

ANNEX 15

ROUTEING MEASURES OTHER THAN TRAFFIC SEPARATION SCHEMES

1 AMENDMENTS TO THE EXISTING RECOMMENDED DIRECTIONS OF TRAFFIC FLOW WITHIN THE PRECAUTIONARY AREA OFF TANGER-MED 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 precautionary area off Tanger-Med

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:

(08)	36° 00'.35 N	005° 28'.98 W
(09)	35° 58'.68 N	005° 35'.44 W
(14)	35° 54'.55 N	005° 33'.90 W
(15)	35° 56'.35 N	005° 27'.40 W

2 NEW AREAS TO BE AVOIDED "OFF FRIESLAND"

Reference charts, Netherlands 1632 (INT 1420), edition 2011, 1633 (INT 1417), edition 2010 and 1307 (1045) editions 2011.

Note: These charts are based on World Geodetic System 1984 datum (WGS 84)

(a) An area to be avoided is established and bounded by a line connecting the following geographical positions:

(101)	54° 01.27 N	004° 24.79 E	(102)	54° 02.23 N	004° 37.05 E
(103)	54° 00.78 N	004° 36.28 E	(104)	53° 59.61 N	004° 20.79 E

(b) An area to be avoided is established and bounded by a line connecting the following geographical positions:

(105)	54° 02.70 N	004° 43.12 E	(106)	54° 03.57 N	004° 54.19 E
(107)	54° 02.13 N	004° 53.32 E	(108)	54° 01.26 N	004° 42.33 E

3 DEEP-WATER ROUTES FORMING PARTS OF ROUTEING SYSTEM "OFF FRIESLAND"

Reference charts Netherlands 1632 (INT 1420), edition 2011, 1633 (INT 1417), edition 2010 and 1307 (1045) editions 2011.

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.)

1 The part "**Friesland Junction**" **precautionary area** (paragraphs e) and f)) is deleted.

2 The text: **Deep-water route from the traffic separation scheme "Off Botney Ground" to the precautionary area "Friesland Junction"** is replaced by:

Deep-water route from the traffic separation scheme "Off Botney Ground" to the traffic separation scheme "North Friesland"

3 After existing paragraph (h), a new paragraph is added reading:

(i) Geographical positions (26) and (31) form part of the traffic separation scheme "North Friesland".

and renumber existing paragraph (i) to (j).

4 Replace the words "Friesland Junction" in note 2 by "TSS North Friesland".

4 AMENDMENTS TO THE MANDATORY ROUTE FOR TANKERS FROM NORTH HINDER TO THE GERMAN BIGHT

Reference charts, Netherlands 1632 (INT 1420), edition 2011, 1633 (INT 1417), edition 2010 and 1307 (1045) editions 2011.

Note: These charts are based on World Geodetic System 1984 datum (WGS 84)

1 The "**Friesland junction**" **precautionary area** is replaced by:

Traffic separation scheme "North Friesland"

(a) 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

(b) 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

(c) 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

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

(67)	54° 00'.37 N	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

- (e) A traffic lane for eastbound traffic is established between the separation zone in paragraph (d) and the following existing geographical positions:
- (26) 53° 57'16 N 004° 09'.94 E (22) 53° 57'.56 N 004° 15'.09 E
- (f) A traffic lane for eastbound traffic is established between the separation zone in paragraph (c) and the amended separation zone of the traffic separation scheme "West Friesland".
- (g) A traffic lane for eastbound traffic is established between the separation zones in paragraph (b) and the new separation zone of the amended traffic separation scheme "West Friesland".
- (h) A traffic lane for eastbound traffic is established between the separation zone in paragraph (b) and the following geographical positions:
- (25) 54° 59'.96 N 004° 45'.92 E (96) 54° 00'.60 N 004° 54'.06 E
- (i) A traffic lane for eastbound traffic is established between the separation zone in paragraph (a) and the following geographical positions:
- (97) 54° 00'.91 N 004° 57'.94 E (98) 54° 01'.38 N 005° 03'.90 E
- (j) A traffic lane for westbound traffic is established between the separation zone in paragraph (a) and the following geographical positions:
- (94) 54° 06'.14 N 005° 06'.77 E (93) 54° 05'.67 N 005° 00'.81 E
- (k) A traffic lane for westbound traffic is established between the separation zone in paragraph (b) and the following geographical positions:
- (92) 54° 05'.37 N 004° 56'.94 E (91) 54° 04'.20 N 004° 42'.14 E
- (l) A traffic lane for westbound traffic is established between the separation zone in paragraph (c) and the following geographical positions:
- (90) 54° 03'.91 N 004° 38'.43 E (89) 54° 03'.13 N 004° 28'.46 E
- (m) A traffic lane for westbound traffic is established between the separation zone in paragraph (d) and the following geographical positions:
- (88) 54° 02'.65 N 004° 22'.44 E (31) 54° 01'.87 N 004° 08'.88 E
- (n) 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 (64) 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

