N, 123°00'.17 W
(36) 48°16'.57 N, 123°06'.58 W	(38) 48°19'.20 N, 123°00'.35 W

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

(39) 48°25'.20 N, 122°45'.73 W	(41) 48°19'.80 N, 122°56'.83 W
(40) 48°23'.75 N, 122°47'.47 W	

Connecting with precautionary area "RA" and thence to:

(42) 48°15'.70 N, 123°06'.58 W	(43) 48°18'.67 N, 122°59'.57 W
--------------------------------	--------------------------------

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

(44) 48°25'.97 N, 122°47'.03 W	(46) 48°20'.85 N, 122°57'.80 W
(45) 48°24'.70 N, 122°48'.68 W	

Connecting with precautionary area "RA" and thence to:

(47) 48°19'.70 N, 123°00'.53 W	(48) 48°17'.15 N, 123°06'.58 W
--------------------------------	--------------------------------

(d) Connecting with the Port Angeles precautionary area, which is bounded by a line connecting the following geographical positions:

(49) 48°10'.98 N, 123°06'.57 W	(51) 48°09'.98 N, 123°27'.70 W
(50) 48°17'.15 N, 123°06'.57 W	(52) 48°08'.20 N, 123°27'.75 W,

thence along the shoreline to the point of beginning.

Northwest/Southeast Approach

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

(53) 48°25'.43 N, 123°03'.88 W	(56) 48°20'.82 N, 122°59'.62 W
(54) 48°22'.88 N, 123°00'.82 W	(57) 48°22'.72 N, 123°01'.12 W
(55) 48°20'.93 N, 122°59'.30 W	(58) 48°25'.32 N, 123°04'.30 W

Connecting with precautionary area "RA" and thence to:

(59) 48°18'.83 N, 122°57'.48 W	(61) 48°13'.00 N, 122°51'.62 W
(60) 48°13'.15 N, 122°51'.33 W	(62) 48°18'.70 N, 122°57'.77 W

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

(63) 48°25'.60 N, 123°03'.13 W	(65) 48°21'.00 N, 122°58'.50 W
(64) 48°23'.20 N, 123°00'.20 W	

Connecting with precautionary area "RA" and thence to:

(66) 48°19'.20 N, 122°57'.03 W	(67) 48°13'.35 N, 122°50'.63 W
--------------------------------	--------------------------------

(g) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(68) 48°25'.17 N, 123°04'.98 W	(70) 48°20'.47 N, 123°00'.20 W
(69) 48°22'.48 N, 123°01'.73 W	

Connecting with precautionary area "RA" and thence to:

(71) 48°18'.52 N, 122°58'.50 W	(72) 48°12'.63 N, 122°52'.15 W
--------------------------------	--------------------------------

(h) Connecting with precautionary area "SA". The waters contained within a circle of radius 2 miles centred at geographical position 48°11'.45 N, 122°49'.78 W

North/South Approach (between precautionary areas "RB" and "SA")

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

(73) 48°25'.25 N, 122°44'.60 W	(76) 48°13'.38 N, 122°49'.15 W
(74) 48°24'.15 N, 122°44'.08 W	(77) 48°24'.17 N, 122°44'.48 W
(75) 48°13'.33 N, 122°48'.78 W	(78) 48°25'.18 N, 122°44'.95 W

(j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(79) 48°25'.55 N, 122°43'.93 W	(81) 48°13'.10 N, 122°48'.12 W
(80) 48°24'.08 N, 122°43'.38 W	

(k) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (82) 48°25'.17 N, 122°45'.62 W | (84) 48°13'.43 N, 122°49'.90 W |
| (83) 48°24'.15 N, 122°45'.27 W | |

East/West Approach (between Port Angeles and "SA" precautionary area)

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

- | | |
|--------------------------------|--------------------------------|
| (85) 48°11'.50 N, 122°52'.73 W | (87) 48°12'.23 N, 123°06'.58 W |
| (86) 48°11'.73 N, 122°52'.70 W | (88) 48°12'.48 N, 123°06'.58 W |

(m) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (89) 48°12'.22 N, 122°52'.52 W | (90) 48°12'.98 N, 123°06'.58 W |
|--------------------------------|--------------------------------|

(n) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|--------------------------------|--------------------------------|
| (91) 48°11'.00 N, 123°06'.58 W | (93) 48°10'.98 N, 122°52'.65 W |
| (92) 48°11'.73 N, 123°06'.58 W | |

Part III: Traffic Separation Scheme in Puget Sound

The traffic separation scheme in Puget Sound consists of a series of traffic lanes with separation zones connecting with precautionary areas.

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

- | | |
|--------------------------------|--------------------------------|
| (94) 48°11'.08 N, 122°46'.88 W | (97) 48°02'.43 N, 122°38'.52 W |
| (95) 48°06'.85 N, 122°39'.52 W | (98) 48°06'.72 N, 122°39'.83 W |
| (96) 48°02'.48 N, 122°38'.17 W | (99) 48°10'.82 N, 122°46'.98 W |

Connecting with precautionary area "SC". The waters contained within a circle of radius 0.62 mile centred at geographical position 48°01'.85 N, 122°38'.15 W

- | | |
|---------------------------------|---------------------------------|
| (100) 48°01'.40 N, 122°37'.57 W | (103) 47°55'.67 N, 122°30'.40 W |
| (101) 47°57'.95 N, 122°34'.67 W | (104) 47°57'.78 N, 122°34'.92 W |
| (102) 47°55'.85 N, 122°30'.22 W | (105) 48°01'.28 N, 122°37'.87 W |

Connecting with precautionary area "SE". The waters contained within a circle of radius 0.62 mile centred at geographical position 47°55'.40 N, 122°29'.55 W

- | | |
|---------------------------------|---------------------------------|
| (106) 47°54'.85 N, 122°29'.18 W | (108) 47°46'.47 N, 122°26'.62 W |
| (107) 47°46'.52 N, 122°26'.30 W | (109) 47°54'.80 N, 122°29'.53 W |

Connecting with precautionary area "SF". The waters contained within a circle of radius 0.62 mile centred at geographical position 47°45'.90 N, 122°26'.25 W

(110) 47°45'.20 N,	122°26'.25 W	(112) 47°40'.30 N,	122°27'.88 W
(111) 47°40'.27 N,	122°27'.55 W	(113) 47°45'.33 N,	122°26'.60 W

Connecting with precautionary area "SG". The waters contained within a circle of radius 0.62 mile centred at geographical position 47°39'.68 N, 122°27'.87 W

(114) 47°39'.12 N,	122°27'.62 W	(116) 47°35'.17 N,	122°27'.35 W
(115) 47°35'.18 N,	122°27'.08 W	(117) 47°39'.08 N,	122°27'.97 W

Connecting with precautionary area "T". The waters contained within a circle of radius 0.62 mile centred at geographical position 47°34'.55 N, 122°27'.07 W

(118) 47°34'.02 N,	122°26'.70 W	(122) 47°19'.98 N,	122°26'.83 W
(119) 47°26'.92 N,	122°24'.10 W	(123) 47°23'.15 N,	122°21'.45 W
(120) 47°23'.07 N,	122°20'.98 W	(124) 47°26'.85 N,	122°24'.45 W
(121) 47°19'.78 N,	122°26'.58 W	(125) 47°33'.95 N,	122°27'.03 W

Connecting with precautionary area "TC". The waters contained within a circle of radius 0.62 mile centred at geographical position 47°19'.48 N, 122°27'.38 W.

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

(126) 48°11'.72 N,	122°46'.83 W	(132) 47°39'.68 N,	122°26'.95 W
(127) 48°07'.13 N,	122°38'.83 W	(133) 47°34'.65 N,	122°26'.18 W
(128) 48°02'.10 N,	122°37'.32 W	(134) 47°27'.13 N,	122°23'.40 W
(129) 47°58'.23 N,	122°34'.07 W	(135) 47°23'.33 N,	122°20'.37 W
(130) 47°55'.82 N,	122°28'.80 W	(136) 47°22'.67 N,	122°20'.53 W
(131) 47°45'.92 N,	122°25'.33 W	(137) 47°19'.07 N,	122°26'.75 W

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

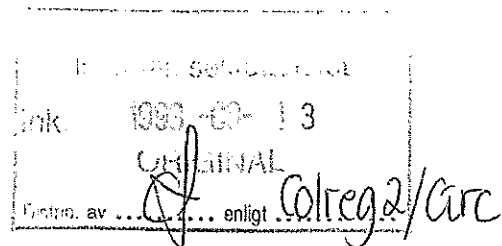
(138) 48°10'.15 N,	122°47'.58 W	(144) 47°45'.90 N,	122°27'.18 W
(139) 48°09'.35 N,	122°45'.55 W	(145) 47°39'.70 N,	122°28'.78 W
(140) 48°06'.45 N,	122°40'.52 W	(146) 47°34'.47 N,	122°27'.98 W
(141) 48°01'.65 N,	122°39'.03 W	(147) 47°26'.63 N,	122°25'.12 W
(142) 47°57'.47 N,	122°35'.45 W	(148) 47°23'.25 N,	122°22'.42 W
(143) 47°55'.07 N,	122°30'.35 W	(149) 47°20'.00 N,	122°27'.90 W

4 ALBERT EMBANKMENT
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T2/2.07



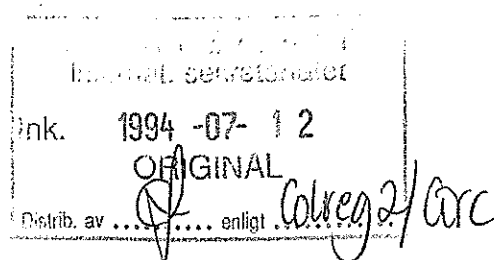
DATE OF IMPLEMENTATION OF THE TRAFFIC SEPARATION SCHEME
"IN THE ENTRANCE TO THE GULF OF AQABA"

1 The Secretary-General has the honour to state that, pursuant to Assembly resolution A.376(X), the Maritime Safety Committee, at its sixty-first session (7 to 11 December 1992), adopted a new traffic separation scheme (TSS) "In the entrance to the Gulf of Aqaba". The implementation date of the new TSS would be established in accordance with section 3.5 of the General Provisions on Ships' Routing following:

- .1 an appropriate hydrographic survey being carried out in the Grafton Passage in accordance with IHO criteria; and
- .2 the establishment of the navigational aids prescribed in the annex to the description of the scheme.

2 The Government of Egypt has subsequently informed the Secretary-General that the necessary hydrographic survey in part of the TSS "In the entrance to the Gulf of Aqaba" has been completed and the proposed supporting navigational aids will be operational by the end of July 1993.

3 The TSS "In the entrance to the Gulf of Aqaba" will be implemented at 00.00 hours UTC on 1 October 1993.

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9 June 1994

Ref. T2/2.07

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that pursuant to Assembly resolution A.376(X), the Maritime Safety Committee, at its sixty-third session (16 to 25 May 1994), adopted the following new and amended traffic separation schemes:

- .1 In the approaches to Salina Cruz
- .2 Strait of Istanbul - North Approach
- .3 Strait of Istanbul
- .4 Strait of Istanbul - South Approach and Sea of Marmara
- .5 Strait of Canakkale
- .6 Strait of Canakkale - South-West Approach
- .7 In the East Lamma Channel
- .8 In the Strait of Gibraltar
- .9 Off Ushant
- .10 In the Strait of Hormuz
- .11 Off Ras Al Hadd
- .12 Off Texel
- .13 Off Cabo San Antonio
- .14 Off La Tabla
- .15 Off Costa de Matanzas
- .16 In the Old Bahama Channel
- .17 Off Punta Maternillos
- .18 Off Punta Lucrezia
- .19 Off Cabo Maysi

2 The new and amended traffic separation schemes (listed above and detailed at annex) will be implemented at 00.00 hours UTC on 24 November 1994.

W/1435n/EWP

ANNEX

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

IN THE APPROACHES TO SALINA CRUZ (New scheme)

(Reference chart: United States 21441, 1986 edition.)

Note: This chart is based on the World Geodetic System 1972 Datum)

Description of the traffic separation scheme

The traffic separation scheme is composed of two parts:

Part I: South-western approach: recommended for oil tankers proceeding to or coming from the three single point moorings or the oil terminal.

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

(1) 16°06'.23N, 95°14'.27W	(3) 15°57'.70N, 95°17'.47W
(2) 15°58'.43N, 95°19'.00W	(4) 16°06'.00N, 95°13'.83W

(b) A traffic lane for south-westbound traffic is established between the separation area and a line connecting the following geographical positions:

(5) 16°06'.50N, 95°14'.70W	(6) 15°59'.35N, 95°20'.43W
----------------------------	----------------------------

(c) A traffic lane for north-eastbound traffic is established between the separation area and a line connecting the following geographical positions:

(7) 15°57'.15N, 95°15'.85W	(8) 16°05'.85N, 95°13'.35W
----------------------------	----------------------------

Part II Southern approach: recommended for ships of over 500 tonnes gross arriving at or leaving the port of Salina Cruz, Oaxaca.

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

(9) 16°05'.75N, 95°11'.70W	(11) 15°56'.70N, 95°11'.03W
(10) 15°56'.70N, 95°11'.70W	(12) 16°05'.75N, 95°11'.03W

(b) A traffic lane for southbound traffic is established between the separation area and a line connecting the following geographical positions:

(13) 16°05'.75N, 95°12'.73W	(14) 15°56'.70N, 95°12'.73W
-----------------------------	-----------------------------

(c) A traffic lane for northbound traffic is established between the separation area and a line connecting the following geographical positions:

(15) 15°56'.70N, 95°10'.00W	(16) 16°05'.75N, 95°10'.00W
-----------------------------	-----------------------------

Notes:

- 1 Ship movement in the port area is supervised by a Port Vessel Traffic Supervisor on a 24-hour basis. Any ship intending to use any traffic separation scheme is requested to contact the Salina Cruz, Oaxaca, Port Vessel Supervisor on channel 6 VHF and follow his advice while transiting the scheme.
- 2 The master of any ship with appropriate equipment may obtain continuous and precise information on his ship's position in the traffic lane, by using the racon identified by the letter Z, located at geographical position:

(23) 16°09'.75N, 95°12'.31W

STRAIT OF ISTANBUL NORTH APPROACH (New scheme)

(Reference chart: Turkish chart 1811 (INT3758), 1993 edition

Note: This chart is based on European Datum)

Description of the traffic separation scheme:

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

(1) 41°20'.50 N, 29°09'.90 E

(2) 41°20'.00 N, 29°12'.50 E

(3) 41°13'.60 N, 29°07'.98 E

- (b) A traffic lane for north-eastbound traffic is established between the separation zone and the line connecting the following geographical positions:

(4) 41°15'.80 N, 29°16'.90 E

(5) 41°14'.10 N, 29°10'.00 E

(6) 41°13'.36 N, 29°08'.55 E

- (c) A traffic lane for south and southwestbound traffic is established between the separation zone and the line connecting the following geographical positions:

(7) 41°19'.40 N, 29°02'.00 E

(8) 41°14'.70 N, 29°07'.20 E

(9) 41°13'.80 N, 29°07'.50 E

STRAIT OF ISTANBUL (New scheme)

(Reference charts: Turkish charts 2921 (INT3756), 1993 edition; 2921A, 1992 edition and 2921B, 1992 edition

Note: These charts are based on European Datum)

Description of the traffic separation scheme

The traffic lanes encompass the area defined by the line joining the Anadolu lighthouse and Rumeli lighthouse in the north, the line joining the Ahirkapi lighthouse and Kadiköy Cape Inci breakwater lighthouse in the south and the outer boundaries of the lanes whose co-ordinates are given below:

(a) A separation line connects the following geographical positions:

(3) 41°13'.60 N, 29°07'.98 E	(10) 41°12'.18 N, 29°06'.83 E
(11) 41°10'.88 N, 29°05'.08 E	(12) 41°09'.38 N, 29°03'.53 E
(13) 41°08'.92 N, 29°03'.53 E	(14) 41°07'.38 N, 29°05'.00 E
(15) 41°07'.21 N, 29°05'.00 E	(16) 41°06'.38 N, 29°03'.81 E
(17) 41°06'.00 N, 29°03'.67 E	(18) 41°04'.98 N, 29°03'.65 E
(19) 41°04'.53 N, 29°03'.17 E	(20) 41°03'.10 N, 29°02'.60 E
(21) 41°01'.55 N, 28°59'.91 E	(22) 41°01'.40 N, 28°59'.80 E
(23) 41°00'.15 N, 28°59'.75 E	

(b) A traffic lane for northbound traffic is established between the separation line and the following geographical positions:

(24) 41°00'.00 N, 29°00'.06 E	(25) 41°01'.10 N, 29°00'.07 E
(26) 41°01'.50 N, 29°00'.20 E	(27) 41°03'.10 N, 29°02'.96 E
(28) 41°04'.50 N, 29°03'.33 E	(29) 41°04'.97 N, 29°03'.92 E
(30) 41°06'.05 N, 29°03'.85 E	(31) 41°06'.35 N, 29°04'.00 E
(32) 41°07'.20 N, 29°05'.40 E	(33) 41°07'.40 N, 29°05'.35 E
(34) 41°08'.85 N, 29°03'.89 E	(35) 41°09'.48 N, 29°03'.84 E
(36) 41°10'.80 N, 29°05'.20 E	(37) 41°11'.67 N, 29°06'.78 E
(38) 41°12'.30 N, 29°07'.20 E	(6) 41°13'.36 N, 29°08'.55 E

(c) A traffic lane for southbound traffic is established between the separation line and the following geographical positions:

(9) 41°13'.80 N, 29°07'.50 E	(39) 41°12'.30 N, 29°06'.63 E
(40) 41°12'.00 N, 29°06'.00 E	(41) 41°10'.51 N, 29°04'.50 E
(42) 41°09'.52 N, 29°03'.29 E	(43) 41°09'.03 N, 29°03'.27 E
(44) 41°07'.48 N, 29°04'.62 E	(45) 41°06'.25 N, 29°03'.50 E
(46) 41°05'.13 N, 29°03'.53 E	(47) 41°04'.92 N, 29°03'.40 E
(48) 41°04'.57 N, 29°02'.94 E	(49) 41°04'.13 N, 29°02'.85 E
(50) 41°02'.97 N, 29°02'.07 E	(51) 41°01'.73 N, 28°59'.73 E
(52) 41°01'.29 N, 28°59'.45 E	(53) 41°00'.30 N, 28°59'.42 E

STRAIT OF ISTANBUL - SOUTH APPROACH AND SEA OF MARMARA (New scheme)

(Reference charts: Turkish charts 2923 (INT3754), 1991 edition; 293, 1990 edition; 295 (INT3752), 1988 edition

Note: These charts are based on European Datum)

Description of the traffic separation scheme

(a) A separation line connects the following geographical positions:

(22) 41°01'.40 N, 28°59'.80 E
(23) 41°00'.15 N, 28°59'.75 E
(54) 40°59'.53 N, 28°59'.73 E
(55) 40°58'.80 N, 28°59'.44 E

(b) A separation zone is bounded by a line joining the following geographical positions:

(55) 40°58'.80 N, 28°59'.44 E
(56) 40°57'.53 N, 28°58'.63 E
(57) 40°57'.78 N, 28°58'.11 E

- (c) A precautionary area is established bounded by a line joining the following geographical positions:

(71) 40°58'.21 N, 28°57'.22 E
(57) 40°57'.78 N, 28°58'.11 E
(56) 40°57'.53 N, 28°58'.63 E
(81A) 40°56'.83 N, 29°00'.06 E
(81) 40°55'.00 N, 29°00'.06 E
(67) 40°54'.70 N, 28°58'.55 E
(68) 40°53'.78 N, 28°57'.15 E
(78) 40°42'.90 N, 28°55'.92 E
(59) 40°54'.30 N, 28°55'.40 E
(65) 40°55'.58 N, 28°54'.82 E
(71A) 40°56'.83 N, 28°54'.23 E

- (d) The focal point of the precautionary area is located at the following geographical position:

(58) 40°56'.10 N, 28°57'.00 E

A circular area to be avoided with a 0.15 mile radius is established around position (58).

- (e) A separation zone is bounded by a line joining the following geographical positions:

(59) 40°54'.30 N, 28°55'.40 E
(60) 40°52'.40 N, 28°52'.10 E
(61) 40°44'.20 N, 27°38'.09 E
(62) 40°26'.00 N, 26°45'.25 E
(63) 40°45'.42 N, 27°38'.09 E
(64) 40°53'.90 N, 28°52'.10 E
(65) 40°55'.58 N, 28°54'.82 E

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

(66) 40°51'.50 N, 29°00'.31 E
(67) 40°54'.70 N, 28°58'.55 E
(68) 40°53'.78 N, 28°57'.15 E
(69) 40°51'.95 N, 28°58'.00 E

- (g) A traffic lane for traffic bound for the Canakkale Strait is established in the Sea of Marmara between the separation zones/lines in paragraphs (a), (b), (c), (d) and (e) above and a line connecting the following geographical positions:

(53) 41°00'.30 N, 28°59'.42 E
(70) 40°59'.50 N, 28°59'.39 E
(71) 40°58'.21 N, 28°57'.22 E
(72) 40°55'.89 N, 28°52'.09 E
(73) 40°47'.40 N, 27°38'.09 E
(74) 40°26'.50 N, 26°45'.25 E

- (h) A traffic lane for traffic bound for the Strait of Istanbul is established in the Sea of Marmara between the separation zones/lines in paragraphs (e), (d), (c), (b) and (a) above and a line connecting the following geographical positions:

(75) 40°25'.50 N, 26°45'.25 E
 (76) 40°42'.20 N, 27°38'.09 E
 (77) 40°50'.39 N, 28°52'.07 E
 (78) 40°52'.90 N, 28°55'.92 E

- (i) A traffic lane for traffic from the Strait of Istanbul headed for the Gulf of Izmit is established between the traffic lane/separation zones in paragraphs (c), (e), (f) and (g) above and a line connecting the following geographical positions:

(78) 40°52'.90 N, 28°55'.92 E
 (79) 40°51'.50 N, 28°56'.57 E

- (j) A traffic lane for traffic from the south and south-east of the Sea of Marmara and the Gulf of Izmit sailing toward the Strait of Istanbul is established between the traffic separation zone in paragraph (f) and a line connecting the following geographical positions:

(80) 40°52'.00 N, 29°01'.73 E
 (81) 40°55'.00 N, 29°00'.06 E
 (24) 41°00'.00 N, 29°00'.06 E

STRAIT OF CANAKKALE (New scheme)

(Reference chart: Turkish chart 212 (INT3750), 1991 edition
 Note: This chart is based on European Datum)

Description of the traffic separation scheme

The Strait of Canakkale traffic lane is the area between the line joining Cape Mehmetcik lighthouse and Cape Kumkale lighthouse in the south-west, the line joining the Gelibolu lighthouse to the Cardak lighthouse in the north-east and the outer boundaries of the Strait of Canakkale traffic lane whose co-ordinates are given below:

- (a) A separation line connects the following geographical positions:

(62) 40°26'.00 N, 26°45'.25 E	(82) 40°24'.05 N, 26°41'.65 E
(83) 40°22'.83 N, 26°40'.21 E	(84) 40°20'.90 N, 26°38'.55 E
(85) 40°18'.62 N, 26°35'.88 E	(86) 40°13'.40 N, 26°27'.80 E
(87) 40°12'.11 N, 26°23'.50 E	(88) 40°11'.63 N, 26°22'.95 E
(89) 40°09'.00 N, 26°23'.40 E	(90) 40°08'.55 N, 26°23'.31 E
(91) 40°08'.15 N, 26°23'.09 E	(92) 40°04'.25 N, 26°18'.54 E
(93) 40°02'.59 N, 26°15'.44 E	

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

(93) 40°02'.59 N, 26°15'.45 E
 (120) 40°01'.52 N, 26°11'.18 E
 (125) 40°01'.28 N, 26°11'.41 E
 (126) 40°01'.90 N, 26°14'.32 E

- (c) A traffic lane for north-east bound traffic is established between the separation zone/line in (b) and (a) above and a line connecting the following geographical positions:

(94)	40°00'.99 N, 26°11'.70 E	(95)	40°01'.10 N, 26°15'.01 E
(96)	40°01'.90 N, 26°17'.22 E	(97)	40°07'.70 N, 26°23'.48 E
(98)	40°08'.90 N, 26°23'.70 E	(99)	40°09'.50 N, 26°23'.95 E
(100)	40°11'.84 N, 26°23'.62 E	(101)	40°13'.10 N, 26°28'.90 E
(102)	40°16'.90 N, 26°34'.35 E	(103)	40°18'.10 N, 26°36'.30 E
(104)	40°20'.50 N, 26°39'.18 E	(105)	40°23'.65 N, 26°42'.04 E
(75)	40°25'.50 N, 26°45'.25 E		

- (d) A traffic lane for south-westbound traffic is established between the separation zone/line in (b) and (a) above and a line connecting the following geographical positions:

(74)	40°26'.50 N, 26°45'.25 E	(106)	40°24'.45 N, 26°41'.20 E
(107)	40°23'.20 N, 26°39'.25 E	(108)	40°21'.30 N, 26°37'.82 E
(109)	40°19'.10 N, 26°35'.45 E	(110)	40°14'.50 N, 26°27'.88 E
(111)	40°13'.12 N, 26°25'.55 E	(112)	40°12'.46 N, 26°23'.31 E
(113)	40°12'.02 N, 26°22'.50 E	(114)	40°11'.39 N, 26°22'.19 E
(115)	40°08'.73 N, 26°23'.10 E	(116)	40°08'.42 N, 26°22'.91 E
(117)	40°05'.60 N, 26°18'.95 E	(118)	40°02'.67 N, 26°13'.24 E
(119)	40°02'.00 N, 26°11'.03 E		

STRAIT OF CANAKKALE SOUTH-WEST APPROACH (New scheme)

(Reference charts: Turkish charts 2134, 1992 edition; 213, 1993 edition)

Note: These charts are based on European Datum)

Description of the traffic separation scheme

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

(120)	40°01'.52 N, 26°11'.18 E
(121)	40°00'.20 N, 25°59'.70 E
(122)	39°58'.80 N, 25°57'.70 E
(123)	39°57'.20 N, 25°57'.70 E
(124)	39°59'.70 N, 26°00'.40 E
(125)	40°01'.28 N, 26°11'.41 E

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(119)	40°02'.00 N, 26°11'.03 E
(127)	40°01'.55 N, 25°57'.70 E

- (c) A traffic lane for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(94)	40°00'.99 N, 26°11'.70 E
(128)	39°58'.29 N, 26°01'.60 E
(129)	39°55'.00 N, 25°57'.70 E

IN THE EAST LAMMA CHANNEL (Amended scheme)

(Reference charts: British Admiralty 937, 1989 edition and 1918, 1988 edition
Note: The above chart is based on Hong Kong (1963) Datum)

Western approaches to Victoria Port (East Lamma Channel)

The traffic separation scheme for the western approaches to Victoria Port (East Lamma Channel) comprises:

- (a) A separation line connects the following geographical positions:
- (1) 22°09'.43 N, 114°12'.58 E
 - (2) 22°10'.35 N, 114°11'.92 E
- (b) A traffic lane for inbound traffic is established between the separation line specified in (a) and straight lines connecting the following geographical positions:
- (3) 22°09'.83 N, 114°13'.22 E
 - (4) 22°10'.68 N, 114°12'.43 E
- (c) A traffic lane for outbound traffic is established between the separation line specified in (a) and straight lines connecting the following geographical positions:
- (5) 22°09'.00 N, 114°11'.88 E
 - (6) 22°10'.00 N, 114°11'.37 E
- (d) A precautionary area established by a line connecting the following geographical positions:
- (7) 22°10'.68 N, 114°12'.43 E
 - (8) 22°11'.30 N, 114°11'.87 E (Chesterman)
 - (9) 22°10'.73 N, 114°10'.97 E
 - (10) 22°10'.00 N, 114°11'.37 E
- (e) A separation line connects the following geographical positions:
- (11) 22°11'.02 N, 114°11'.42 E
 - (12) 22°12'.65 N, 114°10'.23 E (LCS 1)
 - (13) 22°14'.92 N, 114°07'.18 E (Lamma Patch)
 - (14) 22°16'.37 N, 114°06'.43 E (LCS 2)
- (f) A traffic lane for inbound traffic is established between the separation line specified in (e) and straight lines connecting the following geographical positions:
- (15) 22°11'.30 N, 114°11'.87 E (Chesterman)
 - (16) 22°12'.87 N, 114°10'.42 E (LCS 1 NE)
 - (17) 22°15'.10 N, 114°07'.43 E (LP NE)
 - (18) 22°16'.47 N, 114°06'.67 E (LCS 2 NE)

- (g) A traffic lane for outbound traffic is established between the separation line specified in (e) and straight lines connecting the following geographical positions:

- (19) 22°10'.73 N, 114°10'.97 E
- (20) 22°12'.45 N, 114°10'.07 E (LCS 1 SW)
- (21) 22°14'.73 N, 114°06'.97 E (LP SW)
- (22) 22°16'.23 N, 114°06'.13 E (LCS 2 SW)

Inshore traffic zones

- (h) A designated inshore traffic zone on the landward side of the inbound traffic lane is established as follows:

The area between the outer boundary of the inbound traffic lane specified in (f) and a straight line drawn from the position (15) in the direction 056°T to the shore and a straight line drawn from position (18) in the direction 063°T to the shore.

- (i) A designated inshore traffic zone on the landward side of the outbound traffic lane as follows:

The area between the outer boundary of a part of the outbound traffic lane specified in (g) and the adjacent coast, and a straight line drawn from position (20) in the direction 218.5°T to the shore, and a straight line drawn from position (21) in the direction 231°T to the shore.

Remarks:

A Safe Water Mark LCS 1 is to be laid in position (1) with the characteristics of Lfl 10s in conjunction with the amended traffic separation scheme - western approaches to Victoria Port (East Lamma Channel). The existing LCS 1 and LCS 2 will be renamed LCS 2 and LCS 3 respectively; their type and characteristics will remain unchanged.

IN THE STRAIT OF GIBRALTAR (ITZ)

Replace the description of the inshore traffic zones by the following:

Northern Inshore Traffic Zone

- (a) The area between the northern boundary of the scheme and the Spanish coast and lying between the following limits is designated an inshore traffic zone:

- (1) Eastern limit: That part of the meridian 005°25.6 W between the northern boundary of the westbound traffic lane (latitude 36°01.29 N, corresponding to point No.4 on the attached chartlet) and the Spanish coast.
- (2) Western limit: That part of the meridian 005°44.9 W between the northern boundary of the westbound traffic lane (latitude 35°58.49 N, corresponding to point No.6 on the attached chartlet) and the Spanish coast.

Southern Inshore Traffic Zone

(b) The area between the southern limit of the scheme and the adjacent Moroccan coastline and lying between the following limits is designated an inshore traffic zone:

- (1) Eastern limit: That part of the meridian 5°25.6 W between the southernmost extremity of the eastbound lane (latitude 35°56.89 N corresponding to position 9 on the attached chartlet) and the Moroccan coastline.
- (2) Western limit: That part of the meridian 5°44.9 W falling between the southernmost extremity of the eastbound traffic lane (latitude 35°52.49 N corresponding to position 7 on the attached chartlet) and the Moroccan coastline.

OFF USHANT (ITZ)

Replace the description of the inshore traffic zone by the following:

The area between the following limits is designated an inshore traffic zone:

- (1) North-eastern limit: a line joining
 - the eastern corner of the scheme (48°34'2 N - 05°07'4 W)
 - and the MEN KORN buoy (48°28'0 N - 05°01'4 W)
- (2) South-western limit: a line joining
 - the southern corner of the scheme (48°26'4 N - 05°17'3 W)
 - and LA JUMENT lighthouse (48°25'4 N - 05°08'1 W)

IN THE STRAIT OF HORMUZ (ITZ)

Replace the description of the inshore traffic zone by the following:

"The area between the MUSANDAM PENINSULA coast and landward boundary of the traffic separation scheme bounded by a line connecting the following geographical positions:

26°15'.35 N, 56°12'.92 E
26°30'.20 N, 56°23'.25 E (9)
26°32'.50 N, 56°28'.95 E (10)
26°32'.50 N, 56°32'.35 E (11)
26°27'.60 N, 56°35'.65 E (12) and
26°19'.05 N, 56°31'.25 E

is designated as an inshore traffic zone."

OFF RAS AL HADD (ITZ)

Replace the description of the inshore traffic zone by the following:

"The area between the coast and the landward boundary of the traffic separation scheme, and lying between a line connecting the following geographical positions:

- (4) 22°36'.5 N, 59°54'.0 E to Ras Al Hadd position (10) 22°32'.0 N, 59°47'.93 E and a line drawn from position (6) 22°25'.4 N, 59°58'.2 E to Ras Al Junaiz position (11) 22°25'.4 N, 59°50'.0 E

is designated as an inshore traffic zone."

OFF TEXEL
OFF VLIELAND
TERSCHELLING - GERMAN BIGHT

Replace the existing "Special Provisions" by the following:

"Special Provisions

This scheme should not be used by the following classes of ships:

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oils as defined under Annex I, to the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) ships of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories A or B of Annex II, to the International Convention for the Prevention of Pollution by Ships 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) ships of 10,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories C or D of Annex II, to the International Convention for the Prevention of Pollution by Ships 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquefied gasses in bulk.

These ships should use, instead, the "Recommended Route for tankers from North Hinder to the German Bight vice versa.

Exemptions

Ships in ballast condition are exempted from the special provisions above."

OFF CABO SAN ANTONIO (Amended scheme)

(Reference charts: Instituto Cubano de Hidrografia 1001, 1101 and 1122)

Note: These charts are based on North American 1927 Geodetic Datum.

British Admiralty 1220 (1977 edition); 2579 (1934 edition); 3867 (1980 edition))

Description of the traffic separation scheme

- (a) A separation zone, two miles wide, is centred upon the following geographical positions:

(1) 21°43'.9 N, 85°07'.2 W (2) 22°01'.0 N, 85°07'.2 W

- (b) A traffic lane, three miles wide, for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(3) 21°42'.7 N, 85°11.5 W (4) 22°01'.0 N, 85°11'.5 W

- (c) A traffic lane, three miles wide, for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 21°45'.0 N, 85°03'.0 W (6) 22°01'.0 N, 85°03'.0 W

Inshore traffic zone

The area within the lines bounded by the following geographical positions:

Punto del Holandes 21°48'.6 N, 84°48'.2 W, (5) and (6) of the Cabo San Antonio traffic separation scheme and a point on the coast marked by the co-ordinates 22°00'.0 N, 84°34'.5 W

OFF LA TABLA (Amended scheme)

(Reference charts: Instituto Cubano de Hidrografia 1001, 1101 and 1122

Note: This chart is based on North American 1927 Geodetic Datum. British Admiralty 1220, 1977 edition; 2579, 1934 edition; 3867, 1980 edition.)

Description of the traffic separation scheme

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:

(1) 22°27'.9 N, 84°42'.1 W (2) 22°19'.7 N, 84°49'.9 W

- (b) A traffic lane, two miles wide, for south-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(3) 22°21'.4 N, 84°51'.9 W (4) 22°29'.8 N, 84°44'.2 W

- (c) A traffic lane, two miles wide, for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 22°19'.0 N, 84°47'.8 W (6) 22°26'.4 N, 84°40'.2 W

Inshore traffic zone

The area within the lines bounded by the following geographical positions:

Punta Plumajés 22°02'.8 N, 84°29'.3 W, (5) and (6) of the traffic separation scheme off La Tabla, and the point on the coast marked by the co-ordinates 22°14'.0 N, 84°25'0 W.

OFF COSTA DE MATANZAS (Amended scheme)

(Reference charts: Instituto Cubano de Hidrografia 1001, 1101, 1102, 1126, 1127, 2001, 3001, 4001, 4002 and 4101.

Note: These charts are based on North American 1927 Geodetic Datum. British Admiralty 1220, 1977 edition; 2579, 1934 edition; 3867, 1980 edition.)

Description of the traffic separation scheme

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:

(1) 23°23'.5 N, 81°08'.0 W (3) 23°23'.0 N, 80°28'.0 W
(2) 23°25'.0 N, 80°53'.8 W

- (b) A traffic lane, two miles wide, for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(4) 23°26'.0 N, 81°08'.3 W (6) 23°25'.5 N, 80°27'.6 W
(5) 23°27'.5 N, 80°54'.0 W

- (c) A traffic lane, two miles wide, for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(7) 23°21'.1 N, 81°07'.8 W (9) 23°20'.5 N, 80°28'.0 W
(8) 23°22'.5 N, 80°54'.0 W

Inshore traffic zone

The area within the lines bounded by the following geographical positions:

Punta de Molas 23°11'.5 N, 81°07'.15 W, (7), (8) and (9) of the traffic separation scheme off Costa De Matanzas and Faro Cayo Bahia de Cadiz 23°12'.3 N, 80°28'.9 W.

IN THE OLD BAHAMA CHANNEL (Amended scheme)

(Reference charts: Instituto Cubano de Hidrografia 1001, 1102, 1103, 1129, 1130, 3001, 4002 and 4104.

Note: These charts are based on North American 1927 Geodetic Datum. British Admiralty 1220, 1977 edition; 2579, 1934 edition; 3867, 1980 edition.)

Description of the traffic separation scheme

- (a) A separation zone, half a mile wide, is centred upon the following geographical positions:

(1) 22°48'.4 N, 78°45'.0 W	(3) 22°18'.9 N, 77°39'.4 W
(2) 22°35'.2 N, 78°06'.4 W	(4) 22°09'.0 N, 77°27'.8 W

- (b) A traffic lane, two miles wide, for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 22°50'.2 N, 78°43'.3 W	(7) 22°20'.8 N, 77°38'.1 W
(6) 22°37'.3 N, 78°05'.4 W	(8) 22°10'.7 N, 77°26'.3 W

- (c) A traffic lane, two miles wide, for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(9) 22°46'.7 N, 78°47'.0 W	(11) 22°17'.2 N, 77°41'.0 W
(10) 22°33'.2 N, 78°07'.7 W	(12) 22°07'.3 N, 77°29'.6 W

Inshore traffic zone

The area within the lines bounded by the following geographical positions:

The point on the coast marked by the co-ordinates 22°30'.4 N, 78°53'.3 W, (9), (10), (11) and (12) of the traffic separation scheme for the Old Bahama Channel and Point Mangle 21°59'.8 N, 77°37'.4 W.

OFF PUNTA MATERNILLOS (Amended scheme)

(Reference chart: Instituto Cubano de Hidrografia 1001, 1103, 1130, 3001, 4001 and 4002.

Note: These charts are based on North American 1927 Geodetic Datum. British Admiralty 1220, 1977 edition; 2579, 1934 edition, 3867, 1980 edition).

Description of the traffic separation scheme

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:

(1) 21°51'.2 N, 77°06'.8 W	(3) 21°44'.2 N, 76°54'.0 W
(2) 21°47'.8 N, 77°02'.8 W	

- (b) A traffic lane, two miles wide, for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (4) 21°53'.1 N, 77°04'.9 W (6) 21°46'.5 N, 76°53'.0 W
(5) 21°49'.8 N, 77°01'.2 W

(c) A traffic lane, two miles wide, for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (7) 21°49'.5 N, 77°08'.8 W (9) 21°42'.0 N, 76°55'.0 W
(8) 21°45'.7 N, 77°04'.2 W

Inshore traffic zone

The area within the lines bounded by the following geographical positions:

Punta Central 21°40'.8 N, 77°12'.6 W, (7), (8) and (9) of the traffic separation scheme off Punta Maternillos and Punta Ganado 21°31'.25 N, 76°59'.75 W.

OFF PUNTA LUCRECIA (Amended scheme)

(Reference charts: Instituto Cubano de Hidrografia 1001, 1103, 1131, 1132, 3001, 3002, 4001, 4002 and 4104.

Note: These charts are based on North American 1927 Geodetic Datum. British Admiralty 1220, 1977 edition; 2579, 1934 edition, 3867, 1980 edition).

Description of the traffic separation scheme

(a) A separation zone, one mile wide, is centred upon the following geographical positions:

- (1) 21°15'.0 N, 75°42'.2 W (3) 21°07'.0 N, 75°25'.0 W
(2) 21°11'.4 N, 75°33'.4 W

(b) A traffic lane, two miles wide, for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (4) 21°17'.3 N, 75°41'.2 W (6) 21°09'.2 N, 75°23'.7 W
(5) 21°13'.7 N, 75°32'.3 W

(c) A traffic lane, two miles wide, for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (7) 21°12'.8 N, 75°41'.2 W (9) 21°04'.9 N, 75°26'.2 W
(8) 21°09'.2 N, 75°34'.5 W

The coastal navigation zone is the area within the lines bounded by the following geographical positions:

Faro Bahia de Sama 21°07'.3 N, 75°46'.4 W, (7), (8) and (9) of the traffic separation scheme, Punta Lucrecia and Punta Morales 20°55'.1 N, 75°36'.8 W.

OFF CABO MAYSI (Amended scheme)

(Reference charts: Instituto Cubano de Hidrografia 1001, 1103, 1133, 1134, 3001, 3002, 3103, 4001, 4002 and 4104 and 4106.

Note: These charts are based on North American 1927 Geodetic Datum. British Admiralty 1220, 1977 edition; 2579, 1934 edition, 3867, 1980 edition).

Description of the traffic separation scheme

(a) A separation zone, two miles wide, centred upon the following geographical positions:

(1) 20°22'.8 N, 73°58'.8 W (2) 20°05'.0 N, 73°58'.8 W

(b) A traffic lane, two miles wide, for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(3) 20°23'.7 N, 73°55'.0 W (4) 20°05'.0 N, 73°55'.0 W

(c) A traffic lane, two miles wide, for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5) 20°21'.8 N, 74°02'.6 W (6) 20°05'.0 N, 74°02'.6 W

Inshore traffic zone

The area within the lines bounded by the following geographical positions:

Punta Fraile 20°19'.1 N, 74°13'.75 W, (5) and (6) of the traffic separation scheme, Punta Maysi and Punta Negra 20°05'.55 N, 74°14'.1 W.

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COLREG.2/Circ.41
14 June 1996

Ref. T2/2.07

Handwritten notes and stamps in the top right corner. A rectangular stamp contains the text "COLREG.2/Circ.41" and "14 June 1996". Below the stamp, there is a signature and the handwritten text "Colreg./Circ".

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Secretary-General has the honour to state that in accordance with the provisions of Assembly resolution A.826(19), the Maritime Safety Committee, at its sixty-sixth session (28 May to 6 June 1996), adopted the following new and amended traffic separation schemes:

- .1 "Off Tuskar Rock" (amended scheme);
- .2 "Off Fastnet Rock" (amended scheme); and
- .3 "In the Approaches to the Port of Veracruz" (new scheme).

2 The new and amended traffic separation schemes (listed above and detailed at annex) will be implemented at 0000 hours UTC on 30 November 1996.

ANNEX

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

OFF TUSKAR ROCK (amended scheme)

(Reference chart: British Admiralty 1787, 1984 edition.

Note: This chart is based on Ordnance Survey of Ireland Datum.)

Description of the traffic separation scheme

(a) A separation zone, two miles wide, is centred upon the following geographical positions:

- | | | | | | |
|-----|-------------|-----------|-----|-------------|-----------|
| (1) | 52°14'.0 N, | 6°00'.8 W | (3) | 52°04'.7 N, | 6°11'.5 W |
| (2) | 52°08'.5 N, | 6°03'.8 W | | | |

(b) A traffic lane, three miles wide, is established on each side of the separation zone.

Inshore traffic zone

The area bounded between the landward boundary of the traffic separation scheme and lines connecting Tuskar Rock Lighthouse (52°12'.2N, 6°12'.4W) and the following geographical positions is designated an inshore traffic zone:

- | | | |
|-----|-------------|--|
| (4) | 52°15'.2 N, | 6°07'.0 W (northerly corner of the scheme) |
| (5) | 52°07'.8 N, | 6°15'.6 W (westerly corner of the scheme) |

OFF FASTNET ROCK (amended scheme)

(Reference chart: British Admiralty 2424, 1981 edition.

Note: This chart is based on Ordnance Survey of Ireland Datum.)

Description of the traffic separation scheme

(a) A separation zone, two miles wide, is centred upon the following geographical positions:

- | | | | | | |
|-----|-------------|-----------|-----|-------------|-----------|
| (1) | 51°20'.0 N, | 9°25'.8 W | (2) | 51°18'.2 N, | 9°35'.2 W |
|-----|-------------|-----------|-----|-------------|-----------|

(b) A traffic lane, two miles wide, is established on each side of the separation zone.

Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and lines connecting Fastnet Rock Lighthouse (51°23'.3 N, 9°36'.2 W) and the following geographical positions is designated an inshore traffic zone:

- | | | |
|-----|-------------|---|
| (3) | 51°22'.9N, | 9°27'.3 W (easterly corner of the scheme) |
| (4) | 51°21'.1 N, | 9°36'.6 W (westerly corner of the scheme) |

IN THE APPROACHES TO THE PORT OF VERACRUZ (New scheme)

Reference chart: United States 28302, 1991 edition.

Note: This chart is based on World Geodetic System 84 Datum.

Description of the traffic separation scheme

The traffic separation scheme in the approaches to Veracruz, Mexico, consists of two parts:

Part I: East Approach: Recommended for vessels entering or leaving the port of Veracruz.

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

- | | | |
|-----|--------------|-------------|
| (1) | 19°14'.00 N, | 95°45'.00 W |
| (2) | 19°14'.00 N, | 95°53'.43 W |
| (3) | 19°12'.50 N, | 95°53'.43 W |
| (4) | 19°12'.50 N, | 95°45'.00 W |

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

- | | | |
|-----|---------------|--------------|
| (5) | 19°11'. 50 N, | 95°45'. 00 W |
| (6) | 19°11'. 50 N, | 95°53'. 43 W |
| (7) | 19°10'. 90 N, | 95°53'. 43 W |
| (8) | 19°10'. 90 N, | 95°46'. 60 W |

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

- | | | |
|------|--------------|-------------|
| (9) | 19°15'.00 N, | 95°45'.00 W |
| (10) | 19°15'.00 N, | 95°53'.43 W |

(d) A traffic lane for eastbound traffic is established between separation zone (a) and separation zone (b).

Part II: North Approach: Recommended for vessels entering or leaving the port of Veracruz.

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

- | | | |
|------|--------------|-------------|
| (11) | 19°19'.00 N, | 95°59'.62 W |
| (12) | 19°15'.00 N, | 95°59'.62 W |
| (13) | 19°15'.00 N, | 95°58'.05 W |
| (14) | 19°19'.00 N, | 95°58'.05 W |

(b) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | | |
|------|--------------|-------------|
| (15) | 19°19'.00 N, | 96°00'.65 W |
| (16) | 19°15'.00 N, | 96°00'.65 W |

- (c) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographic positions:

(17) 19°15'.00 N, 95°57'.00 W
(18) 19°19'.00 N, 95°57'.00 W

Part III A precautionary area is established bounded by a line connecting the following geographical positions:

(10) 19°15'.00 N, 95°53'.43 W
(17) 19°15'.00 N, 95°57'.00 W
(16) 19°15'.00 N, 96°00'.65 W
(21) 19°12'.07 N, 96°01'.77 W
(23) 19°07'.65 N, 95°58'.92 W
(7) 19°10'.90 N, 95°53'.43 W

Note:

Masters of all appropriately equipped ships should have continual access to highly accurate information on the position of their ships in the traffic lane, using the radar beacons of:

- Sacrificios Island, identified on the radar by morse letter "Z", and located in geographical position:

(21) 19°10'.49 N, 96°05'.53 W.

- Santiaguillo Island, identified on the radar by morse letter "O" and located in geographical position:

(22) 19°08'.52 N, 95°48'.47 W.

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4 September 1996

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Corrigendum

The following correction should be made to COLREG.2/Circ 41:

ANNEX - OFF TUSKAR ROCK (amended scheme)/Inshore traffic zone

Replace "(4) 52°15'.2 N, 6° 97'. 0W (northerly corner of the scheme)" by "(4) 52° 15'.2 N, 6° 07'.0 W (northerly corners of the scheme)".

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 In accordance with the provisions of Assembly resolution A.826(19), the Maritime Safety Committee, at its sixty-seventh session (2 to 6 December 1996), adopted the following new and amended traffic separation schemes:

- .1 "At West Hinder" (amended scheme);
- .2 "Off Delaware Bay" (amended scheme);
- .3 "In the Approaches to Rostock" (cancelled);
- .4 "Off Texel" (amended scheme);
- .5 "Off Vlieland" and "Vlieland North" and precautionary area "Vlieland Junction" (amended scheme);
- .6 "Terschelling-German Bight" (amended scheme); and
- .7 "In the Gulf of Suez" (amended scheme).

2 The new and amended traffic separation schemes (listed above and detailed at annex) will be implemented at 0000 hours UTC on 3 June 1997, whilst the amended TSS "In the Gulf of Suez", will be implemented at 0000 hours on 1 July 1997.

ANNEX

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

At West Hinder (amended scheme)

(Reference chart: British Admiralty 1872, 1991 edition.

Note: This chart is based on European datum.)

Description of the traffic separation scheme

(a) A separation line connects the following geographical positions :

- (1) 51°22'.40 N 2°40'.00 E (3) 51°19'.20 N 2°16'.70 E
 (2) 51°22'.50 N 2°30'.00 E

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

- (4) 51°19'.20 N 2°16'.70 E (6) 51°19'.68 N 2°10'.09 E
 (5) 51°20'.88 N 2°10'.99 E

(c) A traffic lane for westbound traffic is established between the separation line/zone described in paragraphs (a) and (b) above a line connecting the following geographical positions:

- (7) 51°23'.50 N 2°40'.00 E (10) 51°22'.80 N 2°26'.50 E
 (8) 51°23'.50 N 2°37'.00 E (11) 51°21'.30 N 2°17'.70 E
 (9) 51°23'.50 N 2°30'.00 E (12) 51°22'.88 N 2°12'.37 E

(d) A traffic lane for eastbound traffic is established between the separation line/zone described in paragraphs (a) and (b) above and :

(i) a line connecting the following geographical positions :

- (13) 51°21'.10 N 2°40'.00 E (15) 51°21'.50 N 2°30'.00 E
 (14) 51°21'.20 N 2°37'.00 E (16) 51°20'.00 N 2°24'.60 E

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

- (17) 51°20'.00 N 2°24'.60 E (20) 51°11'.29 N 2°04'.17 E
 (18) 51°12'.55 N 2°11'.40 E (21) 51°13'.20 N 2°10'.30 E
 (19) 51°09'.90 N 2°03'.20 E

A precautionary area with recommended direction of traffic flow is established connecting the following geographical positions :

- (22) 51°23'.50 N 2°40'.00 E
 (23) 51°23'.50 N 2°43'.00 E
 (24) 51°22'.30 N 2°46'.40 E
 (25) 51°20'.90 N 2°46'.40 E
 (26) 51°21'.10 N 2°40'.00 E
 (27) 51°23'.50 N 2°40'.00 E

The pilot station Wandelaar is positioned in the following geographical position :

(28) 51°22':25 N 2°43'.00 E

Notes :

1. Positions (12), (19) and (20) form part of both the scheme "At West Hinder" and the scheme "In the Strait of Dover and adjacent waters". The small differences in values of these common points are due to the difference of the geodetic datum of the reference charts on which these two schemes are based.
2. An anchorage is established north of the scheme and is bounded by a line connecting the following geographical positions :
 - (i) 51°24'.00 N 2°33'.40 E
 - (ii) 51°26'.00 N 2°35'.00 E
 - (iii) 51°26'.00 N 2°40'.00 E
 - (iv) 51°24'.00 N 2°40'.00 E

Off Delaware Bay (amended scheme)

(Reference Chart: United States 12214, 1994 edition)

Note: This chart is based on North American Datum 1983 (WGS 84)

Description of the traffic separation scheme

Part I

Eastern Approach

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

	<u>Latitude</u>	<u>Longitude</u>
(1)	38° 46' 30 N	74° 34' 45 W
(2)	38° 46' 33 N	74° 55' 75 W
(3)	38° 47' 45 N	74° 55' 40 W
(4)	38° 47' 35 N	74° 34' 50 W

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

	<u>Latitude</u>	<u>Longitude</u>
(5)	38° 48' 32 N	74° 55' 30 W
(6)	38° 49' 67 N	74° 36' 75 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(7) 38° 45' 45 N	74° 56' 20 W
(8) 38° 44' 45 N	74° 34' 35 W

Part II:

South-eastern Approach

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

(9) 38° 27'.00 N, 74° 42'.30 W	(11) 38° 44'.20 N, 74° 57'.20 W
(10) 38° 43'.40 N, 74° 58'.00 W	(12) 38° 27'.60 N, 74° 41'.30 W

- (b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(13) 38° 28'.80 N, 74° 39'.30 W	(14) 38° 45'.10 N, 74° 56'.60 W
---------------------------------	---------------------------------

- (c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(15) 38° 42'.80 N, 74° 58'.90 W	(16) 38° 27'.00 N, 74° 45'.40 W
---------------------------------	---------------------------------

Precautionary area

A precautionary area is established as follows: from 38° 42'.80 N, 74° 58'.90 W; thence northerly by an arc of eight nautical miles centred at 38° 48'.90 N, 75° 05'.60 W to 38° 48'.32 N, 74° 55'.30 W; thence westerly to 38° 47'.50 N, 75° 01'.80 W; thence northerly to 38° 50'.75 N, 75° 03'.40 W; thence northeasterly to 38° 51'.27 N, 75° 02'.83 W; thence northerly to 38° 54'.80 N, 75° 01'.60 W; thence westerly by an arc of 6.7 nautical miles centred at 38° 48'.90 N, 75° 05'.60 W to 38° 55'.53 N, 75° 05'.87 W; thence southwesterly to 38° 54'.00 N, 75° 08'.00 W; thence southerly to 38° 42'.80 N, 74° 58'.90 W.

Two-way route

A two-way traffic route is bounded on the west and south by a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(1) 38° 50'.75 N	75° 03'.40 W
(2) 38° 47'.50 N	75° 01'.80 W
(3) 38° 48'.32 N	74° 55'.30 W
(4) 38° 50'.20 N	74° 49'.73 W
(5) 39° 00'.00 N	74° 40'.23 W

and is bounded on the east and north by a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(6) 39° 00'.00 N	74° 41'.00 W
(7) 38° 50'.48 N	74° 50'.30 W
(8) 38° 48'.80 N	74° 55'.25 W
(9) 38° 48'.33 N	74° 59'.30 W
(10) 38° 49'.10 N	75° 01'.65 W
(11) 38° 51'.27 N	75° 02'.83 W

Note for the use of the two-way route

This two-way route is recommended for use predominantly by tug and tow traffic transiting to and from the north-east in order to separate such traffic from large, in-bound vessel traffic.

In the Approaches to Rostock (cancelled)

The existing traffic separation scheme is cancelled.

Traffic separation scheme "Off Texel" (amended scheme)

The existing "Special Provisions" are replaced by the following note:

"Note:

The following classes of ships are obliged to use the "Mandatory route for tankers from North Hinder to the German Bight and vice versa" (see annex 4):

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oil as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) ships of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories A or B of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) ships of 10,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories C or D of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquified gases in bulk."

Traffic separation schemes "Off Vlieland", and "Vlieland North" and precautionary area "Vlieland Junction" (amended scheme)

The existing "Special Provisions" are replaced by the following note:

"Note:

The following classes of ships are obliged to use the "Mandatory route for tankers from North Hinder to the German Bight and vice versa" (see annex 4):

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oils as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) ships of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories A or B of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) ships of 10,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories C or D of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquified gases in bulk."

Traffic separation scheme "Terschelling-German Bight" (amended scheme)

The existing "Special Provisions" are replaced by the following note:

"Note:

The following classes of ships are obliged to use the "Mandatory route for tankers from North Hinder to the German Bight and vice versa" (see annex 4):

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oils as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) ships of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories A or B of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);

- (c) ships of 10,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories C or D of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquified gases in bulk."

IN THE GULF OF SUEZ (amended scheme)

Reference Charts: British Admiralty 2373, 1997 edition; 2374, 1997 edition; 2375, 1997 edition; 2090, 1997 edition; 2098, 1997 edition.

Note: These charts are based on WGS 84 Datum.

