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COLREG.2/Circ.59
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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
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(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.