Description of the traffic separation scheme

Part A: Northern scheme

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

(1) 29°46'.60 N,	32°31'.80 E	(3) 29°38'.00 N,	32°32'.90 E
(2) 29°37'.89 N,	32°32'.10 E	(4) 29°46'.60 N,	32°32'.25 E

- (b) A separation line connecting the following geographical positions:

(5) 29°37'.97 N,	32°32'.50 E	(6) 29°35'.55 N,	32°32'.90 E
------------------	-------------	------------------	-------------

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

(7) 29°35'.56 N,	32°32'.60 E	(9) 29°28'.68 N,	32°36'.50 E
(8) 29°29'.10 N,	32°35'.60 E	(10) 29°35'.93 N,	32°33'.25 E

- (d) A separation line connecting the following geographical positions:

(11) 29°28'.90 N,	32°36'.05 E	(12) 29°25'.20 N,	32°37'.80 E
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- (e) A separation zone is bounded by a line connecting the following geographical positions:

(13) 29°25'.50 N,	32°37'.30 E	(18) 28°11'.25 N,	33°19'.70 E
(14) 29°09'.00 N,	32°45'.80 E	(19) 28°36'.00 N,	33°02'.40 E
(15) 28°45'.70 N,	32°54'.90 E	(20) 29°09'.20 N,	32°44'.50 E
(16) 28°15'.25 N,	33°14'.40 E	(21) 29°24'.90 N,	32°38'.20 E
(17) 28°10'.55 N,	28°18'.40 E		

- (f) A traffic lane for southbound traffic is established between:

- (i) The separation zone and a line connecting the following geographical positions:

(22) 29°46'.60 N,	32°30'.80 E	(23) 29°37'.58 N,	32°30'.10 E
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(ii) The separation line and a line connecting the following geographical positions:

(24) 29°37'.58 N, 32°30'.10 E (25) 29°35'.68 N, 32°29'.95 E

(iii) The separation zone and a line connecting the following geographical positions:

(26) 29°35'.68 N, 32°29'.95 E (27) 29°30'.60 N, 32°32'.35 E

(iv) The separation line and a line connecting the following geographical positions:

(28) 29°30'.60 N, 32°32'.35 E (29) 29°27'.60 N, 32°33'.90 E

(v) The separation zone and a line connecting the following geographical positions:

(30) 29°27'.60 N, 32°33'.90 E (33) 28°15'.00 N, 33°12'.60 E
 (31) 29°08'.20 N, 32°43'.80 E (34) 28°09'.80 N, 33°17'.00 E
 (32) 28°45'.80 N, 32°52'.70 E

(g) A traffic lane for northbound traffic is established between the separation zone line and a line connecting the following geographical positions:

(35) 28°11'.95 N, 33°20'.90 E (38) 29°22'.80 N, 32°41'.50 E
 (36) 28°36'.00 N, 33°04'.80 E (39) 29°35'.45 N, 32°35'.40 E
 (37) 29°10'.00 N, 32°48'.40 E (40) 29°46'.60 N, 32°33'.40 E

Part B: Southern Scheme

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

(41) 28°08'.15 N, 33°21'.70 E (46) 27°44'.20 N, 33°50'.35 E
 (42) 27°49'.65 N, 33°44'.10 E (47) 27°50'.20 N, 33°44'.50 E
 (43) 27°43'.60 N, 33°50'.00 E (48) 27°53'.00 N, 33°41'.40 E
 (44) 27°30'.20 N, 34°05'.45 E (49) 27°54'.60 N, 33°38'.85 E
 (45) 27°31'.05 N, 34°06'.40 E (50) 28°08'.55 N, 33°22'.30 E

(i) A traffic lane for southbound traffic is established between separation zone and a line connecting the following geographical positions:

(51) 28°07'.40 N, 33°20'.40 E (53) 27°42'.45 N, 33°49'.40 E
 (52) 27°48'.70 N, 33°43'.40 E (54) 27°28'.65 N, 34°03'.90 E

(j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(55) 27°33'.15 N, 34°08'.60 E (58) 27°53'.75 N, 33°42'.65 E
 (56) 27°45'.20 N, 33°50'.95 E (59) 27°56'.35 N, 33°38'.40 E
 (57) 27°51'.35 N, 33°45'.35 E (60) 28°09'.30 N, 33°23'.60 E

Part C: Junction scheme off Ain-Sukhna

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

- | | | | | | |
|------|--------------|-------------|------|--------------|-------------|
| (61) | 29°32'.27 N, | 32°28'.80 E | (63) | 29°35'.68 N, | 32°29'.65 E |
| (62) | 29°30'.60 N, | 32°32'.35 E | (64) | 29°35'.80 N, | 32°27'.50 E |

(l) A traffic lane for south-east bound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|-------------|------|--------------|-------------|
| (65) | 29°30'.50 N, | 32°29'.35 E | (66) | 29°27'.60 N, | 32°33'.90 E |
|------|--------------|-------------|------|--------------|-------------|

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

- | | | | | | |
|------|--------------|-------------|------|--------------|-------------|
| (67) | 29°37'.58 N, | 32°30'.10 E | (68) | 29°37'.11 N, | 32°27'.00 E |
|------|--------------|-------------|------|--------------|-------------|

Part D: Precautionary area off Ras-Shukeir

(n) A precautionary area is established by a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|-------------|------|--------------|-------------|
| (69) | 28°09'.80 N, | 33°17'.00 E | (71) | 28°09'.30 N, | 33°23'.60 E |
| (70) | 28°06'.80 N, | 33°19'.40 E | (72) | 28°12'.20 N, | 33°21'.40 E |

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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Corrigendum

The following correction should be made to COLREG.2/Circ.42 (English text only):

ANNEX (pages 2 and 3) - Off Delaware Bay (amended scheme)

Due to typographical error a decimal point has been left out, therefore replace Part I, Eastern approach geographical positions given in "(a) (1) (2) (3) (4), (b) (5) (6) and (c) (7) (8)" by the following geographical positions:

REPUBLIQUE
JANIBIRO

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

At West Hinder (amended scheme)

JANIBIRO

(Reference chart British Admiralty 1872, 1991 edition.

Note: This chart is based on European datum.)

Description of the traffic separation scheme

- (a) A separation line connects the following geographical positions :
- (1) 51°22'.40 N 2°40'.00 E (3) 51°19'.20 N 2°16'.70 E
(2) 51°22'.50 N 2°30'.00 E
- (b) A separation zone is bounded by a line connecting the following geographical positions :
- (4) 51°19'.20 N 2°16'.70 E (6) 51°19'.68 N 2°10'.09 E
(5) 51°20'.88 N 2°10'.99 E
- (c) A traffic lane for westbound traffic is established between the separation line/zone described in paragraphs (a) and (b) above a line connecting the following geographical positions:
- (7) 51°23'.50 N 2°40'.00 E (10) 51°22'.80 N 2°26'.50 E
(8) 51°23'.50 N 2°37'.00 E (11) 51°21'.30 N 2°17'.70 E
(9) 51°23'.50 N 2°30'.00 E (12) 51°22'.88 N 2°12'.37 E
- (d) A traffic lane for eastbound traffic is established between the separation line/zone described in paragraphs (a) and (b) above and :
- (i) a line connecting the following geographical positions :
- (13) 51°21'.10 N 2°40'.00 E (15) 51°21'.50 N 2°30'.00 E
(14) 51°21'.20 N 2°37'.00 E (16) 51°20'.00 N 2°24'.60 E
- (ii) a separation zone bounded by lines connecting the following geographical positions :
- (17) 51°20'.00 N 2°24'.60 E (20) 51°11'.29 N 2°04'.17 E
(18) 51°12'.55 N 2°11'.40 E (21) 51°13'.20 N 2°10'.30 E
(19) 51°09'.90 N 2°03'.20 E

A precautionary area with recommended direction of traffic flow is established connecting the following geographical positions :

- (22) 51°23'.50 N 2°40'.00 E
(23) 51°23'.50 N 2°43'.00 E
(24) 51°22'.30 N 2°46'.40 E
(25) 51°20'.90 N 2°46'.40 E
(26) 51°21'.10 N 2°40'.00 E
(27) 51°23'.50 N 2°40'.00 E

The pilot station Wandelaar is positioned in the following geographical position :

(28) 51°22'.25 N 2°43'.00 E

Notes :

1. Positions (12), (19) and (20) form part of both the scheme "At West Hinder" and the scheme "In the Strait of Dover and adjacent waters". The small differences in values of these common points are due to the difference of the geodetic datum of the reference charts on which these two schemes are based.
2. An anchorage is established north of the scheme and is bounded by a line connecting the following geographical positions :

(i) 51°24'.00 N	2°33'.40 E	(iii) 51°26'.00 N	2°40'.00 E
(ii) 51°26'.00 N	2°35'.00 E	(iv) 51°24'.00 N	2°40'.00 E

Off Delaware Bay (amended scheme)

(Reference Chart: United States 12214, 1994 edition)

Note: This chart is based on North American Datum 1983 (WGS 84)

Description of the traffic separation scheme

Part I

Eastern Approach

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

<u>Latitude</u>	<u>Longitude</u>
(1) 38° 46'.30 N	74° 34'.45 W
(2) 38° 46'.33 N	74° 55'.75 W
(3) 38° 47'.45 N	74° 55'.40 W
(4) 38° 47'.35 N	74° 34'.50 W

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(5) 38° 48'.32 N	74° 55'.30 W
(6) 38° 49'.67 N	74° 36'.75 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(7) 38° 45'.45 N	74° 56'.20 W
(8) 38° 44'.45 N	74° 34'.35 W

Part II:**South-eastern Approach**

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

- | | |
|---------------------------------|---------------------------------|
| (9) 38° 27'.00 N, 74° 42'.30 W | (11) 38° 44'.20 N, 74° 57'.20 W |
| (10) 38° 43'.40 N, 74° 58'.00 W | (12) 38° 27'.60 N, 74° 41'.30 W |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (13) 38° 28'.80 N, 74° 39'.30 W | (14) 38° 45'.10 N, 74° 56'.60 W |
|---------------------------------|---------------------------------|

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (15) 38° 42'.80 N, 74° 58'.90 W | (16) 38° 27'.00 N, 74° 45'.40 W |
|---------------------------------|---------------------------------|

Precautionary area

A precautionary area is established as follows: from 38° 42'.80 N, 74° 58'.90 W; thence northerly by an arc of eight nautical miles centred at 38° 48'.90 N, 75° 05'.60 W to 38° 48'.32 N, 74° 55'.30 W; thence westerly to 38° 47'.50 N, 75° 01'.80 W; thence northerly to 38° 50'.75 N, 75° 03'.40 W; thence northeasterly to 38° 51'.27 N, 75° 02'.83 W; thence northerly to 38° 54'.80 N, 75° 01'.60 W; thence westerly by an arc of 6.7 nautical miles centred at 38° 48'.90 N, 75° 05'.60 W to 38° 55'.53 N, 75° 05'.87 W; thence southwesterly to 38° 54'.00 N, 75° 08'.00 W; thence southerly to 38° 42'.80 N, 74° 58'.90 W.

Two-way route

A two-way traffic route is bounded on the west and south by a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(1) 38° 50'.75 N	75° 03'.40 W
(2) 38° 47'.50 N	75° 01'.80 W
(3) 38° 48'.32 N	74° 55'.30 W
(4) 38° 50'.20 N	74° 49'.73 W
(5) 39° 00'.00 N	74° 40'.23 W

and is bounded on the east and north by a line connecting the following geographical positions:

<u>Latitude</u>	<u>Longitude</u>
(6) 39° 00'.00 N	74° 41'.00 W
(7) 38° 50'.48 N	74° 50'.30 W
(8) 38° 48'.80 N	74° 55'.25 W
(9) 38° 48'.33 N	74° 59'.30 W
(10) 38° 49'.10 N	75° 01'.65 W
(11) 38° 51'.27 N	75° 02'.83 W

Note for the use of the two-way route

This two-way route is recommended for use predominantly by tug and tow traffic transiting to and from the north-east in order to separate such traffic from large, in-bound vessel traffic.

In the Approaches to Rostock (cancelled)

The existing traffic separation scheme is cancelled.

Traffic separation scheme "Off Texel" (amended scheme)

The existing "Special Provisions" are replaced by the following note:

"Note:

The following classes of ships are obliged to use the "Mandatory route for tankers from North Hinder to the German Bight and vice versa" (see annex 4):

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oil as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) ships of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories A or B of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) ships of 10,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk as assessed as categories C or D of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquified gases in bulk."



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NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its sixty-ninth session (11 to 20 May 1998), adopted in accordance with the provisions of resolution A.858(20), the following new and amended existing traffic separation schemes and associated routeing measures:

- .1 "At One Fathom Bank" (amended scheme) and the precautionary area "Off Port Klang";
- .2 "Port Klang to Port Dickson" (new scheme) and the precautionary area "Off Port Dickson";
- .3 "Port Dickson to Tanjung Keling" (new scheme) and the precautionary area "Off Malacca/Dumai";
- .4 "Malacca to Iyu Kecil" (new scheme) and the precautionary area "Off Sultan Shoal Lighthouse";
- .5 "In the Singapore Strait" (Main Strait) (amended scheme) and the precautionary area "Off Pulau Sebarok/Pulau Belakang Padang";
- .6 "Singapore Strait (Off St. John's Island)" (new scheme) and the precautionary area "Off St. John's Island/Pulau Sambu";
- .7 "Singapore Strait (Off Changi/Pulau Batam)" (new scheme) and the precautionary area "Off Tanjung Stapa/Pulau Bintan";
- .8 "At Horsburgh Lighthouse Area" (amended scheme);
- .9 "Off the Alphard Banks" (new scheme) and "Off the FA Platform" (new scheme); and
- .10 "Off Cabo de Gata" (new scheme).

2 The new and amended traffic separation schemes (listed above and detailed at annexes 1 to 10) will be implemented at 0000 hours UTC on 1 December 1998.

ANNEX 1

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

STRAITS OF MALACCA AND SINGAPORE

AT ONE FATHOM BANK (amended scheme)

(Reference chart: British Admiralty 3946, 1996 edition)

Note: This chart is based on Revised Kertau Datum)

Description of the traffic separation scheme

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

- | | | | | | |
|-----|--------------|---------------|-----|--------------|---------------|
| (1) | 03° 00'.70 N | 100° 47'.40 E | (5) | 02° 43'.40 N | 101° 10'.00 E |
| (2) | 02° 53'.70 N | 100° 55'.80 E | (6) | 02° 49'.00 N | 100° 59'.50 E |
| (3) | 02° 49'.50 N | 100° 59'.50 E | (7) | 02° 53'.40 N | 100° 55'.40 E |
| (4) | 02° 43'.90 N | 101° 10'.30 E | (8) | 03° 00'.30 N | 100° 47'.10 E |

(b) A traffic lane for north-west bound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|---------------|------|--------------|---------------|
| (9) | 03° 02'.70 N | 100° 48'.80 E | (11) | 02° 46'.30 N | 101° 11'.50 E |
| (10) | 02° 52'.50 N | 101° 00'.00 E | | | |

(c) A traffic lane for south-east bound traffic is established between the separation zone and a line connecting the following geographical positions:-

- | | | | | | |
|------|--------------|---------------|------|--------------|---------------|
| (12) | 02° 54'.70 N | 100° 43'.10 E | (13) | 02° 41'.20 N | 101° 08'.80 E |
|------|--------------|---------------|------|--------------|---------------|

OFF PORT KLANG

Description of the precautionary area.

(a) A precautionary area is established by a line connecting the following geographical positions:-

- | | | | | | |
|------|--------------|---------------|------|--------------|---------------|
| (14) | 02° 46'.30 N | 101° 11'.50 E | (16) | 02° 39'.40 N | 101° 12'.40 E |
| (15) | 02° 44'.30 N | 101° 15'.00 E | (17) | 02° 41'.20 N | 101° 08'.80 E |

ANNEX 2

PORT KLANG TO PORT DICKSON (new scheme)

(Reference chart: British Admiralty 3946, 1996 edition)

Note: This chart is based on Revised Kertau Datum)**Description of the traffic separation scheme.**

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

(18)	02° 42'.00 N	101° 13'.80 E	(21)	02° 26'.50 N	101° 36'.80 E
(19)	02° 35'.00 N	101° 27'.10 E	(22)	02° 35'.20 N	101° 25'.80 E
(20)	02° 27'.10 N	101° 37'.30 E	(23)	02° 41'.60 N	101° 13'.60 E

(b) A traffic lane for north-west bound traffic is established between the separation zone and a separation line connecting the following geographical positions:-

(24)	02° 44'.30 N	101° 15'.00 E	(26)	02° 29'.00 N	101° 38'.80 E
(25)	02° 37'.40 N	101° 28'.00 E			

(c) A traffic lane for south-east bound traffic is established between the separation zone and a line connecting the following geographical positions:

(27)	02° 39'.40 N	101° 12'.40 E	(29)	02° 24'.60 N	101° 35'.30 E
(28)	02° 34'.00 N	101° 23'.30 E			

Inshore Traffic Zone

The area between the landward boundary of the traffic separation scheme and the Malaysian coast between a line drawn from position (24) 02°44'.30 N, 101°15'.00 E in a direction of 027° to meet the coast and a line drawn from position (26) 02°29'.00 N, 101°38'.80 E in a direction of 034° to meet the Malaysian coast.

OFF PORT DICKSON

(Reference chart: British Admiralty 3946, 1996 edition, 3947, 1997 edition)

Note: These charts are based on Revised Kertau Datum).**Description of the precautionary area.**

(a) A precautionary area is established by a line connecting the following geographical positions:-

(30)	02° 29'.00 N	101° 38'.80 E	(32)	02° 21'.40 N	101° 39'.40 E
(31)	02° 25'.80 N	101° 42'.90 E	(33)	02° 24'.60 N	101° 35'.30 E

ANNEX 3

PORT DICKSON TO TANJUNG KELING (new scheme)**Description of the traffic separation scheme.**

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

(34)	02° 23'.90 N	101° 41'.40 E	(36)	02° 09'.00 N	101° 59'.00 E
(35)	02° 09'.70 N	101° 59'.60 E	(37)	02° 23'.20 N	101° 40'.90 E

(b) A traffic lane for north-west bound traffic is established between the separation zone and a separation line connecting the following geographical positions:-

(38)	02° 25'.80 N	101° 42'.90 E	(39)	02° 11'.60 N	102° 01'.00 E
------	--------------	---------------	------	--------------	---------------

(c) A traffic lane for south-east bound traffic is established between the separation zone and a line connecting the following geographical positions:-

(40)	02° 21'.40 N	101° 39'.40 E	(41)	02° 07'.10 N	101° 57'.50 E
------	--------------	---------------	------	--------------	---------------

(d) A deep water route for south-east bound traffic is established by connecting the following geographical positions:

(42)	02° 21'.40 N	101° 39'.40 E	(46)	02° 12'.30 N	101° 36'.80 E
(43)	02° 13'.80 N	101° 39'.30 E	(47)	02° 22'.20 N	101° 36'.80 E
(44)	02° 05'.10 N	101° 55'.90 E	(48)	02° 24'.00 N	101° 36'.10 E
(45)	02° 03'.00 N	101° 54'.20 E			

Inshore Traffic Zone

The area between the landward boundary of the traffic separation scheme and the Malaysian coast between a line drawn from position (38) 02°25'.80 N, 101°42'.90 E in a direction of 059° to meet the Malaysian coast and a line drawn from position (39) 02°11'.60 N, Long. 102°01'.00 E in a direction of 034° to meet the Malaysian coast.

OFF MALACCA/DUMAI

(Reference charts: British Admiralty 3947, 1997 edition, 3833, 1988 edition, 2403, 1983 edition

Note: These charts are based on Revised Kertau Datum).

Description of the precautionary area.

(a) A precautionary area is established by a line connecting the following geographical positions:

(49)	02° 11'.60 N	102° 01'.00 E	(51)	02° 00'.00 N	101° 59'.80 E
(50)	02° 07'.20 N	102° 06'.20 E	(52)	02° 03'.00 N	101° 54'.20 E

ANNEX 4

MALACCA TO IYU KECIL (new scheme)**Description of the traffic separation scheme.**

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

(53)	02° 05'.40 N	102° 04'.60 E	(59)	01° 10'.50 N	103° 27'.50 E
(54)	01° 55'.70 N	102° 15'.40 E	(60)	01° 13'.20 N	103° 23'.40 E
(55)	01° 40'.00 N	102° 48'.30 E	(61)	01° 23'.20 N	103° 12'.40 E
(56)	01° 23'.20 N	103° 12'.40 E	(62)	01° 39'.10 N	102° 48'.00 E
(57)	01° 13'.80 N	103° 24'.00 E	(63)	01° 54'.80 N	102° 14'.80 E
(58)	01° 12'.20 N	103° 28'.50 E	(64)	02° 04'.60 N	102° 03'.80 E

- (b) A traffic lane for north-west bound traffic is established between the separation zone and a separation line connecting the following geographical positions:

(65)	02° 07'.20 N	102° 06'.20 E	(68)	01° 25'.50 N	103° 15'.00 E
(66)	01° 57'.90 N	102° 16'.60 E	(69)	01° 15'.20 N	103° 25'.30 E
(67)	01° 38'.40 N	103° 00'.00 E	(70)	01° 14'.30 N	103° 29'.70 E

- (c) A traffic lane for south-east bound traffic is established between the separation zone and a line connecting the following geographical positions:

(71)	02° 02'.80 N	102° 02'.20 E	(74)	01° 22'.00 N	103° 11'.10 E
(72)	01° 52'.60 N	102° 13'.30 E	(75)	01° 11'.60 N	103° 22'.80 E
(73)	01° 36'.80 N	102° 46'.90 E	(76)	01° 09'.20 N	103° 26'.80 E

- (d) A deep-water route for south-east bound traffic is established by connecting the following geographical positions:

(77)	02° 01'.90 N	102° 01'.50 E	(79)	01° 52'.60 N	102° 13'.30 E
(78)	01° 59'.70 N	102° 05'.60 E	(80)	02° 00'.00 N	101° 59'.80 E

Inshore Traffic Zone

The area between the landward boundary of the traffic separation scheme and the Malaysian coast between a line drawn from position (65) 02°07'.20 N, 102°06'.20 E, to Pulau Undan Lighthouse (Lat. 02°02'.90 N, Long. 102°20'.10 E) then in a direction of 040° to meet the Malaysian coast and a line drawn from position (70) 01°14'.30 N, 103°29'.70 E in a direction of 038° to meet the Malaysian coast.

OFF SULTAN SHOAL LIGHTHOUSE

(Reference charts: British Admiralty 2598, 1990 edition, 2556, 1994 edition, 3833, 1988 edition, 2403, 1983 edition

Note: These charts are based on Revised Kertau Datum).

Description of the precautionary area.

- (a) A precautionary area is established by a line connecting the following geographical positions:

(81)	01° 14'.28 N	103° 29'.73 E	(83)	01° 05'.94 N	103° 32'.30 E
(82)	01° 12'.62 N	103° 36'.24 E	(84)	01° 09'.23 N	103° 26'.76 E

ANNEX 5

IN THE SINGAPORE STRAIT (MAIN STRAIT) (amended scheme)

Description of the traffic separation scheme.

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

(85)	01° 10'.35 N	103° 34'.90 E	(89)	01° 05'.90 N	103° 43'.38 E
(86)	01° 10'.35 N	103° 39'.85 E	(90)	01° 03'.60 N	103° 38'.95 E
(87)	01° 07'.50 N	103° 43'.72 E	(91)	01° 07'.06 N	103° 32'.96 E
(88)	01° 08'.60 N	103° 45'.43 E			

- (b) A separation line connects the following geographical positions:

(92)	01° 08'.60 N	103° 45'.43 E	(94)	01° 10'.81 N	103° 49'.30 E
(93)	01° 10'.26 N	103° 47'.91 E			

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

(95)	01° 12'.62 N	103° 36'.24 E	(98)	01° 10'.45 N	103° 47'.50 E
(96)	01° 11'.50 N	103° 40'.55 E	(99)	01° 11'.13 N	103° 49'.18 E
(97)	01° 08'.65 N	103° 44'.40 E			

- (d) A traffic lane for eastbound traffic is established between the separation zone/line and a line connecting the following geographical positions:

(100)	01° 05'.94 N	103° 32'.30 E	(103)	01° 07'.80 N	103° 46'.25 E
(101)	01° 01'.60 N	103° 39'.65 E	(104)	01° 09'.47 N	103° 48'.70 E
(102)	01° 05'.00 N	103° 43'.67 E	(105)	01° 09'.92 N	103° 49'.65 E

- (e) A deep-water route is established within the eastbound lane described in paragraph (d). The deep-water route is bounded by a line connecting the following geographical positions:

(i)	01° 03'.60 N	103° 38'.95 E	(vi)	01° 10'.45 N	103° 49'.45 E
(ii)	01° 05'.90 N	103° 43'.38 E	(vii)	01° 09'.95 N	103° 48'.28 E
(iii)	01° 08'.61 N	103° 45'.44 E	(viii)	01° 08'.90 N	103° 46'.82 E
(iv)	01° 10'.26 N	103° 47'.91 E	(ix)	01° 04'.95 N	103° 42'.87 E
(v)	01° 10'.81 N	103° 49'.30 E	(x)	01° 02'.97 N	103° 39'.10 E

SINGAPORE STRAIT (OFF PULAU SEBAROK/PULAU BELAKANG PADANG)

Description of the precautionary area.

- (a) A precautionary area is established by a line connecting the following geographical positions:

(106)	01° 11'.13 N	103° 49'.18 E	(108)	01° 10'.45 N	103° 50'.75 E
(107)	01° 11'.59 N	103° 50'.31 E	(109)	01° 09'.92 N	103° 49'.65 E

ANNEX 6

SINGAPORE STRAIT (OFF ST. JOHN'S ISLAND) (new scheme)

(Reference charts: British Admiralty 2556, 1994 edition, 3833, 1988 edition, 2403, 1983 edition)

Note: These charts are based on Revised Kertau Datum).

Description of the traffic separation scheme.

(a) A separation line connects the following geographical positions:

(110) 01° 11'.27 N 103° 50'.43 E (111) 01° 12'.21 N 103° 52'.40 E

(b) A traffic lane for westbound traffic is established between the separation line and a line connecting the following geographical positions:

(112) 01° 11'.59 N 103° 50'.31 E (114) 01° 12'.51 N 103° 52'.25 E
(113) 01° 11'.96 N 103° 51'.21 E

(c) A traffic lane for eastbound traffic is established between the separation line and a line connecting the following geographical positions:

(115) 01° 10'.45 N 103° 50'.75 E (116) 01° 11'.41 N 103° 52'.76 E

(d) A deep water route is established within the eastbound lane described in paragraph (c). The deep water route is bounded by a line connecting the following geographical positions:

(xi) 01° 11'.27 N 103° 50'.43 E (xiii) 01° 11'.78 N 103° 52'.58 E
(xii) 01° 12'.21 N 103° 52'.40 E (xiv) 01° 10'.92 N 103° 50'.57 E

SINGAPORE STRAIT (OFF ST. JOHN'S ISLAND/PULAU SAMBU)**Description of the precautionary area.**

(a) A precautionary area is established by a line connecting the following geographical positions:

(117) 01° 12'.51 N 103° 52'.25 E (119) 01° 12'.11 N 103° 54'.40 E
(118) 01° 13'.38 N 103° 53'.85 E (120) 01° 11'.41 N 103° 52'.76 E

(b) The focal point of the precautionary area is located at the following geographical position:

(121) 01° 12'.60 N 103° 53'.20 E

Description of the area to be avoided

A circular area to be avoided with a diameter of one cable is established around position (121).

ANNEX 7

SINGAPORE STRAIT (OFF CHANGI/PULAU BATAM) (new scheme)

(Reference charts: British Admiralty 2569, 1990 edition, 3833, 1988 edition, 3831, 1988 edition, 2403, 1983 edition)

Note: These charts are based on Revised Kertau Datum).

Description of the traffic separation scheme.

(a) A separation line connects the following geographical positions:

(122) 01° 12'.97 N 103° 54'.03 E (124) 01° 14'.89 N 103° 59'.01 E
 (123) 01° 13'.57 N 103° 55'.40 E

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

(125) 01° 14'.89 N 103° 59'.01 E (127) 01° 15'.42 N 104° 03'.45 E
 (126) 01° 15'.67 N 104° 03'.40 E

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

(128) 01° 13'.38 N 103° 53'.85 E (130) 01° 16'.02 N 104° 00'.00 E
 (129) 01° 14'.07 N 103° 55'.18 E (131) 01° 16'.60 N 104° 03'.32 E

(d) A traffic lane for eastbound traffic is established between the separation zone/line and a line connecting the following geographical positions:

(132) 01° 12'.11 N 103° 54'.40 E (134) 01° 14'.05 N 104° 03'.58 E
 (133) 01° 13'.50 N 103° 57'.67 E

SINGAPORE STRAIT (OFF TANJUNG STAPA/PULAU BINTAN)**Description of the precautionary area.**

(a) A precautionary area is established by a line connecting the following geographical positions:

(135) 01° 16'.60 N 104° 03'.32 E (137) 01° 15'.40 N 104° 15'.00 E
 (136) 01° 18'.63 N 104° 15'.00 E (138) 01° 14'.05 N 104° 03'.58 E

ANNEX 8

AT HORSBURGH LIGHTHOUSE AREA (amended scheme)

(Reference charts: British Admiralty 3831, 1988 edition, 2403, 1983 edition

Note: These charts are based on Revised Kertau Datum).

Description of the traffic separation scheme.

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

(139) 01° 17'.32 N 104° 15'.00 E (142) 01° 24'.30 N 104° 27'.25 E
(140) 01° 18'.00 N 104° 19'.70 E (143) 01° 17'.80 N 104° 19'.85 E
(141) 01° 24'.55 N 104° 27'.05 E (144) 01° 17'.10 N 104° 15'.00 E

- (b) A traffic lane for south-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(145) 01° 18'.63 N 104° 15'.00 E (147) 01° 25'.40 N 104° 26'.32 E
(146) 01° 19'.40 N 104° 19'.50 E

- (c) A traffic lane for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(148) 01° 15'.40 N 104° 15'.00 E (150) 01° 23'.40 N 104° 27'.95 E
(149) 01° 16'.30 N 104° 19'.85 E

ANNEX 9

OFF THE SOUTH COAST OF SOUTH AFRICA (new schemes)**OFF THE FA PLATFORM 47 MILES SOUTH OF MOSSEL BAY (new scheme)**

(Reference Charts: South African Navy SAN 57, SAN 122
British Admiralty 2083, 2084)

Note: The SAN charts are based on Cape Datum (Clarke 1880 Mod).

Description of traffic separation scheme

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

- | | |
|-------------------------------|-------------------------------|
| (1) 34°50'.11 S; 022°00'.00 E | (2) 34°47'.39 S; 022°20'.00 E |
| (3) 35°04'.06 S; 022°00'.00 E | (4) 35°03'.37 S; 22°10'.86 E |
| (5) 35°01'.77 S; 022°20'.00 E | |

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

- | | |
|-------------------------------|-------------------------------|
| (6) 35°07'.16 S; 022°00'.00 E | (7) 35°06'.35 S; 022°11'.18 E |
| (8) 35°04'.81 S; 022°20'.00 E | |

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

- | | |
|-------------------------------|--------------------------------|
| (9) 34°47'.07 S; 022°00'.00 E | (10) 34°44'.75 S; 022°20'.00 E |
|-------------------------------|--------------------------------|

OFF ALPHARD BANKS 34 MILES SOUTH OF CAPE INFANTA (new scheme)

(Reference Charts: South African Navy SAN 57, SAN 121
British Admiralty 2083, 2084)

Note: The SAN charts are based on Cape Datum (Clarke 1880 Mod).

Description of traffic separation scheme

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

- | | |
|-------------------------------|-------------------------------|
| (1) 34°58'.79 S; 020°45'.00 E | (2) 34°56'.48 S; 021°05'.00 E |
| (3) 35°09'.54 S; 020°45'.00 E | (4) 35°08'.10 S; 021°05'.00 E |

(b) A traffic lane for westbound traffic is established between the separation zone and the separation line connecting the following geographical positions:

- | | |
|-------------------------------|-------------------------------|
| (5) 34°55'.76 S; 020°45'.00 E | (6) 34°53'.45 S; 021°05'.00 E |
|-------------------------------|-------------------------------|

(c) A traffic lane for eastbound traffic is established between the traffic separation zone and the separation line connecting the following geographical positions:

- | | |
|-------------------------------|-------------------------------|
| (7) 35°12'.55 S; 020°45'.00 E | (8) 35°11'.11 S; 021°05'.00 E |
|-------------------------------|-------------------------------|

ANNEX 10

OFF CABO DE GATA, SPAIN (new scheme)

- 1 The traffic separation scheme "Off Cabo de Gata" consists of:
- two 2-mile wide traffic lanes;
 - one 1-mile wide intermediate separation zone;
 - one 0.5 mile wide outer separation zone; and
 - one associated inshore zone
- 2 The direction of traffic is as follows:
- Inner traffic lane of the TSS: entry course 232.5° (T) and exit course to the Strait of Gibraltar 257° (T)
 - Outer traffic lane of the TSS: entry course 077° (T), allowing exit on the same course or at 052.5° (T).
- 3 The external boundary of the TSS is 12 miles out, the entire TSS being contained within the territorial sea of Spain.
- 4 The chart reference is No. 46A "Cabo de Palos to Cabo de Gata", issued by the Hydrographic Institute of the Spanish Navy.
- 5 The navigational aids at present available in the area are considered sufficient to make it possible for vessels to determine their position with the degree of precision required by the International Regulations for Preventing Collisions at Sea, 1972.
- 6 When passing through the TSS, ships will observe the rules of the International Regulations for Preventing Collisions at Sea, 1972, and in particular rule 10 governing navigation through traffic separation schemes.
- 7 Breaches of these Regulations will be punished in accordance with Act No. 27/92 on State Ports and the Merchant Marine or reported to the flag State of the vessel in accordance with IMO resolution A.432(XI) on Compliance with the Convention on the International Regulations for Preventing Collisions at Sea, 1972.
- 8 Description of the traffic separation scheme "Off Cabo de Gata":
- (a) Outer separation zone bounded by a line between the following geographical positions:
- | | | | |
|-----|--------------|---|---------------|
| (1) | 36° 34'.78 N | - | 001° 57'.72 W |
| (2) | 36° 33'.09 N | - | 002° 06'.83 W |
| (3) | 36° 33'.61 N | - | 002° 06'.83 W |
| (4) | 36° 35'.22 N | - | 001° 58'.14 W |

- (b) Intermediate separation zone bounded by a line between the following geographical positions:

(5)	36° 35'.66 N	-	002° 06'.83 W
(6)	36° 36'.51 N	-	002° 02'.25 W
(7)	36° 37'.62 N	-	002° 00'.44 W
(8)	36° 38'.41 N	-	002° 01'.19 W
(9)	36° 37'.43 N	-	002° 02'.79 W
(10)	36° 36'.69 N	-	002° 06'.83 W

- (c) Associated inshore traffic zone defined by a line through the following geographical positions:

Punta Loma Pelada

(11)	36° 40'.00 N	-	002° 02'.72 W
(12)	36° 39'.28 N	-	002° 03'.88 W
(13)	36° 39'.28 N	-	002° 06'.83 W

Cabo de Gata lighthouse

- (d) An outer traffic lane eastbound between the separation zones described in (a) and (b) above.
- (e) An inner traffic lane westbound between the separation zone described in (b) and the associated inshore traffic zone described in (d).
-

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Ref. T2/2.07

COLREG.2/Circ.45
8 January 1999

AMENDED TRAFFIC SEPARATION SCHEME

- 1 The Maritime Safety Committee, at its seventieth session (7 to 11 December 1998), adopted, in accordance with the provisions of resolution A.858(20), amendments to the traffic separation scheme between the Zuluf and Marjan oilfields.
- 2 The above amended traffic separation scheme, detailed at annex, will be implemented at 0000 hours UTC on 1 July 1999.
- 3 This circular supersedes COLREG.2/Circ.43 of 10 February 1997

ANNEX

AMENDED TRAFFIC SEPARATION SCHEME

MARJAN/ZULUF (amended scheme)

(Reference Chart: British Admiralty 3774, 1991 edition

Note: This chart is based on WGS 84 Datum).

Description of the traffic separation scheme

- a) A separation zone of 0.54 nautical miles (1,000 metres) wide is centred on the following geographical positions:

(1)	28° 14'.98 N,	049° 18'.60 E
(2)	28° 16'.76 N,	049° 18'.58 E
(3)	28° 18'.41 N,	049° 19'.24 E
(4)	28° 24'.33 N,	049° 27'.80 E
(5)	28° 30'.11 N,	049° 30'.04 E
(6)	28° 32'.04 N,	049° 30'.15 E

- b) A traffic lane for southbound traffic is established between the separation zone and a line joining the following geographical positions:

(7)	28° 14'.94 N,	049° 17'.19 E
(8)	28° 17'.00 N,	049° 17'.13 E
(9)	28° 19'.28 N,	049° 18'.09 E
(10)	28° 25'.16 N,	049° 26'.60 E
(11)	28° 30'.36 N,	049° 28'.61 E
(12)	28° 32'.05 N,	049° 28'.70 E

- c) A traffic lane for northbound traffic is established between the separation zone and a line joining the following geographical positions:

(13)	28° 15'.00 N,	049° 20'.01 E
(14)	28° 16'.55 N,	049° 19'.97 E
(15)	28° 17'.69 N,	049° 20'.45 E
(16)	28° 23'.63 N,	049° 29'.06 E
(17)	28° 29'.87 N,	049° 31'.47 E
(18)	28° 32'.03 N,	049° 31'.59 E



Ref. T2/2.07

COLREG.2/Circ.48

1 June 2000

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its seventy-second session (17 to 26 May 2000), adopted, in accordance with the provisions of resolution A.858(20) new and amended existing traffic separation schemes and associated routing measures, as follows:

- .1 "In the approaches to Iquique" (amended scheme);
- .2 "In the approaches to Punta Arenas" (amended scheme);
- .3 "Landfall and approaches to Paita Bay" (new scheme);
- .4 "Approaches to Puerto Callao" (new scheme);
- .5 "Landfall and approaches to Puerto San Martin" (new scheme);
- .6 "Landfall and approaches to Puerto Ilo" (new scheme); and
- .7 "In the waters Off the Chengsan Jian Promontory" (new scheme).

2 The new and amended traffic separation schemes (listed above and detailed at annexes 1 to 7) will be implemented at 0000 hours UTC on 1 December 2000.

ANNEX 1

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES
AND ASSOCIATED ROUTEING MEASURES**

IN THE APPROACHES TO IQUIQUE (amended scheme)

(Reference chart: Chilean Hydrographic Office 104, 1988 edition.

Note: This chart is based on South American 1969 Datum)

1.1 The amended traffic separation scheme in the approaches to Iquique will consist of:

4 traffic lanes; and
3 traffic separation zones between them.

1.2 The direction of navigation will be:

traffic lanes for entry to the port:
with bearings 103°(T) and 052°(T) respectively.

traffic lanes for exit from the port
with bearings 310°(T) and 257°(T) respectively.

1.3 Description of the amended traffic separation scheme in the approaches to Iquique:

(a) Northern limit, consisting of a line connecting the following geographical positions:

- | | | |
|-----|-------------|--------------|
| (1) | 20°10'.40 S | 070°10'.80 W |
| (2) | 20°11'.10 S | 070°10'.18 W |

(b) Southern limit, consisting of a line connecting the following geographical positions:

- | | | |
|-----|-------------|--------------|
| (3) | 20°12'.60 S | 070°10'.95 W |
| (4) | 20°11'.87 S | 070°10'.17 W |

(c) Traffic separation zones, consisting of the following:

- The area within a line connecting the following geographical positions:

- | | | |
|-----|-------------|--------------|
| (5) | 20°10'.72 S | 070°11'.22 W |
| (6) | 20°11'.22 S | 070°10'.30 W |
| (7) | 20°11'.28 S | 070°10'.33 W |
| (8) | 20°10'.88 S | 070°11'.32 W |

- The area within a line connecting the following geographical positions:

- | | | |
|------|-------------|--------------|
| (9) | 20°11'.38 S | 070°11'.45 W |
| (10) | 20°11'.45 S | 070°10'.38 W |
| (11) | 20°11'.52 S | 070°10'.38 W |
| (12) | 20°11'.60 S | 070°11'.45 W |

- The area within a line connecting the following geographical positions:

- (13) 20°12'.10 S 070°11'.30 W
- (14) 20°11'.68 S 070°10'.33 W
- (15) 20°11'.73 S 070°10'.30 W
- (16) 20°12'.28 S 070°11'.18 W

- (d) Traffic lanes for entry to the port, at the following positions:

Direction east

- (17) 20°11'.25 S 070°10'.85 W

Direction north-east

- (18) 20°12'.10 S 070°10'.68 W

- (e) Traffic lanes for exit from the port, at the following positions:

Direction north-west:

- (19) 20°10'.87 S 070°10'.60 W

Direction west

- (20) 20°11'.72 S 070°10'.38 W

ANNEX 2

IN THE APPROACHES TO PUNTA ARENAS (amended scheme)

(Reference chart: Chilean Hydrographic Office 11410, (1968) edition.

Note: This chart is based on South American 1969 Datum)

2.1 The amended traffic separation scheme in the approaches to Punta Arenas will consist of:

2 traffic lanes; and
1 traffic separation zone

2.2 The direction of navigation will be:

Traffic lane for entry into the port
True bearing 296°

Traffic for exit from the port:
True bearing 129°

2.3 Description of the amended traffic separation scheme in the approaches to Punta Arenas:

(a) Northern limit, consisting of a line connecting the following geographical positions:

(1) 53°10'.25 S 070°49'.90 W
(2) 53°10'.90 S 070°46'.65 W

(b) Southern limit, consisting of a line connecting the following geographical positions:

(3) 53°11'.42 S 070°51'.07 W
(4) 53°12'.80 S 070°48'.70 W

(c) Traffic separation zones, the area within a line connecting the following geographical positions:

(5) 53°10'.65 S 070°50'.30 W
(6) 53°11'.72 S 070°47'.50 W
(7) 53°11'.02 S 070°50'.67 W
(8) 53°12'.03 S 070°47'.85 W

(d) Traffic lanes for entry to the port, at the following position:

(9) 53°11'.00 S 070°48'.30 W

(e) Traffic lanes for exit from the port, at the following position:

(10) 53°11'.80 S 070°49'.60 W

ANNEX 3

LANDFALL AND APPROACHES TO PAITA BAY (new scheme)

(Reference charts: PERU - HIDRONAV – 1133 Ed.1997, Rev.1998

PERU - HIDRONAV - 1150 Ed.1987, Rev.1997

Note: these charts are based on World Geodetic System (WGS 84) Datum)

Description of traffic separation scheme

The traffic separation scheme for the approaches to Paita Bay consists of the following:

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

- | | | | |
|-----|---------------------------|-----|---------------------------|
| (1) | 05°02'.06 S; 081°08'.95 W | (3) | 05°02'.77 S; 081°13'.14 W |
| (2) | 05°01'.80 S; 081°13'.14 W | (4) | 05°02'.52 S; 081°08'.95 W |

(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:

- | | | | |
|-----|---------------------------|-----|---------------------------|
| (5) | 05°00'.93 S; 081°08'.95 W | (6) | 04°59'.63 S; 081°13'.14 W |
|-----|---------------------------|-----|---------------------------|

(c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:

- | | | | |
|-----|---------------------------|-----|---------------------------|
| (7) | 05°04'.96 S; 081°13'.14 W | (8) | 05°03'.65 S; 081°08'.95 W |
|-----|---------------------------|-----|---------------------------|

ANNEX 4

APPROACHES TO PUERTO CALLAO (new scheme)

(Reference charts: PERU - HIDRONAV - 1396 Ed. 1984, Rev.1996

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

Description of traffic separation scheme

The traffic separation scheme for the approaches to Puerto Callao consists of three parts:

Part I**Northwest approaches**

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

- | | |
|-------------------------------|-------------------------------|
| (1) 12°01'.14 S; 077°15'.06 W | (3) 12°00'.07 S; 077°16'.57 W |
| (2) 11°59'.86 S; 077°16'.36 W | (4) 12°01'.31 S; 077°15'.31 W |

(b) A traffic lane for northwestbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|-------------------------------|------------------------------|
| (5) 12°01'.01 S; 077°14'.28 W | (6) 11°59'.26 S; 077°15'.70W |
|-------------------------------|------------------------------|

(c) A traffic lane for southeastbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|-------------------------------|-------------------------------|
| (7) 12°00'.70 S; 077°17'.21 W | (8) 12°01'.78 S; 077°15'.61 W |
|-------------------------------|-------------------------------|

Part II**Southwest approaches**

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

- | | |
|--------------------------------|--------------------------------|
| (9) 12°02'.50 S; 077°15'.56 W | (11) 12°03'.72 S; 077°16'.89 W |
| (10) 12°03'.50 S; 077°17'.08 W | (12) 12°02'.78 S; 077°15'.40 W |

(b) A traffic lane for southwestbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|--------------------------------|-------------------------------|
| (13) 12°01'.92 S; 077°15'.65 W | (14) 12°02'.80 S; 077°17'.81W |
|--------------------------------|-------------------------------|

(c) A traffic lane for northeastbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|--------------------------------|--------------------------------|
| (15) 12°04'.40 S; 077°16'.20 W | (16) 12°03'.00 S; 077°14'.87 W |
|--------------------------------|--------------------------------|

Part III

Main shipping channel

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

(17) 12°02'.62 S; 077°11'.00 W

(18) 12°02'.16 S; 077°13'.63 W

(19) 12°02'.28 S; 077°13'.65 W

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

(20) 12°02'.44 S; 077°13'.71 W

(21) 12°02'.78 S; 077°11'.00W

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

(22) 12°02'.47 S; 077°11'.00 W

(23) 12°02'.00 S; 077°13'.63 W

Precautionary area

A precautionary area of 1 mile in radius, centred on the following geographical position:

(24) 12°02'.05 S; 077°14'.64 W

Area to be avoided

There is a circular area to be avoided of 0.11 miles radius (200 metres, 1.1 cables) at the following geographical position:

(24) 12°02'.05 S; 077°14'.64 W

ANNEX 5

LANDFALL AND APPROACHES TO PUERTO SAN MARTIN (new scheme)

(Reference charts: PERU - HIDRONAV - 226 Ed. 1997
 PERU - HIDRONAV – 2171 Ed.1980 Rev.1996
 PERU - HIDRONAV - 2172 Ed.1978 Rev.1997

Note: these charts are based on World Geodetic System (WGS 84) Datum)

Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to Puerto San Martin consists of three parts:

Part I**Northern approaches**

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

- | | |
|-------------------------------|-------------------------------|
| (1) 13°41'.62 S; 076°17'.60 W | (3) 13°36'.80 S; 076°19'.20 W |
| (2) 13°36'.80 S; 076°18'.85 W | (4) 13°41'.60 S; 076°17'.90 W |

(b) A traffic lane for northbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|-------------------------------|-------------------------------|
| (5) 13°41'.65 S; 076°17'.00 W | (6) 13°36'.80 S; 076°18'.35 W |
|-------------------------------|-------------------------------|

(c) A traffic lane for southbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|-------------------------------|-------------------------------|
| (7) 13°36'.80 S; 076°19'.70 W | (8) 13°41'.58 S; 076°18'.40 W |
|-------------------------------|-------------------------------|

Part II**Western approaches**

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

- | | |
|--------------------------------|--------------------------------|
| (9) 13°42'.20 S; 076°18'.20 W | (11) 13°42'.20 S; 076°25'.00 W |
| (10) 13°41'.80 S; 076°25'.00 W | (12) 13°42'.65 S; 076°18'.10 W |

(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|-------------------------------|--------------------------------|
| (8) 13°41'.58 S; 076°18'.40 W | (13) 13°41'.10 S; 076°25'.00 W |
|-------------------------------|--------------------------------|

(c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:

- | | |
|--------------------------------|--------------------------------|
| (14) 13°42'.85 S; 076°25'.00 W | (15) 13°43'.30 S; 076°17'.90 W |
|--------------------------------|--------------------------------|

Part III
Approach to the port

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

- | | | | |
|------|---------------------------|------|---------------------------|
| (16) | 13°43'.34 S; 076°17'.05 W | (18) | 13°44'.58 S; 076°17'.10 W |
| (17) | 13°44'.60 S; 076°16'.70 W | (19) | 13°43'.32 S; 076°17'.50 W |

(b) A traffic lane for northbound traffic, between the separation zone and a line connecting the following geographical points:

- | | | | |
|------|---------------------------|------|---------------------------|
| (20) | 13°43'.36 S; 076°16'.55 W | (21) | 13°44'.62 S; 076°16'.20 W |
|------|---------------------------|------|---------------------------|

(c) A traffic lane for southbound traffic, between the separation zone and a line connecting the following geographical points:

- | | | | |
|------|---------------------------|------|---------------------------|
| (15) | 13°43'.30 S; 076°17'.90 W | (22) | 13°44'.50 S; 076°17'.60 W |
|------|---------------------------|------|---------------------------|

Precautionary area

A precautionary area bounded by a line connecting the following geographical points is established between the northern and western approaches and the approach to the port:

- | | | | |
|-----|---------------------------|------|---------------------------|
| (5) | 13°41'.65 S; 076°17'.00 W | (15) | 13°43'.30 S; 076°17'.90 W |
| (8) | 13°41'.58 S; 076°18'.40 W | (20) | 13°43'.36 S; 076°16'.55 W |

Area to be avoided

There is a circular area to be avoided of 0.2 miles radius (370 metres, 2 cables) centred on the following geographical position:

- | | |
|------|--------------------------|
| (23) | 13°42'.48 S; 076°17'.45W |
|------|--------------------------|

ANNEX 6

LANDFALL AND APPROACHES TO PUERTO ILO (new scheme)

(Reference charts: PERU - HIDRONAV – 2350 Ed.1980, Rev.1991

PERU - HIDRONAV - 3245 Ed.1995, Rev.1997

Note: these charts are based on World Geodetic System (WGS 84) Datum)

Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to Puerto Ilo consists of the following:

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

- | | | | |
|-----|---------------------------|-----|---------------------------|
| (1) | 17°38'.20 S; 071°24'.10 W | (3) | 17°39'.20 S; 071°27'.00 W |
| (2) | 17°38'.20 S; 071°27'.00 W | (4) | 17°39'.20 S; 071°24'.10 W |

(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:

- | | | | |
|-----|---------------------------|-----|---------------------------|
| (5) | 17°37'.40 S; 071°24'.10 W | (6) | 17°36'.20 S; 071°27'.00 W |
|-----|---------------------------|-----|---------------------------|

(c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:

- | | | | |
|-----|---------------------------|-----|---------------------------|
| (7) | 17°41'.35 S; 071°27'.00 W | (8) | 17°40'.00 S; 071°24'.10 W |
|-----|---------------------------|-----|---------------------------|

ANNEX 7

IN THE WATERS OFF THE CHENGSHAN JIAO PROMONTORY (new scheme)

(Reference charts: Chinese charts 9701, 9304, and 9305.

Note: These charts are based on (WGS 84) Datum)

The ships' routing system in the waters off Chengshan Jiao promontory consists of the traffic separation scheme, the inshore traffic zone and the precautionary area.

1 The traffic separation scheme

- .1 The separation zone, two nautical miles wide, is centred upon the line connecting the following geographical positions:

- | | | |
|-----|--------------|---------------|
| (1) | 37° 31'.18 N | 122° 45'.40 E |
| (2) | 37° 25'.29 N | 122° 49'.68 E |
| (3) | 37° 11'.60 N | 122° 49'.68 E |

- .2 The inner limit of the traffic separation scheme is the line connecting the following geographical positions:

- | | | |
|-----|--------------|---------------|
| (4) | 37° 29'.69 N | 122° 42'.13 E |
| (5) | 37° 24'.49 N | 122° 45'.91 E |
| (6) | 37° 11'.60 N | 122° 45'.91 E |

- .3 The outer limit of the traffic separation scheme is the line connecting the following geographical positions:

- | | | |
|-----|--------------|---------------|
| (7) | 37° 32'.69 N | 122° 48'.68 E |
| (8) | 37° 26'.09 N | 122° 53'.46 E |
| (9) | 37° 11'.60 N | 122° 53'.46 E |

- .4 The traffic lane for northbound traffic, two miles wide, is established between the separation zone and the outer limit of the traffic separation scheme. The main traffic directions are 000° (T) and 330° (T).

- .5 The traffic lane for southbound traffic, two miles wide, is established between the separation zone and the inner limit of the traffic separation scheme. The main traffic directions are 150° (T) and 180° (T).

2 The inshore traffic zone

The inshore traffic zone is the waters between the inner limit of the traffic separation scheme and the adjacent coast.

3 The precautionary area

The precautionary area is the area with the geographical position 37° 34'.65 N, 122° 42'.88 E as the centre and 5 miles as the radius.



Ref. T2/2.07

COLREG.2/Circ.49
19 January 2001

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its seventy-third session (26 November to 6 December 2000), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routing measures, as follows:

- .1 “Landfall and approaches to Talara Bay” (new scheme);
- .2 “Landfall Off Puerto Salaverry” (new scheme);
- .3 “Landfall and approaches to Ferrol Bay (Puerto Chimbotu)” (new scheme);
- .4 “Landfall and approaches to San Nicolas Bay” (new scheme);
- .5 “In the approaches to the River Humber (new scheme); and
- .6 “In Prince William Sound” (amended scheme).

2 The new and amended traffic separation schemes (listed above and detailed at annexes 1 to 7) will be implemented at 0000 hours UTC on 1 June 2001.

ANNEX

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES
AND ASSOCIATED ROUTEING MEASURES**

LANDFALL AND APPROACHES TO TALARA BAY

(Reference charts: PERU-HIDRONAV-1126,1984 edition, Rev.1998; 1150,1999 edition)

Note: these charts are based on the World Geodetic System (WGS 84) Datum)

Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to Talara Bay consists of the following:

- (a) A separation zone bounded by a line connecting the following geographical points:
- (1) 04° 33'.10S; 081° 19'.13W
 - (2) 04° 32'.90S; 081° 22'.13W
 - (3) 04° 33'.90S; 081° 22'.13W
 - (4) 04° 33'.70S; 081° 19'.13W
- (b) A traffic zone for westbound traffic, between the separation zone and a line connecting the following geographical points:
- (5) 04° 32'.40S; 081° 19'.13W
 - (6) 04° 31'.10S; 081° 22'.13W
- (c) A traffic zone for eastbound traffic, between the separation zone and a line connecting the following geographical points:
- (7) 04° 35'.70S; 081° 22'.13W
 - (8) 04° 34'.60S; 081° 19'.13W

LANDFALL OFF PUERTO SALAVERRY

(Reference charts: PERU-HIDRONAV-1270, 1988 edition, Rev.1998; 2111, 1987 edition, Rev.1994)

Note: these charts are based on the World Geodetic System (WGS 84) Datum.)

Description of traffic separation scheme

The traffic separation scheme for the landfall off Puerto Salaverry consists of the following:

- (a) A separation zone bounded by a line connecting the following geographical points:
 - (1) 08° 12'.65S; 079° 02'.23W
 - (2) 08° 12'.65S; 079° 04'.63W
 - (3) 08° 13'.30S; 079° 04'.63W
 - (4) 08° 13'.30S; 079° 02'.23W

- (b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:
 - (5) 08° 11'.96S; 079° 02'.23W
 - (6) 08° 11'.10S; 079° 04'.63W

- (c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:
 - (7) 08° 14'.80S; 079° 04'.63W
 - (8) 08° 14'.00S; 079° 02'.23W

LANDFALL AND APPROACHES TO FERROL BAY (PUERTO CHIMBOTE)

(Reference charts: PERU-HIDRONAV-1310, 1993 edition, Rev.1997; 2123, 1980 edition, Rev.1998
Note: these charts are based on the World Geodetic System (WGS 84) Datum.)

Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to Ferrol Bay (Puerto Chimbote) consists of the following:

- (a) A separation zone bounded by a line connecting the following geographical points:
 - (1) 09° 07'.20S; 078° 37'.83W
 - (2) 09° 07'.20S; 078° 40'.33W
 - (3) 09° 07'.80S; 078° 40'.33W
 - (4) 09° 07'.80S; 078° 37'.83W

- (b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:
 - (5) 09° 06'.70S; 078° 37'.83W
 - (6) 09° 05'.80S; 078° 40'.33W

- (c) A traffic lane for eastbound traffic, between the separation zone and a line connecting the following geographical points:

(7) 09° 09'.40S; 078° 40'.33W

(8) 09° 08'.40S; 078° 37'.83W

LANDFALL AND APPROACHES TO SAN NICOLAS BAY

(Reference charts: PERU-HIDRONAV-312, 1999 edition; 3122, 1999 edition

Note: these charts are based on the World Geodetic System (WGS 84) Datum.)

Description of traffic separation scheme

The traffic separation scheme for the landfall and approaches to San Nicolas Bay consists of the following:

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

(1) 15° 13'.10S; 075° 16'.13W

(2) 15° 13'.10S; 075° 18'.77W

(3) 15° 13'.85S; 075° 18'.77W

(4) 15° 13'.85S; 075° 16'.13W

- (b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:

(5) 15° 12'.54S; 075° 16'.13W

(6) 15° 11'.70S; 075° 18'.77W

- (c) A traffic zone for eastbound traffic, between the separation zone and a line between the following geographical points:

(7) 15° 15'.40S; 075° 18'.77W

(8) 15° 14'.45S; 075° 16'.13W

RIVER HUMBER ENTRANCE

(Reference charts: British Admiralty 1188, 1999 edition; 109, 1998 edition; 107, 1996 edition; 1190, 1997 edition.

Note: These charts are based on Ordnance Survey of Great Britain (1936) Datum.)

Description of the traffic separation scheme

Part I:

Entrance to River Humber within Port Area

(a) A precautionary area established by a line connecting the following geographical positions:

- (1) 53° 34'.20N, 000° 06'.42E
- (2) 53° 33'.52N, 000° 05'.80E
- (3) 53° 33'.12N, 000° 06'.90E (Hobo)
- (4) 53° 33'.90N, 000° 07'.53E (No.3A Binks)
- (1) 53° 34'.20N, 000° 06'.42E

(b) A separation line connecting the following geographical positions:

- (5) 53° 33'.52N, 000° 07'.23E (Delta)
- (6) 53° 32'.71N, 000° 09'.75E (Charlie)

(c) A traffic lane for inbound traffic established between the separation line specified in paragraph (b) above and straight line connecting the following geographical positions:

- (4) 53° 33'.90N, 000° 07'.53E (No.3A Binks)
- (7) 53° 33'.14N, 000° 10'.37E

(d) A traffic lane for outbound traffic established between the separation line specified in paragraph (b) above and straight line connecting the following geographical positions:

- (3) 53° 33'.12N, 000° 06'.90E (Hobo)
- (8) 53° 32'.32N, 000° 09'.21E (No.2B)

(e) A precautionary area established by a line connecting the following geographical positions:

- (7) 53° 33'.14N, 000° 10'.37E
- (8) 53° 32'.32N, 000° 09'.21E (No.2B)
- (9) 53° 32'.36N, 000° 11'.22E
- (10) 53° 33'.14N, 000° 11'.27E
- (11) 53° 33'.05N, 000° 10'.73E (No.3 Chequer)
- (7) 53° 33'.14N, 000° 10'.37E

(f) A traffic separation line connecting the following geographical positions:

- (12) 53° 32'.65N, 000° 11'.25E (Bravo)
- (13) 53° 32'.80N, 000° 13'.30E (Alpha)

- (g) A traffic lane for inbound traffic established between the separation line specified in paragraph (f) above and straight line connecting the following geographical positions:

(10) 53° 33'.14N, 000° 11'.27E
(14) 53° 33'.50N, 000° 13'.90E

- (h) A traffic lane for outbound traffic established between the separation line specified in paragraph (f) above and straight line connecting the following geographical positions:

(9) 53° 32'.36N, 000° 11'.22E
(15) 53° 32'.39N, 000° 12'.90E

Part II:

River Humber Approaches

- (i) A precautionary area established by a line connecting the following geographical positions:

(15) 53° 32'.39N, 000° 12'.90E
(16) 53° 32'.40N 000° 13'.28E (No.2 Haile Sand)
(17) 53° 30'.57N, 000° 16'.72E
(18) 53° 31'.88N, 000° 18'.40E (Hotspur)
(19) 53° 33'.55N, 000° 18'.40E
(20) 53° 34'.20N, 000° 17'.70E (South Haile)
(21) 53° 34'.72N, 000° 16'.65E (South Binks)
(22) 53° 33'.54N, 000° 14'.30E (Spurn Light Float)
(14) 53° 33'.50N, 000° 13'.90E
(15) 53° 32'.39N, 000° 12'.90E

Eastern Approaches (Sea Reach)

- (j) A separation line connecting the following geographical positions:

(23) 53° 32'.70N 000° 18'.40E (Inner Sea Reach)
(24) 53° 32'.70N 000° 23'.06E (Outer Sea Reach)

- (k) A traffic lane for inbound traffic established between the separation line specified in (j) above and a straight line connecting the following geographical positions:

(19) 53° 33'.55N, 000° 18'.40E
(25) 53° 33'.55N, 000° 23'.06E

- (l) A traffic lane for outbound traffic established between the separation line specified in paragraph (j) above and straight line connecting the following geographical positions:

(18) 53° 31'.88N, 000° 18'.40E (Hotspur)
(26) 53° 31'.88N, 000° 23'.06E

Southeast Approaches (Rosse Reach)

(m) A separation line connecting the following geographical positions:

- (27) 53° 31'.22N 000° 17'.55E (Inner Rosse Reach)
- (28) 53° 29'.87N 000° 20'.90E (Outer Rosse Reach)

(n) A traffic lane for inbound traffic established between the separation line specified in paragraph (m) above and a straight line connecting the following geographical positions:

- (18) 53° 31'.88N, 000° 18'.40E (Hotspur)
- (29) 53° 30'.54N, 000° 21'.68E

(o) A traffic lane for outbound traffic established between the separation line specified in paragraph (m) above and straight line connecting the following geographical positions:

- (17) 53° 30'.57N, 000° 16'.72E
- (30) 53° 29'.17N, 000° 20'.08E

Northeast Approaches (New Sand Hole)

(p) A separation line connecting the following geographical positions:

- (31) 53° 34'.46N 000° 17'.17E
- (32) 53° 36'.97N 000° 20'.75E

(q) A traffic lane for inbound traffic established between the separation line specified in paragraph (p) above, and a straight line connecting the following geographical positions:

- (21) 53° 34'.72N 000° 16'.65E (South Binks)
- (33) 53° 37'.25N 000° 20'.20E (Outer Binks)

(r) A traffic lane for outbound traffic established between the separation line specified in paragraph (p) above, and a straight line connecting the following geographical positions:

- (20) 53° 34'.20N 000° 17'.70E (South Haile)
- (34) 53° 36'.70N 000° 21'.30E (Middle New Sand)

AMENDMENTS TO THE TRAFFIC SEPARATION SCHEME IN PRINCE WILLIAM SOUND

(Reference Chart: United States 16700, 26th Edition – 19 September 1998

Note: This chart is based on North American 1983 Geodetic Datum.)

Description of the Traffic Separation Scheme

The traffic separation scheme “In Prince William Sound” consists of two parts:

Part I:

Prince William Sound

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

- | | |
|-----------------|--------------|
| (1) 60° 20'.77N | 146° 52'.31W |
| (2) 60° 48'.12N | 147° 01'.78W |
| (3) 60° 48'.29N | 146° 59'.77W |
| (4) 60° 20'.93N | 146° 50'.32W |

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | |
|-----------------|--------------|
| (5) 60° 20'.59N | 146° 48'.18W |
| (6) 60° 49'.39N | 146° 58'.19W |

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | |
|-----------------|--------------|
| (7) 60° 49'.10N | 147° 04'.19W |
| (8) 60° 20'.60N | 146° 54'.31W |

Part II:

Valdez Arm

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

- | | |
|------------------|--------------|
| (9) 60° 51'.08N | 147° 00'.33W |
| (10) 60° 58'.60N | 146° 48'.10W |
| (11) 60° 58'.30N | 146° 47'.10W |
| (12) 60° 50'.45N | 146° 58'.75W |

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | |
|------------------|--------------|
| (6) 60° 49'.39N | 146° 58'.19W |
| (13) 60° 58'.01N | 146° 46'.52W |

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | |
|------------------|--------------|
| (14) 60° 58'.93N | 146° 48'.86W |
| (15) 60° 50'.61N | 147° 03'.60W |

Precautionary areas

Cape Hinchinbrook: A precautionary area is established, bounded by a line connecting the following geographical positions:

- | | |
|------------------|--------------|
| (5) 60° 20'.59N | 146° 48'.18W |
| (16) 60° 12'.67N | 146° 40'.43W |
| (17) 60° 11'.02N | 146° 28'.65W |
| (18) 60° 05'.47N | 146° 00'.01W |
| (19) 60° 00'.81N | 146° 03'.53W |
| (20) 60° 05'.44N | 146° 27'.58W |
| (21) 59° 51'.80N | 146° 37'.51W |
| (22) 59° 53'.52N | 146° 46'.84W |
| (23) 60° 07'.76N | 146° 36'.24W |
| (24) 60° 11'.51N | 146° 46'.64W |
| (8) 60° 20'.60N | 146° 54'.31W |

Bligh Reef: A precautionary area of radius 1'.5 miles is centred upon geographical position:

- | | |
|-------------|--------------|
| 60° 49'.63N | 147° 01'.33W |
|-------------|--------------|

Note:

A pilot boarding area is located near the centre of the Bligh Reef precautionary area. Due to heavy vessel traffic, mariners are advised not to anchor or linger in this precautionary area except to pick up or disembark a pilot.



Ref. T2/2.07

COLREG.2/Circ.51
31 May 2002

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its seventy-fifth session (15 to 24 May 2002), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routing measures, listed at annexes 1 to 8, as follows:

- .1 "Off the Mediterranean coast of Egypt" (new scheme);
- .2 "South of Gedser" (amended scheme);
- .3 "Off Ushant" (amended scheme);
- .4 "Approaches to Los Angeles - Long Beach" (amended scheme);
- .5 "Strait of Juan De Fuca and its approaches" (amended scheme);
- .6 "In Puget Sound and its approaches" (amended scheme);
- .7 "In Haro Strait, Boundary Pass and in the Strait of Georgia" (amended scheme); and
- .8 "East part of the Gulf of Finland" (amended scheme).

Implementation dates

2(a) The amended ships' routing system in the East part of the Gulf of Finland (annex 8) was implemented by the Russian Federation on 1 November 2001, as an interim measure.

2(b) The amended TSS "South of Gedser" (annex 2) was implemented by Denmark and Germany on 6 January 2002 (SN/Circ.218 of 18 July 2001).

2(c) The new and amended traffic separation schemes (listed in sub-paragraphs 1.1, 1.4, 1.5, 1.6 and 1.7 above and detailed at annexes 1, 4, 5, 6 and 7) will be implemented at 0000 hours UTC on 1 December 2002.

2(d) The amended TSS "Off Ushant" (annex 3) will be implemented by France at 0000 hours UTC on 1 May 2003.

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND
ASSOCIATED ROUTEING MEASURES**

ANNEX 1

OFF THE MEDITERRANEAN COAST OF EGYPT

(Reference charts: British Admiralty chart No. 2573, 2574 and 2578

Note: All positions are in degrees, minutes and decimals of a minute and are referred to World Geodetic System 1984 Datum (WGS 84).

Description of the new traffic separation schemes:

Western Approach to Mina Dumyat (143° - 323°)

(a) A separation line connects the following geographical positions:

- (1) 31°38'.60N, 31°47'.15E
- (2) 31°45'.10N, 31°41'.50E

(b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographical positions:

- (3) 31°39'.00N, 31°47'.80E
- (4) 31°45'.10N, 31°42'.40E

(c) A traffic lane for southbound traffic is established between the separation line and a separation line connecting the following geographical positions:

- (5) 31°37'.75N, 31°47'.00E
- (6) 31°45'.10N, 31°40'.50E

Precautionary area

(d) A precautionary area north Dumyat is established by a line connecting the following geographical positions:

- 31°37'.75N, 31°47'.00E
- 31°38'.60N, 31°47'.15E
- 31°39'.00N, 31°47'.80E
- 31°38'.45N, 31°48'.25E
- 31°37'.50N, 31°48'.00E

Eastern Approaches to Mina Dumyat (055°-235°)

- (a) A separation line connects the following geographical positions:
- (7) 31°38'.45N, 31°48'.25E
 - (8) 31°44'.05N, 31°57'.55E
- (b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographical positions:
- (9) 31°37'.50N, 31°48'.00E
 - (10) 31°43'.55N, 31°58'.10E
- (c) A traffic lane for southbound traffic is established between the separation line and a separation line connecting the following geographical positions:
- (11) 31°39'.00N, 31°47'.80E
 - (12) 31°44'.50N, 31°57'.00E

Western Approaches to Bur Said (135° - 315°)

- (a) A separation zone half mile wide as the following geographical positions:
- (13) 31°44'.25N, 31°59'.30E
 - (14) 31°44'.00N, 31°58'.85E
 - (15) 31°31'.85N, 32°12'.95E
 - (16) 31°32'.20N, 32°13'.40E
- (b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographical positions (one mile wide):
- (17) 31°32'.70N, 32°14'.00E
 - (18) 31°44'.70N, 32°00'.05E
- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions (one mile wide):
- (19) 31°31'.30N, 32°12'.35E
 - (20) 31°43'.55N, 31°58'.10E

Eastern Approach to Bur Said (059°-239°)

- (a) A separation zone half mile wide as the following geographical positions:
- (21) 31°35'.45N, 32°22'.95E
 - (22) 31°35'.85N, 32°22'.65E
 - (23) 31°42'.55N, 32°35'.65E
 - (24) 31°42'.15N, 32°35'.95E

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions (one mile wide):

(25) 31°34'.80N, 32°23'.40E

(26) 31°46'.00N, 32°45'.30E

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions (one mile wide):

(27) 31°46'.00N, 32°35'.20E

(28) 31°43'.20N, 32°35'.20E

(29) 31°35'.80N, 32°20'.80E

Precautionary area

(d) A precautionary area north west Bur Said established by a line connecting the following geographical positions:

31°45'.40N, 31°55'.95E

31°43'.55N, 31°58'.10E

31°44'.70N, 32°00'.05E

31°45'.40N, 31°59'.52E

ANNEX 2

EXTENSION OF THE DEEP WATER ROUTE DW 17M INTO THE TRAFFIC SEPARATION SCHEME SOUTH OF GEDSER**AMENDED DEEP-WATER ROUTE NORTH-EAST OF GEDSER**

(Reference chart: German 163, INT 1351, 2001 edition.)

Note: This chart is based on WGS 84

Description of the deep-water route

A deep-water route with a minimum depth of water below mean sea level of 17 metres is bounded by a line connecting the following geographical positions:

Existing No.	New No.	Geographical positions in WGS 84		
	(1)	54°27'.10N,	012°10'.50E	added
	(2)	54°27'.73N,	012°11'.30E	added
(1)	(3)	54°31'.30N,	012°12'.80E	amended
(2)	(4)	54°36'.46N,	012°15'.83E	
(3)	(5)	54°46'.86N,	012°43'.23E	
(4)	(6)	54°46'.06N,	012°44'.03E	
(5)	(7)	54°35'.36N,	012°16'.93E	
(6)	(8)	54°31'.00N,	012°15'.20E	amended
	(9)	54°27'.40N,	012°13'.10E	added
	(10)	54°26'.57N,	012°11'.90E	added

Note:

Ships, other than ships which, because of their draught, must use the deep-water route, are recommended to use the area outside the deep-water route, in such manner that eastbound ships proceed on the east and south side of the deep-water route and westbound ships on the north and west side.

ANNEX 3

Description of the amended Ushant traffic separation scheme:

(Reference chart: 6989)

Note: All positions are in degrees, minutes and decimals of a minute and are referred to World Geodetic System 1984 Datum (WGS 84).

1 The Ushant traffic separation scheme consists of:

Two traffic lanes;

A two way traffic route;

An Inshore traffic zone;

An outer separation zone;

A separation zone between the traffic lanes;

A separation zone between the northeast bound lane and the two way route;

A separation zone between the two-way traffic route and the inshore traffic zone.

2 The direction of navigation will be as follows:

- Northeast bound traffic, course on ground: 028° as far as the line of the turning point at 315° from the Créac'h light, then: 060° as far as the north-east boundary of the scheme.
- Southwestbound traffic, course on ground: 240° as far as the line of the turning point at 315° from the Créac'h light, then: 208° as far as the south-west boundary of the scheme.

Description of the amended traffic separation scheme:

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

	Latitude	Longitude
Point 1	48°57'.00 N	005°32'.50 W
Point 2	48°52'.75 N	005°28'.60 W
Point 3	48°48'.60 N	005°39'.60 W
Point 4	48°37'.40 N	005°48'.60 W
Point 5	48°39'.70 N	005°55'.20 W
Point 6	48°52'.05 N	005°45'.00 W

(b) A traffic lane for ships leaving the English Channel between the above separation zone and the following geographical positions:

	Latitude	Longitude
Point 7	48°42'.00 N	006°01'.60 W
Point 8	48°55'.60 N	005°50'.60 W
Point 9	49°01'.10 N	005°36'.05 W

- (c) A traffic lane for ships entering the English Channel between that separation zone and the following geographical positions:

	Latitude	Longitude
Point 10	48°35'.10 N	005°42'.30 W
Point 11	48°45'.00 N	005°34'.30 W
Point 12	48°48'.60 N	005°25'.10 W

- (d) An outer separation zone, seaward of the Ouessant traffic separation scheme, bounded by a line connecting points 7, 8, 9 and the following geographical positions:

	Latitude	Longitude
Point 17	48°42'.60 N	006°02'.80 W
Point 18	48°56'.40 N	005°51'.60 W
Point 19	49°02'.00 N	005°36'.80 W

- (e) A separation zone bounded by a line connecting points 10, 11, 12 and the following geographical positions:

	Latitude	Longitude
Point 13	48°39'.70 N	005°14'.70 W
Point 14	48°30'.60 N	005°26'.30 W

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

	Latitude	Longitude
Point 15	48°29'.80 N	005°23'.50 W
Point 16	48°38'.00 N	005°12'.90 W
Point 20	48°37'.20 N	005°11'.90 W
Point 21	48°29'.39 N	005°22'.05 W

- (g) An inshore traffic zone bounded by a line connecting points 20, 21, and the following geographical positions:

	Latitude	Longitude
Men Korn Light	48°28'.00 N	005°01'.40 W
Jument Light	48°25'.35 N	005°08'.00 W

- (h) A two-way traffic route 2 miles wide established between the separation zones described in paragraphs (e) and (f), for passenger ships operating regular schedules to or from a Channel port situated west of meridian 1°W, and for ships sailing between ports situated between Cape de la Hague and Cape Finisterre, except for ships carrying oils listed in appendix 1 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 listed in appendices I and II of Annex II of that Convention.”

3 Special provision

Northeastbound traffic lane in 2(c)

Ships carrying oils listed in appendix 1 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 listed in appendices I and II of Annex II of that Convention must, as far as possible, sail in the outer part of this lane.

ANNEX 4

IN THE APPROACHES TO LOS ANGELES – LONG BEACH

(Reference Chart: United States 18746, 2000 edition.

Note: This chart is based on North American 1983 Datum.)

Description of the amended traffic separation scheme

The traffic separation scheme “In the Approaches to Los Angeles – Long Beach” consists of three parts:

Western approach

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

(1)	33°37'.70N	118°17'.60W
(2)	33°36'.50N	118°17'.60W
(3)	33°36'.50N	118°23'.10W
(4)	33°43'.20N	118°36'.90W
(5)	33°44'.90N	118°35'.70W
(6)	33°37'.70N	118°20'.90W

(b) A traffic lane for northbound coastwise traffic is established between the separation zone and a line connecting the following geographical positions:

(7)	33°38'.70N	118°17'.60W
(8)	33°38'.70N	118°20'.60W
(9)	33°45'.80N	118°35'.10W

(c) A traffic lane for southbound coastwise traffic is established between the separation zone and a line connecting the following geographical positions:

(10)	33°35'.50N	118°17'.60W
(11)	33°35'.50N	118°23'.43W
(12)	33°42'.30N	118°37'.50W

Southern approach

(a) A separation zone is established bounded by a line connecting the following geographic position:

(13)	33°35'.50N	118°10'.30W
(14)	33°35'.50N	118°12'.75W
(15)	33°19'.00N	118°05'.60W
(16)	33°19'.70N	118°03'.50W

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

- (17) 33°35'.50N 118°09'.00W
- (18) 33°20'.00N 118°02'.30W

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

- (19) 33°35'.50N 118°14'.00W
- (20) 33°18'.70N 118°06'.75W

Precautionary area

(a) The precautionary area consists of the water area enclosed by the Los Angeles - Long Beach breakwater and a line connecting Point Fermin Light at 33°42'.30N, 118°17'.60W, with the following geographical positions:

- (10) 33°35'.50N 118°17'.60W
- (17) 33°35'.50N 118°09'.00W
- (21) 33°37'.70N 118°06'.50W
- (22) 33°43'.40N 118°10'.80W

Note: Pilot boarding areas are located in the precautionary area. Due to heavy vessel traffic, mariners are advised not to anchor or linger in this precautionary area except to pick up or disembark a pilot.

ANNEX 5

IN THE STRAIT OF JUAN DE FUCA AND ITS APPROACHES

(Reference charts: United States 18400, 2000 edition; 18421, 2000 edition; 18440, 2000 edition; 18460, 1998 edition; 18465, 1995 edition; 18480, 1999 edition; 18485, 1998 edition; Canadian Hydrographic Service 3440, 1998 edition. *Note:* These charts are based on North American 1983 Datum.)

Description of the amended traffic separation scheme*Part I*

In the approaches to the Strait of Juan de Fuca there are two traffic separation schemes and a precautionary area:

Western approach

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

(1) 48°30'.10N	125°09'.00W
(2) 48°30'.10N	125°04'.67W
(3) 48°29'.11N	125°04'.67W
(4) 48°29'.11N	125°09'.00W

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

(5) 48°31'.09N	125°04'.67W
(6) 48°31'.93N	125°09'.00W

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

(7) 48°27'.31N	125°09'.00W
(8) 48°28'.13N	125°04'.67W

South-western approach

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

(10) 48°23'.99N	125°06'.54W
(11) 48°27'.63N	125°03'.38W
(12) 48°27'.14N	125°02'.08W
(13) 48°23'.50N	125°05'.26W

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

(14) 48°22'.55N	125°02'.80W
(15) 48°26'.64N	125°00'.81W

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

(8) 48°28'.13N	125°04'.67W
(9) 48°24'.94N	125°09'.00W

Precautionary area

A precautionary area "JF", is bounded by a line connecting the following geographical positions:

(5) 48°31'.09N	125°04'.67W
(2) 48°30'.10N	125°04'.67W
(3) 48°29'.11N	125°04'.67W
(8) 48°28'.13N	125°04'.67W
(11) 48°27'.63N	125°03'.38W
(12) 48°27'.14N	125°02'.08W
(15) 48°26'.64N	125°00'.81W
(16) 48°28'.13N	124°57'.90W
(18) 48°29'.11N	125°00'.00W
(25) 48°30'.10N	125°00'.00W
(17) 48°31'.09N	125°00'.00W

thence back to the point of origin at (5).

Part II

In the Strait of Juan de Fuca there are four separation schemes and a precautionary area:

Western lanes

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

(18) 48°29'.11N	125°00'.00W
(19) 48°29'.11N	124°43'.78W
(20) 48°13'.89N	123°54'.84W
(21) 48°13'.89N	123°31'.98W
(22) 48°14'.49N	123°31'.98W
(23) 48°17'.02N	123°56'.46W
(24) 48°30'.10N	124°43'.50W
(25) 48°30'.10N	125°00'.00W

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(26) 48°16'.45N	123°30'.42W
(27) 48°15'.97N	123°33'.54W
(28) 48°18'.00N	123°56'.07W
(29) 48°32'.00N	124°46'.57W
(30) 48°31'.09N	124°47'.13W
(17) 48°31'.09N	125°00'.00W

Traffic may exit the lane between points (29) and (30) or may remain in the lane between points (30) and (17) en route to the precautionary area.

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(16) 48°28'.13N	124°57'.90W
(31) 48°28'.13N	124°44'.07W
(32) 48°12'.90N	123°55'.24W
(33) 48°12'.94N	123°32'.89W

Southern lanes

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

(34) 48°10'.82N	123°25'.44W
(35) 48°12'.38N	123°28'.68W
(36) 48°12'.90N	123°28'.68W
(37) 48°12'.84N	123°27'.46W
(38) 48°10'.99N	123°24'.84W

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

(39) 48°11'.24N	123°23'.82W
(40) 48°12'.72N	123°25'.34W

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

(33) 48°12'.94N	123°32'.89W
(41) 48°09'.42N	123°24'.24W

Northern lanes

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

(42) 48°21'.15N	123°24'.83W
(43) 48°16'.16N	123°28'.50W
(44) 48°15'.77N	123°27'.18W
(45) 48°20'.93N	123°24'.26W

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

(46) 48°21'.83N	123°25'.56W
(26) 48°16'.45N	123°30'.42W

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

(47) 48°20'.93N	123°23'.22W
(48) 48°15'.13N	123°25'.62W

Eastern lanes

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

(49) 48°13'.22N	123°15'.91W
(50) 48°14'.03N	123°25'.98W
(51) 48°13'.54N	123°25'.86W
(52) 48°12'.89N	123°16'.69W

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

(54) 48°14'.27N	123°13'.41W
(55) 48°14'.05N	123°16'.08W
(48) 48°15'.13N	123°25'.62W

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

(40) 48°12'.72N	123°25'.34W
(53) 48°12'.34N	123°18'.01W

Precautionary area

A precautionary area "PA", is bounded by a line connecting the following geographical positions:

(33) 48°12'.94N	123°32'.89W
(21) 48°13'.89N	123°31'.98W
(22) 48°14'.49N	123°31'.98W
(26) 48°16'.45N	123°30'.42W
(43) 48°16'.16N	123°28'.50W
(44) 48°15'.77N	123°27'.18W
(48) 48°15'.13N	123°25'.62W
(50) 48°14'.03N	123°25'.98W
(51) 48°13'.54N	123°25'.86W
(40) 48°12'.72N	123°25'.34W
(37) 48°12'.84N	123°27'.46W
(36) 48°12'.90N	123°28'.68W

thence back to point of origin at (33).

ANNEX 6

IN PUGET SOUND AND ITS APPROACHES

(Reference charts: United States 18421, 2000 edition; 18429, 1999 edition; 18430, 1996 edition; 18440, 2000 edition. *Note:* These charts are based on North American 1983 Datum.)

Description of the traffic separation scheme

The traffic separation scheme “In Puget Sound and its approaches” consists of a series of traffic separation schemes and precautionary areas broken into three geographic designations as follows:

- Part I: Rosario Strait
- Part II: Approaches to Puget Sound
- Part III: Puget Sound

*Part I***Rosario Strait**

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

(1) 48°48'.98N	122°55'.20W
(2) 48°46'.76N	122°50'.43W
(3) 48°45'.56N	122°48'.36W
(4) 48°45'.97N	122°48'.12W
(5) 48°46'.39N	122°50'.76W
(6) 48°48'.73N	122°55'.68W

- (b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(7) 48°49'.49N	122°54'.24W
(8) 48°47'.14N	122°50'.10W
(9) 48°46'.35N	122°47'.50W

- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(10) 48°44'.95N	122°48'.28W
(11) 48°46'.76N	122°53'.10W
(12) 48°47'.93N	122°57'.12W

- (d) Connecting with precautionary “CA”, the waters contained within a circle of radius 1.24 miles centered at geographical position 48°45'.30N, 122°46'.50W.

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

(13) 48°44'.27N	122°45'.53W
(14) 48°41'.72N	122°43'.50W
(15) 48°41'.60N	122°43'.82W
(16) 48°44'.17N	122°45'.87W

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

(17) 48°44'.62N	122°44'.96W
(18) 48°41'.80N	122°42'.70W

(g) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(19) 48°44'.08N	122°46'.65W
(20) 48°41'.25N	122°44'.37W

(h) Connecting with precautionary "C", the waters contained within a circle of radius 1.24 miles centered at geographical position 48°40'.55N, 122°42'.80W.

(i) A two-way route is established between the following geographical positions:

(21) 48°39'.33N	122°42'.73W
(22) 48°36'.08N	122°45'.00W
(23) 48°26'.82N	122°43'.53W
(24) 48°27'.62N	122°45'.53W
(25) 48°29'.48N	122°44'.77W
(26) 48°36'.13N	122°45'.80W
(27) 48°38'.38N	122°44'.20W
(28) 48°39'.63N	122°44'.03W

(j) Connecting with precautionary area "RB", bounded to the north by the arc of a circle of radius 1.24 miles centred on geographical position 48°26'.38N, 122°45'.27W and connecting the following geographical positions:

(42) 48°25'.97N	122°47'.03W
(83) 48°25'.55N	122°43'.93W

and bounded to the south by a line connecting the following geographical positions:

(42) 48°25'.97N	122°47'.03W
(43) 48°24'.62N	122°48'.68W
(38) 48°23'.75N	122°47'.47W
(37) 48°25'.20N	122°45'.73W
(86) 48°25'.17N	122°45'.62W
(87) 48°24'.15N	122°45'.27W
(84) 48°24'.08N	122°43'.38W
(83) 48°25'.55N	122°43'.93W

Part II

Approaches to Puget Sound

The traffic separation scheme in the approaches to Puget Sound consists of a north-east/south-west approach, a north-west/south-east approach, a north/south approach and an east/west approach connecting with precautionary areas as follows:

North-east/south-west approach

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

(29) 48°24'.13N	122°47'.97W
(30) 48°20'.32N	122°57'.02W
(31) 48°20'.53N	122°57'.22W
(32) 48°24'.32N	122°48'.22W

connecting with precautionary area “RA”, the waters contained within a circle of radius 1.24 miles centered at 48°19'.77N, 122°58'.57W, and thence to:

(33) 48°16'.25N	123°06'.58W
(34) 48°16'.57N	123°06'.58W
(35) 48°19'.20N	123°00'.35W
(36) 48°19'.00N	123°00'.17W

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

(38) 48°23'.75N	122°47'.47W
(39) 48°19'.80N	122°56'.83W

connecting with precautionary area “RA”, and thence to:

(40) 48°15'.70N	123°06'.58W
(41) 48°18'.67N	122°59'.57W

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

(43) 48°24'.62N	122°48'.68W
(44) 48°20'.85N	122°57'.80W

connecting with precautionary area “RA”, and thence to:

(45) 48°19'.70N	123°00'.53W
(46) 48°17'.15N	123°06'.57W

(d) Connecting with precautionary area “ND”, which is bounded by a line connecting the following positions:

(47) 48°11'.00N	123°06'.58W
(46) 48°17'.15N	123°06'.57W
(48) 48°14'.27N	123°13'.41W
(49) 48°12'.34N	123°18'.01W
(50) 48°12'.72N	123°25'.34W
(51) 48°11'.24N	123°23'.82W
(52) 48°10'.82N	123°25'.44W
(53) 48°09'.42N	123°24'.24W
(54) 48°08'.39N	123°24'.24W

thence along the shoreline to the point of beginning (47).

North-west/south-east approach

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

(55) 48°27'.79N	123°07'.80W
(56) 48°25'.43N	123°03'.88W
(57) 48°22'.88N	123°00'.82W
(58) 48°20'.93N	122°59'.30W
(59) 48°20'.82N	122°59'.62W
(60) 48°22'.72N	123°01'.12W
(61) 48°25'.32N	123°04'.30W
(62) 48°27'.58N	123°08'.10W

connecting with precautionary area “RA”, and thence to:

(63) 48°18'.83N	122°57'.48W
(64) 48°13'.15N	122°51'.33W
(65) 48°13'.00N	122°51'.62W
(66) 48°18'.70N	122°57'.77W

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

(67) 48°28'.15N	123°07'.31W
(68) 48°25'.60N	123°03'.13W
(69) 48°23'.20N	123°00'.20W
(70) 48°21'.00N	122°58'.50W

connecting with precautionary area “RA”, and thence to:

(71) 48°19'.20N	122°57'.03W
(72) 48°13'.35N	122°50'.63W

(g) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(73) 48°27'.43N	123°08'.94W
(74) 48°25'.17N	123°04'.98W
(75) 48°22'.48N	123°01'.73W
(76) 48°20'.47N	123°00'.20W

connecting with precautionary area “RA”, and thence to:

(77) 48°18'.52N	122°58'.50W
(78) 48°12'.63N	122°52'.15W

(h) Connecting with precautionary area “SA”, the waters contained within a circle of radius 2 miles centered at geographical position 48°11'.45N, 122°49'.78W.

North/south approach (between precautionary areas “RB” and “SA”)

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

(79) 48°24'.15N	122°44'.08W
(80) 48°13'.33N	122°48'.78W
(81) 48°13'.38N	122°49'.15W
(82) 48°24'.17N	122°44'.48W

(j) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(84) 48°24'.08N	122°43'.38W
(85) 48°13'.10N	122°48'.12W

(k) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(87) 48°24'.15N	122°45'.27W
(88) 48°13'.43N	122°49'.90W

East/west approach (between precautionary areas “ND” and “SA”)

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

(89) 48°11'.50N	122°52'.73W
(90) 48°11'.73N	122°52'.70W
(91) 48°12'.48N	123°06'.58W
(92) 48°12'.23N	123°06'.58W

(m) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(93) 48°12'.22N	122°52'.52W
(94) 48°12'.98N	123°06'.58W

(n) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(95) 48°11'.73N	123°06'.58W
(96) 48°10'.98N	122°52'.65W

Part III

Puget Sound

The traffic separation scheme in Puget Sound consists of a series of traffic lanes with separation zones connecting with precautionary areas.

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

(97) 48°11'.08N	122°46'.88W
(98) 48°06'.85N	122°39'.52W
(99) 48°02'.48N	122°38'.17W
(100) 48°02'.43N	122°38'.52W
(101) 48°06'.72N	122°39'.83W
(102) 48°10'.82N	122°46'.98W

connecting with precautionary area “SC”, the waters contained within a circle of radius 0.62 miles centered at 48°01'.85N, 122°38'.15W, and thence to:

(103) 48°01'.40N	122°37'.57W
(104) 47°57'.95N	122°34'.67W
(105) 47°55'.85N	122°30'.22W
(106) 47°55'.67N	122°30'.40W
(107) 47°57'.78N	122°34'.92W
(108) 48°01'.28N	122°37'.87W

connecting with precautionary area “SE”, the waters contained within a circle of radius 0.62 miles centered at 47°55'.40N, 122°29'.55W, and thence to:

(109) 47°54'.85N	122°29'.18W
(110) 47°46'.52N	122°26'.30W
(111) 47°46'.47N	122°26'.62W
(112) 47°54'.80N	122°29'.53W

connecting with precautionary area “SF”, the waters contained within a circle of radius 0.62 miles centered at 47°45'.90N, 122°26'.25W, and thence to:

(113) 47°45'.20N	122°26'.25W
(114) 47°40'.27N	122°27'.55W
(115) 47°40'.30N	122°27'.88W
(116) 47°45'.33N	122°26'.60W

connecting with precautionary area “SG”, the waters contained within a circle of radius 0.62 miles centered at 47°39'.68N, 122°27'.87W, and thence to:

(117) 47°39'.12N	122°27'.62W
(118) 47°35'.18N	122°27'.08W
(119) 47°35'.17N	122°27'.35W
(120) 47°39'.08N	122°27'.97W

connecting with precautionary area “T”, the waters contained within a circle of radius 0.62 miles centered at 47°34'.55N, 122°27'.07W, and thence to:

(121) 47°34'.02N	122°26'.70W
(122) 47°26'.92N	122°24'.10W
(123) 47°23'.07N	122°20'.98W
(124) 47°19'.78N	122°26'.58W
(125) 47°19'.98N	122°26'.83W
(126) 47°23'.15N	122°21'.45W
(127) 47°26'.85N	122°24'.45W
(128) 47°33'.95N	122°27'.03W

connecting with precautionary area “TC”, the waters contained within a circle of radius 0.62 miles centered at 47°19'.48N, 122°27'.38W.

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

(129) 48°11'.72N	122°46'.83W
(130) 48°07'.13N	122°38'.83W
(131) 48°02'.10N	122°37'.32W
(132) 47°58'.23N	122°34'.07W
(133) 47°55'.83N	122°28'.80W
(134) 47°45'.92N	122°25'.33W
(135) 47°39'.68N	122°26'.95W
(136) 47°34'.65N	122°26'.18W
(137) 47°27'.13N	122°23'.40W
(138) 47°23'.33N	122°20'.37W
(139) 47°22'.67N	122°20'.53W
(140) 47°19'.07N	122°26'.75W

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

(141) 48°10'.15N	122°47'.58W
(142) 48°09'.35N	122°45'.55W
(143) 48°06'.45N	122°40'.52W
(144) 48°01'.65N	122°39'.03W
(145) 47°57'.47N	122°35'.45W
(146) 47°55'.07N	122°30'.35W
(147) 47°45'.90N	122°27'.18W
(148) 47°39'.70N	122°28'.78W
(149) 47°34'.47N	122°27'.98W
(150) 47°26'.63N	122°25'.12W
(151) 47°23'.25N	122°22'.42W
(152) 47°20'.00N	122°27'.90W

ANNEX 7

IN HARO STRAIT, BOUNDARY PASS, AND THE STRAIT OF GEORGIA

(Reference charts: United States 18421, 2000 edition; 18423, 2001 edition; 18431, 1996 edition; 18432, 1992 edition; 18433, 2000 edition; Canadian Hydrographic Service 3441, 1996 edition.

Note: The charts are based on North America 1983 Datum.)

Description of the traffic separation scheme

The traffic separation scheme “In Haro Strait, Boundary Pass, and In the Strait of Georgia” consists of a series of traffic separation schemes, two-way traffic lanes, and precautionary areas broken into two geographic designations as follows:

Part I: Haro Strait and Boundary Pass

Part II: Strait of Georgia

*Part I***Haro Strait and Boundary Pass**

(a) A precautionary area “V”, is established bounded by a line connecting the following geographical points:

(1) 48°21'.83N	123°25'.56W
(2) 48°21'.13N	123°24'.84W
(3) 48°20'.95N	123°24'.24W
(4) 48°20'.93N	123°23'.22W
(5) 48°21'.67N	123°21'.12W
(6) 48°22'.12N	123°21'.12W
(7) 48°22'.37N	123°21'.12W
(8) 48°22'.85N	123°21'.24W
(9) 48°23'.71N	123°23'.88W

thence back to point of origin (1).

(b) Connecting with precautionary area “V”, a separation zone is established bounded by a line connecting the following geographical positions:

(7) 48°22'.37N	123°21'.12W
(10) 48°22'.39N	123°18'.36W
(11) 48°23'.90N	123°12'.78W
(12) 48°23'.63N	123°12'.78W
(13) 48°22'.15N	123°18'.30W
(6) 48°22'.12N	123°21'.12W

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

(5) 48°21'.67N	123°21'.12W
(14) 48°21'.73N	123°18'.36W
(15) 48°23'.84N	123°10'.08W

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

(8) 48°22'.85N	123°21'.24W
(16) 48°22'.87N	123°18'.42W
(17) 48°24'.28N	123°13'.02W
(18) 48°24'.78N	123°12'.42W

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

(19) 48°24'.72N	123°11'.40W
(20) 48°28'.81N	123°11'.46W
(21) 48°28'.37N	123°10'.68W
(22) 48°27'.17N	123°10'.26W
(23) 48°24'.95N	123°10'.68W

(f) A traffic lane for north-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(15) 48°23'.84N	123°10'.08W
(24) 48°27'.43N	123°08'.94W

(g) A traffic lane for south-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(25) 48°28'.79N	123°12'.77W
(18) 48°24'.78N	123°12'.42W

(h) A precautionary area "HS", is established bounded by a line connecting the following geographical points:

(25) 48°28'.79N	123°12'.77W
(26) 48°31'.73N	123°13'.02W
(27) 48°31'.03N	123°11'.22W
(28) 48°29'.45N	123°09'.42W
(29) 48°28'.15N	123°07'.31W
(30) 48°27'.79N	123°07'.80W
(31) 48°27'.58N	123°08'.10W
(24) 48°27'.43N	123°08'.94W
(21) 48°28'.37N	123°10'.68W
(20) 48°28'.81N	123°11'.46W

thence back to point of origin (25).

(i) A two-way route is established between the following geographical positions:

(27) 48°31'.03N	123°11'.22W
(32) 48°35'.18N	123°12'.78W
(33) 48°38'.37N	123°12'.36W
(34) 48°39'.20N	123°13'.09W
(35) 48°39'.41N	123°16'.06W
(26) 48°31'.73N	123°13'.02W

(j) A precautionary area “TP”, is established bounded to the north by the arc of a circle of radius 2.1 miles centered at geographical position 48°41.3N, 123°14.2W (Turn Point Light) and connecting the following points:

(36) 48°43'.04N	123°16'.06W
(37) 48°43'.15N	123°12'.75W
(42) 48°42'.23N	123°11'.35W
(43) 48°40'.93N	123°11'.01W

and bounded to the south by the arc of a circle of radius 2.1 miles centered at geographical position 48°41.3N, 123°14.2W (Turn Point Light) and connecting the following points:

(44) 48°39'.76N	123°11'.84W
(34) 48°39'.20N	123°13'.09W
(35) 48°39'.41N	123°16'.06W

thence a direct line connecting the following points:

(35) 48°39'.41N	123°16'.06W
(36) 48°43'.04N	123°16'.06W

(k) A two-way route is established between the following geographical positions:

(37) 48°43'.15N	123°12'.75W
(38) 48°46'.43N	123°03'.12W
(39) 48°48'.19N	123°00'.84W
(40) 48°47'.78N	122°59'.12W
(41) 48°45'.51N	123°01'.82W
(42) 48°42'.23N	123°11'.35W

Part II
Strait of Georgia

(a) A precautionary area “GS”, is established bounded by a line connecting the following geographical points:

(45) 48°52'.30N	123°07'.44W
(46) 48°54'.81N	123°03'.66W
(47) 48°49'.49N	122°54'.24W
(48) 48°47'.93N	122°57'.12W
(40) 48°47'.78N	122°59'.12W
(39) 48°48'.19N	123°00'.84W

thence to the point of origin (45).

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

(49) 48°53'.89N	123°05'.04W
(50) 48°56'.82N	123°10'.08W
(51) 48°56'.30N	123°10'.80W
(52) 48°53'.39N	123°05'.70W

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

(46) 48°54'.81N	123°03'.66W
(54) 48°57'.68N	123°08'.76W

(d) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(53) 48°55'.34N	123°12'.30W
(45) 48°52'.30N	123°07'.44W

(e) A precautionary area “PR”, is established bounded by a line connecting the following geographical points:

(53) 48°55'.34N	123°12'.30W
(54) 48°57'.68N	123°08'.76W
(55) 49°00'.37N	123°13'.32W
(56) 48°58'.18N	123°16'.74W

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

(57) 48°59'.53N	123°14'.66W
(58) 49°03'.80N	123°21'.24W
(59) 49°03'.14N	123°22'.26W
(60) 48°58'.90N	123°15'.63W

(g) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(55) 49°00'.37N	123°13'.32W
(62) 49°04'.52N	123°20'.04W

(h) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(61) 49°02'.51N	123°23'.76W
(56) 48°58'.18N	123°16'.74W

ANNEX 8

Description of the amended traffic separation scheme in the Gulf of Finland

Amendments to the traffic separation schemes previously adopted by IMO

(Reference map (INT 1214). Geodetic datum of the year 1942 (Pulkovo). For obtaining position in WGS datum such position should be moved 0'.14 (8".3) westward).

Traffic separation scheme near Gogland Island

The traffic separation scheme consists of two parts:

Part I consists of two traffic lanes separated by a zone with a centre line connecting the following geographical positions:

- (1) 59°59'.00N 026°57'.40E
- (2) 59°58'.52N 027°03'.10E
- (3) 59°59'.47N 027°06'.30E.

The traffic separation zone is 0.5 mile wide.

The traffic lanes on the both sides of the traffic separation zone are 1 mile wide.

The direction of navigation will be 99°-279° and 59°.3-239°.3.

Part II consists of two traffic lanes separated by a line connecting the following geographical positions :

- (1) 59°59'.47N 027°06'.30E
- (2) 60°07'.55N 027°32'.80E.

The traffic lanes on the both sides of the traffic separation line are 1.25 miles wide.

The direction of navigation will be 59°.3-239°.3.

Traffic separation scheme near Sommers Island

The traffic separation scheme consists of four parts:

Part I consists of a roundabout around the separation zone 0.5 mile in diameter centred on the geographical position 60°11'.50N 027°46'.20E. The roundabout lane is 1 mile wide.

Part II consists of two traffic lanes separated by a zone with a centre line connecting the following geographical positions:

- (1) 60°07'.55N 027°32'.80E
- (2) 60°10'.77N 027°43'.62E.

The traffic separation zone is 0.5 mile wide.

The traffic lanes on both sides of the traffic separation zone are 1 mile wide.

The direction of navigation will be 59°.3-239°.3.

Part III consists of two traffic lanes separated by a line connecting the following geographical positions:

- (1) 60°11'.15N 027°49'.05E
- (2) 60°07'.70N 028°16'.10E.

The traffic lanes on both sides of the traffic separation line are 1 mile wide.
 The direction of navigation will be 104°.3-284°.3.

Part IV consists of two traffic lanes separated by a line connecting the following geographical positions:

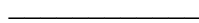
- (1) 60°12'.70N 027°47'.90E
- (2) 60°24'.54N 028°05'.05E.

The traffic lanes on both sides of the traffic separation line are 0.5 mile wide.
 The direction of navigation will be 35°.7-215°.7.

Establishing of deep water route inside the borders of the traffic separation scheme from the Gogland Island to the Rodsher Island

The route lane is 1000 m wide with established direction of traffic flow and is intended for the passage of ships with a draught up to 15 m.

¹	Deep water route centre line connecting positions (Pulkovo-42)		Direction, degrees	Distance, miles	Lane width, cables
1	60°01'.55N 027°11'.20E	59°59'.12N 027°03'.05E	239.3	4.8	5.4
2	59°59'.12N 027°03'.05E	59°59'.90N 026°53'.57E	279	4.8	5.4
3	59°59'.90N 026°53'.57E	60°03'.25N 026°40'.00E	296.5	7.6	5.4
4	60°03'.25N 026°40'.00E	60°02'.06N 026°30'.30E	255.5	5	5.4





Ref. T2/2.07

COLREG.2/Circ.51/Add.1
1 October 2002

TRAFFIC SEPARATION SCHEMES

Non-implementation of the amended traffic separation scheme "In Haro Strait and Boundary Pass"

Note by the Governments of the United States and Canada

1 The Government of the United States (on behalf of Canada also) has informed the Organization that the amended traffic separation scheme (TSS) "In Haro Strait and Boundary Pass", as detailed in Annex 7, Part I of COLREG.2/Circ.51 and adopted by MSC 75, will not be implemented at 0000 hours UTC on 1 December 2002 as envisaged.

2 New safety and environmental concerns, recently presented by various user groups of the identified waterways, have convinced the Governments of the United States and Canada to pursue the aforementioned course of action.

3 In the future, the Governments of the United States and Canada will develop a new traffic separation scheme for the area concerned and will jointly submit a proposal to IMO for adoption.

4 Member Governments are invited to bring this information to the attention of all concerned.



Ref. T2/2.07

COLREG.2/Circ.52
6 January 2003

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety, at its seventy-sixth session (2 to 13 December 2002), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routeing measures, listed at annexes 1 to 6 as follows:

- .1 "In the Southern Red Sea" (new scheme);
- .2 "Off Cape La Nao" (new scheme);
- .3 "Off Cape Palos" (new scheme);
- .4 "In the Gulf of Finland" (amended scheme);
- .5 "In the Bay of Fundy and approaches" (amended scheme); and
- .6 "In the Strait of Bab el Mandeb" (amended scheme).

2 The new and amended traffic separation schemes (listed in subparagraphs 1.1 to 1.6 above and detailed at annexes 1, 2, 3, 4, 5 and 6 will be implemented at 0000 hours UTC on 1 July 2003.

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND
ASSOCIATED ROUTEING MEASURES**

ANNEX 1

**NEW TRAFFIC SEPARATION SCHEMES IN THE SOUTHERN RED SEA - EAST OF
JABAL ZUQUAR ISLAND AND WEST AND SOUTH OF HANISH AL KUBRA ISLAND**

(Reference charts: British Admiralty Charts Nos: 452 and 453

Note: These charts are based on World Geodetic System 1984 Datum (WGS 84))

The new traffic separation scheme east of Jabal Zuqar will consist of:

Two traffic lanes and one traffic separation zone between them.

The direction of navigation will be:

- a southbound traffic lane, 140°(T) as far as the turning line abeam of the 18.3 m shoal, thence 166°(T) to the southern limit of the scheme.
- a northbound traffic lane, 346°(T) as far as the turning line abeam of the 18.3m shoal, thence 320°(T) to the northern limit of the scheme.

Description of the new traffic separation scheme east of Jabal Zuqar Island

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

(1)	14° 07'.28 N	042° 45'.96 E
(2)	14° 02'.76 N	042° 49'.85 E
(3)	13° 58'.21 N	042° 51'.00 E
(4)	13° 58'.55 N	042° 52'.30 E
(5)	14° 03'.76 N	042° 51'.00 E
(6)	14° 08'.27 N	042° 47'.10 E

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

(7)	14° 06'.49 N	042° 44'.98 E
(8)	14° 01'.93 N	042° 48'.94 E
(9)	13° 57'.97 N	042° 49'.95 E

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

(10)	14° 09'.40 N	042° 48'.42 E
(11)	14° 04'.88 N	042° 52'.35 E
(12)	13° 58'.94 N	042° 53'.83 E

The new traffic separation scheme west and south of Hanish al Kubra will consist of:

Two traffic lanes and one traffic separation zone between them.

The direction of navigation will be:

- a southbound traffic lane, 154°(T) as far as the turning line between the Three Foot Rock and the Haycock islands, thence 123°(T) to the eastern limit of the scheme.
- a northbound traffic lane, 309°(T) as far as the turning line between the Three Foot Rock and the Haycock islands, thence 333°(T) to the northern limit of the scheme.

Description of the new traffic separation scheme west and south of Hanish al Kubra Island

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

- | | | |
|-----|--------------|---------------|
| (1) | 13° 38'.33 N | 042° 31'.78 E |
| (2) | 13° 30'.95 N | 042° 35'.60 E |
| (3) | 13° 26'.61 N | 042° 42'.18 E |
| (4) | 13° 29'.12 N | 042° 44'.22 E |
| (5) | 13° 33'.20 N | 042° 39'.08 E |
| (6) | 13° 40'.15 N | 042° 35'.50 E |

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

- | | | |
|-----|--------------|---------------|
| (7) | 13° 37'.40 N | 042° 29'.93 E |
| (8) | 13° 29'.82 N | 042° 33'.88 E |
| (9) | 13° 25'.22 N | 042° 41'.05 E |

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

- | | | |
|------|--------------|---------------|
| (10) | 13° 40'.82 N | 042° 36'.90 E |
| (11) | 13° 34'.06 N | 042° 40'.38 E |
| (12) | 13° 30'.25 N | 042° 45'.18 E |

ANNEX 2

NEW TRAFFIC SEPARATION SCHEME OFF CAPE LA NAO

(Reference chart: Spanish Hydrographic Institute 47, May 1995 2nd edition.

Note: This chart is based on European Datum.)

Description of the new traffic separation scheme Off Cape La Nao

- (a) Northbound traffic separation line bounded by a line connecting the following geographical positions:

(1)	38°41'.40 N	000°28'.80 E
(2)	38°37'.70 N	000°26'.00 E

- (b) Intermediate traffic separation zone bounded by a line connecting the following geographical positions:

(3)	38°37'.90 N	000°23'.10 E
(4)	38°42'.20 N	000°26'.80 E
(5)	38°43'.00 N	000°25'.00 E
(6)	38°37'.90 N	000°20'.60 E

- (c) Associated inshore navigation zone established between the coast and a line passing through the following geographical positions:

(7)	38°37'.90 N	000°13'.50 E
(8)	38°41'.00 N	000°20'.20 E
(9)	38°44'.00 N	000°22'.60 E

and the connection of point No. 7 with the Ifach Headland
and the connection of point No. 9 with the Cape San Antonio Lighthouse.

- (d) A northbound traffic lane for north-eastbound shipping established between the separation zones described in (a) and (b). The main traffic direction is: 032° (T).
- (e) A southbound traffic lane for south-westbound shipping established between the traffic separation zone described in (b) and the associated inshore navigation zone described in (c). The main traffic direction is: 212° (T).

ANNEX 3

NEW TRAFFIC SEPARATION SCHEME OFF CAPE PALOS

(Reference chart: Spanish Hydrographic Institute 47, May 1995 2nd edition.

Note: This chart is based on European Datum.)

Description of the new traffic separation scheme Off Cape Palos

- a) A separation line for northbound traffic delimited by a line connecting the following geographical positions:

(1)	37°34'.30 N	000°28'.70 W
(2)	37°32'.50 N	000°30'.00 W
(3)	37°31'.20 N	000°32'.30 W

- b) A separation zone delimited by a line joining the following geographical positions:

(4)	37°32'.00 N	000°33'.50 W
(5)	37°33'.50 N	000°31'.40 W
(6)	37°34'.85 N	000°30'.30 W
(7)	37°32'.80 N	000°31'.40 W
(8)	37°34'.40 N	000°32'.20 W
(9)	37°35'.20 N	000°34'.60 W

- c) An inshore traffic zone situated between the coast and a line which passes through the following geographical positions:

(10)	37°33'.75 N	000°35'.75 W
(11)	37°35'.00 N	000°33'.80 W
(12)	37°35'.70 N	000°33'.40 W

and a line which joins the geographical position (10) and Cape Agua
and a line which joins the geographical position (12) and Cape Roig.

- d) A northbound traffic lane leading north-east situated between the separation zones described in a) and b).
- e) A southbound traffic lane leading south-west situated between the separation zone described in b) and the inshore traffic zone described in c).

ANNEX 4

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEMES IN THE GULF OF FINLAND**Traffic separation scheme "Off Porkkala Lighthouse"**

Reference chart: FIN 902, 2000 edition.
 Geodetic datum: The national Finnish geodetic chart-coordinate system (KKJ)
 WGS84 correction: latitude correction -0,01'
 longitude correction is +0,19'.

Description of the amended traffic separation scheme

- a) A separation zone, one mile wide, is centred upon the following geographical positions:
- | | | |
|-----|-------------|--------------|
| (1) | 59°43'.70 N | 024°14'.00 E |
| (2) | 59°44'.90 N | 024°21'.40 E |
| (3) | 59°45'.90 N | 024°31'.00 E |
- b) A traffic lane, one and a half miles wide, is established on each side of the separation zone.
- c) A precautionary area is established upon the following geographical positions:
- | | | |
|-----|-------------|--------------|
| (1) | 59°43'.95 N | 024°31'.80 E |
| (2) | 59°46'.15 N | 024°53'.50 E |
| (3) | 59°50'.05 N | 024°51'.90 E |
| (4) | 59°47'.85 N | 024°30'.20 E |
- d) A separation zone, one mile wide, is centred upon the following geographical positions:
- | | | |
|-----|-------------|--------------|
| (1) | 59°48'.10 N | 024°52'.70 E |
| (2) | 59°48'.80 N | 025°00'.00 E |
- e) A traffic lane, one and a half miles wide, is established on each side of the separation zone.

Traffic separation scheme "Off Hankoniemi Peninsula"

Reference chart: FIN 912, 1999 edition.
 Geodetic datum: The national Finnish geodetic chart-coordinate system (KKJ)
 WGS84 correction: latitude correction -0,01'
 longitude correction is +0,20'.

Description of the amended traffic separation scheme

- c) A separation zone, two miles wide, is centred upon the following geographical positions:

- | | | |
|-----|-------------|--------------|
| (1) | 59°24' 50 N | 022°25'.00 E |
| (2) | 59°28'.00 N | 022°34'.00 E |
| (3) | 59°30'.00 N | 022°45'.00 E |

- d) A traffic lane, four miles wide, is established on each side of the separation zone.

ANNEX 5

AMENDMENT TO THE TRAFFIC SEPARATION SCHEME IN THE BAY OF FUNDY AND APPROACHES

(Reference charts: Canadian Hydrographic Service L/C-4011, 1997 edition.

Note: This chart is based on North American 1983 Geodetic Datum which is equivalent at this scale to North American 1927 Geodetic Datum.)

Description of the amended traffic separation scheme

The amended traffic separation scheme “In the Bay of Fundy and Approaches” consists of two parts. (Positions are in North American 1927 Geodetic Datum Co-ordinates.)

Part I

(a) Three separation zones bounded by lines connecting the following geographical positions:

(i)	(1)	44°46'.40 N,	066°14'.39 W	(4)	44°11'.83 N,	066°49'.55 W
	(2)	44°31'.85 N,	066°19'.60 W	(5)	44°30'.70 N,	066°17'.20 W
	(3)	44°14'.95 N,	066°52'.70 W	(6)	44°45'.90 N,	066°11'.68 W

(ii)	(7)	44°48'.32 N,	066°13'.65 W	(9)	44°46'.88 N,	066°11'.30 W
	(8)	44°47'.33 N,	066°14'.00 W	(10)	44°47'.86 N,	066°10'.95 W;

and (iii)	(11)	45°02'.5 N,	066°08'.25 W	(13)	44°48'.80 N,	066°10'.58 W
	(12)	44°49'.3 N,	066°13'.30 W	(14)	45°02'.00 N,	066°05'.55 W

(b) A traffic lane for north-eastbound traffic is established between the separation zones and a line connecting the following geographical positions:

(15)	44°09'.50 N,	066°47'.05 W	(17)	45°01'.50 N,	066°02'.80 W
(16)	44°29'.60 N,	066°14'.75 W			

(c) A traffic lane for south-westbound traffic is established between the separation zones and lines connecting the following geographical positions:

(i)	(18)	45°03'.00 N,	066°11'.00 W	(19)	44°49'.80 N,	066°15'.98 W
-----	------	--------------	--------------	------	--------------	--------------

and (ii)	(20)	44°46'.90 N,	066°17'.00 W	(22)	44°17'.35 N,	066°55'.17 W
	(21)	44°33'.00 N,	066°22'.00 W			

Part II

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

(23)	44°48'.60 N,	066°20'.72 W	(25)	44°48'.88 N,	066°16'.35 W
(24)	44°47'.90 N,	066°16'.70 W	(26)	44°49'.58 N,	066°20'.40 W

- (e) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(27) 44°49'.80 N, 066°15'.98 W (28) 44°50'.58 N, 066°20'.05 W

- (f) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(29) 44°47'.65 N, 066°21'.10 W (30) 44°46'.90 N, 066°17'.00 W

ANNEX 6

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME IN THE STRAIT OF BAB EL MANDEB

(Reference charts: British Admiralty charts Nos: 452 and 453

Note: These charts are based on World Geodetic System 1984 Datum (WGS 84).)

The amended traffic separation scheme in the Strait of Bab el Mandeb will consist of:

Two traffic lanes and one traffic separation zone between them.

The direction of navigation will be:

- a southbound traffic lane, 155°(T) as far as the turning line off Mayyun Island, thence 120°(T) to the eastern limit of the existing scheme.
- a northbound traffic lane, 300°(T) as far as the turning line off Mayyun Island, thence 335°(T) to the northern limit of the scheme.

Description of the amended traffic separation scheme in the Strait of Bab el Mandeb

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

(1)	13° 13'.07 N	043° 02'.87 E
(2)	12° 36'.82 N	043° 20'.22 E
(3)	12° 32'.53 N	043° 27'.79 E
(4)	12° 33'.37 N	043° 28'.30 E
(5)	12° 37'.50 N	043° 21'.00 E
(6)	13° 13'.83 N	043° 03'.60 E

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

(7)	13° 11'.94 N	043° 01'.72 E
(8)	12° 35'.78 N	043° 18'.98 E
(9)	12° 31'.25 N	043° 27'.04 E

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

(10)	13° 15'.00 N	043° 04'.70 E
(11)	12° 38'.50 N	043° 22'.21 E
(12)	12° 34'.69 N	043° 29'.03 E



Ref. T2-NAVSEC/2.7.1

COLREG.2/Circ.53
10 December 2003

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 Pursuant to resolution A.858(20), the Assembly, at its twenty-third session, noting the urgent need to implement amendments to the traffic separation scheme "Off Finisterre" proposed by the Government of Spain in order to enhance maritime safety, safety of navigation and protection of the marine environment in the area concerned and having considered the report of the Maritime Safety Committee on its seventy-seventh session and the recommendation of the Sub-Committee on Safety of Navigation at its forty-ninth session, adopted, on 5 December 2003, resolution A.957(23) on amendments to the traffic separation scheme "Off Finisterre", given at annex.

2 The adopted amended traffic separation scheme "Off Finisterre" will be implemented at 0000 hours UTC on 1 June 2004, on which date resolution A.767(18) will be revoked.

3 Member Governments are invited to bring this information to the attention of all parties concerned.

ANNEX

AMENDED TRAFFIC SEPARATION SCHEME "OFF FINISTERRE"

New traffic lanes for ships carrying dangerous or pollutant cargoes in bulk in the traffic separation scheme "Off Finisterre"

Amended traffic separation scheme "Off Finisterre":

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

(1)	42° 52'.90 N	009° 44'.00 W	(4)	43° 21'.50 N	009° 37'.70 W
(2)	43° 10'.50 N	009° 44'.00 W	(5)	43° 11'.00 N	009° 45'.20 W
(3)	43° 21'.00 N	009° 36'.40 W	(6)	42° 52'.90 N	009° 45'.70 W

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

(7)	42° 52'.90 N	009° 49'.40 W	(10)	43° 25'.00 N	009° 47'.00 W
(8)	43° 12'.20 N	009° 49'.40 W	(11)	43° 13'.70 N	009° 54'.80 W
(9)	43° 23'.00 N	009° 41'.90 W	(12)	42° 52'.90 N	009° 54'.80 W

(c) A traffic lane for northbound traffic is established between the separation zones described in paragraphs (a) and (b).

(d) A traffic lane for northbound traffic is established between the separation zones described in paragraphs (b) and (e).

(e) A separation zone at the outside limit of the existing scheme, bounded by lines connecting the following geographical positions:

(13)	42°52'.90 N	009°59'.00 W
(14)	43°14'.70 N	009°59'.00 W
(15)	43°26'.40 N	009°50'.90 W
(16)	43°28'.20 N	009°56'.00 W
(17)	43°16'.45 N	010°04'.25 W
(18)	42°52'.90 N	010°04'.25 W

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

(19)	42°52'.90 N	010°08'.30 W
(20)	43°17'.40 N	010°08'.30 W
(21)	43°29'.30 N	010°00'.00 W
(22)	43°30'.00 N	010°01'.20 W
(23)	43°17'.75 N	010°09'.75 W
(24)	42°52'.90 N	010°09'.75 W

(g) A traffic lane for southbound traffic is established between the separation zones described in paragraphs (e) and (f).

(h) A traffic lane for southbound traffic is established between the traffic separation zone described in paragraph (f) and a line connecting the following geographical positions:

(25) 42°52'.90 N 010°13'.70 W

(26) 43°19'.00 N 010°13'.70 W

(27) 43°31'.40 N 010°05'.15 W

Inshore traffic zone

The area between the landward boundary of the traffic separation scheme and the Spanish coast and lying between a line drawn from position 43° 06'.70 N, 009° 13'.40 W to position (3) 43° 21'.00 N, 009° 36'.40 W (northern limit) and a line drawn from position 42° 52'.90 N, 009° 16'.20 W to position (1) 42° 52'.90 N, 009° 44'.00 W (southern limit) is designated as an inshore traffic zone.

Notes:

- 1 The traffic lane described in paragraph (c) should be used by northbound ships not carrying dangerous cargoes in bulk.
- 2 The traffic lane described in paragraph (d) should be used by northbound ships carrying dangerous cargoes in bulk¹.
- 3 The traffic lane described in paragraph (g) should be used by southbound ships not carrying dangerous cargoes in bulk.
- 4 The traffic lane described in paragraph (h) should be used by southbound ships carrying dangerous cargoes in bulk.

¹ Dangerous cargoes in bulk refers to the IMDG Code and Annexes I and II of MARPOL.

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Ref. T2-NAVSEC/2.7.1

COLREG.2/Circ.53/Corr.1
27 February 2004

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Corrigendum

The following correction should be made to COLREG.2/Circ.53:

ANNEX – Amended traffic separation scheme “Off Finisterre”

The correct co-ordinates for geographical position (a)(6) of the separation zone are:

(6) 42° 52'.90N 009° 45'.20W



IMO

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Ref. T2-NAVSEC/2.7.1

COLREG.2/Circ.54
28 May 2004

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety, at its seventy-eighth session (12 to 21 May 2004), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routeing measures, listed at annexes 1 to 5 as follows:

- .1 “Off Ra's al kuh” (new scheme);
- .2 “Approaches to the Port of Ra's al Khafji” (new scheme);
- .3 “In the Adriatic Sea” (new scheme);
- .4 “Between Korsoer and Sprogoe” (amended scheme); and
- .5 “In the Singapore Strait” (amended scheme).

2 The new and amended traffic separation schemes (listed in subparagraphs 1.1 to 1.4 above and detailed at annexes 1, 2, 3 and 4 will be implemented at 0000 hours UTC on 1 December 2004, while the amendment to the existing traffic separation scheme "In the Singapore Strait" (annex 5) will be implemented at 0000 hours UTC on 1 January 2005.

ANNEX 1

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND
ASSOCIATED ROUTEING MEASURES**

NEW TRAFFIC SEPARATION SCHEME OFF RA'S AL KUH

(Reference chart: British Admiralty Chart No: 2851

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

The new traffic separation scheme (TSS) off Ra's al Kuh consists of:

- Two traffic lanes 2 miles wide;
- One intermediate traffic separation zone 2 miles wide;
- One associated inshore zone.

The direction of the navigation is:

- TSS inner traffic lane: 320°(T) inbound course and 330°(T) outbound course towards the Strait of Hormuz; and
- TSS outer traffic lane: 150°(T) inbound and 140°(T) outbound course towards the Gulf of Oman.

Description of the new traffic separation scheme off Ra's al Kuh:

(a) Outer traffic separation line bounded by a line connecting the following geographical positions:

- | | | |
|-----|---------------|---------------|
| (1) | 25° 45'.50 N | 057° 03'.30 E |
| (2) | 25° 39'.60 N | 057° 07'.10 E |
| (3) | 25° 34'.05 N0 | 057° 12'.00 E |

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

- | | | |
|-----|--------------|---------------|
| (4) | 25° 47'.50 N | 057° 07'.20 E |
| (5) | 25° 42'.25 N | 057° 10'.55 E |
| (6) | 25° 36'.65 N | 057° 15'.55 E |
| (7) | 25° 35'.30 N | 057° 13'.80 E |
| (8) | 25° 40'.90 N | 057° 08'.80 E |
| (9) | 25° 46'.50 N | 057° 05'.30 E |

(c) The limits of the inshore traffic zone along the coastline lies between the following geographical positions:

- | | | |
|------|--------------|---------------|
| (10) | 25° 48'.45 N | 057° 09'.15 E |
| (11) | 25° 43'.55 N | 057° 12'.25 E |
| (12) | 25° 39'.30 N | 057° 19'.10 E |
| (13) | 25° 52'.50 N | 057° 17'.30 E |
| (14) | 25° 45'.30 N | 057° 26'.70 E |

- (d) An outer traffic lane for south-east-bound shipping established between the separation zones described in (a) and (b).
- (e) An inner traffic lane for north-west-bound shipping established between the traffic separation zone described in (b) and the associated inshore traffic zone described in (c).

ANNEX 2

**NEW TRAFFIC SEPARATION SCHEME FOR THE APPROACHES TO THE PORT OF
RA'S AL KHAFJI**

(Reference chart: British Admiralty Chart No: 3774 published June 1999

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

The new traffic separation scheme for the Ra's Al Khafji approaches will consist of:

Two traffic lanes and one traffic separation zone between them.

The direction of navigation will be:

- inbound traffic lane, 270°(T) from the seaward limit of the scheme to the turning point 5 miles NNW of the Umm al Gharabi shoal, thence 210°(T) to the southern limit of the scheme immediately north of the tanker anchorage;
- outbound traffic lane, 030°(T) as far as the turning point 3.5 miles NNW of the Umm al Gharabi shoal, thence between 090°(T) and 093°(T) to the seaward limit of the scheme.

Description of the new traffic separation scheme for Ra's Al Khafji approaches:

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

(1)	28° 38' 24"N	049° 07' 00"E
(2)	28° 38' 24"N	048° 45' 50"E
(3)	28° 30' 18"N	048° 40' 40"E
(4)	28° 30' 04"N	048° 41' 07"E
(5)	28° 38' 12"N	048° 46' 18"E
(6)	28° 38' 12"N	049° 07' 00"E

(b) A traffic lane for inbound traffic between the separation zone and the following geographical positions:

(7)	28° 39' 24"N	049° 07' 00"E
(8)	28° 39' 24"N	048° 45' 02"E
(9)	28° 30' 49"N	048° 39' 35"E

(c) A traffic lane for outbound traffic between the separation zone and the following geographical positions:

(10)	28° 29' 36"N	048° 42' 03"E
(11)	28° 37' 10"N	048° 46' 54"E
(12)	28° 36' 06"N	049° 07' 00"E

ANNEX 3**NEW TRAFFIC SEPARATION SCHEMES IN THE ADRIATIC SEA****IN THE NORTH ADRIATIC SEA – EASTERN PART**

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid.

The co-ordinates listed below are in WGS 84.

Description of the traffic separation scheme

4. A separation zone is bounded by a line connecting the following geographical positions:

(4a) 44° 05'.90 N	014° 03'.97 E	(4c) 44° 55'.30 N	013° 21'.17 E
(4b) 44° 06'.70 N	014° 05'.77 E	(4d) 44° 54'.80 N	013° 19'.57 E

5. A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5a) 44° 08'.20N	014° 08'.77 E	(5b) 44°56'.90 N	013° 24'.67 E
------------------	---------------	------------------	---------------

6. A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(6a) 44° 04'.40 N	014° 00'.97 E	(6b) 44° 53'.20 N	013° 16'. 17 E
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The established directions of traffic flow are: 327°-147°

IN THE NORTH ADRIATIC SEA – WESTERN PART

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid

The co-ordinates listed below are in WGS 84.

Description of the traffic separation scheme

8. A separation zone is bounded by a line connecting the following geographical positions:

(8a) 43° 58'.30 N	013° 52'.47 E	(8d) 44° 44'.50 N	012° 55'.67 E
(8b) 44° 00'.80 N	013° 54'.97 E	(8e) 44° 43'.80 N	012° 53'.50 E
(8c) 44° 28'.00 N	013° 06'.77 E	(8f) 44° 26'.0 N	013° 03'.47 E

9. A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (9a) 44° 02'.80 N 013° 57'.37 E (9c) 44° 45'.40N 012° 59'.40 E
(9b) 44° 30'.50 N 013° 08'.47 E

10. A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (10a) 43° 55'.80 N 013° 49'.97 E (10c) 44° 43'.10 N 012° 50'.20 E
(10b) 44° 23'.50 N 013° 00'.97 E

The established directions of traffic flow are: 308° - 128°
336° - 159°

PRECAUTIONARY AREA AT THE SOUTHERN LIMITS OF THE TRAFFIC SEPARATION SCHEME

Description of the precautionary area

Precautionary area is established by a line connecting the following geographical position:

- (3) 43° 49'.65 N 014° 01'.18 E (6a) 44° 04'.40 N 014° 00'.97 E
(4) 43° 59'.85 N 014° 16'.61 E (9a) 44° 02'.80 N 013° 57'.37 E
(5a) 44° 08'.20N 014° 08'.77 E (8a) 43° 58'.30 N 013° 52'.47 E
(4b) 44° 06'.70 N 014° 05'.77 E (8b) 44° 00'.80 N 013° 54'.97 E
(4a) 44° 05'.90 N 014° 03'.97 E (10a) 43° 55'.80 N 013° 49'.97 E

APPROACHES TO GULF OF TRIESTE

Reference chart: No 435 of the Italian Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid

The co-ordinates listed below are in WGS 84.

Description of the traffic separation scheme

11. A separation zone is bounded by a line connecting the following geographical positions:

- (11a) 45° 08'.60 N 013° 06'.47 E (11c) 45° 23'.20 N 013° 06'.47 E
(11b) 45° 09'.40 N 013° 10'.97 E (11d) 45° 21'.50 N 013° 02'.57 E

12. A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- (12a) 45° 10'.50 N 013° 17'.17 E (12b) 45° 22'.50 N 013° 13'.27 E

13. A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(13a) 45° 07'.50 N 013° 00'.37 E (13b) 45° 19'.00 N 012° 56'.87 E

The established directions of traffic flow are: 347° - 167°

APPROACHES TO GULF OF VENICE

Reference chart: No 435 of the Italian Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid

The co-ordinates listed below are in WGS 84.

Description of the traffic separation scheme

14. A separation zone is bounded by a line connecting the following geographical positions:

(14a) 44° 55'.30 N 012° 43'.97 E (14c) 45° 12'.70 N 012° 35'.97 E
(14b) 44° 56'.80 N 012° 47'.97 E (14d) 45° 11'.30 N 012° 31'.97 E

15. A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(15a) 44° 57'.50 N 012° 50'.47 E (15b) 45° 13'.60 N 012° 38'.77 E

16. A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(16a) 44° 54'.20 N 012° 41'.47 E (16b) 45° 10'.40 N 012° 29'.47 E

The established directions of traffic flow are: 333° - 153°

IN THE GULF OF TRIESTE

Reference chart: No. 39 of the Italian Navy Hydrographical Institute, Edition 1991, Datum Roma 40, and No. 100-15 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid.

The co-ordinates listed below are in WGS 84.

Description of the traffic separation scheme

17. A separation zone is bounded by a line connecting the following geographical positions:

(17a) 45° 31'.34 N 013° 20'.90 E (17c) 45° 36'.97 N 013° 32'.83 E
(17b) 45° 35'.48 N 013° 32'.62 E (17d) 45° 32'.84 N 013° 20'.00 E

18. A traffic lane for north-east-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(18a) 45° 29'.30 N 013° 22'.10 E (18b) 45° 34'.24 N 013° 32'.20 E

19. A traffic lane for south-west-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(19a) 45° 34'.74 N 013° 18'.90 E (19b) 45° 38'.74 N 013° 32'.80 E

The established directions of traffic flow are: 058° - 248°

APPROACHES TO/FROM KOPER

Reference chart: No. 39 of the Italian Navy Hydrographical Institute, Edition 1991, Datum Roma 40, and No. 100-15 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid.

The co-ordinates listed below are in WGS 84.

Description of the traffic separation scheme

21. A separation zone is bounded by a line connecting the following geographical positions:

(21a) 45° 35'.24 N 013° 35'.00 E (21c) 45° 36'.44 N 013° 37'.50 E
(21b) 45° 35'.04 N 013° 39'.50 E

23. A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(23a) 45° 34'.24 N 013° 35'.00 E (23b) 45° 33'.94 N 013° 39'.40 E

24. A traffic lane for northwestbound traffic is established between the separation zone as defined in Paragraph 21. and a separation zone connecting the following geographical positions:

(24a) 45° 36'.34 N 013° 39'.70 E (24c) 45° 36'.34 N 013° 41'.80 E
(24b) 45° 35'.44 N 013° 41'.00 E

The established directions of traffic flow are: 094° - 315°

APPROACHES TO/FROM MONFALCONE

25. A separation zone is bounded by a line connecting the following geographical positions:

(25a) 45° 40'.34 N 013° 38'.00 E (25c) 45° 42'.74 N 013° 37'.30 E
(25b) 45° 40'.34 N 013° 37'.30 E (25d) 45° 42'.74 N 013° 38'.00 E

26. A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(26a) 45° 4 0'.34 N 013° 38'.65 E (26b) 45° 42'.74 N 013° 38'.65 E

27. A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(27a) 45° 42'.74 N 013° 36'.50 E (27b) 45° 40'.34 N 013° 36'.50 E

The established directions of traffic flow are: 360° - 180°

PRECAUTIONARY AREA IN THE GULF OF TRIESTE

Description of the precautionary area

A precautionary area is established by a line connecting the following geographical positions:

(18b) 45° 34'.24 N 013° 32'.20 E (21c) 45° 36'.44 N 013° 37'.50 E
(17b) 45° 35'. 48 N 013° 32'.62 E (21a) 45° 35'.24 N 013° 35'.00 E
(17c) 45° 36'.97 N 013° 32'.83 E (23a) 45° 34'.24 N 013° 35'.00 E
(19b) 45° 38'.74 N 013° 32'.80 E

AREA TO BE AVOIDED

IN THE NORTH ADRIATIC SEA

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED 50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskögel, Bessel Elipsoid.

The co-ordinates listed below are in WGS 84.

Description of the area to be avoided

7. In order to avoid the risk of pollution due to damage of oil rigs, oil and gas pipelines in this area the area described below should be avoided by ships of more than 200 gross tonnage.

The area to be avoided is bounded by a line connecting the following geographical positions:

(7a) 44° 13'.50 N 013° 38'.67 E (7e) 44° 41'.90 N 013° 24'.97 E
(7b) 44° 17'.00 N 013° 43'.77 E (7f) 44° 52'.00 N 013° 17'.07 E
(7c) 44° 25'.30 N 013° 37'.47 E (7g) 44° 52'.00 N 013° 05'.77 E
(7d) 44° 34'.50 N 013° 25'.47 E (7h) 44° 30'.50 N 013° 08'.47 E

OTHER ROUTEING MEASURES

RECOMMENDED DIRECTIONS OF TRAFFIC FLOW IN THE CHANNEL OF OTRANTO, SOUTHERN AND CENTRAL ADRIATIC SEA

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskógel, Bessel Elipsoid.

The co-ordinates listed below are in WGS 84.

Description of the recommended directions of traffic flow

1. Recommended directions of traffic flow, which should remain as in the present, are established between the parallels of latitudes:

(1a) 40° 25'00 N

(1b) 43° 10'01N

2. Recommended directions of traffic flow, which should be in accordance with the description as per chart in appendix 1 of document NAV 49/3/7, are established between the parallel of latitude:

(2a) 43° 10'01 N

and the precautionary area at the southern limits of the traffic separation scheme.

ANNEX 4

**AMENDMENT TO TRAFFIC SEPARATION SCHEME BETWEEN KORSOER AND
SPROGOE**

(Reference chart: Danish chart 143 (INT 1369), 14th edition 1999

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

Description of the traffic separation scheme

- (a) A separation line connects the following geographical positions:
- (1) 55°21'.75 N, 011°02'.13 E (2) 55°19'.23 N, 011°02'.19 E
- (b) A traffic lane for northbound traffic is established between the separation line and a line connecting the following geographical positions:
- (3) 55°21'.70 N, 011°02'.77 E (4) 55°19'.49 N, 011°02'.80 E
- (c) A traffic lane for southbound traffic is established between the separation line and a line connecting the following geographical positions:
- (5) 55°21'.81 N, 011°01'.35 E (7) 55°20'.43 N, 011°01'.51 E
(6) 55°21'.02 N, 011°01'.59 E (8) 55°18'.91 N, 011°01'.42 E

Notes:

- 1 See mandatory ship reporting system "In the Great Belt Traffic area" in part G, section I.
- 2 The minimum free water depth in the northbound traffic lane is 17 m and in the southbound traffic lane 19 m.
- 3 Ships should reduce speed to maximum 20 knots before entering the appropriate lane of the scheme.

ANNEX 5

**AMENDMENT TO TRAFFIC SEPARATION SCHEME IN THE SINGAPORE STRAIT
(MAIN STRAIT)**

(Reference charts: Indonesian Chart 40, November 1977 edition)

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

1 Amend the existing Traffic Separation Zone to establish an anchorage area in the separation zone as follows:

A separation zone bounded by the following:

(a) Outer co-ordinates:

(85)	01°10'.35N	103°34'.90E	(89)	01°05'.90N	103°43'.38E
(86)	01°10'.35N	103°39'.85E	(90)	01°03'.60N	103°38'.98E
(87)	01°07'.50N	103°43'.72E	(91)	01°07'.06N	103°32'.96E
(88)	01°08'.60N	103°45'.43E			

(b) Inner co-ordinates:

(85a)	01° 09'.40N	103° 36'.60E
(86a)	01° 09'.10N	103° 38'.60E
(89a)	01° 05'.50N	103° 40'.80E
(90a)	01° 04'.50N	103° 38'.90E
(91a)	01° 06'.80N	103° 35'.00E



IMO

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Ref. T2-OSS/2.7.1

COLREG.2/Circ.55

15 December 2004

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its seventy-ninth session (1 to 10 December 2004), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routing measures, listed at annexes 1 to 7 as follows:

- .1 “In the Approaches to the Cape Fear river” (new scheme);
- .2 “Off Mina Al-Ahmadi” (new scheme);
- .3 “In Puget Sound and its approaches in Haro Strait, Boundary Pass and in the Strait of Georgia” (amended scheme);
- .4 “In the approaches to Chesapeake Bay” (amended scheme);
- .5 “Off Cape Roca” (amended scheme);
- .6 “Off Cape S. Vicente” (amended scheme); and
- .7 “In the Approaches to Puerto San Martin” (amended scheme).

2 In addition, the Maritime Safety Committee also **revoked** the following existing traffic separation scheme “Off Berlenga” (revoked scheme).

3 The new and amended traffic separation schemes (listed in subparagraphs 1.1 to 1.7 above and detailed at annexes 1, 2, 3, 4, 5, 6 and 7) will be implemented at 0000 hours UTC on 1 July 2005. The traffic separation scheme “Off Berlenga” will be revoked also at 0000 hours UTC on 1 July 2005 (paragraph 2).

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND
ASSOCIATED ROUTEING MEASURES**

ANNEX 1

**NEW TRAFFIC SEPARATION SCHEME IN THE APPROACHES TO THE
CAPE FEAR RIVER**

(Reference charts: United States 11536, 2003 edition; 11537, 2004 edition.

Note: These charts are based on North American 1983 Datum.)

Description of the traffic separation scheme

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

- | | | |
|-----|--------------|---------------|
| (1) | 33° 44'.70 N | 078° 04'.90 W |
| (2) | 33° 32'.75 N | 078° 09'.66 W |
| (3) | 33° 34'.50 N | 078° 14'.70 W |
| (4) | 33° 44'.98 N | 078° 05'.10 W |

(b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | | |
|-----|--------------|---------------|
| (5) | 33° 32'.75 N | 078° 05'.99 W |
| (6) | 33° 44'.22 N | 078° 03'.80 W |

(c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographic positions:

- | | | |
|-----|--------------|---------------|
| (7) | 33° 36'.22 N | 078° 17'.30 W |
| (8) | 33° 45'.88 N | 078° 05'.60 W |

Precautionary area

(a) A precautionary area is established bounded by a line connecting the following geographical positions: from

- | | | |
|------|--------------|--|
| (9) | 33° 47'.65 N | 078° 04'.78 W to |
| (10) | 33° 48'.50 N | 078° 04'.27 W to |
| (11) | 33° 49'.53 N | 078° 03'.10 W to |
| (12) | 33° 48'.00 N | 078° 01'.00 W to |
| (13) | 33° 41'.00 N | 078° 01'.00 W to |
| (14) | 33° 41'.00 N | 078° 04'.07 W to |
| (15) | 33° 44'.25 N | 078° 03'.00 W thence by an arc of 2 nautical miles radius,
centred at |
| (16) | 33° 46'.20 N | 078° 03'.00 W thence to the point of origin at (9). |

Note: A pilot boarding area is located inside the precautionary area. Due to heavy ship traffic, mariners are advised not to anchor or linger in the precautionary area except to pick up or disembark a pilot.

ANNEX 2

NEW TRAFFIC SEPARATION SCHEME OFF MINA AL-AHMADI

(Reference charts: British Admiralty Chart Nos.: 3773 Edition No.4 dated 06/12/2001 and 1223 Edition No.4 dated 16/5/2002)

Note: All positions are in degrees, minutes and decimals of minutes and are referred to World Geodetic System 1984 datum (WGS 84)).

Description of the new traffic separation schemes**North Scheme I**

1. A separation zone for the North scheme No.1 bounded by a line joining the following geographical positions:

(1)	29° 03'.40 N	048° 45'.00 E
(2)	29° 05'.85 N	048° 30'.00 E
(3)	29° 06'.97 N	048° 27'.57 E
(4)	29° 05'.80 N	048° 26'.00 E
(5)	29° 03'.35 N	048° 28'.10 E
(6)	29° 03'.40 N	048° 34'.50 E
(7)	29° 01'.40 N	048° 45'.00 E

2. A traffic line for inbound traffic is established between the separation zones (in 1) and between the line joining the following geographical positions:

(8)	29° 04'.50 N	048° 45'.00 E
(9)	29° 06'.85 N	048° 30'.00 E
(10)	29° 07'.60 N	048° 28'.40 E

The established direction of in bound traffic flow is: 280° – 300° respectively.

3. A traffic line for outbound traffic is established between the separation zones (in 1) and between the line joining the following geographical positions:

(11)	29° 05'.28 N	048° 25'.22 E
(12)	29° 02'.40 N	048° 27'.80 E
(13)	29° 02'.55 N	048° 34'.50 E
(14)	29° 00'.50 N	048° 45'.00 E

The established direction of out bound traffic flow is: 143° – 089° -104° respectively.

North Scheme II

1. A separation zone for the North scheme No.II bounded by a line joining the following geographical positions:

(15) 29° 07'.94 N 048° 25'.75 E
(16) 29° 07'.40 N 048° 24'.77 E
(17) 29° 09'.20 N 048° 23'.00 E

2. A separation line joining the co-ordinates of (17) above to the following geographical position:

(18) 29° 12'.30 N 048° 15'.00 E

3. A traffic lane for inbound traffic is established between the separation zones (in 1) and separation line (in 2) and between the line joining the following geographical positions:

(19) 29° 08'.40 N 048° 26'.62 E
(20) 29° 10'.05 N 048° 23'.40 E
(21) 29° 13'.20 N 048° 15'.00 E

The established direction of inbound traffic flow is: 300° - 294° respectively.

4. A traffic lane for outbound traffic is established between the separation zones (in 1) and separation line (in 2) and between the line joining the following geographical positions:

(22) 29° 11'.45 N 048° 15'.00 E
(23) 29° 08'.70 N 048° 22'.20 E
(24) 29° 06'.85 N 048° 23'.82 E

The established direction of in bound traffic flow is: 114° - 143° respectively.

5. A junction buoy "A" will be laid in position (17) above:

(17) 29° 09'.20 N 048° 23'.00 E special mark yellow.

6. A first precautionary area joining the following geographical positions:

(21) 29° 13'.20 N 048° 15'.00 E
(22) 29° 11'.45 N 048° 15'.00 E
(25) 29° 11'.45 N 048° 11'.60 E
(26) 29° 15'.00 N 048° 09'.60 E
(27) 29° 15'.00 N 048° 13'.40 E

7. A second precautionary area joining the following geographical positions:

(10) 29° 07'.60 N 048° 28'.40 E
(11) 29° 05'.28 N 048° 25'.22 E
(24) 29° 06'.85 N 048° 23'.82 E
(19) 29° 08'.40 N 048° 26'.62 E

8. Mina Al-Ahmadi deep departure channel still valid and in use for deep draft departing tankers.
9. Mina Al-Ahmadi restricted area will be re-designated through Notices To Mariners (NTM) to accommodate the above mentioned outbound lane upon the adoption of the scheme.

The South Scheme

1. A separation zone for the South scheme bounded by a line joining the following geographical positions:

(28)	28° 57'.70 N	048° 26'.95 E
(29)	28° 57'.00 N	048° 26'.00 E
(30)	29° 00'.40 N	048° 22'.96 E

2. A separation line joining the co-ordinates of position (30) above to the following geographical position:

(31)	29° 02'.60 N	048° 17'.65 E
------	--------------	---------------

3. A traffic lane for inbound traffic is established between the separation zone (in 1) and the separation line (in 2) and between the line joining the following geographical positions:

(32)	28° 58'.40 N	048° 27'.60 E
(33)	29° 01'.15 N	048° 23'.50 E
(34)	29° 03'.30 N	048° 18'.40 E

The established direction of inbound traffic flow is: 307° - 293° respectively.

4. A traffic lane for outbound traffic is established between the separation zone (in 1) and the separation line (in 2) and between the line joining the following geographical positions:

(35)	29° 01'.90 N	048° 17'.00 E
(36)	28° 59'.80 N	048° 22'.00 E
(37)	28° 56'.30 N	048° 25'.10 E

The established direction of outbound traffic flow is: 113° - 142° respectively.

5. A junction buoy (B) will be laid in position (30) above:

(30) (29° 00'.40 N, 048° 22'.96 E) – special mark yellow.

ANNEX 3

**AMENDMENT TO THE EXISTING TRAFFIC SEPARATION SCHEME IN
HARO STRAIT AND BOUNDARY PASS, AND IN THE STRAIT OF GEORGIA**

(Reference charts: Canadian Hydrographic Service 3461, 2002 edition; 3462, 2002 edition; 3463, 2002 edition. United States 18421, 2003 edition; 18423, 2003 edition; 18431, 2002 edition; 18432, 2003 edition; 18433, 2002 edition.

Note: The charts are based on North America 1983 Datum.)

Description of the traffic separation scheme

The traffic separation schemes “In Haro Strait and Boundary Pass” and “In the Strait of Georgia” consists of a series of traffic separation schemes, two-way route, and precautionary areas broken into two geographic designations as follows:

Part I: Haro Strait and Boundary Pass, (New)
Part II: Strait of Georgia, (Amended)

Part I

Haro Strait and Boundary Pass

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

(1)	48° 22'.25 N	123° 21'.12 W
(2)	48° 22'.25 N	123° 17'.95 W
(3)	48° 23'.88 N	123° 13'.18 W
(4)	48° 24'.30 N	123° 13'.00 W
(5)	48° 22'.55 N	123° 18'.05 W
(6)	48° 22'.55 N	123° 21'.12 W

thence back to point of origin (1).

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

(12)	48° 21'.67 N	123° 21'.12 W
(13)	48° 21'.67 N	123° 17'.70 W
(14)	48° 23'.10 N	123° 13'.50 W

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

(19)	48° 25'.10 N	123° 12'.67 W
(20)	48° 23'.15 N	123° 18'.30 W
(21)	48° 23'.15 N	123° 21'.12 W

(d) A precautionary area “V”, is established bounded by a line connecting the following geographical points:

(21)	48° 23'.15 N	123° 21'.12 W
(22)	48° 23'.71 N	123° 23'.88 W
(23)	48° 21'.83 N	123° 25'.56 W
(24)	48° 21'.15 N	123° 24'.83 W
(25)	48° 20'.93 N	123° 24'.26 W
(26)	48° 20'.93 N	123° 23'.22 W
(12)	48° 21'.67 N	123° 21'.12 W

thence back to point of origin (21).

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

(7)	48° 25'.96 N	123° 10'.65 W
(8)	48° 27'.16 N	123° 10'.25 W
(9)	48° 28'.77 N	123° 10'.84 W
(10)	48° 29'.10 N	123° 11'.59 W
(11)	48° 25'.69 N	123° 11'.28 W

thence back to point of origin (7).

(f) A traffic lane for north-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(16)	48° 26'.57 N	123° 09'.22 W
(17)	48° 27'.86 N	123° 08'.81 W

(g) A traffic lane for south-bound traffic is established between the separation zone and a line connecting the following geographical positions:

(18)	48° 29'.80 N	123° 13'.15 W
(19)	48° 25'.10 N	123° 12'.67 W

(h) A precautionary area “DI” is established bounded by a line connecting the following geographical points:

(14)	48° 23'.10 N	123° 13'.50 W
(15)	48° 24'.30 N	123° 09'.95 W
(16)	48° 26'.57 N	123° 09'.22 W
(19)	48° 25'.10 N	123° 12'.67 W

thence back to point of origin (14).

(i) A two-way route is established between the following geographical positions:

(29)	48° 31'.60 N	123° 10'.65 W
(30)	48° 35'.21 N	123° 12'.61 W
(31)	48° 38'.37 N	123° 12'.36 W
(32)	48° 39'.32 N	123° 13'.14 W
(33)	48° 39'.41 N	123° 16'.06 W
(34)	48° 32'.83 N	123° 13'.45 W

thence back to point of origin (29).

(j) A precautionary area “HS”, is established bounded by a line connecting the following geographical points:

(17)	48° 27'.86 N	123° 08'.81 W
(27)	48° 29'.28 N	123° 08'.35 W
(28)	48° 30'.55 N	123° 10'.12 W
(29)	48° 31'.60 N	123° 10'.65 W
(34)	48° 32'.83 N	123° 13'.45 W
(18)	48° 29'.80 N	123° 13'.15 W

thence back to point of origin (17).

(k) A two-way route is established between the following geographical positions:

(35)	48° 42'.23 N	123° 11'.35 W
(36)	48° 45'.51 N	123° 01'.82 W
(37)	48° 47'.78 N	122° 59'.12 W
(38)	48° 48'.19 N	123° 00'.84 W
(39)	48° 46'.43 N	123° 03'.12 W
(40)	48° 43'.80 N	123° 10'.77 W

thence back to point of origin (35).

(l) A precautionary area “TP”, is established bounded by a line connecting the following geographical positions:

(43)	48° 41'.06 N	123° 11'.04 W
(35)	48° 42'.23 N	123° 11'.35 W
(40)	48° 43'.80 N	123° 10'.77 W
(41)	48° 43'.20 N	123° 16'.06 W
(33)	48° 9'.41 N	123° 16'.06 W
(32)	48° 39'.32 N	123° 13'.14 W
(42)	48° 39'.76 N	123° 11'.84 W

Part II
Strait of Georgia

In the Strait of Georgia there are two TSS's and two Precautionary Areas that are currently adopted by IMO. This amendment affects the six geographical positions (55) through (60) used to describe the TSS west of Deltaport and the precautionary area "PR".

(a) Precautionary area "PR", is amended by changing the following highlighted geographical points:

(53)	48° 55'.34 N	123° 12'.30 W
(54)	48° 57'.68 N	123° 08'.76 W
(55)	49° 02'.20 N	123° 16'.28 W
(56)	49° 00'.00 N	123° 19'.69 W

thence back to point of origin (53).

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

(57)	49° 01'.39 N	123° 17'.53 W
(58)	49° 03'.84 N	123° 21'.30 W
(59)	49° 03'.24 N	123° 22'.41 W
(60)	49° 00'.75 N	123° 18'.52 W

thence back to point of origin (57).

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

(55)	49° 02'.20 N	123° 16'.28 W
(62)	49° 04'.52 N	123° 20'.04 W

(d) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(61)	49° 02'.51 N	123° 23'.76 W
(56)	49° 00'.00 N	123° 19'.69 W

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME IN PUGET SOUND AND ITS APPROACHES

(Reference charts: Canadian Hydrographic Service 3461, 2002 edition; 3462, 2002 edition; United States 18421, 2003 edition; 18429, 2002 edition; 18430, 2003 edition; 18440, 2003 edition.

Note: These charts are based on North American 1983 Datum.)

Description of the traffic separation scheme

The traffic separation scheme “In Puget Sound and its approaches” consists of a series of traffic separation schemes and precautionary areas broken into three geographic designations as follows:

- Part I: Rosario Strait
- Part II: Approaches to Puget Sound
- Part III: Puget Sound

Parts I and III remain unchanged.

Part II: Approaches to Puget Sound

The traffic separation scheme in the approaches to Puget Sound consists of a north-east/south-west approach, a north-west/south-east approach, a north/south approach and an east/west approach connecting with precautionary areas.

North-west/south-east approach

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

- | | | |
|------|--------------|---------------|
| (55) | 48° 28'.72 N | 123° 08'.53 W |
| (56) | 48° 25'.43 N | 123° 03'.88 W |
| (57) | 48° 22'.88 N | 123° 00'.82 W |
| (58) | 48° 20'.93 N | 122° 59'.30 W |
| (59) | 48° 20'.82 N | 122° 59'.62 W |
| (60) | 48° 22'.72 N | 123° 01'.12 W |
| (61) | 48° 25'.32 N | 123° 04'.30 W |
| (62) | 48° 28'.39 N | 123° 08'.64 W |

connecting with precautionary area “RA”, and thence to:

- | | | |
|------|--------------|---------------|
| (63) | 48° 18'.83 N | 122° 57'.48 W |
| (64) | 48° 13'.15 N | 122° 51'.33 W |
| (65) | 48° 13'.00 N | 122° 51'.62 W |
| (66) | 48° 18'.70 N | 122° 57'.77 W |

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

- | | | |
|------|--------------|---------------|
| (67) | 48° 29'.28 N | 123° 08'.35 W |
| (68) | 48° 25'.60 N | 123° 03'.13 W |
| (69) | 48° 23'.20 N | 123° 00'.20 W |
| (70) | 48° 21'.00 N | 122° 58'.50 W |

connecting with precautionary area “RA”, and thence to:

- | | | |
|------|-------------|--------------|
| (71) | 48°19'.20 N | 122°57'.03 W |
| (72) | 48°13'.35 N | 122°50'.63 W |

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

(73)	48° 27'.86 N	123° 08'.81 W
(74)	48° 25'.17 N	123° 04'.98 W
(75)	48° 22'.48 N	123° 01'.73 W
(76)	48° 20'.47 N	123° 00'.20 W

connecting with precautionary area “RA”, and thence to:

(77)	48° 18'.52 N	122° 58'.50 W
(78)	48° 12'.63 N	122° 52'.15 W

(d) Connecting with precautionary area “SA”, the waters contained within a circle of radius 2 miles centred at geographical position 48° 11'.45 N, 122°49'.78 W.

ANNEX 4

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME IN THE
APPROACHES TO CHESAPEAKE BAY**

(Reference charts: United States 12200, 2002 edition; 12207, 1998 edition; 12221, 2003 edition.
Note: These charts are based on North American 1983 Datum.)

Description of the traffic separation scheme

The traffic separation scheme “In the Approaches to Chesapeake Bay” consists of three parts:

Part I**Precautionary area**

(a) A precautionary area of radius two miles is centred upon geographical position 36° 56'.13 N, 075° 57'.45 W.

Part II**Eastern approach**

(a) A separation line connects the following geographical positions:

(1)	36° 57'.50 N	075° 48'.21 W
(2)	36° 56'.40 N	075° 52'.40 W
(3)	36° 56'.40 N	075° 54'.95 W

(b) A traffic lane for westbound traffic is established between the separation line and a line connecting the following geographical positions:

(4)	36° 57'.94 N	075° 48'.41 W
(5)	36° 56'.90 N	075° 52'.40 W
(6)	36° 56'.90 N	075° 55'.14 W

(c) A traffic lane for eastbound traffic is established between the separation line and a line connecting the following geographical positions:

(7)	36° 57'.04 N	075° 48'.01 W
(8)	36° 55'.88 N	075° 52'.40 W
(9)	36° 55'.88 N	075° 54'.95 W

Part III
Southern approach

(a) A separation line connects the following geographical positions:

(10)	36° 50'.33 N	075° 46'.29 W
(11)	36° 52'.90 N	075° 51'.52 W
(12)	36° 55'.96 N	075° 54'.97 W

(b) A separation line connects the following geographical positions:

(13)	36° 55'.11 N	075° 55'.23 W
(14)	36° 52'.35 N	075° 52'.12 W
(15)	36° 49'.70 N	075° 46'.80 W

(c) A separation line connects the following geographical positions:

(16)	36° 49'.52 N	075° 46'.94 W
(17)	36° 52'.18 N	075° 52'.29 W
(18)	36° 54'.97 N	075° 55'.43 W

(d) A separation line connects the following geographical positions:

(19)	36° 54'.44 N	075° 56'.09 W
(20)	36° 51'.59 N	075° 52'.92 W
(21)	36° 48'.87 N	075° 47'.42 W

(e) A traffic lane for inbound traffic is established between the separation lines described in paragraphs (a) and (b).

(f) A traffic lane for outbound traffic is established between the separation lines described in paragraphs (c) and (d).

(g) A deep-water route is established between the separation lines described in paragraphs (b) and (c). The types of ships which are recommended to use the deep-water route are given in the description of the deep-water route (see Part C). All other ships using the southern approach traffic separation scheme should use the appropriate inbound or outbound traffic lane.

ANNEX 5

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
“OFF CAPE ROCA”**

(Reference chart: "Cabo Finisterra a Casablanca", Number 21101, (INT 1081) Catalogue of Nautical Charts of the Portuguese Hydrographic Office, 4th impression - April 2002.

Note: This chart is based on European Datum 50.)

Description of the amended traffic separation scheme:

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

(1)	38° 38'.61 N	009° 46'.52 W
(2)	38° 43'.43 N	009° 47'.95 W
(3)	38° 51'.99 N	009° 47'.95 W
(4)	38° 51'.99 N	009° 49'.40 W
(5)	38° 43'.28 N	009° 49'.40 W
(6)	38° 38'.35 N	009° 47'.94 W

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

(7)	38° 37'.64 N	009° 51'.78 W
(8)	38° 42'.93 N	009° 53'.35 W
(9)	38° 51'.99 N	009° 53'.35 W
(10)	38° 51'.99 N	009° 54'.80 W
(11)	38° 42'.79 N	009° 54'.80 W
(12)	38° 37'.38 N	009° 53'.20 W

(c) A northbound traffic lane between the separation zones 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:

(13)	38° 36'.63 N	009° 57'.29 W
(14)	38° 42'.39 N	009° 59'.00 W
(15)	38° 51'.99 N	009° 59'.00 W
(16)	38° 51'.99 N	010° 04'.25 W
(17)	38° 41'.91 N	010° 04'.25 W
(18)	38° 35'.69 N	010° 02'.41 W

(d) A southbound traffic lane between the separation zones 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:

(19)	38° 34'.96 N	010° 06'.35 W
(20)	38° 41'.56 N	010° 08'.30 W
(21)	38° 51'.99 N	010° 08'.30 W
(22)	38° 51'.99 N	010° 09'.75 W
(23)	38° 41'.40 N	010° 09'.75 W
(24)	38° 34'.70 N	010° 07'.76 W

(e) A southbound traffic lane between the separation zones described in (d) and a line connecting the following geographical positions, for ships carrying dangerous or pollutant cargoes in bulk:

(25)	38° 34'.00 N	010° 11'.61 W
(26)	38° 41'.04 N	010° 13'.69 W
(27)	38° 51'.99 N	010° 13'.70 W

(f) The area between the separation zone described in paragraph (a) and the Portuguese coast, bounded on the north by the parallel of 38° 51'.99 N and on the south by the line connecting point with position 38° 38'.61 N 010° 13'.48 W and Cape Raso lighthouse (38° 38'.61 N 010° 13'.48 W) is designated as an inshore traffic zone.

ANNEX 6

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
“OFF CAPE S. VICENTE”**

(Reference chart: "Cabo Finisterra a Casablanca", Number 21101, (INT 1081) Catalogue of Nautical Charts of the Portuguese Hydrographic Office, 4th impression - April 2002.

Note: This chart is based on European Datum 50.)

Description of the amended traffic separation scheme:

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

(1)	36° 45'.16 N	008° 58'.93 W
(2)	36° 47'.10 N	009° 07'.54 W
(3)	36° 54'.44 N	009° 16'.05 W
(4)	37° 01'.40 N	009° 18'.07 W
(5)	37° 01'.14 N	009° 19'.48 W
(6)	36° 53'.87 N	009° 17'.38 W
(7)	36° 46'.06 N	009° 08'.32 W
(8)	36° 44'.04 N	008° 59'.32 W

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

(9)	36° 40'.97 N	009° 00'.39 W
(10)	36° 43'.24 N	009° 10'.45 W
(11)	36° 52'.33 N	009° 20'.99 W
(12)	37° 00'.42 N	009° 23'.33 W
(13)	37° 00'.16 N	009° 24'.74 W
(14)	36° 51'.76 N	009° 22'.32 W
(15)	36° 42'.21 N	009° 11'.24 W
(16)	36° 39'.85 N	009° 00'.78 W

(c) A northbound traffic lane between the separation zones 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:

(17)	36° 36'.57 N	009° 01'.92 W
(18)	36° 39'.19 N	009° 13'.52 W
(19)	36° 50'.12 N	009° 26'.18 W
(20)	36° 59'.39 N	009° 28'.86 W
(21)	36° 58'.43 N	009° 33'.99 W
(22)	36° 48'.06 N	009° 30'.99 W
(23)	36° 35'.42 N	009° 16'.36 W
(24)	36° 32'.48 N	009° 03'.33 W

(d) A southbound traffic lane between the separation zones 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:

(25)	36° 29'.36 N	009° 04'.41 W
(26)	36° 32'.55 N	009° 18'.53 W
(27)	36° 46'.48 N	009° 34'.66 W
(28)	36° 57'.70 N	009° 37'.90 W
(29)	36° 57'.44 N	009° 39'.32 W
(30)	36° 45'.91 N	009° 35'.99 W
(31)	36° 31'.50 N	009° 19'.32 W
(32)	36° 28'.22 N	009° 04'.80 W

(e) A southbound traffic lane between the separation zones described in (d) and a line connecting the following geographical positions, for ships carrying dangerous or pollutant cargoes in bulk:

(33)	36° 25'.15 N	009° 05'.87 W
(34)	36° 28'.68 N	009° 21'.45 W
(35)	36° 44'.37 N	009° 39'.59 W
(36)	36° 56'.72 N	009° 43'.16 W

(f) The area between the separation zone described in paragraph (a) and the Portuguese coast, bounded on the north by the parallel of 37° 01'.40 N and on the east by the line connecting point with position 36° 45'.16 N 009° 01'.07 W and Ponta de Sagres lighthouse (36° 59'.75 N, 008° 56'.87 W) is designated as an inshore traffic zone.

ANNEX 7

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME IN
THE APPROACHES TO PUERTO SAN MARTIN**

(Reference charts: PERU HIDRONAV 226, 2262 and 2263)

Note: These charts are based on World Geodetic System of 1984 Datum (WGS-84))

Description of the traffic separation scheme

1 The name of the traffic separation scheme has been amended to “In the approaches to Puerto Pisco”.

2 The traffic separation scheme “In the approaches to Puerto Pisco” consists of two parts:

Part I

Northern approaches:

(a) Two separation zones bounded by a line connecting the following geographical points:

(1)	13° 36'.59 S	076° 18'.86 W	(5)	13° 42'.11 S	076° 18'.13 W
(2)	13° 41'.23 S	076° 18'.25 W	(6)	13° 44'.74 S	076° 17'.80 W
(3)	13° 41'.24 S	076° 18'.03 W	(7)	13° 44'.74 S	076° 17'.57 W
(4)	13° 36'.59 S	076° 18'.64 W	(8)	13° 42'.12 S	076° 17'.91 W

(b) A traffic lane for northbound traffic, between the separation zones and a line connecting the following geographical points:

(9)	13° 36'.59 S	076° 18'.32 W	(10)	13° 44'.74 S	076° 17'.25 W
-----	--------------	---------------	------	--------------	---------------

(c) A traffic lane for southbound traffic, between the separation zones and the lines connecting the following geographical points:

(11)	13° 44'.74 S	076° 18'.13 W	(13)	13° 41'.20 S	076° 18'.58 W
(12)	13° 42'.08 S	076° 18'.46 W	(14)	13° 36'.59 S	076° 19'.18 W

Part II

Western approaches:

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

(15)	13° 41'.53 S	076° 18'.53 W	(17)	13° 41'.28 S	076° 24'.99 W
(16)	13° 41'.75 S	076° 18'.50 W	(18)	13° 41'.06 S	076° 24'.99 W

(b) A traffic lane for westbound traffic, between the separation zone and a line connecting the following geographical points:

(19)	13° 41'.20 S	076° 18'.58 W	(20)	13° 40'.73 S	076° 24'.99 W
------	--------------	---------------	------	--------------	---------------

(c) A traffic lane for eastbound traffic, between the separation zones and a line connecting the following geographical points:

(21) 13° 42'.08 S 076° 18'.46 W (22) 13° 41'.60 S 076° 24'.99 W

Precautionary area

A precautionary area is established bounded by a line connecting the following geographical points and the east line of the traffic separation scheme:

(3) 13° 41'.24 S 076° 18'.03 W
(19) 13° 41'.20 S 076° 18'.58 W
(21) 13° 42'.08 S 076° 18'.46 W
(8) 13° 42'.12 S 076° 17'.91 W
and
(9) 13° 36'.59 S 076° 18'.32 W
(10) 13° 44'.74 S 076° 17'.25 W

Area to be avoided

There is a circular area to be avoided of 200 m radius centred on the following geographical position:

(23) 13° 41'.68 S 076° 18'.11 W

This area is to be avoided by all ships.



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Ref. T2-OSSHE/2.7.1

COLREG.2/Circ.56
6 December 2005

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 Pursuant to resolution A.858(20), the Assembly, at its twenty-fourth session, noting the urgent need to implement the new and amended traffic separation schemes “In SW Baltic Sea” proposed by the Governments of Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden in order to enhance maritime safety, safety of navigation and protection of the marine environment in the area concerned and having considered the report of the Maritime Safety Committee on its eightieth session and the recommendation of the Sub-Committee on Safety of Navigation at its fifty-first session, adopted, on 1 December 2005, resolution A.977(24) on Ships’ Routeing relating to new and amended traffic separation schemes and associated routeing measures, listed at annexes 1 to 4 as follows:

- .1 “In Bornholmsgat” (new scheme);
- .2 “North of Rügen” (new scheme);
- .3 “Off Gotland Island” (amended scheme); and
- .4 “South of Gedser” (amended scheme).

2 The aforementioned adopted new and amended traffic separation schemes will be implemented at 0000 hours UTC on 1 July 2006.

3 Member Governments are invited to bring this information to the attention of all parties concerned.

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND ASSOCIATED
ROUTEING MEASURES IN SW BALTIC SEA**

ANNEX 1

NEW TRAFFIC SEPARATION SCHEME IN BORNHOLMSGAT

(Reference chart: German Chart No: 40 (6th Edition, 1998)

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

The traffic separation scheme (TSS) in Bornholmsgat consists of:

- Two traffic lanes 2.7 miles wide in three parts;
- One intermediate traffic separation zone 0.8 miles wide in three parts;
- Two associated inshore traffic zones;
- One precautionary area between the three parts.

The direction of navigation is:

- TSS, main part between Sweden and Bornholm: 038° (T) northeastbound course and 218° (T) southwestbound course; and
- TSS, south west part: 071° (T) and 038° (T) northeastbound courses and 218° (T) and 251° (T) southwestbound courses; and
- TSS, west part: 093° eastbound course and 273° westbound course.

Description of the traffic separation scheme

Main part:

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

- | | | |
|-----|--------------|---------------|
| (1) | 55° 24'.58 N | 014° 37'.35 E |
| (2) | 55° 25'.25 N | 014° 36'.48 E |
| (3) | 55° 12'.53 N | 014° 18'.95 E |
| (4) | 55° 12'.03 N | 014° 20'.04 E |

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

- | | | |
|-----|--------------|---------------|
| (5) | 55° 22'.34 N | 014° 40'.28 E |
| (6) | 55° 10'.37 N | 014° 23'.76 E |

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

(7)	55° 27'.55 N	014° 33'.62 E
(8)	55° 14'.19 N	014° 15'.22 E

Southwest part:

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

(9)	55° 06'.06 N	014° 11'.90 E
(10)	55° 06'.56 N	014° 10'.80 E
(11)	55° 02'.99 N	014° 05'.97 E
(12)	55° 02'.30 N	014° 02'.42 E
(13)	55° 01'.54 N	014° 02'.88 E
(14)	55° 02'.32 N	014° 06'.81 E

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

(15)	55° 04'.40 N	014° 15'.60 E
(16)	55° 00'.02 N	014° 09'.65 E
(17)	54° 58'.99 N	014° 04'.40 E

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

(18)	55° 08'.22 N	014° 07'.09 E
(19)	55° 05'.29 N	014° 03'.11 E
(20)	55° 04'.85 N	014° 00'.89 E

West part:

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

(21)	55° 10'.97 N	014° 05'.67 E
(22)	55° 11'.76 N	014° 05'.74 E
(23)	55° 11'.93 N	014° 00'.00 E
(24)	55° 11'.13 N	014° 00'.00 E

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

(25)	55° 08'.22 N	014° 07'.09 E
(26)	55° 08'.43 N	014° 00'.00 E

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

- | | | |
|------|--------------|---------------|
| (27) | 55° 14'.46 N | 014° 05'.99 E |
| (28) | 55° 14'.63 N | 014° 00'.00 E |

Precautionary area

- (j) A precautionary area is established by a line connecting the following geographical positions:

- | | | |
|------|--------------|---------------|
| (29) | 55° 10'.37 N | 014° 23'.76 E |
| (30) | 55° 14'.19 N | 014° 15'.22 E |
| (31) | 55° 14'.46 N | 014° 05'.99 E |
| (32) | 55° 10'.97 N | 014° 05'.67 E |
| (33) | 55° 08'.22 N | 014° 07'.09 E |
| (34) | 55° 04'.40 N | 014° 15'.60 E |

Inshore traffic zone – Sweden

- (k) The limits of the inshore traffic zone along the Swedish coastline lie between the following geographical positions:

- | | | |
|------|--------------|---------------|
| (35) | 55° 23'.18 N | 014° 27'.57 E |
| (36) | 55° 28'.41 N | 014° 17'.04 E |
| (37) | 55° 23'.20 N | 014° 11'.58 E |
| (38) | 55° 14'.19 N | 014° 15'.22 E |

Inshore traffic zone – Denmark (Bornholm)

- (l) The limits of the inshore traffic zone along the Danish coastline lies between the following geographical positions:

- | | | |
|------|--------------|---------------|
| (39) | 55° 17'.88 N | 014° 46'.42 E |
| (40) | 55° 22'.34 N | 014° 40'.28 E |
| (41) | 55° 13'.76 N | 014° 28'.42 E |
| (42) | 55° 11'.35 N | 014° 42'.14 E |

ANNEX 2

NEW TRAFFIC SEPARATION SCHEME NORTH OF RÜGEN

(Reference chart: German Chart No: 40 (6th Edition, 1998)

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

The traffic separation scheme (TSS) North of Rügen consists of:

- Two traffic lanes 2 miles wide; and
- One intermediate traffic separation zone 1 mile wide

The direction of navigation is:

- TSS south lane: 071° (T) eastbound course towards Bornholmshgat
- TSS north lane: 251° (T) westbound course towards Kadettrennen

Description of the traffic separation scheme

(a) North traffic separation line connecting the following geographical positions:

- | | | |
|-----|--------------|--------------|
| (1) | 54° 54'.43 N | 13° 11'.33 E |
| (2) | 54° 52'.80 N | 13° 03'.12 E |

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

- | | | |
|-----|--------------|--------------|
| (3) | 54° 51'.59 N | 13° 13'.03 E |
| (4) | 54° 52'.54 N | 13° 12'.47 E |
| (5) | 54° 50'.91 N | 13° 04'.25 E |
| (6) | 54° 49'.96 N | 13° 04'.82 E |

(c) South traffic separation line connecting the following geographical positions:

- | | | |
|-----|--------------|--------------|
| (7) | 54° 49'.70 N | 13° 14'.16 E |
| (8) | 54° 48'.07 N | 13° 05'.95 E |

(d) A traffic lane for westbound traffic is situated between the separation zone and the North traffic separation line.

(e) A traffic lane for eastbound traffic is situated between the separation zone and the South traffic separation line.

ANNEX 3

AMENDMENT TO THE TRAFFIC SEPARATION SCHEME OFF GOTLAND ISLAND

RULE CONCERNING MAXIMUM DRAUGHT

The following note should be added to the traffic separation scheme “Off Gotland Island”:

Note:

The maximum draught in the traffic separation scheme is 12 metres. All ships bound to or from the northeastern Baltic Sea with a draught of more than 12 metres are recommended to use the deep-water route Off Gotland Island.

ANNEX 4**AMENDMENT TO THE TRAFFIC SEPARATION SCHEME SOUTH OF GEDSER****NEW INSHORE TRAFFIC ZONE**

(Reference chart: German Chart No: 163 (11th Edition, 2003)

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

The new inshore traffic zone is situated between the TSS South of Gedser and the German coast.

Description of the new inshore traffic zone

The limits of the inshore traffic zone along the German coastline lie between the following geographical positions:

(1)	54° 28'.41 N	12° 29'.94 E
(2)	54° 30'.76 N	12° 17'.53 E
(3)	54° 27'.16 N	12° 15'.13 E
(4)	54° 23'.33 N	12° 09'.70 E
(5)	54° 12'.88 N	12° 09'.70 E



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Ref. T2-OSSHE/2.7.1

COLREG.2/Circ.57
26 May 2006

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its eighty-first session (10 to 19 May 2006), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routeing measures, listed at annexes 1 to 5 as follows:

- .1 “The Canary Islands” (new scheme);
- .2 “In the Strait of Juan de Fuca and its approaches” (amended scheme);
- .3 “Off Cabo de Gata” (amended scheme);
- .4 “Off Porkkala Lighthouse” (amended scheme); and
- .5 “In the Strait of Dover and Adjacent Waters” (amended scheme).

2 The new and amended traffic separation schemes (listed in subparagraphs 1.1 to 1.5 above and detailed at annexes 1, 2, 3, 4 and 5) will be implemented at 0000 hours UTC on 1 December 2006.

ANNEX 1

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES
AND ASSOCIATED ROUTEING MEASURES**

NEW TRAFFIC SEPARATION SCHEMES FOR THE CANARY ISLANDS

(Reference chart: No.209 in the Catalogue of Nautical Charts of the Spanish Navy Hydrographical Institute, second edition (12th impression of September 2003), which covers the Canary Islands and the west coast of Africa from Cape Yubi to Cape Bojador.

Note: This chart is based on WGS 84 Datum.)

1 Description of the new traffic separation schemes**2 Eastern Traffic Separation Scheme (between Grand Canary and Fuerteventura):**

- Two traffic lanes, each three miles wide;
- An intermediate traffic separation zone two miles wide;
- A rectangular precautionary area;
- Two inshore traffic zones.

2.1 Description of the traffic separation scheme

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

(3)	28° 20'.47 N	014° 56'.91 W
(4)	28° 12'.30 N	015° 00'.29 W
(5)	28° 02'.90 N	015° 04'.17 W
(6)	27° 51'.62 N	015° 08'.81 W

(b) An intermediate traffic separation zone bounded by the lines connecting the following geographical positions:

(8)	27° 50'.60 N	015° 05'.63 W
(9)	28° 01'.87 N	015° 00'.98 W
(10)	28° 11'.27 N	014° 57'.10 W
(11)	28° 20'.20 N	014° 53'.41 W
(12)	28° 20'.06 N	014° 51'.15 W
(13)	28° 10'.66 N	014° 55'.03 W
(14)	28° 01'.26 N	014° 58'.91 W
(15)	27° 49'.99 N	015° 03'.55 W

(c) A traffic lane for southbound traffic on a 200° (T) course is established between the separation line/zone described in paragraphs (a) and (b) above.

- (d) A line of separation from the inshore traffic zone, connecting the following geographical positions:

(16)	27° 48'.96 N	015° 00'.36 W
(17)	28° 00'.24 N	014° 55'.72 W
(18)	28° 09'.63 N	014° 51'.84 W
(19)	28° 19'.78 N	014° 47'.76 W

- (e) A traffic lane for northbound traffic on a 020° (T) course is established between the separation line/zone described in paragraphs (b) and (d) above.

Precautionary area

- (f) A precautionary area bounded by a line connecting the geographical positions 4, 5, 17 and 18.

Inshore traffic zones

- (g) An inshore traffic zone between the east coast of Grand Canary island and a line joining the following geographical positions:

(1)	Faro de la Isleta (28° 10'.40 N)	015° 25'.00 W
(2)	28° 22'.00 N	015° 19'.00 W
(3)	28° 20'.47 N	014° 56'.91 W
(4)	28° 12'.30 N	015° 00'.29 W
(5)	28° 02'.90 N	015° 04'.17 W
(6)	27° 51'.62 N	015° 08'.81 W
(7)	Faro Punta Arinaga (27° 51'.700 N)	015° 23'.00 W

- (h) An inshore traffic zone bounded by a line joining the following geographical positions:

(16)	27° 48'.96 N	015° 00'.36 W
(17)	28° 00'.24 N	014° 55'.72 W
(18)	28° 09'.63 N	014° 51'.84 W
(19)	28° 19'.78 N	014° 47'.76 W
(20)	28° 19'.00 N	014° 36'.00 W
(21)	Faro de Punta Jandia (28° 03'.80 N)	014° 30'.30 W
(22)	27° 45'.00 N	014° 44'.00 W
(16)	27° 48'.96 N	015° 00'.36 W

Note: Ships that so wish may give voluntary notification of entry to and departure from the TSS via the Las Palmas Regional MRCC, using VHF channel 16.

3 Western Traffic Separation Scheme (between Grand Canary and Tenerife)

- Two traffic lanes, each three miles wide;
- An intermediate traffic separation zone two miles wide;
- A rectangular precautionary area;
- Two inshore traffic zones.

3.1 Description of the traffic separation scheme

(a) A separation line, connecting the following geographical positions:

(3)	28° 38'.01 N	015° 46'.66 W
(4)	28° 27'.28 N	015° 56'.90 W
(5)	28° 18'.86 N	016° 04'.94 W
(6)	28° 03'.54 N	016° 19'.52 W

(b) An intermediate traffic separation zone bounded by the lines connecting the following geographical positions:

(8)	28° 01'.61 N	016° 16'.92 W
(9)	28° 16'.93 N	016° 02'.34 W
(10)	28° 25'.36 N	015° 54'.30 W
(11)	28° 36'.33 N	015° 43'.84 W
(12)	28° 35'.44 N	015° 42'.33 W
(13)	28° 24'.26 N	015° 52'.97 W
(14)	28° 15'.83 N	016° 01'.00 W
(15)	28° 00'.51 N	016° 15'.58 W

(c) A traffic lane for southbound traffic on a 220° (T) course is established between the separation line/zones described in paragraphs (a) and (b) above.

(d) A line of separation from the inshore traffic zone, connecting the following geographical positions:

(16)	27° 58'.58 N	016° 12'.96 W
(17)	28° 13'.90 N	015° 58'.40 W
(18)	28° 22'.33 N	015° 50'.37 W
(19)	28° 33'.81 N	015° 39'.43 W

(e) A traffic lane for northbound traffic on a 040° (T) course is established between the separation line/zone described in paragraphs (b) and (d) above.

Precautionary area

(f) A precautionary area bounded by the line connecting the geographical positions 4, 5, 17 and 18.

Inshore traffic zones

(g) An inshore traffic zone between the east coast of Santa Cruz de Tenerife island and a line connecting the following geographical positions:

(1)	Faro Punta Anaga (28° 34'.80 N)	016° 08'.30 W
(2)	28° 48'.00 N	016° 04'.00 W
(3)	28° 38'.01 N	015° 46'.66 W
(4)	28° 27'.28 N	015° 56'.90 W

(5)	28° 18'.86 N	016° 04'.94 W
(6)	28° 03'.54 N	016° 19'.52 W
(7)	Punta Roja (28° 01'.48 N)	016° 32'.88 W

- (h) An inshore traffic zone between the west coast of Gran Canaria island and a line connecting the following geographical positions:

(16)	27° 58'.58 N	016° 12'.98 W
(17)	28° 13'.90 N	015° 58'.40 W
(18)	28° 22'.33 N	015° 50'.37 W
(19)	28° 33'.81 N	015° 39'.43 W
(20)	28° 22'.00 N	015° 19'.00 W
(21)	Faro de la Isleta (28°10'.40 N)	015° 25'.00 W
(22)	28° 00'.00 N	015° 49'.18 W
(23)	28° 00'.00 N	016° 00'.00 W
(24)	27° 44'.00 N	016° 00'.00 W

Note: Ships that so wish may give voluntary notification of entry to and departure from the TSS via Tenerife MRCC, using VHF channel 16.

ANNEX 2

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME “IN THE STRAIT OF JUAN DE FUCA AND ITS APPROACHES”

(Reference charts: Canadian Hydrographic Service 3602, 2002 edition, 3481, 2000 edition, and 3526, 2001 edition, United States 18400, 2000 edition; 18421, 2000 edition; 18440, 2000 edition; 18460, 1998 edition; 18465, 1995 edition; 18480, 1999 edition; 18485, 1998 edition; Canadian Hydrographic Service 3440, 1998 edition.

Note: The charts are based on WGS 84 Datum.)

Description of the routing system

The present description of the routing system in the “In the Strait of Juan de Fuca and its Approaches” includes two parts. Part I consists of a Western approach (TSS), a Southwestern approach (TSS), and a precautionary area in the approaches to the Strait of Juan de Fuca. Part II consists of Western lanes (TSS), Southern lanes (TSS), Northern lanes (TSS), and a precautionary area in the Strait of Juan de Fuca. This amendment will affect the Western approach and precautionary area of Part I and the Western lanes of Part II.

Part I	Western approaches (TSS)	(amended)
	Southwestern approach (TSS)	(no change)
	Precautionary area	(amended)
Part II	Western lanes (TSS)	(amended)
	Southern lanes (TSS)	(no change)
	Northern lanes (TSS)	(no change)
	Precautionary area	(no change)

Description of the traffic separation schemes

Part I

In the approaches to the Strait of Juan de Fuca there are two traffic separation schemes and one precautionary area:

Western approach

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

- | | | |
|-----|--------------|---------------|
| (1) | 48° 30'.10 N | 125° 09'.00 W |
| (2) | 48° 30'.10 N | 125° 04'.67 W |
| (3) | 48° 29'.11 N | 125° 04'.67 W |
| (4) | 48° 29'.11 N | 125° 09'.00 W |

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(5)	48° 32'.09 N	125° 04'.67 W
(6)	48° 32'.09 N	125° 08'.98 W

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(7)	48° 27'.31 N	125° 09'.00 W
(8)	48° 28'.13 N	125° 04'.67 W

South-western approach

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

(10)	48° 23'.99 N	125° 06'.54 W
(11)	48° 27'.63 N	125° 03'.38 W
(12)	48° 27'.14 N	125° 02'.08 W
(13)	48° 23'.50 N	125° 05'.26 W

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

(14)	48° 22'.55 N	125° 02'.80 W
(15)	48° 26'.64 N	125° 00'.81 W

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

(8)	48° 28'.13 N	125° 04'.67 W
(9)	48° 24'.94 N	125° 09'.00 W

Precautionary area “JF”

A precautionary area “JF”, is bounded by a line connecting the following geographical positions:

(5)	48° 32'.09 N	125° 04'.67 W
(2)	48° 30'.10 N	125° 04'.67 W
(3)	48° 29'.11 N	125° 04'.67 W
(8)	48° 28'.13 N	125° 04'.67 W
(11)	48° 27'.63 N	125° 03'.38 W
(12)	48° 27'.14 N	125° 02'.08 W
(15)	48° 26'.64 N	125° 00'.81 W
(16)	48° 28'.13 N	124° 57'.90 W
(18)	48° 29'.11 N	125° 00'.00 W
(25)	48° 30'.10 N	125° 00'.00 W
(17)	48° 32'.09 N	125° 00'.00 W

thence back to the point of origin at (5).

Part II

Within Part II there are four traffic separation schemes and one Precautionary area in the Strait of Juan de Fuca.

Western lanes (TSS)

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

(18)	48° 29'.11 N	125° 00'.00 W
(19)	48° 29'.11 N	124° 43'.78 W
(20)	48° 13'.89 N	123° 54'.84 W
(21)	48° 13'.89 N	123° 31'.98 W
(22)	48° 14'.49 N	123° 31'.98 W
(23)	48° 17'.02 N	123° 56'.46 W
(24)	48° 30'.10 N	124° 43'.50 W
(25)	48° 30'.10 N	125° 00'.00 W

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(26)	48° 16'.45 N	123° 30'.42 W
(27)	48° 15'.97 N	123° 33'.54 W
(28)	48° 18'.00 N	123° 56'.07 W
(29)	48° 32'.00 N	124° 46'.57 W
(30)	48° 32'.09 N	124° 49'.90 W
(17)	48° 32'.09 N	125° 00'.00 W

Traffic may exit the lane between points (29) and (30) or may remain in the lane between points (30) and (17) en route to the precautionary area.

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(16)	48° 28'.13 N	124° 57'.90 W
(31)	48° 28'.13 N	124° 44'.07 W
(32)	48° 12'.90 N	123° 55'.24 W
(33)	48° 12'.94 N	123° 32'.89 W

Southern lanes

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

(34)	48° 10'.82 N	123° 25'.44 W
(35)	48° 12'.38 N	123° 28'.68 W
(36)	48° 12'.90 N	123° 28'.68 W
(37)	48° 12'.84 N	123° 27'.46 W
(38)	48° 10'.99 N	123° 24'.84 W

- (b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(39) 48° 11'.24 N 123° 23'.82 W
(40) 48° 12'.72 N 123° 25'.34 W

- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(33) 48° 12'.94 N 123° 32'.89 W
(41) 48° 09'.42 N 123° 24'.24 W

Northern lanes

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

(42) 48° 21'.15 N 123° 24'.83 W
(43) 48° 16'.16 N 123° 28'.50 W
(44) 48° 15'.77 N 123° 27'.18 W
(45) 48° 20'.93 N 123° 24'.26 W

- (b) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

(46) 48° 21'.83 N 123° 25'.56 W
(26) 48° 16'.45 N 123° 30'.42 W

- (c) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

(47) 48° 20'.93 N 123° 23'.22 W
(48) 48° 15'.13 N 123° 25'.62 W

Eastern lanes

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

(49) 48° 13'.22 N 123° 15'.91 W
(50) 48° 14'.03 N 123° 25'.98 W
(51) 48° 13'.54 N 123° 25'.86 W
(52) 48° 12'.89 N 123° 16'.69 W

- (b) A traffic lane for westbound traffic is established between the separation zone and a line connecting the following geographical positions:

(54) 48° 14'.27 N 123° 13'.41 W
(55) 48° 14'.05 N 123° 16'.08 W
(48) 48° 15'.13 N 123° 25'.62 W

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

(40)	48° 12'.72 N	123° 25'.34 W
(53)	48° 12'.34 N	123° 18'.01 W

Precautionary area

A precautionary area "PA", is bounded by a line connecting the following geographical positions:

(33)	48° 12'.94 N	123° 32'.89 W
(21)	48° 13'.89 N	123° 31'.98 W
(22)	48° 14'.49 N	123° 31'.98 W
(26)	48° 16'.45 N	123° 30'.42 W
(43)	48° 16'.16 N	123° 28'.50 W
(44)	48° 15'.77 N	123° 27'.18 W
(48)	48° 15'.13 N	123° 25'.62 W
(50)	48° 14'.03 N	123° 25'.98 W
(51)	48° 13'.54 N	123° 25'.86 W
(40)	48° 12'.72 N	123° 25'.34 W
(37)	48° 12'.84 N	123° 27'.46 W
(36)	48° 12'.90 N	123° 28'.68 W

thence back to point of origin at (33).

ANNEX 3

**AMENDMENT TO THE EXISTING TRAFFIC SEPARATION SCHEME
“OFF CABO DE GATA”**

(Reference chart: No.45 B of the Spanish Navy Hydrographical Institute, March 2001 edition, which covers the area from Cabo Sacratif to Cabo de Gata.

Note: This charts is based on European datum (Potsdam).)

Description of the amended traffic separation scheme

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

(1)	36° 26'.89 N	002° 15'.23 W
(2)	36° 26'.89 N	002° 11'.47 W
(3)	36° 28'.13 N	002° 09'.65 W

(b) An intermediate separation zone bounded by a line connecting the following geographical positions:

(4)	36° 25'.70 N	002° 09'.37 W
(5)	36° 24'.27 N	002° 11'.47 W
(6)	36° 23'.70 N	002° 15'.96 W
(7)	36° 22'.45 N	002° 16'.24 W
(8)	36° 23'.06 N	002° 11'.47 W
(9)	36° 24'.55 N	002° 09'.23 W

(c) A traffic lane for south-westbound traffic is established between the separation line and separation zone described in paragraphs (a) and (b) above.

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

(10)	36° 21'.36 N	002° 08'.85 W
(11)	36° 20'.36 N	002° 16'.72 W
(12)	36° 19'.84 N	002° 16'.84 W
(13)	36° 20'.87 N	002° 08'.80 W

(e) A traffic lane for north-eastward bound traffic is established between the separation zones described in paragraphs (b) and (d) above.

Precautionary area

(f) A precautionary area bounded by a line connecting the following geographical positions:

(1)	36° 26'.89 N	002° 15'.23 W
(12)	36° 19'.84 N	002° 16'.84 W
(14)	36° 19'.84 N	002° 20'.00 W
(15)	36° 26'.89 N	002° 20'.00 W

Inshore traffic zone

- (g) An inshore traffic zone contained between the coast of Cabo de Gata and a line connecting the following geographical positions:

(16)	Ermita de la Virgen del Mar (36° 49'.60 N)	002° 17'.80 W
(1)	36° 26'.89 N	002° 15'.23 W
(2)	36° 26'.89 N	002° 11'.47 W
(3)	36° 28'.13 N	002° 09'.65 W
(17)	Faro Punta de la Polacra (36° 50'.60 N)	002° 00'.10 W

Note: Ships that so wish may give voluntary notification of entry to and departure from the TSS, via the Almería MRCC, using VHF channel 16.

ANNEX 4

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
“OFF PORKKALA LIGHTHOUSE”**

(Reference chart: FIN 952, 2004 edition)

Note: This chart is based on WGS 84 Datum.)

Description of the amended traffic separation scheme

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:
- | | | |
|-----|--------------|---------------|
| (5) | 59° 48'.75 N | 024° 58'.50 E |
| (6) | 59° 49'.30 N | 025° 04'.50 E |
- (b) A traffic lane, one and a half miles wide, is established on each side of the separation zone.

Description of the extended precautionary area

- (c) A precautionary area is established upon the following geographical positions:
- | | | |
|-----|--------------|---------------|
| (1) | 59° 43'.95 N | 024° 31'.80 E |
| (2) | 59° 50'.70 N | 024° 57'.90 E |
| (3) | 59° 46'.75 N | 024° 59'.50 E |
| (4) | 59° 47'.85 N | 024° 30'.20 E |

ANNEX 5

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
“IN THE STRAITS OF DOVER AND ADJACENT WATERS”**

- 1 The existing separation line passing through the F3 station is deleted.
- 2 The geographical positions of the boundary for the new “Precautionary Area” around the F3 Station Buoy are as follows (co-ordinates are based on WGS 84 Datum):

(1)	51° 26′.01 N	002° 02′.67 E
(2)	51° 25′.31 N	002° 03′.81 E
(3)	51° 23′.23 N	001° 58′.69 E
(4)	51° 22′.76 N	001° 59′.59 E
- 3 The position of the F3 Station Buoy and the area surrounding it in *IMO Ships’ Routeing, 7th Edition 1999, Part D, I/4* remains unchanged.
- 4 Recommended direction of traffic flow arrows is inserted in accordance with convention for ships crossing the Precautionary Area around the F3 Station, passing the buoy and leaving it on their own port side as follows:
 - .1 to the northeast of the F3 Station Buoy indicating a north-westerly traffic flow; and
 - .2 to the southwest of the F3 Station Buoy indicating a south-easterly traffic flow.



IMO

E

Ref. T2-OSS/2.7.1

COLREG.2/Circ.58
11 December 2006

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its eighty-second session (29 November to 8 December 2006) adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routing measures listed, in annexes 1 to 8, as follows:

- .1 “Off the coast of Norway from Vardø to Røst” (new scheme);
- .2 “In the SUNK area and northern approaches to the Thames estuary” (new scheme);
- .3 “Off Neist Point” in the Minches (new scheme);
- .4 “In the Strait of Gibraltar” (amended scheme);
- .5 “In the approach to Boston, Massachusetts” (amended scheme);
- .6 “In the Adriatic Sea” (amended scheme);
- .7 “Off Cani Island” and “Off Cape Bon”, off the coast of Tunisia (amended scheme);
and
- .8 “Off Botney Ground” (amended scheme).

2 The new and amended traffic separation schemes (listed in subparagraphs 1.1 to 1.8 above and detailed in annexes 1, 2, 3, 4, 5, 6, 7 and 8) will be implemented at 0000 hours UTC on 1 July 2007.

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND ASSOCIATED ROUTEING MEASURES

ANNEX 1

NEW TRAFFIC SEPARATION SCHEMES OFF THE COAST OF NORWAY FROM VARDØ TO RØST

(Reference charts are Norwegian Hydrographic Service Fisheries Chart Series:

No.	Title	Scale	Datum	Published
551	Barentshavet, sørvestlige del	1:700 000	ED 50	1963
552	Vesterålen – Vest Finnmark – Bjørnøya	1:700 000	ED 50	1964
557	Haltenbanken – Vesterålen	1:700 000	ED 50	1966

Position co-ordinates referred to the WGS 84 Datum should be plotted direct on to these charts, as the difference between the WGS 84 and ED 50 Datums is of no practical significance at the actual scale.

Note: The geographical positions, (1) – (98), listed below are given in the WGS 84 Datum.)

Categories of ships to which the traffic separation schemes apply

Tankers of all sizes, including gas and chemical tankers, and all other cargo ships of 5,000 gross tonnage and upwards engaged on international voyages should follow the routeing system consisting of a series of traffic separation schemes joined by recommended routes off the coast of Norway from Vardø to Røst.

International voyages to or from ports in Norway from Vardø to Røst

Ships on international voyages to or from ports in Norway from Vardø to Røst should follow the ship's routeing system until a course to port can be clearly set. This also applies to ships calling at Norwegian ports for supplies or service.

Description of the traffic separation schemes

I Off Vardø

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

(1) 70° 44'.55 N	031° 49'.52 E	(3) 70° 51'.05 N	031° 33'.87 E
(2) 70° 49'.44 N	031° 30'.08 E	(4) 70° 46'.20 N	031° 53'.31 E

- (b) A traffic lane for westbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(5) 70° 48'.59 N 031° 58'.90 E (6) 70° 53'.40 N 031° 39'.19 E

- (c) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(7) 70° 42'.22 N 031° 44'.20 E (8) 70° 47'.08 N 031° 24'.76 E

II Off Slettnes

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

(9) 71° 23'.01 N 029° 11'.08 E (12) 71° 29'.21 N 028° 44'.33 E
(10) 71° 26'.11 N 028° 58'.61 E (13) 71° 27'.86 N 029° 01'.25 E
(11) 71° 27'.26 N 028° 42'.95 E (14) 71° 24'.63 N 029° 14'.78 E

- (e) A traffic lane for westbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(15) 71° 27'.06 N 029° 20'.38 E (17) 71° 32'.13 N 028° 46'.76 E
(16) 71° 30'.60 N 029° 05'.28 E

- (f) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(18) 71° 20'.58 N 029° 05'.48 E (20) 71° 24'.39 N 028° 40'.62 E
(19) 71° 23'.35 N 028° 54'.38 E

III Off North Cape

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

(21) 71° 40'.27 N 026° 08'.73 E (24) 71° 42'.53 N 025° 26'.58 E
(22) 71° 41'.78 N 025° 49'.27 E (25) 71° 43'.72 N 025° 49'.45 E
(23) 71° 40'.61 N 025° 27'.86 E (26) 71° 42'.19 N 026° 10'.46 E

- (h) A traffic lane for westbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(27) 71° 45'.05 N 026° 13'.20 E (29) 71° 45'.39 N 025° 24'.48 E
(28) 71° 47'.03 N 025° 49'.12 E

- (i) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(30) 71° 37'.34 N 026° 06'.36 E (32) 71° 37'.60 N 025° 29'.77 E
(31) 71° 38'.80 N 025° 48'.40 E

IV Off Sørøya

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

(33)	71° 30'.11 N	022° 39'.50 E	(36)	71° 28'.08 N	021° 59'.45 E
(34)	71° 28'.95 N	022° 20'.05 E	(37)	71° 30'.73 N	022° 18'.35 E
(35)	71° 26'.29 N	022° 01'.90 E	(38)	71° 32'.06 N	022° 38'.23 E

(k) A traffic lane for westbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(39)	71° 35'.00 N	022° 36'.42 E	(41)	71° 30'.85 N	021° 55'.63 E
(40)	71° 33'.65 N	022° 15'.39 E			

(l) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(42)	71° 27'.17 N	022° 41'.31 E	(44)	71° 23'.55 N	022° 05'.83 E
(43)	71° 26'.00 N	022° 23'.00 E			

V Off Torsvåg

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

(45)	71° 02'.07 N	019° 13'.93 E	(48)	70° 56'.51 N	018° 36'.45 E
(46)	70° 59'.63 N	018° 55'.90 E	(49)	71° 01'.26 N	018° 52'.77 E
(47)	70° 55'.07 N	018° 40'.45 E	(50)	71° 03'.97 N	019° 11'.40 E

(n) A traffic lane for westbound traffic is established between the separation zone described in paragraph (m) and a line connecting the following geographical positions:

(51)	71° 06'.72 N	019° 07'.81 E	(53)	70° 58'.73 N	018° 30'.34 E
(52)	71° 03'.77 N	018° 47'.82 E			

(o) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (m) and a line connecting the following geographical positions:

(54)	70° 59'.40 N	019° 17'.65 E	(56)	70° 52'.80 N	018° 46'.70 E
(55)	70° 56'.97 N	019° 00'.60 E			

VI Off Andenes

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

(57)	69° 48'.74 N	015° 06'.86 E	(59)	69° 44'.77 N	014° 46'.12 E
(58)	69° 43'.32 N	014° 50'.07 E	(60)	69° 50'.22 N	015° 03'.14 E

- (q) A traffic lane for westbound traffic is established between the separation zone described in paragraph (p) and a line connecting the following geographical positions:

(61) 69° 52'.41 N 014° 57'.25 E (62) 69° 47'.00 N 014° 40'.38 E

- (r) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (p) and a line connecting the following geographical positions:

(63) 69° 46'.52 N 015° 12'.75 E (64) 69° 41'.09 N 014° 55'.85 E

VII **Off Røst (1)**

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

(65) 68° 12'.89 N 010° 16'.07 E (68) 68° 03'.57 N 009° 50'.12 E
(66) 68° 08'.36 N 010° 02'.92 E (69) 68° 09'.41 N 009° 58'.73 E
(67) 68° 02'.64 N 009° 54'.93 E (70) 68° 14'.26 N 010° 12'.03 E

- (t) A traffic lane for westbound traffic is established between the separation zone described in paragraph (s) and a line connecting the following geographical positions:

(71) 68° 16'.38 N 010° 06'.20 E (73) 68° 04'.83 N 009° 43'.01 E
(72) 68° 11'.32 N 009° 52'.34 E

- (u) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (s) and a line connecting the following geographical positions:

(74) 68° 10'.82 N 010° 21'.89 E (76) 68° 01'.24 N 010° 02'.10 E
(75) 68° 06'.71 N 010° 09'.50 E

VIII **Off Røst (2)**

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

(77) 67° 37'.66 N 009° 21'.34 E (79) 67° 31'.31 N 009° 07'.29 E
(78) 67° 30'.42 N 009° 12'.05 E (80) 67° 38'.55 N 009° 16'.66 E

- (w) A traffic lane for westbound traffic is established between the separation zone described in paragraph (v) and a line connecting the following geographical positions:

(81) 67° 40'.00 N 009° 09'.73 E (82) 67° 32'.64 N 009° 00'.28 E

- (x) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (v) and a line connecting the following geographical positions:

(83) 67° 36'.29 N 009° 28'.33 E (84) 67° 29'.06 N 009° 18'.88 E

Description of the recommended routes

- (y) A recommended route is established between the traffic separation schemes Off Vardø to Off Slettnes with a central line between the following geographical positions:

(85) 70° 50'.43 N 031° 31'.22 E (86) 71° 23'.64 N 029° 13'.67 E

- (z) A recommended route is established between the traffic separation schemes Off Slettnes to Off North Cape with a central line between the following geographical positions:

(87) 71° 28'.28 N 028° 42'.65 E (88) 71° 41'.20 N 026° 10'.59 E

- (aa) A recommended route is established between the traffic separation schemes Off North Cape to Off Sørøya with a central line between the following geographical positions:

(89) 71° 41'.50 N 025° 26'.81 E (90) 71° 31'.20 N 022° 39'.83 E

- (bb) A recommended route is established between the traffic separation schemes Off Sørøya to Off Torsvåg with a central line between the following geographical positions:

(91) 71° 27'.06 N 022° 00'.01 E (92) 71° 03'.18 N 019° 13'.28 E

- (cc) A recommended route is established between the traffic separation schemes Off Torsvåg to Off Andenes with a central line between the following geographical positions:

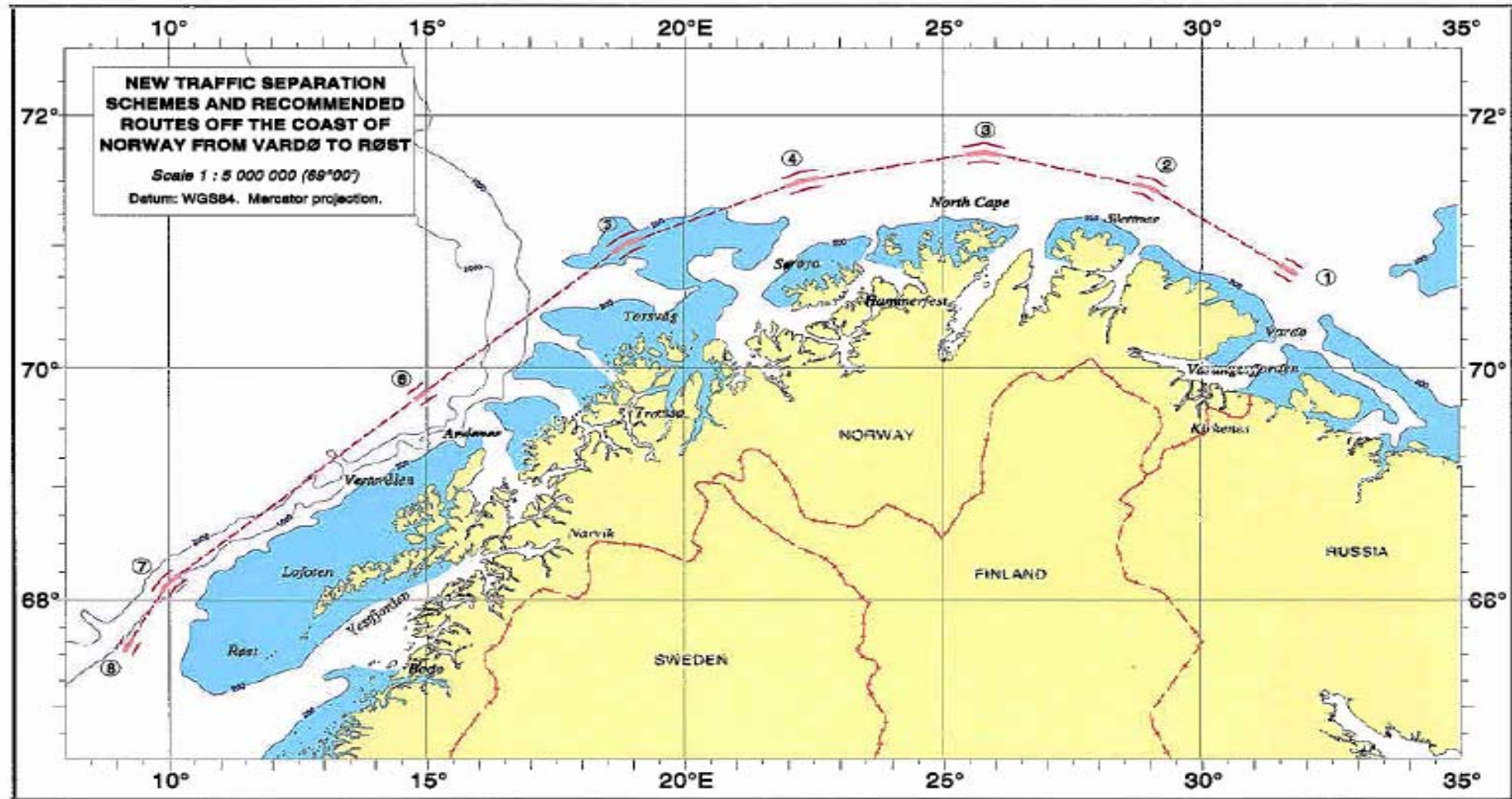
(93) 70° 55'.68 N 018° 38'.05 E (94) 69° 49'.78 N 015° 05'.38 E

- (dd) A recommended route is established between the traffic separation schemes Off Andenes to Off Røst (1) with a central line between the following geographical positions:

(95) 69° 43'.79 N 014° 47'.17 E (96) 68° 13'.89 N 010° 15'.05 E

- (ee) A recommended route is established between the traffic separation schemes Off Røst (1) to Off Røst (2) with a central line between the following geographical positions:

(97) 68° 02'.84 N 009° 52'.08 E (98) 67° 38'.34 N 009° 19'.26 E



ANNEX 2

**NEW TRAFFIC SEPARATION SCHEMES IN THE SUNK AREA AND IN THE
NORTHERN APPROACHES TO THE THAMES ESTUARY**

(Reference Chart: British Admiralty 1183, 2005 edition;

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

A new integrated traffic routing scheme for the SUNK Area consists of several elements comprising:

- .1 One two-way route (Long Sand Head);
- .2 Two traffic lanes 1.9 miles wide in two parts (SUNK TSS North and South);
- .3 Two traffic lane 1.0 miles wide in one part (SUNK TSS East);
- .4 A new inner Precautionary Area, named SUNK Inner Precautionary Area;
- .5 A new precautionary area, adjacent to the SUNK Inner Precautionary Area, named SUNK Outer Precautionary Area;
- .6 A 1 nautical mile diameter Area to be Avoided in the SUNK Outer Precautionary Area; and
- .7 A recommended route (“Gallop” recommended route).

Description of the two-way route

Part I:

Long Sand Head two-way route is established. (Note that entry is restricted to piloted vessels, vessels operated under pilotage exemption certificate (PEC), and vessels exempt from pilotage under the destination ports pilotage directions.)

- (a) A boundary line connecting the following geographical positions:

(1)	51° 38'.09N	001° 40'.43E
(2)	51° 47'.90N	001° 39'.42E
(3)	51° 47'.77N	001° 38'.16E

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

(4)	51° 38'.31N	001° 43'.60E
(5)	51° 38'.33N	001° 43'.89E
(6)	51° 42'.16N	001° 43'.20E
(7)	51° 48'.29N	001° 42'.08E
(8)	51° 48'.98N	001° 41'.64E
(9)	51° 49'.28N	001° 40'.72E
(10)	51° 49'.49N	001° 40'.06E
(11)	51° 49'.30N	001° 38'.16E
(12)	51° 49'.11N	001° 38'.16E
(13)	51° 49'.30N	001° 40'.01E
(14)	51° 48'.84N	001° 41'.40E
(15)	51° 48'.24N	001° 41'.79E

- (c) A two-way route bounded by the boundary line described in (a) above and the separation zone described in (b) above.

Part II:

Description of the traffic separation schemes

SUNK traffic separation scheme

South

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

(16)	51° 38'.54N	001° 46'.87E
(17)	51° 38'.61N	001° 47'.85E
(18)	51° 42'.44N	001° 47'.16E
(19)	51° 42'.37N	001° 46'.18E

- (e) A traffic lane for northbound traffic between the separation zone described in (d) above and a line connecting the following geographical positions:

(20)	51° 38'.82N	001° 50'.83E
(21)	51° 42'.65N	001° 50'.14E

- (f) A traffic lane for southbound traffic between the separation zone described in (d) above and that portion of the separation zone described in (b) above connecting the following geographic positions:

(5)	51° 38'.33N	001° 43'.89E
(6)	51° 42'.16N	001° 43'.20E

SUNK traffic separation scheme

East

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

(22)	51° 50'.91N	002° 00'.00E
(23)	51° 51'.21N	002° 00'.00E
(24)	51° 48'.84N	001° 51'.86E
(25)	51° 48'.54N	001° 51'.85E

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

(26)	51° 52'.29N	002° 00'.00E
(27)	51° 49'.92N	001° 51'.89E
(28)	51° 52'.06N	001° 49'.37E
(29)	51° 53'.90N	001° 49'.96E
(30)	51° 55'.72N	001° 50'.54E
(31)	51° 55'.59N	001° 51'.73E
(32)	51° 52'.31N	001° 50'.68E
(33)	51° 50'.99N	001° 52'.27E
(34)	51° 53'.24N	002° 00'.00E

- (i) A traffic lane for eastbound traffic between the separation zone described in (g) above and a line connecting the following geographical positions:

(35)	51° 47'.45N	001° 51'.82E
(36)	51° 49'.84N	002° 00'.00E

- (j) A traffic lane for westbound traffic between the separation zone described in (g) above and that portion of the separation zone described in (h) above connecting the following geographical positions:

(26)	51° 52'.29N	002° 00'.00E
(27)	51° 49'.92N	001° 51'.89E

SUNK traffic separation scheme North

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

(37)	51° 56'.06N	001° 47'.40E
(38)	51° 56'.16N	001° 46'.45E
(39)	51° 54'.34N	001° 45'.87E
(40)	51° 54'.24N	001° 46'.81E

- (l) A traffic lane for northbound traffic between the separation zone described in (k) above and that portion of the separation zone described in (h) above connecting the following geographical positions:

(29)	51° 53'.90N	001° 49'.96E
(30)	51° 55'.72N	001° 50'.54E

- (m) A traffic lane for southbound traffic between the separation zone described in (k) above and a line connecting the following geographical positions:

(41)	51° 56'.50N	001° 43'.31E
(42)	51° 54'.68N	001° 42'.72E

SUNK Inner Precautionary area

- (n) A precautionary area will be established by a line connecting the following geographical positions:

(12)	51° 49'.11N	001° 38'.16E
(11)	51° 49'.30N	001° 38'.16E
(10)	51° 49'.49N	001° 40'.06E
(9)	51° 49'.28N	001° 40'.72E
(43)	51° 52'.61N	001° 41'.12E
(44)	51° 53'.03N	001° 39'.03E
(45)	51° 52'.73N	001° 34'.26E
(46)	51° 52'.46N	001° 33'.20E
(47)	51° 52'.46N	001° 32'.35E
(48)	51° 51'.59N	001° 31'.32E
(49)	51° 49'.61N	001° 31'.32E
(50)	51° 48'.51N	001° 29'.50E
(51)	51° 46'.07N	001° 33'.42E
(52)	51° 47'.50N	001° 35'.64E
(3)	51° 47'.77N	001° 38'.16E

SUNK Outer Precautionary area

- (o) A precautionary area will be established by a line connecting the following geographical positions:

(43)	51° 52'.61N	001° 41'.12E
(9)	51° 49'.28N	001° 40'.72E
(8)	51° 48'.98N	001° 41'.64E
(7)	51° 48'.29N	001° 42'.08E
(6)	51° 42'.16N	001° 43'.20E
(21)	51° 42'.65N	001° 50'.14E
(35)	51° 47'.45N	001° 51'.82E
(27)	51° 49'.92N	001° 51'.89E
(28)	51° 52'.06N	001° 49'.37E
(29)	51° 53'.90N	001° 49'.96E
(42)	51° 54'.68N	001° 42'.72E

Area to be avoided

- (p) An area to be avoided, 1 nautical mile in diameter, centred upon the following geographical position:

(53)	51° 50'.10N	001° 46'.02E
------	-------------	--------------

Note: The flow of traffic around the ATBA is counter-clockwise as indicated by the recommended directions of traffic flow in the Precautionary area. All ships should avoid the area within a circle of radius 0.5 miles, centred upon the following geographical position: 51° 50'.10N 001°46'.02E.

This area is established to avoid hazard to a navigational aid which is established at the geographical position listed above, and which is considered vital to the safety of navigation.

Part III:

Description of the recommended route

- (q) A recommended route (“Galopper” recommended route in the south-east sector of the scheme to enable regular ferry traffic sailing to and from the Port of Ostend to enter and leave the SUNK Outer Precautionary Area without deviating unnecessarily to use traffic separation lanes) connecting the following geographical positions:

(54)	51° 44'.93N	001° 50'.93E
(55)	51° 41'.33N	002° 00'.03E

ANNEX 3

NEW TRAFFIC SEPARATION SCHEME OFF NEIST POINT IN THE MINCHES

(Reference charts: British Admiralty Chart No.2635, 1794, 1795.

Note: These charts are based on the Ordnance Survey of Great Britain, 1936 (OSGB 36)).

Description of the traffic separation scheme**Little Minches traffic separation scheme**

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

(1)	57° 23'.90 N 57° 23'.84 N	006° 53'.40 W 006° 53'.33 W (WGS 84)
(2)	57° 26'.20 N 57° 26'.16 N	006° 52'.80 W 006° 52'.88 W (WGS 84)
(3)	57° 27'.90 N 57° 28'.02 N	006° 51'.60 W 006° 51'.42 W (WGS 84)
(4)	57° 28'.20 N 57° 28'.37 N	006° 53'.06 W 006° 52'.96 W (WGS 84)
(5)	57° 26'.50 N 57° 26'.39 N	006° 54'.40 W 006° 54'.52 W (WGS 84)
(6)	57° 24'.06 N 57° 23'.93 N	006° 55'.10 W 006° 54'.99 W (WGS 84)

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

(7)	57° 23'.70 N 57° 23'.68 N	006° 50'.50 W 006° 50'.56 W (WGS 84)
(8)	57° 25'.80 N 57° 25'.78 N	006° 50'.10 W 006° 50'.16 W (WGS 84)
(9)	57° 27'.44 N 57° 27'.44 N	006° 48'.86 W 006° 48'.86 W (WGS 84)

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

(10)	57° 24'.26 N 57° 24'.08 N	006° 57'.60 W 006° 57'.75 W (WGS 84)
------	------------------------------	---

- | | | |
|------|------------------------------|---|
| (11) | 57° 26'.94 N
57° 26'.76 N | 006° 57'.08 W
006° 57'.24 W (WGS 84) |
| (12) | 57° 28'.70 N
57° 28'.96 N | 006° 55'.55 W
006° 55'.52 W (WGS 84) |

ANNEX 4

AMENDMENTS TO THE EXISTING TSS “IN THE STRAIT OF GIBRALTAR”

(Reference chart is No.445 issued by the Hydrographic Institute of the Spanish Navy, Datum WGS 84, 3rd edition, December 2003, covering the south coast of Spain (from Punta Camariñal to Punta Europa) and north Morocco (from Cape Espartel to Punta Almina)).

Description of the amended traffic separation scheme

(a) A separation zone, half a mile wide, is centred upon the following geographical positions:

- | | |
|-----------------|--------------|
| (1) 35°59'.01 N | 005°25'.68 W |
| (2) 35°58'.36 N | 005°28'.19 W |

(b) A separation zone, half a mile wide, is centred upon the following geographical positions:

- | | |
|-----------------|--------------|
| (3) 35°57'.08 N | 005°33'.08 W |
| (4) 35°56'.21 N | 005°36'.48 W |
| (5) 35°56'.21 N | 005°44'.98 W |

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

- | | |
|-----------------|--------------|
| (7) 36°01'.21 N | 005°25'.68 W |
| (8) 36°00'.35 N | 005°28'.98 W |

(d) A traffic lane for westbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

- | | |
|------------------|--------------|
| (9) 35°59'.07 N | 005°33'.87 W |
| (10) 35°58'.41 N | 005°36'.48 W |
| (11) 35°58'.41 N | 005°44'.98 W |

(e) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

- | | |
|------------------|--------------|
| (12) 35°52'.51 N | 005°44'.98 W |
| (13) 35°53'.81 N | 005°36'.48 W |
| (14) 35°54'.97 N | 005°32'.25 W |

(f) A traffic lane for eastbound traffic is established between the separation zone (described in paragraph (a)) and a line connecting the following geographical positions:

- | | |
|------------------|--------------|
| (15) 35°56'.35 N | 005°27'.40 W |
| (16) 35°56'.84 N | 005°25'.68 W |

(g) A precautionary area is established on the eastern side of the Gibraltar TSS by the lines connecting the following geographical positions:

- (6) 36° 02'.80 N 005° 19'.68 W
- (7) 36° 01'.21 N 005° 25'.68 W
- (16) 35° 56'.84 N 005° 25'.68 W
- (17) 35° 58'.78 N 005° 18'.55 W

(h) A precautionary area with recommended directions of traffic flow is established off the Moroccan port of Tanger-Med in the Gibraltar TSS formed by the lines connecting the following geographical positions:

- (8) 36° 00'.35 N 005° 28'.98 W
- (9) 35° 59'.07 N 005° 33'.87 W
- (14) 35° 54'.97 N 005° 32'.25 W
- (15) 35° 56'.35 N 005° 27'.40 W

Inshore traffic zones

Description of the northern inshore traffic zone

(1) The area between the northern boundary of the scheme formed by the continuing line that links points 7,8,9,10 and 11 and the Spanish coast, and lying between the following limits is designated as an inshore traffic zone:

(2) **Eastern limit:** That part of the meridian 005°25'.68 W (23) between the northern boundary of the westbound traffic lane (latitude 36° 01'.21 N, corresponding to point (7) on the attached chartlet) and the Spanish coast.

(2) **Western limit:** That part of the meridian 005°44'.98 W (22) between the northern boundary of the westbound traffic lane (latitude 35°58'.41 N, corresponding to point (11) on the attached chartlet) and the Spanish coast.

Description of the south-eastern and the south-western inshore traffic zones

(1) The existing southern inshore traffic zone is divided into two inshore traffic zones to east and west, with a free navigational area between them, located between the southern limit of the TSS and the coast of Morocco; these are bounded by eight geographical positions.

(2) **South-eastern zone:** a traffic zone within the inshore traffic zone formed by the coast of Morocco, the external limit of the traffic lane for the traffic heading towards the eastern area of the current scheme and the lines connecting the following geographical positions:

- (18) 35°54'.45 N 005°25'.68 W
- (16) 35°56'.84 N 005°25'.68 W

- (15) 35°56'.35 N 005°27'.40 W
- (19) 35°54'.88 N 005°27'.40 W

- (3) **South-western zone:** a traffic zone within the inshore zone formed by the coast of Morocco, the external limit of the traffic lane for the traffic heading towards the eastern area of the current scheme and the lines connecting the following geographical positions:

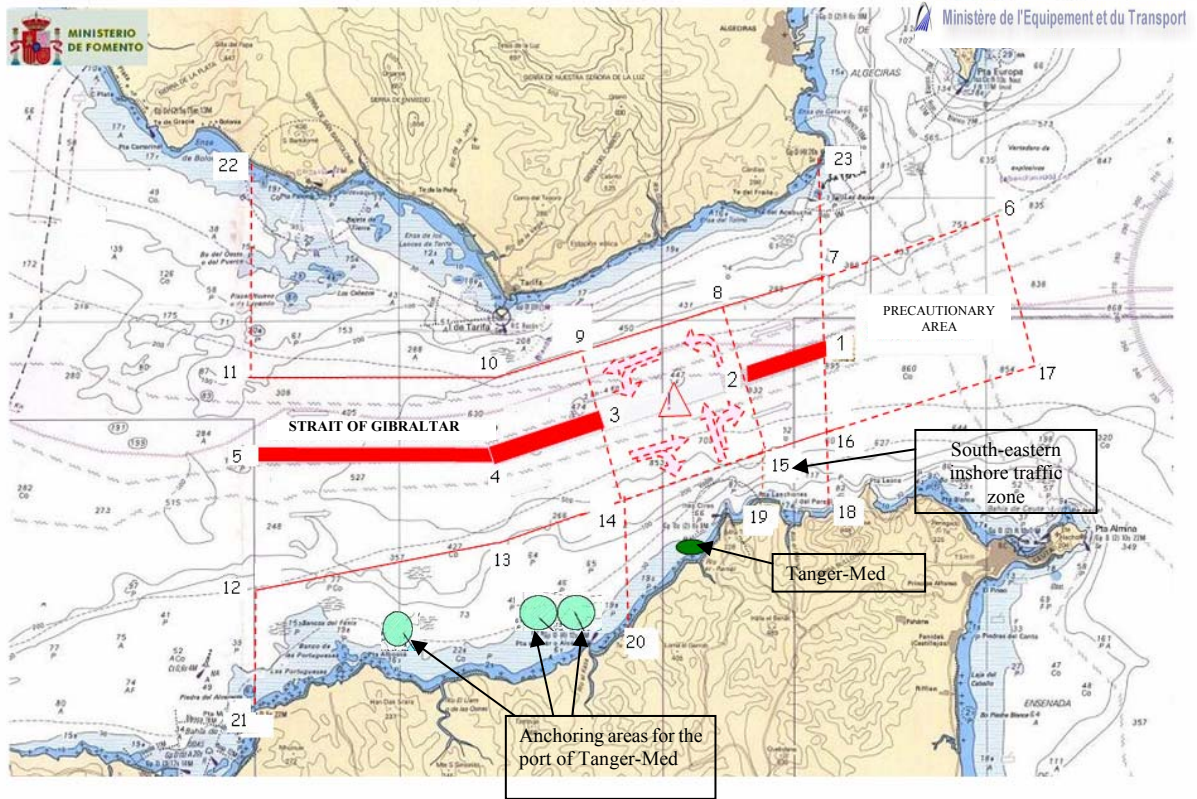
(20) 35°51'.33 N	005°32'.25 W
(14) 35°54'.97 N	005°32'.25 W
(12) 35°52'.51 N	005°44'.98 W
(21) 35°49'.09 N	005°44'.98 W

Notes:

- 1 Within this zone are arranged three areas serving the port of Tanger-Med as anchoring areas.

These areas are configured as three circles centred on the following co-ordinates and having a radius of 0.4 miles.

First anchoring area	(A):	35°51'.05 N	005°40'.34 W
Second anchoring area	(B):	35°52'.03 N	005°34'.65 W
Third anchoring area	(C):	35°52'.03 N	005°33'.49 W
- 2 Ships heading for the anchorages indicated in the south-western inshore traffic zone must sail through that zone if coming from the Atlantic or from the port of Tanger or if proceeding from these areas to anchorages at Tanger-Med or *vice versa*.
- 3 Given the absence of ports or any type of facility in the south-eastern inshore traffic zone, ships entering or leaving the port of Tanger-Med must sail along the corresponding traffic lanes.
- 4 Ships sailing from the Atlantic Ocean or the Mediterranean Sea towards the port of Tanger-Med, or departing from it for the Atlantic or the Mediterranean Sea must sail along the corresponding traffic lanes.
- 5 Ships heading from the Atlantic to the anchoring areas of the south-western inshore traffic zone must sail, in accordance with rule 10 of the 1972 COLREGs, through that same inshore traffic zone.
- 6 Ships heading from the port of Tanger-Med to the anchoring areas of the south-western inshore traffic zone must sail, in accordance with rule 10 of the 1972 COLREGs, through that same inshore traffic zone.
- 7 Ships heading from the anchoring areas of the south-western inshore traffic zone towards the Atlantic must sail, in accordance with rule 10 of the 1972 COLREGs, through that same inshore traffic zone.



ANNEX 5

AMENDMENTS TO THE EXISTING TSS IN THE APPROACH TO BOSTON,
MASSACHUSETTS

(Reference charts: United States 13009, 2004 edition; 13200, 2005 edition; 13246, 2003 edition; 13267, 2004 edition.)

Note: These charts are based on North American 1983 Datum, which for charting purposes is considered equivalent to the WGS 84.)

Description of the amended traffic separation scheme

(a) A separation zone, one mile wide, is centred upon the following geographic positions:

(1) 42°20'.84 N	070°40'.70 W	(3) 40°49'.16 N	068°59'.97 W
(2) 42°18'.24 N	070°00'.40 W		

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

(4) 40°50'.27 N	068°56'.97 W	(6) 42°22'.81 N	070°40'.22 W
(5) 42°20'.08 N	069°57'.92 W		

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

(7) 42°18'.95 N	070°42'.52 W	(9) 40°48'.03 N	069°02'.96 W
(8) 42°16'.39 N	070°02'.88 W		

Precautionary areas

(a) A precautionary area of radius five miles is centred upon geographical position 42°22'.71 N, 070°46'.97 W.

(b) A precautionary area is bounded to the east by a circle of radius 15.5 miles, centred upon geographical position 40°35'.01 N, 068°59'.97 W, intersected by the traffic separation schemes “In the approach to Boston, Massachusetts” and “Eastern Approach, Off Nantucket” (part II of the traffic separation scheme “Off New York”) at the following geographical positions:

(4) 40°50'.27 N	068°56'.97 W	(11) 40°23'.75 N	069°13'.95 W
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The precautionary area is bounded to the west by a line connecting the two traffic separation schemes between the following geographical positions:

(9) 40°48'.03 N	069°02'.96 W	(10) 40°36'.76 N	069°15'.13 W
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ANNEX 6

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEMES IN
THE ADRIATIC SEA**

IN THE NORTH ADRIATIC SEA – WESTERN PART (amended)

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskogel, Bessel Ellipsoid.

The co-ordinates listed below are in WGS 84 Datum

Description of the traffic separation scheme

- 8 A separation zone is bounded by a line connecting the following geographical positions:
- | | | | |
|-------------------|---------------|-------------------|---------------|
| (8a) 43° 54'.90 N | 013° 49'.20 E | (8d) 44° 45'.50 N | 013° 00'.00 E |
| (8b) 43° 56'.40 N | 013° 50'.50 E | (8e) 44° 45'.40 N | 012° 59'.40 E |
| (8c) 44° 17'.20 N | 013° 12'.80 E | (8f) 44° 12'.10 N | 013° 14'.50 E |
- 9 A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:
- | | | | |
|-------------------|---------------|-------------------|----------------|
| (9a) 43° 58'.40 N | 013° 52'.70 E | (9c) 44° 46'.10 N | 013° 03'.450 E |
| (9b) 44° 18'.80 N | 013° 15'.90 E | | |
- 10 A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:
- | | | | |
|--------------------|---------------|--------------------|---------------|
| (10a) 43° 53'.00 N | 013° 47'.40 E | (10c) 44° 44'.70 N | 012° 55'.80 E |
| (10b) 44° 10'.50 N | 013° 11'.20 E | | |

The established directions of traffic flow are: 162° – 124° and 342° – 307°

PRECAUTIONARY AREA AT THE SOUTHERN LIMITS OF THE TRAFFIC SEPARATION SCHEME (amended)

Description of the precautionary area

A precautionary area is established by a line connecting the following geographical positions:

- | | | | |
|-------------------|---------------|--------------------|---------------|
| (3) 43° 47'.50 N | 013° 58'.20 E | (6a) 44° 04'.40 N | 014° 00'.97 E |
| (4) 43° 59'.85 N | 014° 16'.61 E | (9a) 43° 58'.40 N | 013° 52'.70 E |
| (5a) 44° 08'.20 N | 014° 08'.77 E | (10a) 43° 53'.00 N | 013° 47'.40 E |

APPROACHES TO GULF OF VENICE (amended)

Reference chart: No 435 of the Italian Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskogel, Bessel Ellipsoid.

The co-ordinates listed below are in WGS 84 Datum

Description of the traffic separation scheme approaches to Gulf of Venice

The separation zone in the approaches to Gulf of Venice is amended with the establishments of a new scheme consisting of two new separation schemes connected by a precautionary area for the transversal traffic from and to the LNG platform.

14 NORTHERN PART

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

- | | | | |
|------------------|--------------|------------------|--------------|
| (1) 45° 09'.10 N | 12° 38'.50 E | (2) 45° 10'.50 N | 12° 40'.40 E |
| (3) 45° 14'.30 N | 12° 34'.00 E | (4) 45° 12'.00 N | 12° 31'.50 E |

A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|------------------|--------------|------------------|--------------|
| (5) 45° 12'.00 N | 12° 42'.40 E | (6) 45° 15'.70 N | 12° 35'.70 E |
|------------------|--------------|------------------|--------------|

A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|------------------|--------------|------------------|--------------|
| (7) 45° 07'.70 N | 12° 36'.50 E | (8) 45° 10'.30 N | 12° 29'.50 E |
|------------------|--------------|------------------|--------------|

The established directions of traffic flow are: 120° – 309°

15 SOUTHERN PART

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

- | | | | |
|-------------------|--------------|-------------------|--------------|
| (9) 44° 57'.20 N | 12° 50'.30 E | (10) 44° 57'.90 N | 12° 53'.00 E |
| (11) 45° 07'.80 N | 12° 47'.10 E | (12) 45° 06'.80 N | 12° 43'.80 E |

A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|-------------------|-------------|-------------------|-------------|
| (13) 44° 58'.50 N | 12°55'.60 E | (14) 45° 08'.50 N | 12°49'.50 E |
|-------------------|-------------|-------------------|-------------|

A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | | |
|-------------------|-------------|-------------------|-------------|
| (15) 44° 56'.50 N | 12°47'.60 E | (16) 45° 06'.00 N | 12°40'.50 E |
|-------------------|-------------|-------------------|-------------|

The established directions of traffic flow are: 337° – 154°

16 PRECAUTIONARY AREA

Description of the precautionary area connecting the southern and northern part of the separation scheme in the approaches to Gulf of Venice.

A precautionary area is established by a line connecting the following geographical positions:

(16) 45° 06'.00 N	12°40'.50 E	(7) 45° 07'.70 N	12°36'.50 E
(5) 45° 12'.00 N	12°42'.40 E	(14) 45° 08'.50 N	12°49'.50 E

AREA TO BE AVOIDED IN THE NORTH ADRIATIC SEA – Northern Part (amended)

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskogel, Bessel Ellipsoid.

The co-ordinates listed below are in WGS 84 Datum

Description of the area to be avoided (amended)

7 In order to avoid the risk of pollution due to damage of oil rigs, oil and gas pipelines in this area the area described below should be avoided by ships of more than 200 gross tonnage. The area to be avoided is bounded by a line connecting the following geographical positions:

(7a) 44° 12'.80 N	013° 37'.50 E	(7f) 44° 52'.00 N	013° 17'.07 E
(7b) 44° 17'.00 N	013° 43'.77 E	(7g) 44° 52'.00 N	013° 05'.77 E
(7c) 44° 25'.30 N	013° 37'.47 E	(7h) 44° 37'.70 N	013° 07'.90 E
(7d) 44° 34'.50 N	013° 25'.47 E	(7i) 44° 23'.00 N	013° 14'.30 E
(7e) 44° 41'.90 N	013° 24'.97 E		

AREA TO BE AVOIDED IN THE NORTH ADRIATIC SEA – Southern Part (new)

Reference chart: No. 435 of the Italian Navy Hydrographical Institute, Edition 1993, Datum ED-50, and No. 101 of the Hydrographical Institute of the Republic of Croatia, Edition 1998, Datum Hermanskogel, Bessel Ellipsoid.

The co-ordinates listed below are in WGS 84 Datum

Description of the area to be avoided (new)

7 In order to avoid the risk of pollution due to damage of oil rigs, oil and gas pipelines in this area the area described below should be avoided by ships of more than 200 gross tonnage. The area to be avoided is bounded by a line connecting the following geographical positions:

(7l) 43° 58'.40 N	013° 52'.70 E	(7n) 44° 09'.00 N	013° 40'.50 E
(7m) 44° 01'.40 N	013° 56'.80 E	(7o) 44° 06'.60 N	013° 37'.90 E

ANNEX 7

AMENDMENT TO THE TRAFFIC SEPARATION SCHEME NORTH OF CANI ISLAND

(Reference chart: The nautical chart used is No. 150-DST from the catalogue of the Tunisian Hydrographic and Oceanographic Service, WGS 84, scale: 1/150000, published in 2006 (1st edition), covering the area from Ras Enghela to Ras Mostapha.)

Description of the amended traffic separation scheme

The proposed new traffic separation scheme will comprise:

- Two traffic lanes, three miles wide.
- A separation zone between the two above-mentioned lanes, two miles wide.
- Another separation zone, one mile wide, separating the eastbound traffic lane and the inshore traffic zone.
- An inshore traffic zone in the form of a triangle, whose base is the separation zone located to the south of the scheme and whose apex is represented on the chart by the Cani Islands light (Lat: 37° 21' 19.8" N; Long: 010° 07' 33.7" E).

- (a) To the south of the TSS, a separation zone is established between the inshore traffic zone and the eastbound traffic lane, bounded by the following geographical positions:

1: Lat : 37° 31' 25.9" N	2: Lat: 37° 31' 25.9" N
Long: 010° 02' 27.7" E	Long: 010° 13' 22.7" E
3: Lat: 37° 32' 25.9" N	4: Lat: 37° 32' 25.9" N
Long: 010° 02' 27.7" E	Long: 010° 13' 22.7" E

- (b) In the centre of the TSS, a separation zone is established between the eastbound and westbound traffic lanes, bounded by the following geographical positions:

5: Lat: 37° 35' 25.9" N	6: Lat: 37° 35' 25.9" N
Long: 010° 02' 27.7" E	Long: 010° 13' 22.7" E
7: Lat: 37° 37' 25.9" N	8: Lat: 37° 37' 25.9" N
Long: 010° 02' 27.7" E	Long: 010° 13' 22.7" E

- (c) To the north of the TSS, a separation line is established between the westbound traffic lane and the open sea, bounded by the following geographical positions:

9: Lat: 37° 40' 25.9" N	10: Lat: 37° 40' 25.9" N
Long: 010° 02' 27.7" E	Long: 010° 13' 22.7" E

Inshore traffic zone

- (a) The inshore traffic zone to be established to the south of the TSS will form a triangle whose base will be a line joining the following geographical positions:

1: Lat: 37° 31' 25.9" N
Long: 010° 02' 27.7" E

2: Lat: 37° 31' 25.9" N
Long: 010° 13' 22.7" E

and whose apex will be represented on chart 150-DST by the Cani Islands light, with the co-ordinates: Lat: 37° 21' 19.8" N; Long: 010° 07' 33.7" E.

AMENDMENT TO THE TRAFFIC SEPARATION SCHEME NORTH OF CAPE BON

(Reference chart: The nautical chart used is No. 150-DST from the catalogue of the Tunisian Hydrographic and Oceanographic Service, WGS 84 Datum, scale: 1/150000, published in 2006 (1st edition), covering the area from Ras Enghela to Ras Mostapha.)

Description of the amended traffic separation scheme

The proposed new traffic separation scheme will comprise:

- Two traffic lanes, three miles wide.
- A separation zone between the two above-mentioned lanes, two miles wide.
- Another separation zone, one mile wide, separating the eastbound traffic lane and the inshore traffic zone.
- An inshore traffic zone in the form of a triangle, whose base is the separation zone located to the south of the scheme and whose apex is represented on the chart by the Cape Bon light (Lat: 37° 04' 43.8" N; Long: 011° 02' 33.8" E).

(a) To the south of the TSS, a separation zone is established between the inshore traffic zone and the eastbound traffic lane, bounded by the following geographical positions:

1: Lat : 37° 21' 03.9" N
Long: 011° 06' 30.8" E

2: Lat: 37° 16' 45.9" N
Long: 011° 15' 42.8" E

3: Lat: 37° 21' 55.9" N
Long: 011° 07' 07.8" E

4: Lat: 37° 17' 40.9" N
Long: 011° 16' 22.8" E

(b) In the centre of the TSS, a separation zone is established between the eastbound and westbound traffic lanes, bounded by the following geographical positions:

5: Lat: 37° 24' 31.9" N
Long: 011° 09' 00.8" E

6: Lat: 37° 20' 15.9" N
Long: 011° 18' 17.8" E

7: Lat: 37° 26' 15.9" N
Long: 011° 10' 15.8" E

8: Lat: 37° 22' 00.9" N
Long: 011° 19' 27.8" E

(c) To the north of the TSS, a separation line is established between the westbound traffic lane and the open sea, bounded by the following geographical positions:

9: Lat: 37° 28' 55.9" N
Long: 011° 12' 09.8" E

10: Lat: 37° 24' 36.9" N
Long: 011° 21' 23.8" E

Inshore traffic zone

- (a) The inshore traffic zone to be established to the south of the TSS will form a triangle whose base will be a line joining the following geographical positions:

1:	Lat: 37° 21' 03.9" N	2:	Lat: 37° 16' 45.9" N
	Long: 011° 06' 30.8" E		Long: 011° 15' 42.8" E

and whose apex will be represented on chart 150-DST by the Cape Bon light, with the co-ordinates: Lat: 37° 04' 43.8" N; Long: 011° 02' 33.8" E.

ANNEX 8

AMENDMENT TO THE TRAFFIC SEPARATION SCHEME OFF BOTNEY GROUND

(Reference Chart: British Admiralty 1632, 2005 edition)

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

The proposed amendment consists of three distinct elements:

- Extension of the existing separation zone of the Off Botney Grounds TSS to the south west;
- Extension of the existing south west traffic lane of the Off Botney Grounds TSS to the south west; and
- Extension of the existing north east traffic lane of the Off Botney Grounds TSS to the south west.

Note: Certain geographical positions for the revised scheme also correspond to positions found in both the “Off Friesland” DWR and “Off Botney Ground” TSS. Such positions are identified below (e.g. equates to existing (46)) and any positional discrepancy is due to the use of the WGS 84 Datum for the revised scheme, as opposed to the ED 50 Datum for the original schemes.

a) An extension to the separation zone extension is bounded by the following geographical positions:

- | | | | |
|-----|--------------|---------------|--------------------------|
| (1) | 53° 35'.25 N | 003° 03'.05 E | Equates to existing (46) |
| (2) | 53° 36'.22 N | 002° 58'.80 E | Equates to existing (47) |
| (3) | 53° 21'.38 N | 002° 49'.20 E | |
| (4) | 53° 20'.69 N | 002° 52'.13 E | |
| (5) | 53° 29'.82 N | 002° 58'.05 E | |

b) An extension to the traffic lane for south west bound traffic is bounded by the extended separation zone in (a) above and a line connecting the following geographical positions:

- | | | | |
|-----|--------------|---------------|--------------------------|
| (6) | 53° 36'.70 N | 002° 56'.40 E | Equates to existing (53) |
| (7) | 53° 21'.88 N | 002° 46'.88 E | |

c) An extension to the traffic lane for north east bound traffic is bounded by the extended separation zone in (a) above and a line joining the following geographic positions:

- | | | | |
|------|--------------|---------------|--------------------------|
| (8) | 53° 20'.15 N | 002° 54'.48 E | |
| (9) | 53° 29'.40 N | 003° 00'.60 E | Equates to existing (61) |
| (10) | 53° 34'.66 N | 003° 05'.40 E | Equates to existing (54) |



IMO

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Ref. T2-OSS/2.7

COLREG.2/Circ.59
31 October 2007

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its eighty-third session (3 to 12 October 2007) adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes and associated routing measures listed, in annexes 1 to 8, as follows:

- .1 “Maas North-West” forming part of the routing system “In the Approaches to Hook of Holland and at North Hinder” (new scheme);
- .2 “On the approaches to the Polish ports in the Gulf of Gdańsk” (new scheme);
- .3 “Off the southwest coast of Iceland” (new scheme);
- .4 “Mandatory route for tankers from North Hinder to the German Bight and vice versa” and to related traffic separation schemes “Off Texel”, “Off Vlieland, Vlieland North and Vlieland Junction”, “Terschelling-German Bight” and “German Bight western approaches” (amended schemes);
- .5 “In the Approaches to Hook of Holland and at North Hinder” (amended scheme);
- .6 “In the Sound” (amended scheme);
- .7 “In the Approaches to Chedabucto Bay” (amended scheme); and
- .8 “In the Strait of Dover and Adjacent Waters” (amended scheme).

2 The new and amended traffic separation schemes (listed in subparagraphs 1.2, 1.4, 1.6 and 1.7 above and detailed in annexes 2, 4, 6 and 7) will be implemented at 0000 hours UTC on 1 May 2008; whilst the new and amended traffic separation schemes (listed in subparagraphs 1.1, 1.3, 1.5 and 1.8 above and detailed in annexes 1, 3, 5 and 8) will be implemented at 0000 hours UTC on 1 July 2008.

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND ASSOCIATED
ROUTEING MEMBERS**

ANNEX 1

**NEW TRAFFIC SEPARATION SCHEME “MAAS NORTH-WEST”
FORMING PART OF THE ROUTEING SYSTEM “IN THE APPROACHES TO HOOK
OF HOLLAND AND AT NORTH HINDER”**

(Reference Chart: Netherlands 1630 (INT 1416) (Edition 1 dated February 2005)

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

2 Maas North-West traffic separation scheme

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

(13) 52° 08'.01 N 003° 39'.60 E (14) 52° 06'.34 N 003° 43'.33 E
(15) 52° 06'.12 N 003° 42'.98 E (16) 52° 07'.77 N 003° 39'.30 E

(b) A traffic lane for north-westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(11) 52° 07'.40 N 003° 45'.00 E (12) 52° 09'.16 N 003° 41'.06 E

(c) A traffic lane for south-eastbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(17) 52° 06'.61 N 003° 37'.84 E (18) 52° 05'.06 N 003° 41'.32 E

ANNEX 2

NEW TRAFFIC SEPARATION SCHEMES “ON THE APPROACHES TO THE POLISH PORTS IN THE GULF OF GDAŃSK”

(Reference chart: Polish Chart No.73 (INT 1288) published by the Hydrographic Office of the Polish Navy (Edition 2004).

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

TRAFFIC SEPARATION SCHEME “EAST”

The traffic separation scheme (TSS) “East” consists of:

- two traffic lanes 1.0 nautical mile wide;
- one intermediate traffic separation zone 0.5 mile wide in two parts: northeast and southwest;
- one traffic separation line connecting two parts of the intermediate traffic separation zone.

The direction of navigation is:

- inbound traffic lane, 163° (T) from the seaward limit of the scheme to the turning point marked by the buoy ZN, thence 206° to the southern limit of the scheme marked by the buoy ZS northeast of the Gdańsk Northern Port (Port Północny) pilot embarkation position;
- outbound traffic lane, 026° (T) as far as the turning point marked by the buoy ZN, thence 343° (T) to the seaward limit of the scheme.

Description of the traffic separation scheme (the co-ordinates listed below are in WGS-84):

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

(1)	54° 40'.43 N	019° 03'.79 E
(2)	54° 40'.57 N	019° 04'.61 E
(3)	54° 37'.33 N	019° 06'.28 E
(4)	54° 37'.19 N	019° 05'.46 E

- (b) A southwest separation zone is bounded by a line connecting the following geographical positions:

(5)	54° 36'.47 N	019° 05'.36 E
(6)	54° 36'.26 N	019° 06'.13 E
(7)	54° 26'.45 N	018° 58'.03 E
(8)	54° 26'.67 N	018° 57'.25 E

(c) A traffic separation line connecting the following geographical positions:

(9)	54° 37'.26 N	019° 05'.87 E
(10)	54° 36'.80 N	019° 06'.10 E (buoy ZN)
(11)	54° 36'.36 N	019° 05'.74 E

(d) A traffic lane for inbound traffic is established between the separation zone line and a line connecting the following geographical positions:

(12)	54° 40'.15 N	019° 02'.15 E
(13)	54° 36'.90 N	019° 03'.81 E
(14)	54° 27'.10 N	018° 55'.71 E

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

(15)	54° 40'.86 N	019° 06'.26 E
(16)	54° 36'.69 N	019° 08'.39 E
(17)	54° 26'.02 N	018° 59'.57 E

TRAFFIC SEPARATION SCHEME “WEST”

The traffic separation scheme (TSS) “West” consists of:

- two traffic lanes 0.75 to 0.5 mile wide (northeast part of the TSS) separated by traffic separation line;
two traffic lanes 0.5 mile wide in two parts (southwest and west) separated by traffic separation line;
- one precautionary area;
- one associated inshore traffic zones.

The direction of navigation is:

- inbound traffic lane, 205° from the seaward limit of the scheme to the turning point marked by the buoy HEL (northeast part of the TSS), then 221° as far as the turning point at the buoy GN in the Precautionary Area, thence:
 - 221° to the southwestern limit of the scheme marked by the buoy NP northeast of the Gdańsk New Port (Nowy Port) pilot embarkation position; or
 - 092° to the western limit of the scheme marked by the buoy GD east of the Gdynia pilot embarkation position;
- outbound traffic lane: 041° (southwest part of the TSS for vessels leaving Gdańsk New Port (Nowy Port) or 272° (west part of the TSS for vessels leaving Gdynia) to the turning point marked by the buoy GN in the Precautionary Area, then 041° as far as the turning point at the buoy HEL, thence 025° to the seaward limit of the scheme.

Description of the traffic separation scheme (the co-ordinates listed below are in WGS-84):

Northeast part:

(f) A separation line connecting the following geographical positions:

(18)	54° 40'.00 N	018° 57'.00 E
(19)	54° 36'.30 N	018° 54'.00 E
(20)	54° 35'.43 N	018° 53'.29 E (buoy HEL)
(21)	54° 35'.10 N	018° 52'.80 E
(22)	54° 32'.40 N	018° 48'.74 E

(g) A traffic lane for inbound traffic is established between the separation line and a line connecting the following geographical positions:

(23)	54° 40'.32 N	018° 55'.84 E
(24)	54° 36'.62 N	018° 52'.84 E
(25)	54° 35'.43 N	018° 52'.15 E
(26)	54° 32'.73 N	018° 48'.09 E

(h) A traffic lane for outbound traffic is established between the separation line and a line connecting the following geographical positions:

(27)	54° 39'.68 N	018° 58'.16 E
(28)	54° 35'.98 N	018° 55'.16 E
(29)	54° 34'.77 N	018° 53'.45 E
(30)	54° 32'.07 N	018° 49'.39 E

Precautionary area:

(i) A precautionary area bounded by a line connecting the following geographical positions:

(31)	54° 32'.07 N	018° 49'.39 E
(32)	54° 32'.40 N	018° 48'.74 E
(33)	54° 32'.73 N	018° 48'.09 E
(34)	54° 32'.44 N	018° 46'.22 E
(35)	54° 31'.94 N	018° 46'.20 E
(36)	54° 31'.45 N	018° 46'.17 E
(37)	54° 31'.12 N	018° 46'.81 E
(38)	54° 30'.79 N	018° 47'.46 E
(39)	54° 31'.56 N	018° 48'.61 E

Southwest part:

(j) A separation line connecting the following geographical positions:

(40)	54° 31'.12 N	018° 46'.81 E
(41)	54° 28'.48 N	018° 42'.84 E

- (k) A traffic lane for inbound traffic is established between the separation line and a line connecting the following geographical positions:

(42)	54° 31'.45 N	018° 46'.17 E
(43)	54° 28'.81 N	018° 42'.20 E

- (l) A traffic lane for outbound traffic is established between the separation line and a line connecting the following geographical positions:

(44)	54° 30'.79 N	018° 47'.46 E
(45)	54° 28'.15 N	018° 43'.49 E

West part:

- (m) A separation line connecting the following geographical positions:

(46)	54° 31'.94 N	018° 46'.20 E
(47)	54° 32'.04 N	018° 41'.10 E

- (n) A traffic lane for inbound traffic is established between the separation line and a line connecting the following geographical positions:

(48)	54° 32'.44 N	018° 46'.22 E
(49)	54° 32'.54 N	018° 41'.13 E

- (o) A traffic lane for outbound traffic is established between the separation line and a line connecting the following geographical positions:

(50)	54° 31'.45 N	018° 46'.17 E
(51)	54° 31'.54 N	018° 41'.07 E

- (p) Inshore traffic zone:

The inshore traffic zone is established in the waters between the inner limit of the northeastern and western part of the traffic separation scheme “WEST” and the adjacent Polish coast and limited:

- from north by a line connecting the following geographical positions:

(23)	54° 40'.32 N	018° 55'.84 E
(52)	54° 40'.32 N	018° 44'.85 E

- from west by a line connecting the following geographical positions:

(49)	54° 32'.54 N	018° 41'.13 E
(53)	54° 41'.66 N	018° 41'.13 E

Recommended track between GD and NP buoys

1 A recommended track is established between the following geographical positions:

(54)	54° 32'.05 N	018° 39'.84 E	(buoy GD)
(55)	54° 27'.90 N	018° 42'.05 E	(buoy NP)

2 The direction (T) of navigation is 163° – 343°.

Recommended track between GN and PP buoys

1 A recommended track is established between the following geographical positions:

(56)	54° 31'.56 N	018° 48'.61 E	(vicinity of buoy GN)
(57)	54° 28'.23 N	018° 54'.54 E	
(58)	54° 25'.88 N	018° 54'.54 E	(vicinity of buoy PP)

2 The directions (T) of navigation are: 134° – 314° and 000° – 180°.

ANNEX 3

NEW TRAFFIC SEPARATION SCHEMES “OFF THE SOUTHWEST COAST OF ICELAND”

(Reference chart: Icelandic Chart No.31 (INT 1105) Dyrhólaey – Snæfellsnes (new edition June 2004)

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

Description of the traffic separation schemes*Part I***Traffic separation scheme northwest of Gardskagi Point**

The routing measures consist of a traffic separation scheme northwest of Gardskagi Point with attached two-way routes at both ends.

A separation zone is established bounded by a line connecting the following geographical positions:

- | | | |
|-----|--------------|---------------|
| (1) | 64° 09'.02 N | 022° 41'.40 W |
| (2) | 64° 09'.02 N | 022° 49'.60 W |
| (3) | 64° 07'.03 N | 022° 53'.25 W |
| (4) | 64° 06'.65 N | 022° 52'.14 W |
| (5) | 64° 08'.40 N | 022° 48'.92 W |
| (6) | 64° 08'.40 N | 022° 41'.40 W |

A traffic lane for north-east-/east-bound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | |
|-----|--------------|---------------|
| (7) | 64° 05'.91 N | 022° 50'.06 W |
| (8) | 64° 07'.20 N | 022° 47'.51 W |
| (9) | 64° 07'.20 N | 022° 41'.40 W |

A traffic lane for west-/south-west-bound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | | |
|------|--------------|---------------|
| (10) | 64° 10'.26 N | 022° 41'.40 W |
| (11) | 64° 10'.26 N | 022° 50'.94 W |
| (12) | 64° 07'.80 N | 022° 55'.46 W |

Description of the two-way routes

A two-way route for east/west-bound traffic north of Gardskagi Point is established by lines connecting the following geographical positions:

- | | | |
|------|--------------|---------------|
| (9) | 64° 07'.20 N | 022° 41'.40 W |
| (10) | 64° 10'.26 N | 022° 41'.40 W |
| (13) | 64° 10'.26 N | 022° 33'.26 W |
| (14) | 64° 07'.20 N | 022° 33'.26 W |

A two-way route for north-east/south-west-bound traffic west of Gardskagi Point is established by lines connecting the following geographical positions:

- (15) 64° 05'.63 N 022° 59'.45 W
- (12) 64° 07'.80 N 022° 55'.46 W
- (16) 64° 03'.54 N 022° 54'.70 W
- (7) 64° 05'.91 N 022° 50'.06 W

Part II

Traffic separation scheme southwest of the Reykjanes Peninsula

The routing measures consist of a traffic separation scheme southwest of the Reykjanes Peninsula, with an attached two-way route.

A separation zone is established bounded by a line connecting the following geographical positions:

- (30) 63° 31'.75 N 023° 32'.28 W
- (31) 63° 33'.90 N 023° 33'.92 W
- (32) 63° 31'.55 N 023° 33'.62 W
- (33) 63° 33'.69 N 023° 35'.26 W

A traffic lane for north-north-west-bound traffic is established between the separation zone and a line connecting the following geographical positions:

- (29) 63° 32'.00 N 023° 29'.50 W
- (34) 63° 34'.30 N 023° 31'.23 W

A traffic lane for south-south-east-bound traffic is established between the separation zone and a line connecting the following geographical positions:

- (35) 63° 30'.82 N 023° 36'.06 W
- (36) 63° 33'.37 N 023° 38'.00 W

Description of the two-way route

A two-way route (the outer route) west of the Reykjanes Peninsula, located off the southwest corner of the proposed western Area to be Avoided, is established by lines connecting the following geographical positions:

- (34) 63° 34'.30 N 023° 31'.23 W
- (36) 63° 33'.37 N 023° 38'.00 W
- (28) 63° 42'.00 N 023° 37'.00 W
- (37) 63° 41'.00 N 023° 43'.69 W

Notes:

- 1.1 All ships of over 5,000 gross tonnage in size and all ships carrying dangerous or noxious cargoes in bulk or cargo tanks should navigate the outer route, southwest of the Reykjanes Peninsula, unless they are permitted to navigate the inner route, Hullid Passage, according to the provisions of paragraphs 1.2 and 1.4 below.
- 1.2 Ships of up to 5,000 gross tonnage not carrying dangerous or noxious cargoes in bulk or cargo tanks may transit the inner route.
- 1.3 Ships of up to 20,000 gross tonnage may transit the inner route provided that:
 - .1 the ship does not carry any dangerous or noxious cargoes in bulk or cargo tanks; and
 - .2 the master of the ship has attended a course held by Icelandic authorities and achieved transit permit. In order to be eligible to attend the course, the master must have been involved in six passages without any incidents and/or remarks to Faxaflói Bay ports as master or chief mate in the preceding 18 months. The master's transit permit expires if the master has not navigated a ship to Faxaflói Bay port in 24 months.
- 1.4 Tankers with a cargo capacity of up to 5,000 gross tonnage may navigate the inner route carrying gas cargoes or petroleum products with a maximum kinematic viscosity of 11.0 cSt at 40°C¹. The master shall fulfil the conditions as provided for in paragraph 1.3.2 above.
- 2 Mariners should be aware that fishing vessels may be encountered in the area and should navigate accordingly.
- 3 Exceptions applying to the routing measures are in accordance with SOLAS chapter V, regulation 1.1. Exempt are warships, naval auxiliaries and other ships owned or operated by a contracting Government and used only on Government non-commercial service. The exceptions do not apply to the TSS.

¹ According to ISO 8217:2005.

ANNEX 4**AMENDMENTS TO EXISTING MANDATORY ROUTE FOR TANKERS FROM
NORTH HINDER TO THE GERMAN BIGHT AND VICE VERSA**

Replace the existing text under “Application and use of the route” by the following new text:

Application and use of the route

The route is mandatory for use by the following classes of ships:

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oil as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) chemical tankers of 5,000 tons gross tonnage and upwards, carrying noxious liquid substances in bulk assessed or provisionally assessed as Category X or Y of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) chemical tankers and NLS tankers of 10,000 tons gross tonnage and upwards, carrying Noxious Liquid Substances in bulk assessed or provisionally assessed as Category Z of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78); and
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquefied gasses in bulk.

These ships shall avoid the sea area between the mandatory route and the adjacent Frisian Islands’ coast, except when joining or leaving the route at the nearest point of the route to the port of departure or destination which permits a safe passage to or from that port.

The classes of ships referred to above shall use the mandatory route or part of it:

- (i) when sailing from North Hinder to the Baltic or to North Sea ports of Norway, Sweden, Denmark, Germany or the Netherlands north of latitude 53° N and vice versa;
- (ii) when sailing between North Sea ports of the Netherlands north and/or Germany, except in cases of adjacent port areas;
- (iii) when sailing between United Kingdom or Continental North Sea ports south of latitude 53° N and Scandinavian and Baltic ports; and
- (iv) when sailing between North Hinder, United Kingdom or Continental ports south of latitude 53° N and offshore and offshore-based loading facilities in the North Sea area. However this provision does not apply to ships sailing between ports on the east coast of the United Kingdom, including Orkney and Shetland Islands.

Ships which, because of their draft, cannot safely navigate the mandatory route – in particular the southern part of it (the routeing measures a, b and c above) – are exempted from the requirements to use the southern part of the mandatory route and are strongly recommended to use the western route of the routeing system “Off Friesland” or part of it, as appropriate, instead.

This alternative western route is formed by the following routeing measures:

- .1 Deep-water route from North Hinder to Indefatigable Bank via DR 1 lightbuoy;
- .2 TSS “Off Botney Ground”; and
- .3 Deep-water route from TSS “Off Botney Ground” to the Precautionary Area “Friesland Junction”.

Shipmasters should enter this deviation in the ships’ log.

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEMES “OFF TEXEL”, “OFF VLIELAND, VLIELAND NORTH AND VLIELAND JUNCTION”, “TERSCHELLING-GERMAN BIGHT” AND “GERMAN BIGHT WESTERN APPROACH”

Replace in each of the above-mentioned routeing systems the existing “Special Provisions” text by the following new text:

Note:

The following classes of ships are referred to the provisions being part of the description of the “Mandatory route for tankers from North Hinder to the German Bight and vice versa”:

- (a) tankers of 10,000 tons gross tonnage and upwards, carrying oil as defined under Annex I to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (b) chemical tankers of 5,000 tons gross tonnage and upwards, carrying Noxious Liquid Substances in bulk assessed or provisionally assessed as Category X or Y of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (c) chemical tankers and NLS tankers of 10,000 tons gross tonnage and upwards, carrying Noxious Liquid Substances in bulk assessed or provisionally assessed as Category Z of Annex II to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78);
- (d) ships of 10,000 tons gross tonnage and upwards, carrying liquefied gases in bulk.

ANNEX 5

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEMES “IN THE APPROACHES TO HOOK OF HOLLAND AND AT NORTH HINDER”

The following traffic separation schemes to be amended as presented below:

(Reference chart: Netherlands 1630 (INT 1416) (Edition 1, dated February 2005)

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

1 Maas North traffic separation scheme

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

(1) 52° 15'.00 N	003° 59'.38 E	(2) 52° 07'.18 N	003° 56'.56 E
(3) 52° 15'.00 N	003° 56'.42 E	(5) 52° 07'.27 N	003° 54'.34 E
(4) 52° 10'.26 N	003° 55'.54 E		

(b) A traffic lane for northbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(7) 52° 07'.04 N	004° 00'.00 E	(6) 52° 15'.00 N	004° 02'.80 E
------------------	---------------	------------------	---------------

(c) A traffic lane for southbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(8) 52° 15'.00 N	003° 53'.39 E	(9) 52° 10'.26 N	003° 52'.49 E
(10) 52° 07'.40 N	003° 51'.36 E		

3 Maas West Inner traffic separation scheme

(a) A separation zone to the north of the Eurochannel is outward bounded by a line connecting the following geographical positions:

(21) 52° 02'.36 N	003° 32'.20 E	(22) 52° 02'.74 N	003° 41'.25 E
(23) 52° 01'.07 N	003° 41'.47 E	(24) 52° 00'.20 N	003° 30'.73 E

and inward bounded by a line connecting the following geographical positions:

(32) 52° 02'.17 N	003° 37'.83 E	(33) 52° 02'.00 N	003° 33'.98 E
(34) 52° 00'.90 N	003° 33'.23 E	(35) 52° 01'.26 N	003° 37'.63 E

(b) A separation zone to the south of the Eurochannel is bounded by a line connecting the following geographical positions:

(25) 52° 00'.42 N	003° 41'.55 E	(26) 51° 59'.48 N	003° 30'.24 E
(27) 51° 58'.03 N	003° 29'.26 E	(28) 51° 59'.72 N	003° 41'.65 E

- (c) A traffic lane for westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(19) 52° 04'.84 N 003° 40'.97 E (20) 52° 04'.73 N 003° 33'.81 E

- (d) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(29) 51° 54'.59 N 003° 26'.92 E (30) 51° 57'.10 N 003° 40'.05 E
(31) 51° 57'.21 N 003° 41'.98 E

Note: The inside of the area in the separation zone to the north of the Eurochannel, bounded by a line connection geographical positions (32), (33), (34) and (35) above, is designated as an anchorage area.

4 Inshore traffic zone

The area between the landward boundary of the Maas West Inner traffic separation scheme and the coast, which lies between a line connecting positions (29) 51° 54'.59 N 003° 26'.92 E, (59) 51° 51'.73 N 003° 24'.96 E and (60) 51° 43'.73 N 003° 42'.25 E and a line connecting geographical positions (29) above, (30) 51° 57'.10 N 003° 40'.05 E and (56) 51° 58'.27 N 004° 00'.62 E is designated as an inshore traffic zone.

5 Maas Centre precautionary area

- (a) A precautionary area is established off the entrance to the Rotterdam Waterway. The area is bounded by a line connecting geographical positions: (58) North Mole Head Light, (57) South Mole Head Light, thence along the southern sea wall to geographical position (56) 51° 58'.27 N 004° 00'.62 E, thence to geographical positions (31), (19), (11), (7) and (58) North Mole head Light.
- (b) The focal point of the precautionary area is located at the following geographical position: (79) 52° 01'.68 N 03° 53'.11 E.

Note: An area to be avoided “At Maas Centre” is established around position (79) above. It consists of a circle of 0.6 mile radius.
(See also Caution 1 and the description of the area to be avoided in part D I/5.6)

6 Maas Junction precautionary area

A precautionary area is established at the junction between the Maas West Inner and Maas West Outer traffic separation schemes. The precautionary area is bounded by a line connecting the following geographical positions:

(20), (29), (50), (36) and (20) above.

7 Maas West Outer traffic separation scheme

- (a) A separation zone to the north of the Eurochannel is outward bounded by a line connecting the following geographical positions:

(38) 52° 01'.40 N 003° 09'.19 E (39) 52° 01'.99 N 003° 23'.17 E
(40) 51° 59'.42 N 003° 21'.43 E (41) 51° 58'.46 N 003° 09'.83 E

and inward bounded by a line connecting the following geographical positions:

(42) 51° 59'.68 N 003° 21'.06 E (43) 52° 01'.59 N 003° 22'.35 E
(44) 52° 01'.37 N 003° 16'.88 E (45) 51° 59'.37 N 003° 17'.33 E

- (b) A separation zone to the south of the Eurochannel is outward bounded by a line connecting the following geographical positions:

(46) 51° 58'.71 N 003° 20'.95 E (47) 51° 57'.81 N 003° 09'.99 E
(48) 51° 55'.47 N 003° 10'.51 E (49) 51° 56'.71 N 003° 19'.59 E

and inward bounded by a line connecting the following geographical positions:

(52) 51° 56'.96 N 003° 19'.25 E (53) 51° 58'.36 N 003° 20'.19 E
(54) 51° 58'.06 N 003° 16'.64 E (55) 51° 56'.60 N 003° 16'.54 E

- (c) A traffic lane for westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(36) 52° 04'.61 N 003° 24'.96 E (37) 52° 04'.37 N 003° 08'.52 E

- (d) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(50) 51° 52'.66 N 003° 16'.84 E (51) 51° 51'.62 N 003° 11'.37 E

Note: The inside of the area in the separation zone to the north of the Eurochannel, bounded by a line connecting geographical positions (42), (43), (44) and (45) above, and the inside of the area in the separation zone to the south of the Eurochannel, bounded by a line connecting geographical positions (52), (53), (54) and (55) above, are designated as anchorage areas.

8 North Hinder South traffic separation scheme

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

(69) 51° 31'.07 N 002° 07'.90 E (70) 51° 29'.84 N 002° 10'.62 E
(71) 51° 47'.88 N 002° 35'.27 E (72) 51° 48'.53 N 002° 34'.04 E

- (b) A traffic lane for north-eastbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(73) 51° 26'.97 N 002° 16'.95 E (74) 51° 36'.20 N 002° 27'.25 E
(75) 51° 45'.42 N 002° 39'.92 E

- (c) A traffic lane for south-westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(76) 51° 33'.66 N 002° 02'.17 E (77) 51° 51'.35 N 002° 28'.70 E

The delineations of North Hinder North traffic separation scheme and North Hinder Junction precautionary area remain the same.

The geographical positions for the description of the scheme are revised for WGS-84 chart Datum.

9 North Hinder North traffic separation scheme

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

(61) 52° 07'.53 N 003° 02'.64 E (62) 52° 09'.78 N 003° 05'.84 E
(63) 52° 11'.29 N 003° 03'.03 E (64) 52° 09'.03 N 002° 59'.83 E

- (b) A traffic lane for south-westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(65) 52° 13'.26 N 002° 59'.34 E (66) 52° 10'.99 N 002° 56'.14 E

- (c) A traffic lane for north-eastbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(67) 52° 05'.54 N 003° 06'.31 E (68) 52° 07'.81 N 003° 09'.51 E

10 North Hinder Junction precautionary area

- (a) A precautionary area is established off North Hinder. The area is bounded by a line connecting the following geographical positions:

(75) 51° 45'.42 N 002° 39'.92 E (51) 51° 51'.62 N 003° 11'.37 E
(37) 52° 04'.37 N 003° 08'.52 E (66) 52° 10'.99 N 002° 56'.14 E
(77) 51° 51'.35 N 002° 28'.70 E and (75) above.

- (b) The focal point of the precautionary area is located at the following geographical position:

(78) 52° 00'.09 N 002° 51'.09 E

This position coincides with the location of North Hinder buoy.

A circular area to be avoided with a diameter of one mile is established around position (78).
(See also caution 5 and the description of the area to be avoided in Part D I/5.6.)

Note:

Cautions

Amend as follows: (amended parts are underlined)

- 1 (In the “Maas Centre” precautionary area, near the area to be avoided)
Ships should proceed with caution in the area where the traffic lanes merge. Any ship which is not compelled to adhere to the deep-water route should, if practicable, not enter the circular area to be avoided “At Maas Centre”. All ships should keep this circular area on their port side unless the available water depth, the density of traffic, the pilotage or the weather conditions warrant otherwise.
- 2 (Maas Junction precautionary area between Maas West Outer traffic separation scheme and Maas West Inner traffic separation scheme). Mariners are warned that in this precautionary area ships on routes to and from TSS “Off Texel”, the river Scheldt and Europoort are merging or crossing.
- 3 (no change)
- 4 (no change)
- 5 (In the “North Hinder Junction” precautionary area, near the area to be avoided.) Ships should proceed with caution in this area where traffic lanes merge. Ships should, where practicable, not enter the area to be avoided “At North Hinder Junction Point” around North Hinder buoy. All ships should keep the circular area to be avoided on their port side unless the density of traffic, the pilotage (helicopter operations) or the weather conditions warrant otherwise.

ANNEX 6

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
“IN THE SOUND”**

(Reference charts: Danish chart No.131 (INT 1331) (14th edition February 2006).
Swedish chart No.922, 5th edition January 2007.

Note: These charts are based on World Geodetic System 1984 Datum (WGS-84)).

Description of the traffic separation scheme

(a) A separation line connects the following geographical positions:

(1) 56° 07'.30 N	012° 31'.46 E	(3) 55° 58'.88 N	012° 41'.23 E
(2) 56° 03'.27 N	012° 39'.01 E		

(b) A traffic lane for northbound traffic is established between the separation line and a separation line connecting the following geographic positions:

(4) 56° 08'.03 N	012° 32'.69 E	(6) 56° 03'.35 N	012° 39'.97 E
(5) 56° 06'.39 N	012° 34'.74 E	(7) 55° 59'.08 N	012° 42'.37 E

(c) A traffic lane for southbound traffic is established between the separation line and a separation line connecting the following geographical positions:

(8) 56° 06'.58 N	012° 30'.22 E	(10) 56° 03'.10 N	012° 38'.21 E
(9) 56° 05'.50 N	012° 33'.22 E	(11) 56° 01'.66 N	012° 37'.79 E

(d) In the southern part of this traffic lane the southbound traffic is divided into two lanes by a separation zone, bounded by a line connecting the following geographical positions:

(12) 56° 00'.80 N	012° 38'.20 E	(14) 56° 00'.80 N	012° 39'.35 E
(13) 56° 01'.66 N	012° 38'.82 E		

(e) A traffic lane eastern most for southbound traffic is established between the separation line and a separation line connecting the following geographic positions:

(15) 56° 00'.80 N	012° 39'.35 E	(17) 55° 58'.82 N	012° 39'.98 E
(16) 55° 59'.98 N	012° 39'.87 E		

Inshore traffic zones*Western inshore traffic zone*

The area between the western landward boundary of the traffic separation scheme and the Danish coast and between a line drawn in the direction 224° from position (8) to position (20) and a line drawn in the direction of 257° from position (11) to position (21) is designated as an inshore traffic zone.

(8) 56° 06'.58 N 012° 30'.22 E

(20)	56° 05'.64 N	012° 28'.64 E
(11)	56° 01'.66 N	012° 37'.79 E
(21)	56° 01'.47 N	012° 36'.37 E

Eastern inshore traffic zone

The area between the eastern landward boundary of the traffic separation scheme and the Swedish coast and between a line drawn in a direction 049° from position (4) to position (18) and a line drawn in a direction of 060° from position (6) to position (19) is designated as an inshore traffic zone.

(4)	56° 08'.03 N	012° 32'.69 E
(18)	56° 08'.72 N	012° 34'.09 E
(6)	56° 03'.35 N	012° 39'.97 E
(19)	56° 03'.66 N	012° 40'.82 E

Note:

Cross-channel traffic

All precautions, including if necessary a reduction of speed, should be taken in the area between Helsingborg and Helsingør, which is widely used by local cross-channel ferry traffic.

ANNEX 7

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME “IN THE APPROACHES TO CHEDABUCTO BAY”

(Reference charts: Canadian Hydrographic Service 4013 (2002 edition; 4307, 2002 edition; 4335, 1998 edition.)

Note: These charts are based on North American 1983 Geodetic Datum, which is equivalent to WGS-84).

Description of the traffic separation scheme

The traffic separation scheme “In the approaches to Chedabucto Bay” consists of three parts:

Part I

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

- | | |
|--------------------------------|--------------------------------|
| (1) 45° 24'.00 N 060° 36'.70 W | (3) 45° 23'.70 N 060° 28'.20 W |
| (2) 45° 24'.20 N 060° 27'.17 W | (4) 45° 23'.82 N 060° 36'.48 W |

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

- | | |
|--------------------------------|--------------------------------|
| (5) 45° 26'.00 N 060° 23'.20 W | (6) 45° 25'.43 N 060° 41'.70 W |
|--------------------------------|--------------------------------|

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

- | | |
|--------------------------------|---------------------------------|
| (7) 45° 22'.30 N 060° 34'.50 W | (8) 45° 22'.15 N, 060° 31'.60 W |
|--------------------------------|---------------------------------|

Part II

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

- | | |
|---------------------------------|---------------------------------|
| (9) 45° 22'.57 N 060° 40'.00 W | (11) 45° 19'.30 N 060° 37'.80 W |
| (10) 45° 19'.88 N 060° 36'.50 W | (12) 45° 22'.68 N 060° 42'.17 W |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (13) 45° 21'.35 N 060° 33'.30 W | (14) 45° 22'.30 N 060° 34'.50 W |
|---------------------------------|---------------------------------|

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

- | | |
|---------------------------------|---------------------------------|
| (15) 45° 22'.90 N 060° 46'.50 W | (17) 45° 14'.47 N 060° 48'.38 W |
| (16) 45° 21'.28 N 060° 44'.40 W | |

Part III

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

- | | | | | | |
|------|--------------|---------------|------|--------------|---------------|
| (18) | 45° 24'.00 N | 060° 41'.70 W | (22) | 45° 28'.45 N | 061° 10'.33 W |
| (19) | 45° 23'.82 N | 060° 41'.50 W | (23) | 45° 24'.92 N | 061° 06'.07 W |
| (20) | 45° 23'.82 N | 061° 05'.00 W | (24) | 45° 24'.00 N | 061° 02'.65 W |
| (21) | 45° 28'.36 N | 061° 10'.46 W | | | |

(b) A traffic lane for west inbound traffic is established between the separation line and a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|---------------|------|--------------|---------------|
| (25) | 45° 25'.43 N | 060° 41'.70 W | (27) | 45° 25'.63 N | 061° 06'.29 W |
| (26) | 45° 24'.77 N | 061° 03'.26 W | (28) | 45° 28'.70 N | 061° 09'.94 W |

(c) A traffic lane for east outbound traffic is established between the separation line and a line connecting the following geographical positions:

- | | | | | | |
|------|--------------|---------------|------|--------------|---------------|
| (29) | 45° 22'.90 N | 060° 46'.50 W | (31) | 45° 28'.12 N | 061° 10'.83 W |
| (30) | 45° 22'.89 N | 061° 04'.52 W | | | |

ANNEX 8

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME “IN THE STRAIT OF DOVER AND ADJACENT WATERS”

(Reference Chart: British Admiralty 2449, 2450, 2451 June 2007.

Note: These charts are based on World Geodetic System 1984 Datum (WGS-84)).

Description of the traffic separation scheme

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

(1)	51° 25'.31 N	002° 04'.03 E
(2)	51° 26'.77 N	002° 01'.48 E
(3)	51° 31'.07 N	002° 07'.90 E
(4)	51° 29'.84 N	002° 10'.62 E

(b) A separation line connects the following geographical positions:

(5)	51° 26'.97 N	002° 16'.95 E
(6)	51° 22'.83 N	002° 12'.29 E

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

(7)	51° 22'.03 N	001° 58'.39 E
(8)	51° 22'.49 N	001° 57'.61 E
(9)	51° 16'.53 N	001° 52'.29 E

(d) A precautionary area with recommended directions of traffic flow is established connecting geographical positions (1), (2), (8) and (7) above.

(e) A separation line connects the following geographical positions:

(10)	51° 16'.53 N	001° 52'.29 E
(11)	51° 06'.13 N	001° 38'.10 E

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

(12)	51° 05'.77 N	001° 38'.65 E
(13)	51° 06'.49 N	001° 37'.55 E
(14)	50° 57'.59 N	001° 23'.00 E
(15)	50° 51'.14 N	001° 17'.20 E
(16)	50° 33'.37 N	000° 36'.50 E
(17)	50° 26'.91 N	000° 01'.09 W
(18)	50° 22'.12 N	000° 00'.91 E
(19)	50° 32'.71 N	000° 57'.73 E
(20)	50° 42'.87 N	001° 18'.30 E
(21)	50° 56'.87 N	001° 24'.03 E

- (g) A traffic lane for south-westbound traffic is established between the separation zones/lines described in paragraphs (a), (c), (e) and (f) above and the following separation line/zone:

a separation line connection the following geographical positions:

(22)	51° 33'.66 N	002° 02'.17 E
(23)	51° 27'.35 N	001° 52'.76 E
(24)	51° 14'.13 N	001° 43'.99 E
(25)	51° 06'.93 N	001° 30'.90 E
(26)	50° 52'.29 N	001° 02'.65 E

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

(27)	50° 52'.47 N	001° 02'.45 E
(28)	50° 39'.37 N	000° 32'.50 E
(29)	50° 34'.64 N	000° 04'.29 W
(30)	50° 32'.71 N	000° 03'.49 W
(31)	50° 38'.91 N	000° 32'.70 E
(32)	50° 52'.09 N	001° 02'.85 E

- (h) A traffic lane for north-eastbound traffic is established between the separation zones/lines described in paragraphs (a), (c), (e) and (f) above and the following separation line/zone:

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

(33)	50° 16'.34 N	000° 03'.31 E
(34)	50° 14'.49 N	000° 04'.11 E
(35)	50° 26'.37 N	001° 00'.20 E
(36)	50° 39'.29 N	001° 22'.63 E
(37)	50° 39'.69 N	001° 22'.20 E
(38)	50° 26'.94 N	000° 59'.90 E

a separation line connects the following geographical positions:

(39)	50° 39'.49 N	001° 22'.40 E
(40)	50° 44'.54 N	001° 26'.90 E
(41)	50° 53'.64 N	001° 30'.70 E
(42)	51° 04'.34 N	001° 45'.89 E

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

(43)	51° 04'.34 N	001° 45'.89 E
(44)	51° 06'.44 N	001° 48'.89 E
(45)	51° 11'.23 N	002° 04'.09 E
(46)	51° 09'.84 N	002° 03'.12 E

an uncharted line representing the junction of the scheme with the adjacent scheme “At West Hinder” and joining the following geographical positions:

(47) 51° 11'.23 N 002° 04'.09 E
(6) 51° 22'.83 N 002° 12'.29 E

A separation zone is established within this lane as described in (i) below.

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

(48) 51° 18'.43 N 002° 04'.69 E
(49) 51° 16'.03 N 002° 04'.19 E
(50) 51° 13'.71 N 002° 00'.99 E
(51) 51° 09'.35 N 001° 47'.10 E
(52) 51° 09'.75 N 001° 45'.61 E
(53) 51° 12'.35 N 001° 51'.03 E
(54) 51° 15'.05 N 001° 54'.40 E

(j) A deep-water route forming part of the north-eastbound traffic lane between the separation zone described in (i) above and the separation zone/line described in paragraphs (c) and (e) above has been established between a line connecting the following geographical positions:

(i) 51° 09'.75 N 001° 45'.61 E
(ii) 51° 10'.26 N 001° 43'.74 E

and

(iii) 51° 22'.03 N 001° 58'.39 E
(iv) 51° 18'.43 N 002° 04'.69 E

Note:

An area to be avoided around the Foxtrot 3 station (51° 24'.15 N; 002° 00'.38 E) is described in part D, section I.

An uncharted line representing the junction of the scheme with the adjacent scheme “In the Approaches to Hook of Holland and At North Hinder” and joining the following geographical positions:

(5) 51° 26'.97 N 002° 16'.95 E
(4) 51° 29'.84 N 002° 10'.62 E
(3) 51° 31'.07 N 002° 07'.90 E
(22) 51° 33'.66 N 002° 02'.17 E

Inshore traffic zones

The area between the outer boundary of the traffic separation scheme and the English coast which lies between a line:

- (v) 51° 08'.42 N 001° 22'.24 E
- (vi) 51° 02'.53 N 001° 22'.24 E

and a line between:

- (vii) 50° 34'.64 N 000° 04'.29 W
- (viii) 50° 49'.60 N 000° 16'.86 W

is designated as an inshore traffic zone.

The area between the outer boundary of the traffic separation scheme and the French coast which lies between:

- (ix) 50° 53'.64 N 001° 30'.70 E
- (x) 50° 52'.10 N 001° 34'.96 E

and a line between:

- (xi) 50° 30'.09 N 001° 06'.66 E
- (xii) 50° 30'.09 N 001° 34'.59 E

is designated as an inshore traffic zone.

Warnings

- 1 A deep-water route forming part of the north-eastbound traffic lane is established to the north-west of the Sandettie Bank, and masters considering the use of this route should take into account the proximity of traffic using the south-westbound lane.
- 2 The main traffic lane for north-eastbound traffic lies to the south-east of the Sandettie Bank and shall be followed by all such ships as can safely navigate therein having regard to their draught.
- 3 In the area of the deep-water route east of the separation line, ships are recommended to avoid overtaking.

Note:

It is important that ships passing through the Dover Strait listen to the appropriate VHF broadcasts by the Channel Navigation Information Service which provide information concerning traffic, navigation and visibility conditions in the Strait.



IMO

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Ref. T2-OSS/2.7.1

COLREG.2/Circ.60
10 December 2008

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its eighty-fifth session (26 November to 5 December 2008) 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 7, as follows:

- .1 “In the approaches to the Port of Thessaloniki” (new scheme);
- .2 “The Åland Sea” (new scheme);
- .3 “In Liverpool Bay” (new scheme);
- .4 “In the approach to Boston, Massachusetts” (amended scheme);
- .5 “Off Land’s End, between Seven Stones and Longships” (amended scheme);
- .6 “In the approaches to the River Humber” (amended scheme); and
- .7 “At Hatter Barn” (amended scheme).

2 The new and amended traffic separation schemes listed in subparagraphs 1.1 and 1.4 above and detailed in annexes 1 and 4 will be implemented at 0000 hours UTC on 1 June 2009; those listed in subparagraphs 1.3, 1.5, 1.6 and 1.7 and detailed in annexes 3, 5, 6 and 7 will be implemented at 0000 hours UTC on 1 July 2009 and the one listed in subparagraph 1.2 and detailed in annex 2 will be implemented at 0000 hours UTC on 1 January 2010.

**NEW AND AMENDED TRAFFIC SEPARATION SCHEMES AND
ASSOCIATED ROUTEING MEASURES**

ANNEX 1

**NEW TRAFFIC SEPARATION SCHEME
“IN THE APPROACHES TO THE PORT OF THESSALONIKI”**

(Reference chart: Hellenic Navy Hydrographic Service Chart No.255, edition May 1979 – as updated.

Note: The chart is based on European Datum (RE 50), however the positions mentioned below are in accordance with World Geodetic System 1984 Datum (WGS 84).

Description of the traffic separation scheme

The routeing measures consist of a traffic separation scheme southwest of the Ak. Mikro Emvolon.

- (a) A separation line connects the following geographical positions:
- (4) 40° 33'.39 N 022° 51'.96 E
 - (5) 40° 29'.94 N 022° 46'.66 E
- (b) A separation zone connects the following geographical positions:
- (5) 40° 29'.94 N 022° 46'.66 E
 - (6) 40° 27'.24 N 022° 46'.11 E
 - (7) 40° 27'.24 N 022° 45'.18 E
- (c) A traffic lane for northbound traffic is established between the separation line and the separation zone and a line connecting the following geographical positions:
- (1) 40° 27'.24 N 022° 47'.21 E
 - (2) 40° 29'.94 N 022° 47'.46 E
 - (3) 40° 33'.06 N 022° 52'.36 E
- (d) A traffic lane for southbound traffic is established between the separation line and the separation zone and a line connecting the following geographical positions:
- (8) 40° 27'.24 N 022° 43'.86 E
 - (9) 40° 30'.12 N 022° 46'.11 E
 - (10) 40° 33'.69 N 022° 51'.61 E

ANNEX 2

**NEW TRAFFIC SEPARATION SCHEME
“THE ÅLAND SEA”**

Note: See “Åland Sea Deep-Water routes” in part C.

(Reference chart: Finnish chart number 953, Edition 2007 V and Swedish chart SE61 (INT1205) Edition 21/2-2008.

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

Description of the traffic separation scheme

North Åland Sea

Part I

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

(1) 60° 29'.52 N 019° 00'.30 E (2) 60° 26'.94 N 019° 00'.36 E

(b) A traffic lane for southbound traffic is established between separation line and a line connecting the following geographical positions:

(3) 60° 29'.54 N 018° 56'.36 E (4) 60° 26'.89 N 18° 57'.05 E

(c) A traffic lane for northbound traffic is established between separation line and a line connecting the following geographical positions:

(5) 60° 26'.89 N 19° 03'.88 E (6) 60° 29'.51 N 019° 04'.56 E

Part II

(d) A separation zone 1.1 mile wide is centred upon the following geographical positions:

(7) 60° 11'.06 N 019° 03'.21 E (8) 60° 10'.09 N 019° 04'.80 E

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

(9) 60° 09'.79 N 019° 00'.12 E (10) 60° 08'.83 N 019° 01'.71 E

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

(11) 60° 11'.36 N 019° 07'.89 E (12) 60° 12'.33 N 019° 06'.30 E

South Åland Sea TSS

Part I

(g) A separation zone 1.1 mile wide is centred upon the following geographical positions:

(13) 59° 47'.28 N 019° 42'.44 E (14) 59° 46'.30 N 019° 44'.04 E

(h) A traffic lane for the southbound traffic is established between the traffic separation zone and a line connecting the following geographical positions:

(15) 59° 46'.01 N 019° 39'.39 E (16) 59° 45'.04 N 019° 40'.99 E

(i) A traffic lane for the northbound traffic is established between the traffic separation zone and a line connecting the following geographical positions:

(17) 59° 47'.57 N 019° 47'.10 E (18) 59° 48'.55 N 019° 45'.50 E

Part II

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

(19) 59° 46'.03 N 019° 52'.85 E (21) 59° 45'.36 N 019° 58'.85 E
(20) 59° 45'.96 N 019° 58'.87 E (22) 59° 45'.42 N 019° 53'.83 E

(k) A traffic lane for the eastbound traffic is established between the separation zone, and a line connecting the following geographical positions:

(23) 59° 44'.24 N 019° 55'.74 E (24) 59° 44'.25 N 019° 58'.80 E

(l) A traffic lane for the westbound traffic is established between the separation zone, and a line connecting the following geographical positions:

(25) 59° 46'.96 N 019° 58'.92 E (26) 59° 47'.37 N 019° 50'.68 E

Part III

(m) A separation line connecting the following geographical positions:

(27) 59° 41'.22 N 020° 31'.98 E (28) 59° 43'.32 N 020° 28'.38 E
(29) 59° 44'.76 N 020° 23'.10 E

(n) A traffic lane for the eastbound traffic is established between the separation line, and the following geographical positions:

(30) 59° 44'.32 N 020° 19'.60 E (32) 59° 40'.56 N 020° 30'.34 E
(31) 59° 42'.87 N 020° 27'.57 E

- (o) A traffic lane for the westbound traffic is established between the separation line, and a line connecting the following geographical positions:

(33) 59° 41'.93 N 020° 33'.72 E (34) 59° 45'.68 N 020° 24'.51 E

Part IV

- (p) A separation line connecting the following geographical positions:

(35) 59° 42'.26 N 019° 51'.55 E (37) 59° 34'.26 N 020° 08'.40 E
(36) 59° 39'.70 N 019° 55'.19 E (38) 59° 30'.27 N 020° 08'.40 E

- (q) A separation line connecting the following geographical positions:

(39) 59° 30'.27 N 020° 06'.51 E (41) 59° 39'.44 N 019° 54'.13 E
(40) 59° 33'.75 N 020° 06'.51 E (42) 59° 41'.91 N 019° 50'.60 E

- (r) A traffic lane for the southbound traffic is established between the separation line above in paragraph (q) and a line connecting the following geographical positions:

(43) 59° 40'.89 N 019° 47'.83 E (45) 59° 34'.89 N 019° 57'.20 E
(44) 59° 39'.57 N 019° 51'.58 E (46) 59° 30'.27 N 019° 54'.70 E

- (s) A traffic lane for the northbound traffic is established between the separation line above in paragraph (p) and the following two lines connecting the following geographical positions:

Line 1

(47) 59° 30'.27 N 020° 15'.79 E (49) 59° 33'.90 N 020° 30'.13 E
(48) 59° 33'.90 N 020° 15'.79 E

Line 2

(50) 59° 37'.92 N 020° 30'.13 E (52) 59° 43'.59 N 019° 55'.17 E
(51) 59° 37'.92 N 020° 06'.72 E

- (t) The traffic is separated by natural obstructions (Svenska Björn lighthouse in geographical position 59°32'.86 N 020°01'.24 E and two shallow waters) inside the traffic lane for the southbound traffic by a line connecting the following geographical positions:

(53) 59° 30'.27 N 020° 01'.84 E (55) 59° 34'.15 N 019° 59'.68 E
(54) 59° 34'.15 N 020° 01'.84 E (56) 59° 30'.27 N 019° 59'.68 E

Precautionary areas

- (u) A precautionary area is bounded by a line connecting the following geographical positions:

(16) 59° 46'.01 N 019° 39'.39 E (23) 59° 44'.24 N 019° 55'.74 E
(17) 59° 47'.57 N 019° 47'.10 E (52) 59° 43'.59 N 019° 55'.17 E
(26) 59° 46'.96 N 019° 58'.92 E (43) 59° 40'.89 N 019° 47'.83 E

- (v) A circular precautionary area of radius of 6.5 nautical miles is centred upon the following geographical position:

(57) 59° 52'.03 N 019° 34'.66 E

ANNEX 3

**NEW TRAFFIC SEPARATION SCHEME
“IN LIVERPOOL BAY”**

Note: See ATBA “In Liverpool Bay”

(Reference Chart: British Admiralty 1978, Edition 2007

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

Description of the traffic separation scheme

- (a) A separation zone (east of the “Douglas Oil Field” Platform), 1.0 nautical mile wide, is bounded by lines connecting the following geographical positions:

- (1) 53° 32'.76 N 003° 32'.18 W
- (2) 53° 32'.74 N 003° 33'.83 W
- (3) 53° 31'.74 N 003° 33'.80 W
- (4) 53° 31'.76 N 003° 32'.15 W

- (b) A separation zone (west of the “Douglas Oil Field” Platform), 1.0 nautical mile wide, is bounded by lines connecting the following geographical positions:

- (5) 53° 32'.72 N 003° 35'.51 W
- (6) 53° 32'.64 N 003° 41'.30 W
- (7) 53° 31'.64 N 003° 41'.27 W
- (8) 53° 31'.72 N 003° 35'.48 W

- (c) A traffic lane for east-bound traffic, 1.8 nautical miles wide, is established between the separation zones and a separation line connecting the following geographical positions:

- (9) 53° 29'.96 N 003° 32'.10 W
- (10) 53° 29'.84 N 003° 41'.21 W

- (d) A traffic lane for west-bound traffic, 1.8 nautical miles wide is established between the separation zones and a separation line connecting the following geographical positions:

- (11) 53° 34'.56 N 003° 32'.24 W
- (12) 53° 34'.44 N 003° 41'.36 W

ANNEX 4

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
“IN THE APPROACH TO BOSTON, MASSACHUSETTS”**

(Reference charts: United States 13009, 2007 edition; 13200, 2007 edition.

Note: These charts are based on North American 1983 Datum which is equivalent to WGS 1984 Datum (WGS 84).)

Description of the amended traffic separation scheme

- (a) A separation zone, one mile wide, is centred upon the following geographical positions:
- | | |
|--------------------------------|-------------------------------|
| (1) 42° 20'.73 N 070° 39'.06 W | (3) 40° 49'.25 N 069° 00'.81W |
| (2) 42° 18'.28 N 070° 01'.14 W | |
- (b) A traffic lane for northbound traffic is established between the separation zone and a line connecting the following geographical positions:
- | | |
|--------------------------------|--------------------------------|
| (4) 40° 50'.47 N 068° 58'.67 W | (6) 42° 22'.71 N 070° 38'.62 W |
| (5) 42° 20'.17 N 069° 59'.40 W | |
- (c) A traffic lane for southbound traffic is established between the separation zone and a line connecting the following geographical positions:
- | | |
|--------------------------------|--------------------------------|
| (7) 42° 18'.82 N 070° 40'.49 W | (9) 40° 48'.03 N 069° 02'.96 W |
| (8) 42° 16'.39N 070° 02'.88 W | |

Precautionary areas

- (a) A precautionary area of radius 6.17 nautical miles is centred upon the following geographical position (12) 42° 22'.71 N, 070° 46'.97 W.
- (b) A precautionary area is bounded to the east by a circle of radius 15.5 miles, centred upon geographical position (13) 40° 35'.01 N, 068° 59'.96 W, intersected by the traffic separation schemes “In the approach to Boston, Massachusetts” and “Eastern Approach, Off Nantucket” (part II of the traffic separation scheme “Off New York”) at the following geographical positions:

(4) 40° 50'.47 N 068° 58'.67 W	(11) 40° 23'.75 N 069° 13'.95 W
--------------------------------	---------------------------------

The precautionary area is bounded to the west by a line connecting the two traffic separation schemes between the following geographical positions:

(9) 40° 48'.03 N 069° 02'.95 W	(10) 40° 36'.76 N 069° 15'.13 W
--------------------------------	---------------------------------

ANNEX 5

**AMENDED TRAFFIC SEPARATION SCHEME
“OFF LAND’S END, BETWEEN SEVEN STONES AND LONGSHIPS”**

(Reference Charts: British Admiralty 1148 (published 06/2001), 2565 (published 06/2001))

Note: These charts are based on World Geodetic System 1984 Datum (WGS 84.)

Description of the amended traffic separation scheme

- (a) A separation zone, two miles wide, is bounded by lines connecting the following geographical positions:
- (1) 49° 58'.02 N 005° 55'.76 W
 - (2) 50° 20'.03 N 005° 55'.76 W
 - (3) 50° 20'.03 N 005° 58'.88 W
 - (4) 49° 56'.52 N 005° 58'.88 W
- (b) A separation zone, one mile wide, is bounded by lines connecting the following geographical positions:
- (5) 50° 00'.99 N 005° 49'.58 W
 - (6) 50° 20'.03 N 005° 49'.58 W
 - (7) 50° 20'.03 N 005° 51'.11 W
 - (8) 50° 00'.22 N 005° 51'.11 W
- (c) A separation zone, one mile wide, is bounded by lines connecting the following geographical positions:
- (9) 49° 54'.29 N 006° 03'.56 W
 - (10) 50° 20'.03 N 006° 03'.56 W
 - (11) 50° 20'.03 N 006° 05'.06 W
 - (12) 49° 53'.54 N 006° 05'.06 W
- (d) A traffic lane for northbound traffic, three miles wide, is established between the separation zones described in paragraphs (a) and (b) above.
- (e) A traffic lane for southbound traffic, three miles wide, is established between the separation zones described in paragraphs (a) and (c) above.

Inshore Traffic Zones

- (f) The area between the eastern boundary of the TSS and Land’s End, and which lies between a line drawn from position (5) above in a direction of 078° to the coast and a line drawn from position (13) 50° 08'.00 N, 005° 49'.52 W, 005° 49'.58 W in a direction of 090° to the coast at Pendeen Point, is designated an inshore traffic zone.

- (g) The area between the western boundary of the TSS and the Isles of Scilly, and which lies between a line drawn from position (12) above in a direction of 270° to the islands and a line drawn from position (14) $50^{\circ} 08'.00$ N, $006^{\circ} 05'.00$ W, $50^{\circ} 08'.00$ N, $006^{\circ} 05'.06$ W in a direction of 225° to Round Island Lighthouse, is designated an inshore traffic zone.

ANNEX 6

**AMENDED TRAFFIC SEPARATION SCHEME
“IN THE APPROACHES TO THE RIVER HUMBER”**

(Reference Charts: British Admiralty 109, (published 06/2006), 107, (published 09/2004)

Note: These charts are based on World Geodetic System 1984 Datum (WGS 84.)

Description of the Traffic Separation Scheme (TSS)

The proposed amendment to the Humber Traffic Separation Scheme (TSS) comprises:

- Extending the existing TSS by 18 nautical miles in a NNE direction to enhance the safety of navigation in the area between Mid New Sand Buoy and the pilot boarding area north of Humber Light Float.

Part I

Entrance to River Humber within Port Area

(a) A precautionary area established by a line connecting the following geographical positions:

- | | | | |
|-----|--------------|---------------|----------------|
| (1) | 53° 34'.22 N | 000° 06'.32 E | |
| (2) | 53° 33'.54 N | 000° 05'.70 E | |
| (3) | 53° 33'.14 N | 000° 06'.80 E | (Hobo) |
| (4) | 53° 33'.92 N | 000° 07'.43 E | (No. 3A Binks) |
| (1) | 53° 34'.22 N | 000° 06'.32 E | |

(b) A separation line connecting the following geographical positions:

- | | | | |
|-----|--------------|---------------|-----------|
| (5) | 53° 33'.54 N | 000° 07'.13 E | (Delta) |
| (6) | 53° 32'.73 N | 000° 09'.65 E | (Charlie) |

(c) A traffic lane for inbound traffic established between the separation line specified in paragraph (b) above and a straight line connecting the following geographical positions:

- | | | | |
|-----|--------------|---------------|----------------|
| (4) | 53° 33'.92 N | 000° 07'.43 E | (No. 3A Binks) |
| (7) | 53° 33'.16 N | 000° 10'.27 E | |

(d) A traffic lane for outbound traffic established between the separation line specified in paragraph (b) above and a straight line connecting the following geographical positions:

- | | | | |
|-----|--------------|---------------|----------|
| (3) | 53° 33'.14 N | 000° 06'.80 E | (Hobo) |
| (8) | 53° 32'.34 N | 000° 09'.11 E | (No. 2B) |

(e) A precautionary area established by a line connecting the following geographical positions:

- | | | | |
|-----|--------------|---------------|----------|
| (7) | 53° 33'.16 N | 000° 10'.27 E | |
| (8) | 53° 32'.34 N | 000° 09'.11 E | (No. 2B) |
| (9) | 53° 32'.38 N | 000° 11'.12 E | |

- (10) 53° 33'.16 N 000° 11'.17 E
- (11) 53° 33'.07 N 000° 10'.63 E (No. 3 Chequer)
- (7) 53° 33'.16 N 000° 10'.27 E

(f) A separation line connecting the following geographical positions:

- (12) 53° 32'.67 N 000° 11'.15 E (Bravo)
- (13) 53° 32'.82 N 000° 13'.20 E (Alpha)

(g) A traffic lane for inbound traffic established between the separation line specified in paragraph (f) above and a straight line connecting the following geographical positions:

- (10) 53° 33'.16 N 000° 11'.17 E
- (14) 53° 33'.52 N 000° 13'.80 E

(h) A traffic lane for outbound traffic established between the separation line specified in paragraph (f) above and a straight line connecting the following geographical positions:

- (9) 53° 32'.38 N 000° 11'.12 E
- (15) 53° 32'.41 N 000° 12'.80 E

Part II

River Humber Approaches

(i) A precautionary area established by a line connecting the following geographical positions:

- (15) 53° 32'.41 N 000° 12'.80 E
- (16) 53° 32'.42 N 000° 13'.18 E (No. 2 Haile Sand)
- (17) 53° 30'.59 N 000° 16'.61 E
- (18) 53° 31'.90 N 000° 18'.29 E (Hotspur)
- (19) 53° 33'.57 N 000° 18'.29 E
- (20) 53° 34'.22 N 000° 17'.59 E (S. Haile)
- (21) 53° 34'.74 N 000° 16'.54 E (S. Binks)
- (22) 53° 33'.56 N 000° 14'.19 E (Spurn Light Float)
- (14) 53° 33'.52 N 000° 13'.80 E
- (15) 53° 32'.41 N 000° 12'.80 E

Eastern Approaches (Sea Reach)

(j) A separation line connecting the following geographical positions:

- (23) 53° 32'.72 N 000° 18'.29 E (Inner Sea Reach)
- (24) 53° 32'.72 N 000° 22'.95 E (Outer Sea Reach)

(k) A traffic lane for inbound traffic established between the separation line specified in paragraph (j) above and a straight line connecting the following geographical positions:

- (19) 53° 33'.57 N 000° 18'.29 E
- (25) 53° 33'.57 N 000° 22'.95 E

- (l) A traffic lane for outbound traffic established between the separation line specified in paragraph (j) above and a straight line connecting the following geographical positions:

(18) 53° 31'.90 N 000° 18'.29 E (Hotspur)
(26) 53° 31'.90 N 000° 22'.95 E

South-east Approaches (Rosse Reach)

- (m) A separation line connecting the following geographical positions:

(27) 53° 31'.24 N 000° 17'.44 E (Inner Rosse Reach)
(28) 53° 29'.89 N 000° 20'.79 E (Outer Rosse Reach)

- (n) A traffic lane for inbound traffic established between the separation line specified in paragraph (m) above and a straight line connecting the following geographical positions:

(18) 53° 31'.90 N 000° 18'.29 E (Hotspur)
(29) 53° 30'.56 N 000° 21'.57 E

- (o) A traffic lane for outbound traffic established between the separation line specified in paragraph (m) above and a straight line connecting the following geographical positions:

(17) 53° 30'.59 N 000° 16'.61 E
(30) 53° 29'.19 N 000° 19'.97 E

Part III

North-east Approaches (New Sand Hole)

- (p) A separation line connecting the following geographical positions:

(31) 53° 34'.48 N 000° 17'.06 E
(32) 53° 36'.99 N 000° 20'.64 E
(35) 53° 38'.52 N 000° 21'.87 E

- (q) A traffic lane for inbound traffic established between the separation line specified in paragraph (p) above and a straight line connecting the following geographical positions:

(21) 53° 34'.74 N 000° 16'.54 E (S. Binks)
(33) 53° 37'.27 N 000° 20'.10 E (Outer Binks)
(36) 53° 38'.70 N 000° 21'.24 E

- (r) A traffic lane for outbound traffic established between the separation line specified in paragraph (p) above and a straight line connecting the following geographical positions:

(20) 53° 34'.22 N 000° 17'.59 E (S. Haile)
(34) 53° 36'.72 N 000° 21'.20 E (Mid New Sand)
(37) 53° 38'.35 N 000° 22'.49 E (North New Sand)

ANNEX 7

**AMENDED TRAFFIC SEPARATION SCHEME
“AT HATTER BARN”**

Note: See mandatory ship reporting system “In the Storebælt (Great Belt) Traffic Area (BELTREP)” in part G, section I.

(Reference chart: Danish chart no. 128, 9th edition, October 2007.

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

Description of the amended traffic separation scheme

(a) A separation line connects the following geographical positions:

(1) 55° 54'.67 N 010° 56'.40 E (2) 55° 50'.03 N 010° 49'.58 E

(b) A traffic lane of 675 metres wide at the narrowest part, for north-eastbound traffic, is established between the separation line and a separation zone connecting the following geographical positions:

(3) 55° 54'.75 N 010° 57'.87 E	(7) 55° 47'.89 N 010° 50'.24 E
(4) 55° 53'.88 N 010° 56'.08 E	(8) 55° 47'.89 N 010° 51'.64 E
(5) 55° 52'.42 N 010° 53'.93 E	(9) 55° 53'.27 N 010° 59'.53 E
(6) 55° 49'.64 N 010° 50'.24 E	(10) 55° 54'.75 N 011° 00'.00 E

(c) A traffic lane of 800 metres wide, for south-westbound traffic is established between the separation line and a separation line connecting the following geographical positions:

(11) 55° 54'.61 N 010° 55'.31 E (12) 55° 50'.54 N 010° 49'.34 E

Notes:

- 1 The minimum depth of water below mean sea level in the traffic separation scheme is 15 m.
- 2 Ships with a draught of more than 13 m should use the deep-water route which lies northwest of the traffic separation scheme.



IMO

E

Ref. T2-OSS/2.7.1

COLREG.2/Circ.60/Corr.1
2 April 2009

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

Corrigenda

The following corrections should be made to COLREG.2/Circ.60:

1 **ANNEX 5 – AMENDED TRAFFIC SEPARATION SCHEME “OFF LAND’S END, BETWEEN SEVEN STONES AND LONGSHIPS”**

Section (f), the correct co-ordinates for geographical position (13) are:

(13) 50° 10'.00N 005° 49'.58W

Section (g), in the third line the correct co-ordinates for geographical position (14) are:

(14) 50° 08'.00N 006° 05'.06W

2 **ANNEX 6 – AMENDED TRAFFIC SEPARATION SCHEME “IN THE APPROACHES TO THE RIVER HUMBER”**

Amend the paragraph relating to the Description of the Traffic Separation Scheme (TSS) as follows:

“Extending the existing TSS by 1.8 nautical miles in a NNE direction to enhance the safety of navigation in the area between Mid New Sand Buoy and the pilot boarding area north of Humber Light Float.”



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COLREG.2/Circ.61

1 June 2010

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 routing 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).

2 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

ANNEX 2

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.

ANNEX 3

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 | | | |

ANNEX 4

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"

(j) 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

(k) A traffic lane for the southbound traffic is established between the traffic separation 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

ANNEX 5

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:

A	(24)	44° 38'.26 N	033° 18'.88 E	B	(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:

(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

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:

(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

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:

(36)	44° 38'.52 N	033° 22'.91 E
(37)	44° 38'.04 N	033° 22'.91 E

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, Routing 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:

A	(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:

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

Separation zone:

B	(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:

B	(57)	44° 16'.99 N	033° 30'.31 E	C	(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:

A	(65)	44° 17'.99 N	034° 14'.91 E	B	(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:

C	(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.*
- 2 *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.*

ANNEX 6

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 |
| (2) 38° 51'.91 N 009° 44'.43 W | (4) 38° 43'.20 N 009° 49'.48 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.

ANNEX 7

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	008° 58'.09 W	(5)	37° 01'.06 N	009° 19'.56 W
(2)	36° 49'.36 N	009° 05'.96 W	(6)	36° 53'.79 N	009° 17'.46 W
(3)	36° 55'.58 N	009° 13'.12 W	(7)	36° 45'.98 N	009° 08'.40 W
(4)	37° 01'.94 N	009° 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*):

(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

(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:

(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

(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*):

(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.

ANNEX 8

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
(8)	59° 45'.74 N	024° 21'.11 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
(12)	59° 45'.67 N	024° 36'.13 E

- (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:

(15)	59° 42'.98 N	024° 30'.50 E
(16)	59° 43'.70 N	024° 36'.99 E
(24)	59° 47'.18 N	025° 08'.10 E
(20)	59° 49'.14 N	025° 07'.23 E
(23)	59° 50'.80 N	025° 06'.50 E
(27)	59° 52'.76 N	025° 05'.64 E
(17)	59° 49'.29 N	024° 34'.53 E
(7)	59° 47'.33 N	024° 35'.39 E
(12)	59° 45'.67 N	024° 36'.13 E
(11)	59° 45'.34 N	024° 33'.21 E
(3)	59° 44'.94 N	024° 29'.64 E

ANNEX 9

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

ANNEX 10

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



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COLREG.2/Circ.62
15 December 2010

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its eighty-eighth session (24 November to 3 December 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 4, as follows:

- .1 "Off the western coast of Norway" (new scheme);
- .2 "Off the southern coast of Norway" (new scheme);
- .3 "In the Strait of Dover and adjacent waters" (amended scheme); and
- .4 "Off the south-west coast of Iceland" (amended scheme).

2 In addition, the Maritime Safety Committee also **revoked** the existing traffic separation scheme "Off Feistein" (revoked scheme).

3 The new and amended traffic separation schemes listed in subparagraphs 1.1, 1.2, 1.3, and 1.4 above and detailed in annexes 1, 2, 3 and 4 will be implemented at 0000 hours UTC on 1 June 2011. The traffic separation scheme "Off Feistein" will be revoked also at 0000 hours UTC on 1 June 2011.

ANNEX 1

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

OFF THE WESTERN COAST OF NORWAY

(Reference charts: Norwegian Charts No.306, 307 and 308 published by the Norwegian Hydrographic Service.

Note: These charts are based on European Datum 1950 (ED 50). The geographical positions, (1) to (43), listed below are based on World Geodetic System 1984 Datum (WGS 84).)

Categories of ships to which the traffic separation schemes apply

- (a) tankers as defined in Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78);
- (b) chemical tankers carrying noxious liquid substances in bulk assessed or provisionally assessed as Category X or Y in Annex II to MARPOL 73/78;
- (c) ships of 5,000 gross tonnage and upwards, in transit or on international voyages to or from Norwegian ports; and
- (d) the routing schemes do not apply to any size or category of ship in domestic traffic with passengers and/or goods between Norwegian ports.

International voyages to or from ports in Norway

Ships of above categories on international voyages, to or from ports in Norway, should follow the ship's routing system until a course to port can be clearly set. This also applies to ships calling at Norwegian ports for supplies or service.

Description of the traffic separation schemes

I Off Runde

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

(1)	62° 59'.95 N	004° 08'.40 E
(2)	62° 55'.17 N	004° 04'.07 E
(3)	62° 49'.98 N	004° 04'.07 E
(4)	62° 49'.98 N	004° 08'.43 E
(5)	62° 54'.78 N	004° 08'.43 E
(6)	62° 59'.18 N	004° 12'.45 E

- (b) A traffic lane for southbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(7)	63° 01'.12 N	004° 02'.32 E
(8)	62° 55'.78 N	003° 57'.50 E
(9)	62° 50'.00 N	003° 57'.52 E

(c) A traffic lane for northbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(10)	62° 58'.05 N	004° 18'.52 E
(11)	62° 54'.20 N	004° 15'.00 E
(12)	62° 50'.00 N	004° 14'.97 E

II Off Stad

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

(13)	61° 59'.00 N	004° 04'.13 E
(14)	61° 54'.00 N	004° 04'.13 E
(15)	61° 54'.00 N	004° 08'.37 E
(16)	61° 59'.00 N	004° 08'.37 E

(e) A traffic lane for southbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(17)	61° 59'.00 N	003° 57'.78 E
(18)	61° 54'.00 N	003° 57'.80 E

(f) A traffic lane for northbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(19)	61° 59'.00 N	004° 14'.72 E
(20)	61° 54'.00 N	004° 14'.70 E

III Off Sotra

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

(21)	60° 20'.00 N	004° 04'.23 E
(22)	60° 15'.00 N	004° 04'.25 E
(23)	60° 15'.00 N	004° 08'.25 E
(24)	60° 20'.00 N	004° 08'.27 E

(h) A traffic lane for southbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(25)	60° 20'.00 N	003° 58'.20 E
(26)	60° 15'.00 N	003° 58'.23 E

(i) A traffic lane for northbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(27)	60° 20'.00 N	004° 14'.30 E
(28)	60° 15'.00 N	004° 14'.27 E

IV Off Utsira

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

(29)	59° 05'.00 N	004° 04'.32 E
(30)	58° 59'.83 N	004° 04'.32 E
(31)	58° 57'.72 N	004° 08'.20 E
(32)	59° 05'.00 N	004° 08'.20 E

(k) A traffic lane for southbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(33)	59° 05'.00 N	003° 58'.47 E
(34)	58° 58'.50 N	003° 58'.47 E

(l) A traffic lane for northbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(35)	59° 05'.00 N	004° 14'.03 E
(36)	59° 01'.73 N	004° 14'.03 E
(37)	58° 58'.50 N	004° 19'.95 E

Description of the recommended routes

(m) A recommended route is established between the traffic separation schemes Off Runde and Off Stad with a central line between the following geographical positions:

(38)	62° 50'.00 N	004° 06'.25 E
(39)	61° 59'.00 N	004° 06'.25 E

(n) A recommended route is established between the traffic separation schemes Off Stad and Off Sotra with a central line between the following geographical positions:

(40)	61° 54'.00 N	004° 06'.25 E
(41)	60° 20'.00 N	004° 06'.25 E

(o) A recommended route is established between the traffic separation schemes Off Sotra and Off Utsira with a central line between the following geographical positions:

(42)	60° 15'.00 N	004° 06'.25 E
(43)	59° 05'.00 N	004° 06'.25 E

Note:

Chart No.	Title	Scale	Datum
306	Skagerrak, vestre blad	1:350 000	ED 50
307	Stavanger – Florø	1:350 000	ED 50
308	Florø – Smøla	1:350 000	ED 50

Typical shift of position co-ordinates referred to the WGS 84 Datum to the ED 50 Datum are:

From Datum	To Datum	Approximate latitude in the area	Datum shift
WGS 84	ED 50	62° 30' N	99 m (NE-diagonal)
WGS 84	ED 50	59° 00' N	109 m (NE-diagonal)

ANNEX 2

OFF THE COAST OF SOUTHERN NORWAY

(Reference charts: Norwegian Charts No.305 (INT 1300) and 306 published by the Norwegian Hydrographic Service.

Note: These charts are based on European Datum 1950 (ED 50). The geographical positions, (1) to (63), listed below are based on World Geodetic System 1984 Datum (WGS 84).)

Categories of ships to which the traffic separation schemes apply

- (a) tankers as defined in Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78);
- (b) chemical tankers carrying noxious liquid substances in bulk assessed or provisionally assessed as Category X or Y in Annex II to MARPOL 73/78;
- (c) ships of 5,000 gross tonnage and upwards, in transit or on international voyages to or from Norwegian ports; and
- (d) the routing schemes do not apply to any size or category of ship in domestic traffic with passengers and/or goods between Norwegian ports.

International voyages to or from ports in Norway

Ships of above categories on international voyages, to or from ports in Norway, should follow the ship's routing system until a course to port can be clearly set. This also applies to ships calling at Norwegian ports for supplies or service.

Description of the traffic separation schemes

I Off Egersund

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

(1)	58° 21'.00 N	005° 15'.23 E
(2)	58° 18'.78 N	005° 19'.20 E
(3)	58° 16'.82 N	005° 23'.58 E
(4)	58° 18'.33 N	005° 26'.02 E
(5)	58° 20'.22 N	005° 21'.80 E
(6)	58° 22'.37 N	005° 18'.00 E

- (b) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(7)	58° 18'.95 N	005° 11'.08 E
(8)	58° 16'.60 N	005° 15'.27 E
(9)	58° 14'.53 N	005° 19'.90 E

- (c) A traffic lane for westbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(10)	58° 24'.40 N	005° 22'.17 E
(11)	58° 22'.40 N	005° 25'.75 E
(12)	58° 20'.63 N	005° 29'.70 E

II Off Farsund

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

(13)	57° 46'.62 N	006° 30'.43 E
(14)	57° 44'.43 N	006° 35'.20 E
(15)	57° 44'.30 N	006° 41'.48 E
(16)	57° 46'.30 N	006° 41'.62 E
(17)	57° 46'.40 N	006° 36'.63 E
(18)	57° 48'.12 N	006° 32'.87 E

- (e) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(19)	57° 44'.33 N	006° 26'.80 E
(20)	57° 41'.48 N	006° 33'.03 E
(21)	57° 41'.32 N	006° 41'.25 E

- (f) A traffic lane for westbound traffic is established between the separation zone described in paragraph (d) and a line connecting the following geographical positions:

(22)	57° 50'.40 N	006° 36'.52 E
(23)	57° 49'.35 N	006° 38'.80 E
(24)	57° 49'.28 N	006° 41'.85 E

III Off Ryvingen

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

(25)	57° 42'.80 N	007° 41'.87 E
(26)	57° 42'.55 N	007° 51'.72 E
(27)	57° 44'.87 N	007° 59'.92 E
(28)	57° 44'.55 N	007° 50'.77 E
(29)	57° 44'.78 N	007° 42'.10 E

- (h) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(30)	57° 39'.85 N	007° 41'.72 E
(31)	57° 39'.58 N	007° 52'.97 E
(32)	57° 39'.92 N	008° 00'.25 E

- (i) A traffic lane for westbound traffic is established between the separation zone described in paragraph (g) and a line connecting the following geographical positions:

(33)	57° 47'.75 N	007° 42'.55 E
(34)	57° 47'.58 N	007° 49'.68 E
(35)	57° 49'.40 N	007° 56'.00 E

IV Off Lillesand

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

(36)	57° 58'.25 N	008° 46'.92 E
(37)	57° 59'.75 N	008° 52'.25 E
(38)	58° 02'.17 N	008° 56'.22 E
(39)	58° 03'.47 N	008° 53'.38 E
(40)	58° 01'.35 N	008° 49'.88 E
(41)	58° 00'.02 N	008° 45'.15 E

- (k) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(42)	57° 55'.60 N	008° 49'.55 E
(43)	57° 57'.37 N	008° 55'.82 E
(44)	58° 00'.18 N	009° 00'.47 E

- (l) A traffic lane for westbound traffic is established between the separation zone described in paragraph (j) and a line connecting the following geographical positions:

(45)	58° 02'.67 N	008° 42'.50 E
(46)	58° 03'.73 N	008° 46'.32 E
(47)	58° 05'.45 N	008° 49'.13 E

V Off Risør

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

(48)	58° 26'.27 N	009° 36'.28 E
(49)	58° 30'.03 N	009° 42'.53 E
(50)	58° 31'.33 N	009° 39'.67 E
(51)	58° 27'.57 N	009° 33'.42 E

- (n) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (m) and a line connecting the following geographical positions:

(52)	58° 24'.30 N	009° 40'.60 E
(53)	58° 28'.07 N	009° 46'.85 E

- (o) A traffic lane for westbound traffic is established between the separation zone described in paragraph (m) and a line connecting the following geographical positions:

(54)	58° 29'.53 N	009° 29'.08 E
(55)	58° 33'.30 N	009° 35'.33 E

Description of the recommended routes

(p) A recommended route is established between the traffic separation schemes Off Egersund and Off Farsund with a central line between the following geographical positions:

(56)	58° 17'.60 N	005° 24'.85 E
(57)	57° 47'.38 N	006° 31'.65 E

(q) A recommended route is established between the traffic separation schemes Off Farsund and Off Ryvingen with a central line between the following geographical positions:

(58)	57° 45'.33 N	006° 41'.57 E
(59)	57° 43'.82 N	007° 41'.97 E

(r) A recommended route is established between the traffic separation schemes Off Ryvingen and Off Lillesand with a central line between the following geographical positions:

(60)	57° 44'.70 N	007° 55'.23 E
(61)	57° 59'.17 N	008° 46'.03 E

(s) A recommended route is established between the traffic separation schemes Off Lillesand and Off Risør with a central line between the following geographical positions:

(62)	58° 02'.78 N	008° 54'.80 E
(63)	58° 26'.95 N	009° 34'.78 E

Note:

Chart No.	Title	Scale	Datum
306	Skagerrak, vestre blad	1:350 000	ED 50
305 (INT 1300)	Skagerrak	1:350 000	WGS 84

Typical shift of position co-ordinates referred to the WGS 84 Datum to the ED 50 Datum are:

From Datum	To Datum	Approximate latitude in the area	Datum shift
WGS 84	ED 50	62° 30' N	99 m (NE-diagonal)
WGS 84	ED 50	59° 00' N	109 m (NE-diagonal)

ANNEX 3

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "IN THE STRAIT OF DOVER AND ADJACENT WATERS"

1 *In "WARNINGS" section, the existing paragraph 3 is deleted and the following new paragraphs are added after the existing paragraph 2:*

"3 In the area of the deep-water route east of the separation line, ships are recommended to avoid overtaking where traffic and navigation do not allow sufficient sea room and passing distance. If overtaking is performed then a safe distance must be maintained and COLREG Rule 13 observed.

4 Mariners leaving the north east going lane and planning to cross the south west going lane, between the Varne (51° 01'.3 N 001° 23'.9 E) and F1 (51° 11'.2 N 001°45'.0 E) light-buoys should be aware of heavy traffic in the south west going lane, as well as ferry traffic, and alter course and/or speed at an appropriate point."

ANNEX 4

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF THE SOUTH-WEST COAST OF ICELAND"

- 1 *The first paragraph after the title "OFF THE SOUTH-WEST COAST OF ICELAND", which refers to the reference chart, is replaced by the following text:*

"(Reference chart: Icelandic No.31 (INT 1103) Dyrhólaey – Snæfellsnes (May 2008 edition).

Note: The chart is based on World Geodetic System 1984 datum (WGS 84).)"

- 2 *In "Notes" section, the following paragraph is added after the existing paragraph 1.4:*

"1.5 Passenger ships of unlimited size may only navigate the Inner Route (Húllid Passage) during the period from 1 May to 1 October."

- 3 *In "Notes" section, the reference to paragraphs "1.2 and 1.4" in the last part of paragraph 1.1 is replaced by "1.2 to 1.5".*

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COLREG.2/Circ.63
28 May 2012

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its ninetieth session (16 to 25 May 2012), 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, 2 and 3 as follows:

- .1 "In Norra Kvarken" (new scheme);
- .2 "Sunk East" (amended scheme); and
- .3 "At West Hinder" (amended scheme).

2 The new traffic separation scheme listed in subparagraph 1.1 above and detailed in annex 1 will be implemented at 0000 hours UTC on 1 May 2013, whilst the amended traffic separation schemes in subparagraphs 1.2 and 1.3 above and detailed in annexes 2 and 3 will be implemented at 0000 hours UTC on 1 December 2012.

ANNEX 1

NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

IN NORRA KVARKEN

(Reference chart: Finnish chart number 47 edition 2005 V based on World Geodetic System (WGS 84))

Part I

(a) A traffic separation zone 0.1 mile wide is centred upon the following geographical positions:

(1) 63° 27'.22 N 020° 37'.58 E (2) 63° 27'.94 N 020° 38'.61 E

(b) A traffic lane for the northbound traffic is established between the traffic separation line described in paragraph (a) and a line connecting the following geographical positions:

(3) 63° 27'.03 N 020° 38'.32 E (4) 63° 27'.77 N 020° 39'.28 E

(c) A traffic lane for the southbound traffic is established between the traffic separation line described in paragraph (a) and a line connecting the following geographical positions:

(5) 63° 28'.12 N 020° 37'.93 E (6) 63° 27'.42 N 020° 36'.84 E

Part II

(d) A traffic separation zone 0.1 mile wide is centred upon the following geographical positions:

(7) 63° 31'.60 N 020° 42'.72 E (8) 63° 31'.84 N 020° 43'.00' E
(9) 63° 32'.50 N 020° 45'.82 E

(e) A traffic lane for the northbound traffic is established between the traffic separation line described in paragraph (d) and a line connecting the following geographical positions:

(10) 63° 31'.19 N 020° 43'.77 E (11) 63° 32'.29 N 020° 46'.24 E

(f) A traffic lane for the southbound traffic is established between the traffic separation line described in paragraph (d) and a line connecting the following geographical positions:

(12) 63° 32'.71 N 020° 45'.40 E (13) 63° 32'.23 N 020° 41'.09 E

Part III

(g) A traffic separation zone 0.1 mile wide is centred upon the following geographical positions:

(14) 63° 34'.73 N 021° 01'.51 E (15) 63° 35'.06 N 021° 03'.60 E

(h) A traffic lane for the northbound traffic is established between the traffic separation line described in paragraph (g) and a line connecting the following geographical positions:

(16) 63° 34'.42 N 021° 01'.76 E (17) 63° 34'.72 N 021° 03'.88 E

(i) A traffic lane for the southbound traffic is established between the traffic separation line described in paragraph (g) and a line connecting the following geographical positions:

(18) 63° 35'.40 N 021° 03'.33 E (19) 63° 35'.04' N 021° 01'.26' E

ANNEX 2

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "SUNK EAST"

(Reference Charts: British Admiralty 1610)

Note: *Chart is based on World Geodetic System 1984 Datum (WGS 84)*

1 Description

- 1.1 The proposed amendment to the SUNK routing measure comprises of amendments to the SUNK TSS East to be extended 5.5 nautical miles eastwards.

2 Details of proposed Amendments

SUNK East traffic separation scheme

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

(22)	51° 53'.07 N	002° 07'.46 E	(24)	51° 48'.84 N	001° 51'.86 E
(23)	51° 53'.39 N	002° 07'.55 E	(25)	51° 48'.54 N	001° 51'.85 E

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

(26)	51° 54'.59 N	002° 07'.93 E	(31)	51° 55'.59 N	001° 51'.73 E
(27)	51° 49'.92 N	001° 51'.89 E	(32)	51° 52'.31 N	001° 50'.68 E
(28)	51° 52'.06 N	001° 49'.37 E	(33)	51° 50'.99 N	001° 52'.27 E
(29)	51° 53'.90 N	001° 49'.96 E	(34)	51° 55'.63 N	002° 08'.24 E
(30)	51° 55'.72 N	001° 50'.54 E			

- (i) A traffic lane for eastbound traffic between the separation zone described in (g) above and a line connecting the following geographical positions:

(35)	51° 47'.45 N	001° 51'.82 E	(36)	51° 51'.89 N	002° 07'.08 E
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- (j) A traffic lane for westbound traffic between the separation zone described in (g) above and that portion of the separation zone described in (h) above connecting the following geographical positions:

(26)	51° 54'.59 N	002° 07'.93 E	(27)	51° 49'.92 N	001° 51'.89 E
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ANNEX 3

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "AT WEST HINDER"

(Reference charts: D11 and 102INT1480 published by the Agency of Maritime and Coastal Services, Flemish Hydrography.

Note: *These charts are based on World Geodetic System 1984 Datum (WGS 84)*

1 A new extended Precautionary Area with recommended direction of traffic flow is established connecting the following geographical positions:

1	51° 23'.45 N	002° 32'.95 E joining TSS
2	51° 23'.45 N	002° 36'.92 E AN Buoy
3	51° 24'.25 N	002° 44'.52 E GZ Buoy
4	51° 23'.38 N	002° 46'.21 E VG Buoy
5	51° 20'.82 N	002° 46'.29 E MBN Buoy
6	51° 21'.39 N	002° 31'.33 E near Oost Dyck Buoy joining the TSS.

2 Consequently, the revised coordinates of the geographical positions (East end) of the eastbound traffic lane, the westbound traffic lane and the separation line are as follows:

(7(revised))	51° 23'.45 N	002° 32'.95 E
(1(revised))	51° 22'.43 N	002° 32'.15 E
(13(revised))	51° 21'.39 N	002° 31'.33 E

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COLREG.2/Circ.64
4 December 2012

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its ninety-first session (26 to 30 November 2012), adopted, in accordance with the provisions of resolution A.858(20), new and amended existing traffic separation schemes listed in annexes 1, 2, 3, 4, 5, 6, 7 and 8 as follows:

- .1 "In the approaches to IJmuiden" (new scheme);
- .2 "Off Texel" (amended scheme);
- .3 "In the Approaches to Hook of Holland and at North Hinder" (amended scheme);
- .4 "Off Rodsher Island" (amended scheme);
- .5 "Off Ushant" (amended scheme), including article 3 of SN/Circ.232;
- .6 "In the Santa Barbara Channel" (amended scheme);
- .7 "Off San Francisco" (amended scheme); and
- .8 "In the Approaches to Los Angeles – Long Beach" (amended scheme).

2 The new traffic separation scheme including amended traffic separation schemes listed in subparagraphs 1.1, 1.2 and 1.3 above and detailed in annexes 1, 2 and 3 will be implemented at 0000 hours UTC on 1 August 2013, whilst the amended traffic separation schemes in subparagraphs 1.4, 1.5, 1.6, 1.7 and 1.8 above and detailed in annexes 4, 5, 6, 7 and 8 will be implemented at 0000 hours UTC on 1 June 2013.

ANNEX 1
NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

"IN THE APPROACHES TO IJMUIDEN"

Reference chart Netherlands 1631 (INT 1418 edition 3)

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

IJmuiden West Inner traffic separation scheme

- (a) A separation zone to the north of the IJmuiden-geul is bounded by a line connecting the following geographical positions:

(1)	52° 29'.47 N	4° 20'.03 E	(4)	52° 30'.90 N	4° 08'.55 E
(2)	52° 29'.76 N	4° 20'.12 E	(5)	52° 30'.36 N	4° 08'.93 E
(3)	52° 30'.90 N	4° 10'.17 E	(6)	52° 30'.38 N	4° 11'.84 E

- (b) A triangular separation zone north of the IJmuiden-geul is bounded by a line connecting the following geographical positions:

(7)	52° 31'.50 N	4° 10'.60 E	(9)	52° 32'.73 N	4° 07'.26 E
(8)	52° 31'.50 N	4° 08'.13 E			

- (c) A traffic lane for westbound traffic is established between the separation zones in paragraphs (a) and (b) above and a line connecting the following geographical positions:

(16)	52° 30'.52 N	4° 20'.35 E	(17)	52° 31'.35 N	4° 13'.25 E
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- (d) A separation zone to the south of the IJmuiden-geul is bounded by a line connecting the following geographical positions:

(11)	52° 28'.70 N	4° 19'.80 E	(14)	52° 30'.04 N	4° 09'.16 E
(12)	52° 29'.23 N	4° 19'.96 E	(15)	52° 29'.87 N	4° 09'.28 E
(13)	52° 30'.06 N	4° 12'.50 E			

- (e) A traffic lane for eastbound traffic is established between the separation zone in paragraph (d) above and a line connecting the following geographical positions:

(20)	52° 27'.62 N	4° 19'.48 E	(21)	52° 28'.58 N	4° 10'.85 E
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IJmuiden North traffic separation scheme

- (a) A separation line extending north north-west from the small triangular separation zone in the IJmuiden Inner traffic separation scheme is established between the following geographical positions:

(9)	52° 32'.73 N	4° 07'.26 E	(10)	52° 35'.72 N	4° 05'.15 E
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- (b) A traffic lane for north north-westbound traffic is established between the separation line and the small triangular separation zone in paragraphs (a) above and (b) above and a line connecting the following geographical positions:

(17)	52° 31'.35 N	4° 13'.25 E	(19)	52° 36'.04 N	4° 06'.36 E
(18)	52° 33'.28 N	4° 08'.30 E			

- (c) A traffic lane for south south-eastbound traffic is established between the separation line and the triangular separation zone in paragraphs (a) above and (b) above and a line connecting the following geographical positions:

(31)	52° 35'.40 N	4° 03'.95 E	(32)	52° 31'.50 N	4° 06'.70 E
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IJmuiden West outer traffic separation scheme

- (a) A separation zone to the north of the IJmuiden-geul is bounded by a line connecting the following geographical positions:

(23)	52° 30'.36 N	4° 07'.51 E	(25)	52° 30'.91 N	3° 56'.18 E
(24)	52° 30'.91 N	4° 07'.12 E	(26)	52° 30'.27 N	3° 55'.98 E

- (b) A separation zone to the south of the IJmuiden-geul is bounded by a line connecting the following geographical positions:

(27)	52° 29'.22 N	4° 08'.31 E	(29)	52° 29'.95 N	3° 55'.87 E
(28)	52° 30'.03 N	4° 07'.74 E	(30)	52° 27'.60 N	3° 55'.10 E

- (c) A traffic lane for westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(32)	52° 31'.50 N	4° 06'.70 E	(33)	52° 31'.50 N	3° 56'.38 E
------	--------------	-------------	------	--------------	-------------

- (d) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(22)	52° 28'.29 N	4° 08'.97 E	(35)	52° 25'.53 N	3° 54'.43 E
(34)	52° 26'.55 N	3° 57'.50 E			

ANNEX 2

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF TEXEL"

Reference chart Netherlands 1631 (INT 1418 edition 3)

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

Description of the traffic separation scheme

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

- | | | |
|------------------|---------------|--------------------------------|
| (1) 53° 05'.42 N | 004° 23'.60 E | (5) No position necessary |
| (2) 52° 59'.95 N | 004° 17'.89 E | (6) 52° 49'.59 N 003° 58'.56 E |
| (3) 52° 51'.85 N | 004° 12'.64 E | (7) 52° 56'.53 N 004° 00'.92 E |
| (4) 52° 45'.85 N | 004° 05'.04 E | (8) 53° 06'.48 N 004° 20'.79 E |

(b) A traffic lane for north-eastbound traffic is established between the separation zone in paragraph (a) and a line connecting the following geographical positions:

- | | | | |
|-------------------|---------------|--------------------|---------------|
| (9) 53° 03'.82 N | 004° 27'.80 E | (11a) 52° 44'.60 N | 004° 09'.90 E |
| (10) 52° 58'.60 N | 004° 22'.34 E | (11b) 52° 43'.48 N | 004° 09'.14 E |
| (11) 52° 50'.38 N | 004° 17'.01 E | | |

(c) A traffic lane for south-westbound traffic is established between the separation zone in paragraph (a) and a line connecting the following geographical positions:

- | | | | |
|--------------------|---------------|-------------------|---------------|
| (12b) 52° 56'.67 N | 003° 53'.44 E | (13) 53° 08'.17 N | 004° 16'.35 E |
|--------------------|---------------|-------------------|---------------|

(d) A separation zone west of the separation zone in paragraph (a) is established and bounded by the following geographical positions:

- | | | | |
|-------------------|---------------|-------------------|---------------|
| (14) 52° 50'.60 N | 003° 56'.80 E | (16) 52° 54'.31 N | 003° 56'.67 E |
| (15) 52° 55'.22 N | 003° 58'.32 E | (17) 52° 52'.31 N | 003° 53'.83 E |

(e) A southbound traffic lane branching off from the main south-westbound traffic lane is established between the separation zones in paragraphs (a) and (d) and the boundaries of the south-westbound traffic lane are extended, as described in paragraphs (f) and (g).

(f) The north-western boundary of the extended south-westbound traffic lane is formed by a line connecting the following geographical positions:

- | | | | |
|--------------------|---------------|--------------------|---------------|
| (12a) 52° 35'.71 N | 003° 25'.56 E | (12b) 52° 56'.67 N | 003° 53'.44 E |
|--------------------|---------------|--------------------|---------------|

(g) The south-eastern boundary of the extended south-westbound traffic lane is formed by a line connecting the following geographical positions:

- | | | | |
|-------------------|---------------|-------------------|---------------|
| (17) 52° 52'.31 N | 003° 53'.83 E | (18) 52° 36'.04 N | 003° 31'.02 E |
|-------------------|---------------|-------------------|---------------|

(h) A separation zone at the south-western end of the south-westbound traffic lane is established and bounded by the following geographical positions:

(20) 52° 34'.34 N 003° 28'.65 E (22) 52° 31'.94 N 003° 28'.01 E
(21) 52° 32'.35 N 003° 26'.36 E

(i) A traffic lane for south-westbound traffic is established between the separation zone in paragraph (h) and a line connecting the following geographical positions:

(12) 52° 33'.71 N 003° 23'.17 E (12a) 52° 35'.71 N 003° 25'.56 E

(j) A southbound traffic lane branching off from the main south-westbound traffic lane is established between the separation zone in paragraph (h) and a line connecting the following geographical positions:

(18) 52° 36'.04 N 003° 31'.02 E (19) 52° 31'.76 N 003° 29'.87 E

Note: The note is to remain unchanged.

ANNEX 3

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEMES "IN THE APPROACHES TO HOOK OF HOLLAND AND AT NORTH HINDER"

Reference chart Netherlands 1630 (INT 1416), Edition 4/2010

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

Maas North traffic separation scheme

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

(1)	52° 22'.21 N	003° 51'.38 E	(3)	52° 07'.14 N	003° 47'.10 E
(1a)	52° 19'.17 N	003° 50'.38 E	(4)	52° 17'.07 N	003° 47'.69 E
(2)	52° 07'.17 N	003° 54'.08 E	(5)	52° 22'.45 N	003° 49'.51 E

(b) A traffic lane for northbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(6)	52° 21'.97 N	003° 53'.28 E	(7)	52° 07'.18 N	003° 55'.95 E
(6a)	52° 19'.03 N	003° 52'.34 E			

(c) A traffic lane for southbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(8)	52° 22'.68 N	003° 47'.73 E	(10)	52° 07'.13 N	003° 44'.66 E
(9)	52° 14'.02 N	003° 44'.96 E			

Maas North-west traffic separation scheme

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

(13)	52° 07'.98 N	003° 31'.54 E	(15)	52° 05'.96 N	003° 36'.27 E
(14)	52° 06'.17 N	003° 36'.64 E	(16)	52° 07'.72 N	003° 31'.29 E

(b) A traffic lane for north-westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(11)	52° 07'.09 N	003° 38'.25 E	(12)	52° 09'.08 N	003° 32'.64 E
------	--------------	---------------	------	--------------	---------------

(c) A traffic lane for south-eastbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(17)	52° 06'.62 N	003° 30'.19 E	(18)	52° 05'.04 N	003° 34'.66 E
------	--------------	---------------	------	--------------	---------------

Maas West inner traffic separation scheme

(a) A separation zone to the north of the DW route is outwardly bounded by a line connecting the following geographical positions:

(21)	52° 02'.12 N	003° 25'.73 E	(23)	52° 00'.57 N	003° 35'.17 E
(22)	52° 02'.56 N	003° 34'.94 E	(24)	51° 59'.75 N	003° 25'.29 E

and inwardly bounded by a line connecting the following geographical positions:

(32)	52° 02'.15 N	003° 33'.36 E	(34)	52° 00'.03 N	003° 27'.01 E
(33)	52° 01'.89 N	003° 27'.31 E	(35)	52° 00'.57 N	003° 33'.51 E

Note: The inside of the area in the separation zone to the north of the DW route, bounded by a line connecting the following geographical positions (32), (33), (34) and (35), is designated as an anchorage area.

(b) A separation zone to the south of the DW route is outwardly bounded by a line connecting the following geographical positions:

(25)	51° 59'.92 N	003° 35'.24 E	(26)	51° 59'.09 N	003° 25'.17 E
(25a)	51° 59'.89 N	003° 34'.87 E	(27)	51° 56'.90 N	003° 24'.78 E
(25b)	51° 58'.86 N	003° 33'.51 E	(28)	51° 58'.25 N	003° 35'.44 E
(25c)	51° 59'.47 N	003° 29'.78 E			

Positions 25a and 25b are connected by a circular arc centred on point "25d" (see NAV 58/3/10, annex 3).

(25d) 51° 59.56' N 003° 33.82' E Radius of the arc = 0.729 miles

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

(19)	52° 04'.74 N	003° 34'.69 E	(20)	52° 04'.63 N	003° 26'.20 E
------	--------------	---------------	------	--------------	---------------

(d) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(29)	51° 54'.10 N	003° 24'.29 E	(30)	51° 56'.26 N	003° 35'.66 E
------	--------------	---------------	------	--------------	---------------

(e) A separation zone between the westbound traffic lane of TSS Maas West Inner and the south-eastbound traffic lane of TSS Maas Northwest is bounded by a line connecting the following geographical positions:

(17)	52° 06'.62 N	003° 30'.19 E	(19)	52° 04'.74 N	003° 34'.69 E
(18)	52° 05'.04 N	003° 34'.66 E	(19a)	52° 04'.66 N	003° 28'.25 E

Maas West outer traffic separation scheme

(a) A separation zone to the north of the DW route is outwardly bounded by a line connecting the following geographical positions:

(38)	52° 01'.26 N	003° 08'.37 E	(40a)*	51° 58'.79 N	003° 13'.86 E
(39)	52° 01'.77 N	003° 18'.81 E	(40b)*	51° 59'.49 N	003° 12'.47 E
(40)	51° 59'.15 N	003° 18'.13 E	(41)	51° 59'.13 N	003° 08'.26 E

* Positions 40a and 40b are connected by a circular arc centred on point "40c" (see NAV 58/3/10, annex 3).

(40c) 51° 58'.77 N 003° 12'.66 E Radius of the arc = 0.729 miles

and inwardly bounded by a line connecting the following geographical positions:

(42) 51° 59'.88 N	003° 13'.89 E	(44) 52° 01'.05 N	003° 08'.36 E
(43) 52° 01'.26 N	003° 12'.56 E	(45) 51° 59'.40 N	003° 08'.28 E

Thus the created inside area in the separation zone is designated as anchor area.

- (b) A separation zone to the south of the DW route is outwardly bounded by a line connecting the following geographical positions:

(46) 51° 58'.49 N	003° 17'.96 E	(48) 51° 54'.77 N	003° 07'.49 E
(47) 51° 57'.64 N	003° 08'.00 E	(49) 51° 55'.99 N	003° 17'.31 E

and inwardly bounded by a line connecting the following geographical positions:

(52) 51° 55'.64 N	003° 12'.25 E	(54) 51° 56'.89 N	003° 07'.87 E
(53) 51° 57'.37 N	003° 13'.55 E	(55) 51° 55'.06 N	003° 07'.54 E

Thus the created inside area in the separation zone is designated as anchor area.

- (c) A traffic lane for westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(36) 52° 04'.54 N	003° 19'.53 E	(37) 52° 04'.37 N	003° 08'.52 E
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- (d) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(50) 51° 52'.59 N	003° 16'.43 E	(51) 51° 50'.72 N	003° 06'.78 E
-------------------	---------------	-------------------	---------------

Note: The inside of the area in the separation zone to the north of the Eurochannel, bounded by a line connecting the following geographical positions (42), (43), (44) and (45), and the inside of the area in the separation zone to the south of the Eurochannel, bounded by a line connecting the following geographical positions (52), (53), (54) and (55), are designated as anchorage areas.

North Hinder North traffic separation scheme

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

(61) 52° 07'.29 N	003° 03'.08 E	(63) 52° 11'.51 N	003° 02'.62 E
(62) 52° 09'.38 N	003° 06'.60 E	(64) 52° 09'.03 N	002° 59'.83 E

- (b) A traffic lane for south-westbound traffic is established between the separation zone in (a) above and a line connecting the following geographical positions:

(65) 52° 13'.42 N	002° 59'.03 E	(66) 52° 10'.99 N	002° 56'.16 E
-------------------	---------------	-------------------	---------------

- (c) A traffic lane for north-eastbound traffic is established between the separation zone in (a) above and a line connecting the following geographical positions:

(67) 52° 05'.55 N	003° 06'.32 E	(68) 52° 07'.72 N	003° 09'.70 E
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ANNEX 4

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
"OFF RODSHER ISLAND"**

Positions are based on World Geodetic System 1984 Datum (WGS 84). The Russian Federation reference chart #23004 (Pulkovo). For obtaining position in WGS datum charted positions should be moved 0'.14 (8".3) westward.

Amendments to the traffic separation scheme

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

- | | | |
|----|---------------|--------------------|
| .1 | 60° 00'.43 N, | 026° 30'.16 E; |
| .2 | 60° 01'.05 N, | 026° 34'.86 E; |
| .3 | 60° 00'.35 N, | 026° 44'.24 E; |
| .4 | 59° 59'.85 N, | 026° 44'.08 E; |
| .5 | 60° 00'.15 N, | 026° 40'.21 E; and |
| .6 | 59° 58'.76 N, | 026° 30'.16 E. |

(b) A traffic lane, one mile wide, is established on each side of the separation zone.

ANNEX 5

AMENDMENT TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF USHANT"

CHANGE IN THE USE OF THE TWO-WAY ROUTE

Amend existing paragraph (h) in the description of the traffic separation scheme "Off Ushant", as follows:

"The two-way route may be used by:

- passenger ships;
- ships of less than 6,000 gross tonnage, travelling from or towards a port situated between Cape Finisterre and Cap de la Hague.

This authorization does not apply to ships carrying oils listed in appendix I, annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), ships carrying in bulk the substances classified in categories X and Y as defined in regulation 6, annex II of that convention, ships corresponding to the requirements of the International Code for the Construction and Equipment of ships Carrying Liquefied Gases in Bulk (IGC Code) and ships carrying fissile or irradiated materials."

Consequential amendments to SN/Circ.232

Replace existing article 3 with the following text:

"The two-way route may be used by:

- passenger ships;
- ships of less than 6,000 gross tonnage, travelling from or towards a port situated between Cape Finisterre and Cap de la Hague.

This authorization does not apply to ships carrying oils listed in appendix I, annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), ships carrying in bulk the substances classified in categories X and Y as defined in regulation 6, annex II of that convention, ships corresponding to the requirements of the International Code for the Construction and Equipment of ships Carrying Liquefied Gases in Bulk (IGC Code) and ships carrying fissile or irradiated materials."

ANNEX 6

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "IN THE SANTA BARBARA CHANNEL"

(Reference charts: United States 18700, 2003 edition; 18720, 2008 edition.

Note: These charts are based on North American 1983 Datum which is equivalent to WGS 1984 datum.)

Description of the traffic separation scheme

The traffic separation scheme in the Santa Barbara Channel consists of two parts:

Part I

Between Point Vicente and Point Conception

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

- | | |
|---------------------------------|---------------------------------|
| (1) 34° 20'.84 N, 120° 30'.28 W | (4) 33° 44'.06 N, 118° 36'.34 W |
| (2) 34° 03'.87 N, 119° 15'.63 W | (5) 34° 02'.94 N, 119° 16'.09 W |
| (3) 33° 44'.93 N, 118° 35'.75 W | (6) 34° 19'.88 N, 120° 30'.59 W |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (7) 34° 21'.80 N, 120° 29'.96 W | (9) 33° 45'.80 N, 118° 35'.15 W |
| (8) 34° 04'.80 N, 119° 15'.16 W | |

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (10) 33° 43'.18 N, 118° 36'.94 W | (12) 34° 18'.92 N, 120° 30'.91 W |
| (11) 34° 02'.01 N, 119° 16'.56 W | |

Note:

Port Hueneme Fairway

A safety fairway is established in the approach to Port Hueneme.

Part II

Between Point Conception and Point Arguello

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

- | | |
|---------------------------------|----------------------------------|
| (1) 34° 20'.84 N, 120° 30'.28 W | (13) 34° 24'.76 N, 120° 52'.10 W |
| (6) 34° 19'.88 N, 120° 30'.59 W | (14) 34° 25'.72 N, 120° 51'.78 W |

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

- | | |
|---------------------------------|----------------------------------|
| (7) 34° 21'.80 N, 120° 29'.96 W | (15) 34° 26'.68 N, 120° 51'.46 W |
|---------------------------------|----------------------------------|

- (c) A traffic lane for eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

(12) 34° 18'.92 N, 120° 30'.91 W

(16) 34° 23'.80 N, 120° 52'.42 W

ANNEX 7

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF SAN FRANCISCO"

(Reference charts: United States 18680, 2005 edition; 18645, 2008 edition.

Note: These charts are based on North American 1983 Datum which is equivalent to WGS 1984 datum.)

Description of the traffic separation scheme

The traffic separation scheme Off San Francisco consists of four parts:

Part I

Northern approach

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

- | | |
|----------------------------------|-----------------------------------|
| (1) 37° 48'.52 N, 122° 47'.63 W | (38) 38° 08'.03 N, 123° 21'.34 W. |
| (2) 37° 58'.45 N, 123° 09'.49 W | (3) 37° 57'.67 N, 123° 10'.31 W |
| (37) 38° 09'.09 N, 123° 20'.82 W | (4) 37° 47'.66 N, 122° 48'.29 W |

(b) A traffic lane for north-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|----------------------------------|
| (5) 37° 49'.29 N, 122° 46'.79 W | (36) 38° 10'.14 N, 123° 20'.29 W |
| (6) 37° 59'.22 N, 123° 08'.66 W | |

(c) A traffic lane for south-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|----------------------------------|---------------------------------|
| (39) 38° 06'.92 N, 123° 21'.82 W | (8) 37° 46'.72 N, 122° 48'.76 W |
| (7) 37° 56'.89 N, 123° 11'.14 W | |

Part II

Southern approach

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

- | | |
|----------------------------------|----------------------------------|
| (9) 37° 39'.07 N, 122° 40'.40 W | (11) 37° 18'.71 N, 122° 43'.00 W |
| (10) 37° 18'.45 N, 122° 40'.40 W | (12) 37° 39'.12 N, 122° 43'.00 W |

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

- | | |
|----------------------------------|----------------------------------|
| (13) 37° 39'.30 N, 122° 39'.14 W | (14) 37° 18'.36 N, 122° 39'.14 W |
|----------------------------------|----------------------------------|

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

- | | |
|----------------------------------|----------------------------------|
| (15) 37° 18'.89 N, 122° 44'.26 W | (16) 37° 39'.41 N, 122° 44'.26 W |
|----------------------------------|----------------------------------|

Part III

Western approach

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

- | | |
|----------------------------------|----------------------------------|
| (17) 37° 41'.90 N, 122° 47'.99 W | (19) 37° 34'.15 N, 123° 00'.37 W |
| (18) 37° 33'.54 N, 123° 03'.79 W | (20) 37° 41'.09 N, 122° 47'.25 W |

(b) A traffic lane for south-westbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (21) 37° 42'.81 N, 122° 48'.55 W | (22) 37° 34'.37 N, 123° 04'.49 W |
|----------------------------------|----------------------------------|

(c) A traffic lane for north-eastbound traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (23) 37° 31'.87 N, 123° 02'.40 W | (24) 37° 40'.38 N, 122° 46'.33 W |
|----------------------------------|----------------------------------|

Part IV

Main ship channel

(a) A separation line connects the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (25) 37° 45'.90 N, 122° 38'.00 W | (27) 37° 48'.10 N, 122° 31'.00 W |
| (26) 37° 47'.00 N, 122° 34'.30 W | |

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

- | | |
|----------------------------------|----------------------------------|
| (28) 37° 45'.80 N, 122° 37'.70 W | (29) 37° 47'.80 N, 122° 30'.80 W |
|----------------------------------|----------------------------------|

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

- | | |
|----------------------------------|----------------------------------|
| (30) 37° 46'.20 N, 122° 37'.90 W | (32) 37° 48'.50 N, 122° 31'.30 W |
| (31) 37° 46'.90 N, 122° 35'.30 W | |

Area to be avoided

A circular area to be avoided, of radius half a mile, is centred upon geographical position:

- (33) 37° 45'.00 N, 122° 41'.50 W

Precautionary area

A precautionary area is established bounded to the west by an arc of a circle of radius 6 miles centring upon geographic position (33) 37° 45'.00 N, 122° 41'.50 W and connecting with the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (34) 37° 42'.70 N, 122° 34'.60 W | (35) 37° 50'.30 N, 122° 38'.00 W |
|----------------------------------|----------------------------------|

The precautionary area is bounded to the east by a line connecting the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (34) 37° 42'.70 N, 122° 34'.60 W | (35) 37° 50'.30 N, 122° 38'.00 W |
| (25) 37° 45'.90 N, 122° 38'.00 W | |

ANNEX 8

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "IN THE APPROACHES TO LOS ANGELES – LONG BEACH"

(A continuation of the Santa Barbara Channel scheme)

(Reference Chart: United States 18746, 2009 edition.

Note: These charts are based on North American 1983 Datum which is equivalent to WGS 1984 datum.)

Description of the traffic separation scheme

The traffic separation scheme "In the Approaches to Los Angeles – Long Beach" consists of three parts:

Western approach

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

- | | |
|---------------------------------|---------------------------------|
| (1) 33° 37'.70 N, 118° 17'.60 W | (4) 33° 44'.06 N, 118° 36'.34 W |
| (2) 33° 36'.50 N, 118° 17'.60 W | (5) 33° 44'.93 N, 118° 35'.75 W |
| (3) 33° 36'.50 N, 118° 20'.48 W | (6) 33° 37'.70 N, 118° 20'.57 W |

(b) A traffic lane for northbound coastwise traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|---------------------------------|---------------------------------|
| (7) 33° 38'.70 N, 118° 17'.60 W | (9) 33° 45'.80 N, 118° 35'.15 W |
| (8) 33° 38'.70 N, 118° 20'.24 W | |

(c) A traffic lane for southbound coastwise traffic is established between the separation zone and a line connecting the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (10) 33° 35'.50 N, 118° 17'.60 W | (12) 33° 43'.18 N, 118° 36'.94 W |
| (11) 33° 35'.50 N, 118° 20'.81 W | |

Southern approach

(a) A separation zone is established bounded by a line connecting the following geographic positions:

- | | |
|----------------------------------|----------------------------------|
| (13) 33° 35'.50 N, 118° 10'.30 W | (15) 33° 19'.00 N, 118° 05'.60 W |
| (14) 33° 35'.50 N, 118° 12'.75 W | (16) 33° 19'.70 N, 118° 03'.50 W |

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

- | | |
|----------------------------------|----------------------------------|
| (17) 33° 35'.50 N, 118° 09'.00 W | (18) 33° 20'.00 N, 118° 02'.30 W |
|----------------------------------|----------------------------------|

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

- | | |
|----------------------------------|----------------------------------|
| (19) 33° 35'.50 N, 118° 14'.00 W | (20) 33° 18'.70 N, 118° 06'.75 W |
|----------------------------------|----------------------------------|

Precautionary area

(a) The precautionary area consists of the water area enclosed by the Los Angeles – Long Beach breakwater and a line connecting Point Fermin Light at 33° 42'.30N, 118° 17'.60W, with the following geographical positions:

- | | |
|----------------------------------|----------------------------------|
| (10) 33° 35'.50 N, 118° 17'.60 W | (21) 33° 37'.70 N, 118° 06'.50 W |
| (17) 33° 35'.50 N, 118° 09'.00 W | (22) 33° 43'.40 N, 118° 10'.80 W |

Note:

Pilot boarding areas are located in the precautionary area. Due to heavy vessel traffic, mariners are advised not to anchor or linger in this precautionary area except to pick up or disembark a pilot.

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COLREG.2/Circ.64/Corr.1
22 March 2013

NEW AND AMENDED EXISTING TRAFFIC SEPARATION SCHEMES

Corrigendum

The following correction should be made to annex 7, page 2, of COLREG.2/Circ.64 dated 4 December 2012:

ANNEX 7 – The traffic separation scheme Off San Francisco – *Part III, Western approach*

Section (a), the correct coordinates for geographical position (19) are:

(19) 37° 32'.70 N 123° 03'.10 W

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COLREG.2/Circ.65
23 May 2014

NEW TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its ninety-third session (14 to 23 May 2014) adopted, in accordance with resolution A.858(20), the following new traffic separation schemes:

- .1 "On the Pacific coast of Panama"; and
- .2 "At the approaches to Puerto Cristobal".

2 The new traffic separation schemes listed in subparagraphs .1 and .2 above and detailed in the annexes will be implemented at 0000 hours UTC on 1 December 2014.

ANNEX 1

NEW TRAFFIC SEPARATION SCHEMES

"ON THE PACIFIC COAST OF PANAMA"

Part 1 "Gulf of Panama"

Reference chart: British Admiralty 1929, 1998 edition

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

Description of the traffic separation scheme

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

(4)	08°44'.70 N, 079°27'.00 W	(5)	08°35'.00 N, 079°26'.00 W
(6)	07°45'.00 N, 079°26'.00 W	(7)	07°45'.00 N, 079°23'.00 W
(8)	08°35'.00 N, 079°23'.00 W	(9)	08°45'.42 N, 079°25'.44 W

The separation zone is approximately three miles wide in the south and narrowing in the north.

(b) A southbound traffic lane between the separation zone and a separation line connecting the geographical positions 1, 2 and 3:

(1)	07°45'.00 N, 079°28'.20 W	(2)	08°35'.00 N, 079°28'.20 W
(3)	08°44'.00 N, 079°28'.00 W		

The southbound traffic lane is approximately one mile wide at the northern limit and two miles wide in the south.

(c) A northbound traffic lane between the separation zone and a separation line connecting the geographical positions 10, 11 and 12:

(10)	08°46'.00 N, 079°24'.62 W	(11)	08°35'.00 N, 079°21'.00 W
(12)	07°45'.00 N, 079°21'.00 W		

The northbound traffic lane is approximately two miles wide in the south and one mile wide at the northern limit.

Part 2 "Morro de Puercos"

Reference chart: British Admiralty 2496, 2013 edition

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

Description of the traffic separation scheme

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

(13)	07°03'.40 N,	080°11'.53 W	(14)	07°00'.00 N,	080°15'.00 W
(15)	07°00'.00 N,	080°27'.00 W	(16)	06°59'.00 N,	080°27'.00 W
(17)	06°59'.00 N,	080°14'.55 W	(18)	07°02'.65 N,	080°10'.76 W

The separation zone is approximately one mile wide.

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

(19)	07°01'.26 N,	080°09'.30 W	(20)	06°57'.00 N,	080°13'.67 W
(21)	06°57'.00 N,	080°27'.00 W	(22)	06°55'.00 N,	080°27'.00 W
(23)	06°55'.00 N,	080°12'.70 W	(24)	06°59'.87 N,	080°07'.84 W

The separation zone is approximately two miles wide.

(f) A traffic lane for south-westbound and westbound traffic, two miles wide, is established between the separation zones indicated in paragraphs (d) and (e).

(g) A traffic lane for eastbound and north-eastbound traffic, two miles wide, is established between the separation zone referred in paragraph (e) and a line connecting the geographical positions 25, 26 and 27:

(25)	06°58'.46 N,	080°06'.34 W	(26)	06°53'.00 N,	080°11'.77 W
(27)	06°53'.00 N,	080°27'.00 W			

Part 3 "Isla Jicarita"

Reference chart: British Admiralty 2496, 2013 edition

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

Description of the traffic separation scheme

(h) A separation zone, one mile wide, is bounded by a line connecting the following geographical positions:

(28)	07°00'.00 N,	081°45'.00 W	(29)	07°00'.00 N,	081°50'.00 W
(30)	06°59'.00 N,	081°50'.00 W	(31)	06°59'.00 N,	081°45'.00 W

- (i) A separation zone, two miles wide, is bounded by a line connecting the following geographical positions:

(32)	06°57'.00 N,	081°45'.00 W	(33)	06°57'.00 N,	081°50'.00 W
(34)	06°55'.00 N,	081°50'.00 W	(35)	06°55'.00 N,	081°45'.00 W

- (j) A westbound traffic lane, two miles wide, is established between the two separation zones indicated in paragraphs (h) and (i).

- (k) An eastbound traffic lane, two miles wide, is established between the separation zone referred in paragraph (i) and a line connecting points 36 and 37:

(36)	06°53'.00 N,	081°45'.00 W	(37)	06°53'.00 N,	081°50'.00 W
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Part 4

Inshore traffic zones

Reference charts: British Admiralty 1929, 1998 edition, British Admiralty 2496, 2013 edition

Note: These charts are based on World Geodetic System 1984 (WGS 84) datum

Description of the inshore traffic zones

- (l) An Eastern inshore traffic zone is designated to the east of the Gulf of Panama scheme, in an area contained between the following geographical positions:

(40)	08°56'.48 N,	078°58'.52 W	(10)	08°46'.00 N,	079°24'.62 W
(11)	08°35'.00 N,	079°21'.00 W	(12)	07°45'.00 N,	079°21'.00 W
(41)	07°33'.60 N,	078°12'.84 W			

- (m) A Western inshore traffic zone is designated to the west, in an area contained between the following geographical positions:

(39)	08°43'.81 N,	079°44'.75 W	(3)	08°44'.00 N,	079°28'.00 W
(2)	08°35'.00 N,	079°28'.20 W	(1)	07°45'.00 N,	079°28'.20 W
(13)	07°03'.40 N,	080°11'.53 W	(14)	07°00'.00 N,	080°15'.00 W
(15)	07°00'.00 N,	080°27'.00 W	(28)	07°00'.00 N,	081°45'.00 W
(29)	07°00'.00 N,	081°50'.00 W	(38)	07°12'.39 N,	081°47'.88 W

ANNEX 2

"AT THE APPROACHES TO PUERTO CRISTOBAL"

Reference chart: British Admiralty 1400, 2000 edition

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

Description of the traffic separation scheme

(a) A west-south-western separation line connecting the following geographical positions:

(1) 09°28'.00 N, 080°03'.00 W (2) 09°28'.90 N, 079°59'.20 W

(b) A north-eastern separation line connecting the following geographical positions:

(3) 09°31'.95 N, 079°48'.10 W (4) 09°43'.00 N, 079°38'.90 W

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

(5) 09°31'.00 N, 079°57'.52 W (6) 09°33'.97 N, 080°02'.50 W
(7) 09°35'.65 N, 080°01'.40 W (8) 09°32'.20 N, 079°56'.50 W

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

(9) 09°33'40 N, 079°54'.92 W (10) 09°40'.00 N, 079°57'.20 W
(11) 09°41'08 N, 079°55'30 W (12) 09°33'.90 N, 079°53'.50 W

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

(13) 09°33'.85 N, 079°51'.20 W (14) 09°42'.38 N, 079°47'.61 W
(15) 09°42'.58 N, 079°45'.00W (16) 09°33'.15 N, 079°49'.80 W

(f) Traffic lanes for entry to ports, anchorages and transit through the Canal in the following geographical positions:

Direction East:

(17) 09°31'.09 N, 080°03'.19 W

Direction South:

(18) 09°41'.60 N, 079°51'.89 W

(g) Traffic lanes for exit from ports, anchorages and transit through the Canal in the following geographical positions:

Direction North-West:

(19) 09°32'.69 N, 079°55'.80 W

Direction North-East:

(20) 09°32'.50 N, 079°48'.98 W

Inshore traffic zones

(h) An inshore traffic zone is designated along the western boundary of the eastbound entry traffic lane described in paragraph (f), and limited by the lines connecting the following geographical positions:

(1) 09°28'.00 N, 080°03'.00 W (2) 09°28'.90 N, 079°59'.20 W

(21) 09°18'.68 N, 080°01'.20 W (22) 09°21'.40 N, 079°59'.10 W

(i) An inshore traffic zone is designated along the eastern boundary of the north-eastbound exit traffic lane described in paragraph (g), and limited by the lines connecting the following geographical positions:

(3) 09°31'.95 N, 079°48'.10 W (4) 09°43'.00 N, 079°38'.90 W

(23) 09°29'.00 N, 079°43'.50 W (24) 09°38'.05 N, 079°32'.30 W

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COLREG.2/Circ.66
21 November 2014

AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its ninety-fourth session (17 to 21 November 2014) adopted, in accordance with resolution A.858(20), amended traffic separation schemes, set out in annexes 1 to 3 as follows:

- .1 "In the Strait of Gibraltar";
- .2 "In the waters off the Chengshan Jiao Promontory"; and
- .3 "Off Friesland".

2 The amended traffic separation schemes listed above and detailed in the annexes will be implemented at 0000 hours UTC on 1 June 2015

ANNEX 1

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "IN THE STRAIT OF GIBRALTAR"

Reference chart No.445 issued by the Hydrographic Institute of the Spanish Navy, Datum WGS 84, 4th edition, June 2007.

Description of the amended traffic separation scheme

(a) A separation zone, half a mile wide, is centred upon the following geographical positions:

(1) 35° 59'.01 N 005° 25'.68 W (2) 35° 58'.36 N 005° 28'.19 W

(b) A separation zone, half a mile wide, is centred upon the following geographical positions:

(3) 35° 56'.70 N 005° 34'.71 W (5) 35° 56'.21 N 005° 44'.98 W
(4) 35° 56'.21 N 005° 36'.48 W

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

(7) 36° 01'.21 N 005° 25'.68 W (8) 36° 00'.35 N 005° 28'.98 W

(d) A traffic lane for westbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

(9) 35° 58'.68 N 005° 35'.44 W (11) 35° 58'.41 N 005° 44'.98 W
(10) 35° 58'.41 N 005° 36'.48 W

(e) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (b) and a line connecting the following geographical positions:

(12) 35° 52'.51 N 005° 44'.98 W (14) 35° 54'.55 N 005° 33'.90 W
(13) 35° 53'.81 N 005° 36'.48 W

(f) A traffic lane for eastbound traffic is established between the separation zone described in paragraph (a) and a line connecting the following geographical positions:

(15) 35° 56'.35 N 005° 27'.40 W (16) 35° 56'.84 N 005° 25'.68 W

(g) A precautionary area is established on the eastern side of the TSS "In the Strait of Gibraltar" by the lines connecting the following geographical positions:

(6) 36° 02'.80 N 005° 19'.68 W (16) 35° 56'.84 N 005° 25'.68 W
(7) 36° 01'.21 N 005° 25'.68 W (17) 35° 58'.78 N 005° 18'.55 W

- (h) A precautionary area with recommended directions of traffic flow is established off the Moroccan port of Tanger-Med in the TSS "In the Strait of Gibraltar" formed by the lines connecting the following geographical positions:

(8)	36° 00'.35 N	005° 28'.98 W	(14)	35° 54'.55 N	005° 33'.90 W
(9)	35° 58'.68 N	005° 35'.44 W	(15)	35° 56'.35 N	005° 27'.40 W

Inshore traffic zones

Description of the northern inshore traffic zone

- (a) The area between the northern boundary of the scheme formed by the continuing line that links points 7, 8, 9, 10 and 11 and the Spanish coast, and lying between the following limits is designated as an inshore traffic zone:
- (1) Eastern limit: That part of the meridian 005° 25'.68 W (27) between the northern boundary of the westbound traffic lane (latitude 36° 01'.21 N, corresponding to point (7) on the attached chartlet) and the Spanish coast.
 - (2) Western limit: That part of meridian 005° 44'.98 W (26) between the northern boundary of the westbound traffic lane (latitude 35°58'.41 N, corresponding to point (11) on the attached chartlet) and the Spanish coast.

Description of the south-eastern and south-western inshore traffic zones

- (b) The two southern inshore traffic zones, located between the southern limit of the TSS and the coast of Morocco, are separated by a free navigational area between them; these are defined as below. A Tanger-Med ports anchorage area is established within the limits of the free navigational area.
- (1) South-eastern inshore traffic zone: a zone between the southern limit of the eastern portion of the eastbound traffic lane and the coast of Morocco and limited by the following geographical positions:

(18)	35° 54'.45 N	005° 25'.68 W
(16)	35° 56'.84 N	005° 25'.68 W

 and

(15)	35° 56'.35 N	005° 27'.40 W
(19)	35° 54'.88 N	005° 27'.40 W
 - (2) South-western inshore traffic zone: a zone formed by the coast of Morocco, the external limit of the traffic lane for the traffic heading towards the eastern area of the current scheme and the lines connecting the following geographical positions:

(24)	35° 51'.20 N	005° 32'.40 W
(23)	35° 52'.18 N	005° 34'.00 W
(22)	35° 51'.10 N	005° 36'.20 W
(21)	35° 52'.06 N	005° 36'.30 W
(20)	35° 52'.87 N	005° 36'.70 W
(14)	35° 54'.55 N	005° 33'.90 W

 and

(12)	35° 52'.51 N	005° 44'.98 W
(25)	35° 49'.09 N	005° 44'.98 W

Notes:

- 1 An anchorage area, named "Alpha", for the port of Tanger-Med is established within the south-western inshore traffic zone configured as a circle centred in geographical position 35°51'.05 N, 005°40'.34 W and having a radius of 0.4 miles.
- 2 Ships heading for the anchorage "Alpha" can enter the south-western inshore traffic zone:
 - by its western limit if coming from the Atlantic Ocean; and
 - by its eastern limit if coming from the port of Tanger-Med or the Mediterranean Sea, subject to the provisions of requirements to use appropriate TSS and follow the recommended directions of traffic flow within the precautionary area (h) above, in accordance with rule 10 (d) of the 1972 COLREGs.
- 3 Given the absence of ports or any type of facility in the south-eastern inshore traffic zone, ships entering or leaving the port of Tanger-Med coming from or heading for the Mediterranean Sea must sail along the corresponding traffic lanes, in accordance with rule 10 of the 1972 COLREGs.
- 4 Ships sailing from the Atlantic Ocean or the Mediterranean Sea towards the port of Tanger-Med, or departing from it for the Atlantic Ocean or the Mediterranean Sea must sail along the corresponding traffic lanes, in accordance with rule 10 of the 1972 COLREGs.

ANNEX 2

**AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME
"IN THE WATERS OFF THE CHENGSHAN JIAO PROMONTORY"**

Note: See mandatory ship reporting system "Off the Chengshan Jiao Promontory".

Reference charts: Chinese charts 1305 and 35001.

Note: These charts are based on WGS 84 Datum.

The ship's routing system in the waters off the Chengshan Jiao promontory consists of several elements comprising:

- .1 The inner traffic separation scheme, the inner precautionary area and inshore traffic zone;
- .2 The outer traffic separation schemes and outer precautionary area.

Part I (Inner TSS):

Description of the Chengshan Jiao inner traffic separation scheme, the inner precautionary area and inshore traffic zone;

- (a) A separation zone, 2 miles wide, is centered upon the line connecting the following geographical positions:

(1)	37°31'.18 N	122°45'.40 E	(3)	37°11'.60 N	122°49'.68 E
(2)	37°25'.29 N	122°49'.68 E			

- (b) A separation zone is bounded by part of the inner precautionary area (g) and by lines connecting the following geographical positions:

(13)	37°38'.20N	122°47'.31E	(27)	37°11'.60N	122°56'.60E
(14)	37°38'.82N	122°47'.76E	(9)	37°11'.60N	122°53'.46E
(15)	37°37'.30N	122°51'.00E	(8)	37°26'.09N	122°53'.46E
(26)	37°31'.08N	122°56'.62E	(7)	37°32'.69N	122°48'.68E

- (c) The inner limit of the traffic separation scheme is the line connecting the following geographical positions:

(4)	37°29'.69 N	122°42'.13E	(6)	37°11'.60 N	122°45'.91E
(5)	37°24'.49 N	122°45'.91E			

- (d) The outer limit of the traffic separation scheme is the part of separation zone (b) connecting the following geographical positions:

(7)	37°32'.69N	122°48'.68E	(9)	37°11'.60N	122°53'.46E
(8)	37°26'.09N	122°53'.46E			

- (e) The traffic lane for southbound traffic, 2 miles wide, is established between the separation zone (a) and the inner limit of the traffic separation scheme (c). The main traffic directions are 150° (T) and 180° (T).

- (f) The traffic lane for northbound traffic, 2 miles wide, is established between the separation zone (a) and part of the separation zone (d). The main traffic directions are 000° (T) and 330° (T).

Inner precautionary area

- (g) The inner precautionary area is established to the north by an arc of a circle of radius 5 miles centering upon geographical position:

(10) 37°34'.65N 122°42'.88E

and connecting with the following geographical positions:

(4) 37°29'.69 N 122°42'.13E (7) 37°32'.69N 122°48'.68E

Inshore traffic zone

- (h) The inshore traffic zone is the waters between the inner limit of the traffic separation scheme described in (c) and the adjacent coast.

Part II (Outer TSSs):

Description of the Chengshan Jiao outer traffic separation schemes and outer precautionary area

North traffic separation scheme

- (i) A separation zone, 2 miles wide, is centered upon the following geographical positions:

(11) 37°41'.41N 122°49'.65E (12) 37°39'.89N 122°52'.89E

- (j) A separation line connects the following geographical positions:

(16) 37°44'.00N 122°51'.56E (17) 37°42'.49N 122°54'.76E

- (k) A 2 mile wide traffic lane for southeast bound traffic between the separation zone described in (i) and that portion of separation zone described in (b) above connecting the following geographical positions:

(14) 37°38'.82N 122°47'.76E (15) 37°37'.30N 122°51'.00E

The main traffic direction is 120° (T)

- (l) A 2 mile wide traffic lane for northwest bound traffic is established between the separation zone described in (i) above and a separation line described in (j). The main traffic direction is 300° (T).

East traffic separation scheme

- (m) A separation zone, 2 miles wide, is centered upon the following geographical positions:

(18) 37°33'.72N 123°06'.07E (19) 37°32'.15N 123°09'.44E

- (n) A separation line connects the following geographical positions:
(20) 37°31'.14N 123°04'.16E (21) 37°29'.56N 123°07'.53E
- (o) A separation line connects the following geographical positions:
(22) 37°36'.33N 123°07'.94E (23) 37°34'.76N 123°11'.30E
- (p) A traffic lane for south-eastbound traffic between the separation zone described in (m) and separation line described in (n) above. 2 miles wide, the main traffic direction is 120° (T)
- (q) A traffic lane for north-westbound traffic between the separation zone described in (m) above and a separation line described in (o). 2 miles wide, the main traffic direction is 300° (T).

South traffic separation scheme

- (r) A separation zone, 2 miles wide, is centered upon the following geographical positions:
(24) 37°31'.08N 123°00'.37E (25) 37°11'.60N 123°00'.37E
- (s) A separation line connects the following geographical positions:
(20) 37°31'.14N 123°04'.16E (28) 37°11'.60N 123°04'.14E
- (t) A traffic lane for southbound traffic between the separation zone described in (r) above and that portion of separation zone described in (b) above connecting the following geographical positions:
(26) 37°31'.08N 122°56'.62E (27) 37°11'.60N 122°56'.60E
2 miles wide, the main traffic direction is 180° (T).
- (u) A traffic lane for northbound traffic between the separation zone described in (r) above and the separation line described in (s) above connecting the following geographical positions:
(20) 37°31'.14N 123°04'.16E (28) 37°11'.60N 123°04'.14E
The main traffic direction is 000° (T).

Outer precautionary area

- (v) The outer precautionary area is established by a line connecting the following geographical positions:
(17) 37°42'.49N 122°54'.76E
(22) 37°36'.33N 123°07'.94E
(20) 37°31'.14N 123°04'.16E
(26) 37°31'.08N 122°56'.62E
(15) 37°37'.30N 122°51'.00E

Notes: All oil tankers 150 gross tonnage and above, all vessels carrying dangerous, hazardous cargo, vessels of LOA more than 200 meters, or mean draft more than 12 meters, and high speed vessels which are transiting the area of Chengshan Jiao Promontory are recommended to sail in the traffic lanes of the Outer Traffic Separation Schemes.

ANNEX 3

AMENDMENTS TO THE EXISTING TRAFFIC SEPARATION SCHEME "OFF FRIESLAND"

Reference charts, Netherlands 1632 (INT 1420), 2011 edition, 1633 (INT 1417), 2010 edition and 1037 (INT 1045), 2011 edition.

Note: These charts are based on World Geodetic System 1984 datum (WGS 84)

(EXISTING GEOGRAPHICAL POSITIONS IN ED50 COINCIDING WITH THE PROPOSED NEW SYSTEM HAVE BEEN CONVERTED TO WGS 84.)

West Friesland scheme

- (a) The eastern boundary of the separation zone is amended from existing position (19) north-eastward and newly bounded by the following geographical positions as follows:

(100) 53° 55'.36 N 004° 33'.85 E (21) 53° 59'.18 N 004° 35'.92 E

- (b) A new separation zone is established bounded by a line connecting the following geographical positions:

(85) 53° 59'.46 N 004° 39'.60 E (86) 53° 59'.68 N 004° 42'.44 E
(87) 53° 57'.17 N 004° 38'.40 E

- (c) A traffic lane for northbound traffic branching off from the main north-eastbound traffic lane is established between the separation zones in paragraphs (a) and (b).

North Friesland scheme

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

(79) 54° 04'.30 N 004° 59'.98 E (80) 54° 04'.78 N 005° 05'.94 E
(81) 54° 02'.76 N 005° 04'.73 E (82) 54° 02'.28 N 004° 58'.76 E

- (e) A separation zone is established bounded by a line connecting the following geographical positions:

(75) 54° 02'.84 N 004° 41'.41 E (76) 54° 03'.99 N 004° 56'.11 E
(77) 54° 01'.98 N 004° 54'.89 E (78) 54° 00'.83 N 004° 40'.34 E

- (f) A separation zone is established bounded by a line connecting the following geographical positions:

(71) 54° 01'.52 N 004° 24'.62 E (72) 54° 02'.55 N 004° 37'.69 E
(73) 54° 00'.54 N 004° 36'.62 E (74) 53° 59'.21 N 004° 19'.05 E

- (g) A separation zone is established bounded by a line connecting the following geographical positions:

(67)	54° 00'.37N	004° 09'.21 E	(68)	54° 01'.10 N	004° 18'.89 E
(69)	53° 58'.91 N	004° 13'.93 E	(70)	53° 58'.66 N	004° 09'.60 E

- (h) A traffic lane for eastbound traffic is established between the separation zone in paragraph (g) and the following existing geographical positions:

(26)	53° 57'.16 N	004° 09'.94 E	(22)	53° 57'.56 N	004° 15'.09 E
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- (i) A traffic lane for eastbound traffic is established between the separation zone in paragraph (f) and the amended separation zone of the traffic separation scheme "West Friesland".

- (j) A traffic lane for eastbound traffic is established between the separation zones in paragraph (b) and (e).

- (k) A traffic lane for eastbound traffic is established between the separation zone in paragraph (e) and the following geographical positions:

(25)	53° 59'.96 N	004° 45'.92 E	(96)	54° 00'.60 N	004° 54'.06 E
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- (l) A traffic lane for eastbound traffic is established between the separation zone in paragraph (d) and the following geographical positions:

(97)	54° 00'.91 N	004° 57'.94 E	(98)	54° 01'.38 N	005° 03'.90 E
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- (m) A traffic lane for westbound traffic is established between the separation zone in paragraph (d) and the following geographical positions:

(94)	54° 06'.14 N	005° 06'.77 E	(93)	54° 05'.67 N	005° 00'.81 E
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- (n) A traffic lane for westbound traffic is established between the separation zone in paragraph (e) and the following geographical positions:

(92)	54° 05'.37 N	004° 56'.94 E	(91)	54° 04'.20 N	004° 42'.14 E
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- (o) A traffic lane for westbound traffic is established between the separation zone in paragraph (f) and the following geographical positions:

(90)	54° 03'.91 N	004° 38'.43 E	(89)	54° 03'.13 N	004° 28'.46 E
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- (p) A traffic lane for westbound traffic is established between the separation zone in paragraph (g) and the following geographical positions:

(88)	54° 02'.65 N	004° 22'.44 E	(31)	54° 01'.87 N	004° 08'.88 E
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- (q) A traffic lane for south-westbound traffic is established between, on the west side, a line connecting the following geographical positions:

(68)	54° 01'.10 N	004° 18'.89 E	(69)	53° 58'.91 N	004° 13'.93 E
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and, on the east side, a line connecting the following geographical positions:

(71) 54° 01'.52 N 004° 24'.62 E (74) 53° 59'.21 N 004° 19'.05 E

- (r) A traffic lane for northbound traffic is established between, on the west side, a line connecting the following geographical positions:

(72) 54°02'.55 N 004° 37'.69 E (73) 54° 00'.54 N 004° 36'.62 E

and, on the east side, a line connecting the following geographical positions:

(75) 54° 02'.84 N 004° 41'.41 E (78) 54° 00'.83 N 004° 40'.34 E

- (s) A traffic lane for southbound traffic is established between, on the west side, a line connecting the following geographical positions:

(76) 54° 03'.99 N 004° 56'.11 E (77) 54° 01'.98 N 004° 54'.89 E

and, on the east side, a line connecting the following geographical positions:

(79) 54° 04.30 N 004° 59'.98 E (82) 54° 02'.28 N 004° 58'.76 E

- (t) A traffic lane for northbound traffic is established between, on the west side, a line connecting the following geographical positions:

(80) 54° 04'.78 N 005° 05'.94 E (81) 54° 02.76 N 005° 04'.73 E

and, on the east side, a line connecting the following geographical positions:

(83) 54° 04'.84 N 005° 09'.60 E (84) 54° 03'.26 N 005° 08'.65 E

East Friesland scheme

- (u) The western boundary of the separation zone is amended as follows:

Existing position 32 is shifted east to new position (84) 54° 03'.26 N 005° 08'. 65 E

Existing position 37 is shifted east to new position (83) 54° 04'.84 N 005° 09'.60 E

- (v) The traffic lane for eastbound traffic is amended as follows:

Existing position (28) I shifted east to new position (99) 54° 01'.69 N 005° 07'.70 E

- (w) The traffic lane for westbound traffic is amended as follows:

Existing position (29) I shifted east to new position (95) 54° 06'.44 N 005° 10'.57 E

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COLREG.2/Circ.67
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NEW AND AMENDED TRAFFIC SEPARATION SCHEMES

1 The Maritime Safety Committee, at its ninety-sixth session (11 to 20 May 2016), adopted, in accordance with resolution A.858(20), new and amended traffic separation schemes, set out in annexes 1 to 5 as follows:

- .1 "Off Southwest Australia" (new scheme);
- .2 "In the Corsica Channel" (new scheme);
- .3 "In the approaches to Hook of Holland and at North Hinder", including associated precautionary areas (amended scheme), which also revokes the existing precautionary areas "In the approaches to Hook of Holland and at North Hinder" (SN.1/Circ.317, annex, pages 4 and 5);
- .4 "At West Hinder (amended scheme); and
- .5 "In Bornholmsgat" (amended scheme).

2 Accordingly, the new and amended traffic separation schemes listed in:

- .1 subparagraphs 1.1 and 1.2 above and detailed in annexes 1 and 2 will be implemented at 0000 hours UTC on 1 December 2016,
- .2 subparagraphs 1.3 and 1.4 above and detailed in annexes 3 and 4 will be implemented at 0000 hours UTC on 1 June 2017, and
- .3 subparagraph 1.5 above and detailed in annex 5 will be implemented at 0000 hours UTC on 1 January 2017.

ANNEX 1

NEW TRAFFIC SEPARATION SCHEMES "OFF SOUTHWEST AUSTRALIA"

(Reference charts:

Name	Number	Edition
Cape Naturaliste to Point D'Entrecasteaux	AUS335	Ed 2
Cape Leeuwin to King George Sound	AUS336	Ed 2
Cape Naturaliste to Cape Leeuwin	AUS756	Ed 3
Cape Leeuwin to Point D'Entrecasteaux	AUS757	Ed 3
Point D'Entrecasteaux to Point Hillier	AUS758	Ed 3

Electronic

ENC	AU240110	Ed 1 U/d 3
ENC	AU335114	Ed 1 U/d 2
ENC	AU335115	Ed 1 U/d 5
ENC	AU336115	Ed 1 U/d 0
ENC	AU336116	Ed 3 U/d 3

Note: These charts are based on the World Geodetic System 1984 datum (WGS 84))

Description of the Traffic Separation Schemes

I Off Cape Leeuwin

The traffic separation scheme Off Cape Leeuwin consists of the following:

- (a) A two nautical mile wide traffic lane for north-west bound traffic between the separation zone and a line connecting the following geographical positions:

- (1) 34°00'.00 S 114°43'.00 E
- (2) 34°09'.30 S 114°42'.70 E
- (3) 34°28'.50 S 114°49'.30 E
- (4) 34°32'.96 S 114°56'.98 E

- (b) A two nautical mile wide traffic lane for south-east bound traffic between the separation zone and a line connecting the following geographical positions:

- (5) 34°00'.00 S 114°33'.00 E
- (6) 34°10'.50 S 114°36'.90 E
- (7) 34°31'.50 S 114°44'.20 E
- (8) 34°37'.39 S 114°54'.32 E

- (c) A separation zone, one nautical mile wide, created by a polygon with the following geographical positions:

- (9) 34°00'.00 S 114°37'.09 E
- (10) 34°10'.00 S 114°39'.10 E
- (11) 34°30'.20 S 114°45'.90 E
- (12) 34°35'.68 S 114°55'.35 E
- (13) 34°34'.66 S 114°55'.96 E
- (14) 34°29'.49 S 114°47'.10 E
- (15) 34°09'.75 S 114°40'.30 E
- (16) 34°00'.00 S 114°38'.40 E

II Off Chatham Island

The traffic separation scheme Chatham Island consists of the following:

- (a) A two nautical mile wide traffic lane for north-west bound traffic between the separation zone and a line connecting the following geographical positions:

- (17) 35°23'.17 S 116°23'.52 E
- (18) 35°27'.95 S 116°31'.76 E
- (19) 35°27'.26 S 116°39'.78 E

- (b) A two nautical mile wide traffic lane for south-east bound traffic between the separation zone and a line connecting the following geographical positions:

- (20) 35°27'.78 S 116°20'.86 E
- (21) 35°33'.10 S 116°30'.00 E
- (22) 35°34'.50 S 116°39'.78 E

- (c) A separation zone, one nautical mile wide, created by a polygon with the following geographical positions:

- (23) 35°25'.93 S 116°21'.93 E
- (24) 35°30'.41 S 116°29'.64 E
- (25) 35°31'.38 S 116°39'.78 E
- (26) 35°30'.37 S 116°39'.78 E
- (27) 35°29'.59 S 116°30'.35 E
- (28) 35°25'.00 S 116°22'.47 E

ANNEX 2

NEW TRAFFIC SEPARATION SCHEME "IN THE CORSICA CHANNEL"

(Reference charts: France No.7013, 2015 edition, of the French Hydrographic Office (SHOM) and Italy No.40, 2015 edition, of the Italian Navy Hydrographical Institute.

Note: These charts are based on World Geodetic System 1984 Datum (WGS 84.)

Description of the traffic separation scheme

(a) A separation zone, 0.2 nautical mile wide, is centred upon a line connecting the following geographical positions:

- (1) 43°02'.00 N 009°37'.10 E
- (2) 42°54'.00 N 009°39'.60 E

(b) A traffic lane for southbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

- (3) 43°02'.00 N 009°33'.68 E
- (4) 42°54'.00 N 009°35'.30 E

(c) A traffic lane for northbound traffic is established between the separation zone in the paragraph (a) above and a line connecting the following geographical positions:

- (5) 43°02'.00 N 009°40'.00 E
- (6) 42°54'.00 N 009°43'.20 E

(d) A separation zone, 0.2 nautical mile wide, between the southbound traffic lane and an inshore traffic zone, is bounded by lines connecting the following geographical positions:

- (3) 43°02'.00 N 009°33'.68 E
- (4) 42°54'.00 N 009°35'.30 E
- (15) 42°54'.00 N 009°35'.02 E
- (14) 43°02'.00 N 009°33'.40 E

Description of the inshore traffic zone

An inshore traffic zone is established between the separation zone d) above and the Corsican coast, with the following geographical positions:

- (9) 42°39'.80 N 009°26'.90 E
- (8) 42°48'.00 N 009°36'.50 E
- (4) 42°54'.00 N 009°35'.30 E
- (15) 42°54'.00 N 009°35'.02 E
- (14) 43°02'.00 N 009°33'.40 E
- (3) 43°02'.00 N 009°33'.68 E
- (13) 43°07'.00 N 009°27'.20 E
- (10) 43°01'.60 N 009°24'.30 E
- (11) 43°00'.52 N 009°24'.02 E

Description of the precautionary areas

(a) A precautionary areas is established in the southern part of the traffic separation scheme bounded by the following geographical positions:

(4)	42°54'.00 N	009°35'.30 E	(7)	42°48'.00 N	009°45'.40 E
(6)	42°54'.00 N	009°43'.20 E	(8)	42°48'.00 N	009°36'. 50 E

(b) A precautionary areas is established in the northern part of the traffic separation scheme bounded by the following geographical positions:

(3)	43°02'.00 N	009°33'.68 E	(12)	43°07'.00 N	009°41'.30 E
(5)	43°02'.00 N	009°40'.20 E	(13)	43°07".00 N	009°27'.20 E

ANNEX 3

**AMENDED EXISTING TRAFFIC SEPARATION SCHEMES
AND ASSOCIATED PRECAUTIONARY AREAS¹
"IN THE APPROACHES TO HOOK OF HOLLAND AND AT NORTH HINDER"**

Note: See "Deep-water route leading to Europoort" in part C, section II, area to be avoided "At Maas North traffic separation scheme" in part D, section I.

(Reference chart Netherlands 1630 (INT 1416), edition 2013

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

Maas North traffic separation scheme²

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

(1)	52°22'.21 N	003°51'.38 E	(4)	52°07'.14 N	003°47'.10 E
(2)	52°19'.17 N	003°50'.38 E	(5)	52°17'.07 N	003°47'.69 E
(3)	52°07'.17 N	003°54'.08 E	(6)	52°22'.45 N	003°49'.51 E

(b) A traffic lane for northbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(7)	52°21'.97 N	003°53'.28 E	(9)	52°07'.18 N	003°55'.95 E
(8)	52°19'.03 N	003°52'.34 E			

(c) A traffic lane for southbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(10)	52°22'.68 N	003°47'.73 E	(12)	52°07'.13 N	003°44'.66 E
(11)	52°14'.02 N	003°44'.96 E			

Maas North-west traffic separation scheme²

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

(15)	52°07'.98 N	003°31'.54 E	(17)	52°05'.96 N	003°36'.27 E
(16)	52°06'.17 N	003°36'.64 E	(18)	52°07'.72 N	003°31'.29 E

(b) A traffic lane for north-westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(13)	52°07'.09 N	003°38'.25 E	(14)	52°09'.08 N	003°32'.64 E
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¹ This amended routing system consolidates and supersedes existing TSS "In the approaches to Hook of Holland and at North Hinder" (part B, page II/10) and the precautionary areas "In the approaches to Hook of Holland and at North Hinder" (part E, page 10).

² Unchanged from the previously adopted measures listed in the *Ships' Routing* publication, 2015 edition, B-II/10.

- (c) A traffic lane for south-eastbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(19) 52°06'.62 N 003°30'.19 E (20) 52°05'.04 N 003°34'.66 E

Maas West Inner traffic separation scheme²

- (a) A separation zone to the north of the deep-water route leading to Europoort is outwardly bounded by a line connecting the following geographical positions:

(24) 52°02'.12 N 003°25'.73 E (26) 52°00'.57 N 003°35'.17 E
(25) 52°02'.56 N 003°34'.94 E (27) 51°59'.75 N 003°25'.29 E

and inwardly bounded by a line connecting the following geographical positions:

(39) 52°02'.15 N 003°33'.36 E (41) 52°00'.03 N 003°27'.01 E
(40) 52°01'.89 N 003°27'.31 E (42) 52°00'.57 N 003°33'.51 E

Note: The inside of the area in the separation zone to the north of the deep-water route leading to Europoort, bounded by a line connecting the geographical positions (39), (40), (41) and (42), is designated as an anchorage area.

- (b) A separation zone to the south of the deep-water route is outwardly bounded by a line connecting the following geographical positions:

(28) 51°59'.92 N 003°35'.24 E (32) 51°59'.09 N 003°25'.17 E
(29) 51°59'.89 N 003°34'.87 E (33) 51°56'.90 N 003°24'.78 E
(30) 51°58'.86 N 003°33'.51 E (34) 51°58'.25 N 003°35'.44 E
(31) 51°59'.47 N 003°29'.78 E

Positions (29) and (30) are connected by a circular arc centred on point (35).
Radius of the arc = 0.729 miles.

(35) 51°59'.56 N 003°33'.82 E

- (c) A traffic lane for westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(21) 52°04'.74 N 003°34'.69 E (23) 52°04'.63 N 003°26'.20 E

- (d) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) above and a line connecting the following geographical positions:

(36) 51°54'.10 N 003°24'.29 E (37) 51°56'.26 N 003°35'.66 E

- (e) A separation zone between the westbound traffic lane of TSS Maas West Inner and the south-eastbound traffic lane of TSS Maas North-west is bounded by a line connecting the following geographical positions:

(19) 52°06'.62 N 003°30'.19 E (21) 52°04'.74 N 003°34'.69 E
(20) 52°05'.04 N 003°34'.66 E (22) 52°04'.66 N 003°28'.25 E

Inshore traffic zone²

An inshore traffic zone south of the Maas West Inner TSS and the Maas Centre precautionary area is established between the coast and a line connecting the following geographical positions:

(70)	51°34'.00 N	003°30'.00 E	(66)	51°58'.12 N	003°57'.86 E
(36)	51°54'.10 N	003°24'.29 E	(67)	51°59'.14 N	004°02'.49 E
(38)	51°57'.11 N	003°40'.05 E			

Maas West Outer traffic separation scheme

(a) A separation zone to the north of the deep-water route leading to Europoort is outwardly bounded by a line connecting the following geographical positions:

(45)	52°01'.26 N	003°08'.37 E	(48)	51°58'.79 N	003°13'.86 E
(46)	52°01'.77 N	003°18'.81 E	(49)	51°59'.49 N	003°12'.47 E
(47)	51°59'.15 N	003°18'.13 E	(50)	51°59'.13 N	003°08'.26 E

Positions (48) and (49) are connected by a circular arc, centred on position (51). Radius of the arc 0.729 nautical miles:

(51) 51°58'.77 N 003°12'.66 E

and inwardly bounded by a line connecting the following geographical positions:

(52)	51°59'.88 N	003°13'.89 E	(54)	52°01'.05 N	003°08'.36 E
(53)	52°01'.26 N	003°12'.56 E	(55)	51°59'.40 N	003°08'.28 E

Note: The inside of the area in the separation zone bounded by a line connecting the geographical positions (52), (53), (54), (55), is designated as an anchorage area.

(b) A separation zone to the south of the deep-water route leading to Europoort is outwardly bounded by a line connecting the following geographical positions:

(56)	51°58'.49 N	003°17'.96 E	(58)	51°54'.77 N	003°07'.49 E
(57)	51°57'.64 N	003°08'.00 E	(59)	51°55'.99 N	003°17'.31 E

and inwardly bounded by a line connecting the following geographical positions:

(62)	51°55'.64 N	003°12'.25 E	(64)	51°56'.89 N	003°07'.87 E
(63)	51°57'.37 N	003°13'.55 E	(65)	51°55'.06 N	003°07'.54 E

Note: The inside of the area in the separation zone bounded by a line connecting the geographical positions (62), (63), (64), (65), is designated as an anchorage area.

(c) A traffic lane for west bound traffic is established between the separation zone in paragraph (a) and a line connecting the following geographical positions:

(43)	52°04'.54 N	003°19'.53 E	(44)	52°04'.37 N	003°08'.52 E
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- (d) A traffic lane for east bound traffic is established between the separation zone in paragraph (b) and a line connecting the following geographical positions:

(60) 51°52'.59 N 003°16'.43 E (61) 51° 51'.22 N 003° 09'.29 E

North Hinder North traffic separation scheme²

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

(71) 52°07'.29 N 003°03'.08 E (73) 52°11'.51 N 003°02'.62 E
(72) 52°09'.38 N 003°06'.60 E (74) 52°09'.03 N 002°59'.83 E

- (b) A traffic lane for south-westbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(75) 52°13'.42 N 002°59'.03 E (76) 52°10'.99 N 002°56'.16 E

- (c) A traffic lane for north-eastbound traffic is established between the separation zone in paragraph (a) above and a line connecting the following geographical positions:

(77) 52°05'.55 N 003°06'.32 E (78) 52°07'.72 N 003°09'.70 E

North Hinder South traffic separation scheme

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

(79) 51°31'.07 N 002°07'.90 E (81) 51°45'.93 N 002°32'.60 E
(80) 51°29'.84 N 002°10'.62' E (82) 51°46'.67 N 002°31'.25 E

- (b) A traffic lane for north-east bound traffic is established between the separation zone in paragraph (a) and a line connecting the following geographical positions:

(83) 51°26'.97 N 002°16'.95 E (85) 51°43'.44 N 002°37'.21 E
(84) 51°36'.20 N 002°27'.25 E

- (c) A traffic lane for south-west bound traffic is established between the separation zone in paragraph (a) and a line connecting the following geographical positions:

(86) 51°33'.66 N 002°02'.17 E (87) 51°49'.53 N 002°25'.95 E

Off North Hinder traffic separation scheme

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

(88) 51°37'.18 N 002°40'.85 E (91) 51°42'.07 N 002°39'.74 E
(89) 51°37'.18 N 002°42'.05 E (92) 51°43'.70 N 002°39'.18 E
(90) 51°38'.86 N 002°42'.70 E (93) 51°43'.63 N 002°38'.69 E

- (b) A traffic lane for north bound traffic is established between the separation zone in paragraph (a) above and a separation zone bounded by a line connecting the following geographical positions:

(94)	51°38'.02 N	002°47'.15 E	(97)	51°44'.11 N	002°42'.45 E
(95)	51°39'.13 N	002°44'.78 E	(98)	51°42'.25 N	002°41'.40 E
(96)	51°42'.31 N	002°41'.85 E	(99)	51°39'.07 N	002°44'.34 E

- (c) A traffic lane for south bound traffic is established between the separation zone in paragraph (a) and a line connecting the following geographical positions:

(100)	51°37'.20 N	002°38'.41 E	(85)	51°43'.44 N	002°37'.21 E
(101)	51°39'.01 N	002°38'.65 E			

Maas Centre precautionary area³

A precautionary area is established off the entrance to the Rotterdam Waterway. The area is bounded by a line connecting the following geographical positions:

(68) ¹	51° 59'.67 N	004° 02'.84 E	(20)	52° 05'.04 N	003° 34'.66 E
(67) ¹	51° 59'.14 N	004° 02'.49 E	(17)	52° 05'.96 N	003° 36'.27 E
(66) ²	51° 58'.12 N	003° 57'.86 E	(16)	52° 06'.17 N	003° 36'.64 E
(38)	51° 57'.11 N	003° 40'.05 E	(13)	52° 07'.09 N	003° 38'.25 E
(37)	51° 56'.26 N	003° 35'.66 E	(12)	52° 07'.13 N	003° 44'.66 E
(34)	51° 58'.25 N	003° 35'.44 E	(4)	52° 07'.14 N	003° 47'.10 E
(28)	51° 59'.92 N	003° 35'.24 E	(3)	52° 07'.17 N	003° 54'.08 E
(26)	52° 00'.57 N	003° 35'.17 E	(9)	52° 07'.18 N	003° 55'.95 E
(25)	52° 02'.56 N	003° 34'.94 E	(69)	52° 07'.19 N	004° 00'.08 E
(21)	52° 04'.74 N	003° 34'.69 E		and back to 68	

¹ Position (68) is the North Mole Head light and position (67) is the South Mole Head Light.

² The line between positions (67) and (66) follows southern sea wall.

Maas Junction precautionary area³

A precautionary area between the Maas West Inner and Outer traffic separation schemes is established by a line connecting the following geographical positions:

(23)	52° 04'.63 N	003° 26'.20 E	(60)	51° 52'.59 N	003° 16'.43 E
(24)	52° 02'.12 N	003° 25'.73 E	(59)	51° 55'.99 N	003° 17'.31 E
(27)	51° 59'.75 N	003° 25'.29 E	(56)	51° 58'.49 N	003° 17'.96 E
(32)	51° 59'.09 N	003° 25'.17 E	(47)	51° 59'.15 N	003° 18'.13 E
(33)	51° 56'.90 N	003° 24'.78 E	(46)	52° 01'.77 N	003° 18'.81 E
(36)	51° 54'.10 N	003° 24'.29 E	(43)	52° 04'.54 N	003° 19'.53 E
				and back to 20	

³ Unchanged from the previously adopted measures listed in the *Ships' Routing* publication, 2015 edition, E-10.

North Hinder Junction precautionary area

A precautionary area is established off North Hinder and bounded by a line joining the following geographical positions, outside the existing "Deep-water route leading to Europoort":

(85)	51°43'.44 N	002°37'.21 E	(54)	52°01'.05 N	003°08'.36 E
(93)	51°43'.63 N	002°38'.69 E	(45)	52°01'.26 N	003°08'.37 E
(92)	51°43'.70 N	002°39'.18 E	(44)	52°04'.37 N	003°08'.52 E
(97)	51°44'.11 N	002°42'.45 E	(77)	52°05'.55 N	003°06'.32 E
(103)	51°46'.15 N	002°43'.60 E	(71)	52°07'.29 N	003°03'.08 E
(102)	51°50'.10 N	003°03'.46 E	(74)	52°09'.03 N	002°59'.83 E
(61)	51°51'.22 N	003°09'.29 E	(76)	52°10'.99 N	002°56'.16 E
(58)	51°54'.77 N	003°07'.49 E	(104)	52°01'.23 N	002°42'.47 E
(65)	51°55'.06 N	003°07'.54 E	(105)	51°54'.88 N	002°33'.60 E
(64)	51°56'.89 N	003°07'.87 E	(87)	51°49'.53 N	002°25'.95 E
(57)	51°57'.64 N	003°08'.00 E	(82)	51°46'.67 N	002°31'.25 E
(50)	51°59'.13 N	003°08'.26 E	(81)	51°45'.93 N	002°32'.60 E
(55)	51°59'.40 N	003°08'.28 E			

Notes:

CAUTIONS

- (Maas Junction precautionary area between Maas West Outer traffic separation scheme and Maas West Inner separation scheme)
Mariners are warned that in this precautionary area ships on routes to and from the traffic separation scheme "Off Texel", the River Scheldt and Europoort are merging or crossing.
- (Off the seaward entrances to the "Maas West Inner", the "Maas Northwest" and the "Maas North" traffic separation schemes)
The precautionary area in the approaches to Hook of Holland should be avoided by passing traffic which is not entering or leaving the adjacent ports.
- (Near the deep-water route in the North Hinder Junction precautionary area and near the "deep-water route leading to Europoort" between the "Maas West Outer" and the "Maas West Inner" traffic separation schemes (see section I of part D)).

For ships that have to cross the deep-water route attention is drawn to rule 18(d)(i) of the 1972 Collision Regulations. Mariners are, however, reminded that, when risk of collision is deemed to exist, the 1972 Collision Regulations fully apply and, in particular, the rules of part B, sections II and III are of specific relevance to the crossing situation.

- 4 (Across the boundary between the "in the vicinity of Thornton and Bligh Banks" and "Windfarm Borssele" precautionary areas)

The "in the vicinity of Thornton and Bligh Banks" and "Windfarm Borssele" precautionary areas surround wind farm development zones. Ships, other than those that are engaged in supporting the construction of these sites, should avoid the areas as much as possible.

- 5 (Close by the area to be avoided in the Windfarm Borssele precautionary area)

In view of the limited width of the area to be avoided "Windfarm Borssele Pass", following ships are recommended to avoid the area:

- a ships exceeding 45 m in length; and
- b ships carrying dangerous goods.

Ships engaged in the construction and maintenance of wind turbines and their associated electrical infrastructure are permitted in this area

ANNEX 4

AMENDED EXISTING TRAFFIC SEPARATION SCHEMES "AT WEST HINDER"

(Reference charts:

- 1) British Admiralty chart 323 (INT 1564), 2013 edition
- 2) Flemish Hydrography charts 101 (INT 1474) and 102 (INT 1480)

Note: These charts are based on the World Geodetic System 1984 datum (WGS 84).)

Description of the traffic separation scheme

(a) A separation line connects the following geographical positions:

- | | | | | | |
|-----|-------------|--------------|-----|-------------|--------------|
| (1) | 51°22'.45 N | 002°29'.92 E | (2) | 51°19'.15 N | 002°16'.62 E |
|-----|-------------|--------------|-----|-------------|--------------|

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

- | | | | | | |
|-----|-------------|--------------|-----|-------------|--------------|
| (2) | 51°19'.15 N | 002°16'.62 E | (4) | 51°19'.63 N | 002°10'.01 E |
| (3) | 51°20'.83 N | 002°10'.91 E | | | |

(c) A traffic lane for westbound traffic is established between the separation line/zone in paragraphs (a) and (b) above and a line connecting the following geographical positions:

- | | | | | | |
|-----|-------------|--------------|-----|-------------|--------------|
| (5) | 51°23'.45 N | 002°29'.92 E | (7) | 51°21'.25 N | 002°17'.62 E |
| (6) | 51°22'.75 N | 002°26'.42 E | (8) | 51°22'.83 N | 002°12'.29 E |

(d) A traffic lane for eastbound traffic is established between the separation line/zone in paragraphs (a) and (b) above and:

(i) a line connecting the following geographical positions:

- | | | | | | |
|-----|-------------|--------------|------|-------------|--------------|
| (9) | 51°21'.45 N | 002°29'.92 E | (10) | 51°19'.95 N | 002°24'.52 E |
|-----|-------------|--------------|------|-------------|--------------|

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

- | | | | | | |
|------|-------------|--------------|------|-------------|--------------|
| (10) | 51°19'.95 N | 002°24'.52 E | (13) | 51°11'.23 N | 002°04'.09 E |
| (11) | 51°12'.50 N | 002°11'.32 E | (14) | 51°13'.15 N | 002°10'.22 E |
| (12) | 51°09'.85 N | 002°03'.12 E | | | |

Description of the precautionary area

A precautionary area with recommended direction of traffic flow is established by connecting the following geographical positions:

(5)	51°23'.45 N	002°29'.92 E	(18)	51°23'.38 N	002°46'.21 E
(15)	51°23'.45 N	002°36'.92 E	(19)	51°20'.82 N	002°46'.29 E
(16)	51°23'.81 N	002°40'.30 E	(9)	51°21'.45 N	002°29'.92 E
(17)	51°24'.25 N	002°44'.52 E	(1)	51°22'.45 N	002°29'.92 E

Notes: An anchorage is established north of the scheme and is bounded by a line connecting the following geographical positions:

(i)	51°25'.95 N	002°34'.92' E	(iv)	51°23'.95 N	002°36'.90 E
(ii)	51°25'.95 N	002°40'.30 E	(v)	51°23'.95 N	002°33'.32 E
(iii) ¹	51°24'.40 N	002°40'.30 E			

¹ Positions (iii) and (iv) of this anchorage are points [3] and [2] respectively of the boundary of the area to be avoided "At West Hinder", in part D, section I of the *Ships' Routeing*.

ANNEX 5

**AMENDED EXISTING TRAFFIC SEPARATION SCHEMES
"IN BORNHOLMSGAT"**

(Additional reference chart: N°189 (INT 1336) Baltic Sea – Bornholmsgat, 10th edition, April 2014 issued by the Danish Geodata Agency.

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

Description of amended Inshore Traffic Zone (ITZ).

Inshore traffic zone – Denmark (Bornholm)

(I) The limits of the inshore traffic zone along the Danish coastline lie between the following geographical positions:

(39) 55°17′.88 N	014°46′.42 E
(40) 55°22′.34 N	014°40′.28 E
(41) 55°13′.76 N	014°28′.42 E
(42) 55°05′.00 N	014°38′.47 E (revised position)
(43) 55°05′.00 N	014°42′.37 E (revised position)

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COLREG.2/Circ.66/Corr.1
20 May 2016

AMENDED TRAFFIC SEPARATION SCHEMES

Corrigendum

1 The Maritime Safety Committee, at its ninety-sixth session (11 to 20 May 2016), approved corrections to the amended traffic separation schemes "Off Friesland" adopted at its ninety-fourth session (17 to 21 November 2014), as set out in the annex, replacing annex 3 of COLREG.2/Circ.66 dated 21 November 2014.

2 The corrections to the amended traffic separation scheme detailed and reproduced in the annex will take immediate effect.

ANNEX

AMENDED TRAFFIC SEPARATION SCHEME "OFF FRIESLAND" (Corrected text of COLREG.2/Circ.66, annex 3)

Reference charts, Netherlands 1632 (INT 1420), 2011 edition, 1633 (INT 1417), 2010 edition and 1037 (INT 1045), 2011 edition.

Note: These charts are based on World Geodetic System 1984 datum (WGS 84)

(EXISTING GEOGRAPHICAL POSITIONS IN ED50 COINCIDING WITH THE PROPOSED NEW SYSTEM HAVE BEEN CONVERTED TO WGS 84.)

West Friesland scheme

- (a) The eastern boundary of the separation zone is amended from existing position (19) north-eastward and newly bounded by the following geographical positions as follows:

(100) 53°55'.36 N 004°33'.85 E (21) 53°59'.18 N 004°35'.92 E

- (b) A new separation zone is established bounded by a line connecting the following geographical positions:

(85) 53°59'.46 N 004° 39'.60 E (87) 53°57'.17 N 004°38'.40 E
(86) 53°59'.68 N 004° 42'.44 E

- (c) A traffic lane for northbound traffic branching off from the main north-eastbound traffic lane is established between the separation zones in paragraphs (a) and (b).

- (d) The western boundary of the existing north-eastbound traffic lane is amended from existing position (19) north-eastward and newly bounded by the following geographical positions:

(86) 53°59'.68 N 004°42'.44 E (100) 53°55'.36 N 004°33'.85 E
(87) 53°57'.17 N 004°38'.40 E

North Friesland scheme

- (e) A separation zone is established bounded by a line connecting the following geographical positions:

(79) 54°04'.30 N 004°59'.98 E (81) 54°02'.76 N 005°04'.73 E
(80) 54°04'.78 N 005°05'.94 E (82) 54°02'.28 N 004°58'.76 E

- (f) A separation zone is established bounded by a line connecting the following geographical positions:

(75) 54°02'.84 N 004°41'.41 E (77) 54°01'.98 N 004°54'.89 E
(76) 54°03'.99 N 004°56'.11 E (78) 54°00'.83 N 004°40'.34 E

- (g) A separation zone is established bounded by a line connecting the following geographical positions:

(71) 54°01'.52 N 004° 24'.62 E (73) 54°00'.54 N 004°36'.62 E
(72) 54°02'.55 N 004° 37'.69 E (74) 53°59'.21 N 004°19'.05 E

- (h) A separation zone is established bounded by a line connecting the following geographical positions:

(67) 54°00'.37N 004°09'.21 E (69) 53°58'.91 N 004°13'.93 E
(68) 54°01'.10 N 004°18'.89 E (70) 53°58'.66 N 004°09'.60 E

- (i) A traffic lane for eastbound traffic is established between the separation zone in paragraph (h) and the following existing geographical position:

(26) 53°57'.16 N 004°09'.94 E

- (j) A traffic lane for eastbound traffic is established between the separation zone in paragraph (g) and the amended separation zone of the traffic separation scheme "West Friesland".

- (k) A traffic lane for eastbound traffic is established between the separation zone in paragraph (f) and the following geographical positions:

(85) 53°59'.46 N 004°39'.60 E (86) 53°59'.68 N 004°42'.44 E
(25) 53°59'.96 N 004°45'.92 E (96) 54°00'.60 N 004°54'.06 E

- (l) A traffic lane for eastbound traffic is established between the separation zone in paragraph (e) and the following geographical positions:

(97) 54°00'.91 N 004°57'.94 E (98) 54°01'.38 N 005°03'.90 E

- (m) A traffic lane for westbound traffic is established between the separation zone in paragraph (e) and the following geographical positions:

(94) 54°06'.14 N 005°06'.77 E (93) 54°05'.67 N 005°00'.81 E

- (n) A traffic lane for westbound traffic is established between the separation zone in paragraph (f) and the following geographical positions:

(92) 54°05'.37 N 004°56'.94 E (91) 54°04'.20 N 004°42'.14 E

- (o) A traffic lane for westbound traffic is established between the separation zone in paragraph (g) and the following geographical positions:

(90) 54°03'.91 N 004°38'.43 E (89) 54°03'.13 N 004°28'.46 E

- (p) A traffic lane for westbound traffic is established between the separation zone in paragraph (h) and the following geographical positions:

(88) 54°02'.65 N 004°22'.44 E (31) 54°01'.87 N 004°08'.88 E

- (q) A traffic lane for south-westbound traffic is established between, on the west side, a line connecting the following geographical positions:

(68) 54°01'.10 N 004°18'.89 E (69) 53°58'.91 N 004°13'.93 E

and, on the east side, a line connecting the following geographical positions:

(71) 54°01'.52 N 004°24'.62 E (74) 53°59'.21 N 004°19'.05 E

- (r) A traffic lane for northbound traffic is established between, on the west side, a line connecting the following geographical positions:

(72) 54°02'.55 N 004°37'.69 E (73) 54°00'.54 N 004°36'.62 E

and, on the east side, a line connecting the following geographical positions:

(75) 54°02'.84 N 004°41'.41 E (78) 54°00'.83 N 004°40'.34 E

- (s) A traffic lane for southbound traffic is established between, on the west side, a line connecting the following geographical positions:

(76) 54°03'.99 N 004°56'.11 (77) 54°01'.98 N 004°54'.89 E

and, on the east side, a line connecting the following geographical positions:

(79) 54°04.30 N 004°59'.98 E (82) 54°02'.28 N 004°58'.76 E

- (t) A traffic lane for northbound traffic is established between, on the west side, a line connecting the following geographical positions:

(80) 54°04'.78 N 005°05'.94 E (81) 54°02.76 N 005°04'.73 E

and, on the east side, a line connecting the following geographical positions:

(83) 54°04'.84 N 005°09'.60 (84) 54°03'.26 N 005°08'.65 E

East Friesland scheme

- (u) The western boundary of the separation zone is amended as follows:

Existing position 32 is shifted east to new position (84) 54°03'.26 N 005°08'.65 E

Existing position 37 is shifted east to new position (83) 54°04'.84 N 005°09'.60 E

- (v) The traffic lane for eastbound traffic is amended as follows:

Existing position (28) is shifted east to new position (99) 54°01'.69 N 005°07'.70 E

- (w) The traffic lane for westbound traffic is amended as follows:

Existing position (29) is shifted east to new position (95) 54°06'.44 N 005°10'.57 E

Existing position (29) is shifted east to new position (95) 54°06'.44 N 005°10'.57 E

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COLREG.2/Circ.68
21 February 2017

**TRAFFIC SEPARATION SCHEMES
AND ASSOCIATED ROUTEING MEASURES
"IN NORRA KVARKEN"**

TEMPORARY SUSPENSION

Communication by the Government of Sweden

At the request of the Government of Sweden, the information contained in the annex, on an announcement issued by the Swedish Transport Agency, is brought to the attention of Member States and international organizations.

ANNEX

TEMPORARY SUSPENSION OF THE TRAFFIC SEPARATION SCHEME "IN NORRA KVARKEN"

After consultation with the Finnish Transport Agency, the Swedish Transport Agency has decided to temporarily suspend the traffic separation scheme (TSS) "In Norra Kvarken", which is described in detail in COLREG.2/Circ.63, paragraph 1.1 and annex 1, dated 8 May 2012.

The suspension came into force at 0000 UTC on 18 February 2017. The reason for the suspension is the prevailing ice conditions in the area. These conditions are expected to remain the same until mid April 2017. The suspension will be revoked as soon as the ice conditions allow. This temporary suspension is deemed to be cancelled on 15 April 2017, unless further notice is given by a notice to mariners.

The area is covered with solid and drifting ice of variable thickness, and ice channels arise in varying locations. Ship traffic is guided or assisted by Swedish and Finnish icebreakers: the ships receive information about the present ice situation and proposed routes, or sail in convoys headed by the icebreakers.

If the TSS is not suspended, the ships will have to be navigated in accordance with COLREG rule 10. Doing so under the prevailing ice conditions would involve unacceptable risk.

Sweden would appreciate if this information could be brought to the attention of other Member States and organizations so that they can inform shipowners, ship operators, shipping companies, masters and all others concerned.

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COLREG.2/Circ.69
16 June 2017

AMENDED TRAFFIC SEPARATION SCHEME

**Amendments to the existing Long Sand Head two-way route and
SUNK Inner precautionary area
in the existing traffic separation scheme "In the SUNK area and in the northern
approaches to the Thames Estuary"**

1 The Maritime Safety Committee, at its ninety-eighth session (7 to 16 June 2017), adopted, in accordance with resolution A.858(20), amendments to the existing Long Sand Head two-way route and Sunk Inner precautionary area in the existing traffic separation scheme "In the Sunk Area and in the Northern Approaches to the Thames Estuary".

2 Accordingly, the aforementioned will be implemented at 0000 hours UTC on 1 January 2018.

ANNEX

AMENDMENTS¹ TO THE EXISTING LONG SAND HEAD TWO-WAY ROUTE AND SUNK INNER PRECAUTIONARY AREA IN THE EXISTING TRAFFIC SEPARATION SCHEME "IN THE SUNK AREA AND IN THE NORTHERN APPROACHES TO THE THAMES ESTUARY" (COLREG.2/Circ.58, paragraph 1.2 and annex 2)

(Reference chart: British Admiralty No. 2692, 10th edition, June 2016.)

Note: These charts are based on the World Geodetic System 1984 datum (WGS 84.)

Description of the amendments to Long Sand Head two-way route

Geographical positions (2) and (3) of two-way route (COLREG.2/Circ.58, paragraph 1.2 and annex 2, paragraph (a)) are amended as follows:

- (2) 51° 48'.12 N; 001° 39'.39 E
- (3) 51° 48'.22 N; 001° 38'.16 E

Description of the amendments to SUNK Inner precautionary area

Geographical positions (52) and (3) of SUNK Inner precautionary area (COLREG.2/Circ.58, paragraph 1.2 and annex 2, paragraph (n)) are amended as follows:

- (52) 51° 48'.32 N; 001° 36'.96 E
- (3) 51° 48'.22 N; 001° 38'.16 E

¹ These amendments concern sections B-II/8 and E-8 of IMO publication *Ships' Routing*, 2015 edition.