- (o) 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

2 The traffic separation scheme "East Friesland" is amended as follows:

- (p) 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

- (q) 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

- (r) 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

3 The traffic separation scheme "West Friesland" is amended as follows

- (s) 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

- (t) 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

- (u) A traffic lane for northbound traffic branching off from the main north-eastbound traffic lane is established between the separation zones in paragraphs (s) and (t).

5 TWO-WAY ROUTE IN THE GREAT NORTH-EAST CHANNEL, TORRES STRAIT

Reference charts:

Electronic Navigation Charts (ENC): AU410143 (edition 9), AU411142 (edition 4), AU411143 (edition 8)

Paper charts: Aus292 (2005 June edition), Aus293 (2011 November edition), Aus837 (2012 February edition), Aus839 (2012 January edition), Aus840 (2012 July edition)

Description of the area

(a) The northern limits are bound by the line joining the following geographical positions:

(1)	10° 29'.51 S	142° 22'.29 E
(2)	10° 28'.81 S	142° 25'.61 E
(3)	10° 28'.54 S	142° 26'.93 E
(4)	10° 27'.80 S	142° 28'.45 E
(5)	10° 26'.40 S	142° 31'.30 E
(6)	10° 21'.90 S	142° 41'.50 E
(7)	10° 19'.37 S	142° 47'.97 E
(8)	10° 18'.14 S	142° 50'.82 E
(9)	10° 13'.38 S	142° 54'.96 E
(10)	10° 00'.50 S	143° 03'.42 E
(11)	09° 47'.73 S	143° 10'.40 E
(12)	09° 25'.80 S	143° 31'.07 E
(13)	09° 12'.47 S	143° 51'.34 E

(b) The southern limits are bound by the line joining the following geographical positions:

(14)	10° 30'.45 S	142° 24'.02 E
(15)	10° 28'.38 S	142° 28'.66 E
(16)	10° 27'.38 S	142° 31'.85 E
(17)	10° 22'.85 S	142° 41'.95 E
(18)	10° 19'.80 S	142° 48'.23 E
(19)	10° 17'.63 S	142° 53'.29 E
(20)	10° 09'.78 S	143° 05'.55 E
(21)	09° 53'.97 S	143° 15'.61 E
(22)	09° 46'.02 S	143° 18'.48 E
(23)	09° 37'.96 S	143° 21'.97 E
(24)	09° 27'.60 S	143° 32'.15 E
(25)	09° 13'.95 S	143° 52'.62 E

(c) The centre polygon is defined by the following geographical positions:

(26)	10° 16'.10 S	142° 53'.82 E
(27)	10° 13'.79 S	142° 55'.85 E
(28)	10° 01'.05 S	143° 04'.20 E
(29)	09° 48'.10 S	143° 11'.30 E
(30)	09° 41'.04 S	143° 18'.87 E
(31)	09° 45'.72 S	143° 17'.51 E
(32)	09° 53'.84 S	143° 14'.50 E
(33)	10° 09'.15 S	143° 04'.70 E

6 TWO-WAY ROUTES AND PRECAUTIONARY AREA AT JOMARD ENTRANCE

(Reference Charts:

Electronic Navigation charts (ENC): AU412152 (edition 2, 2014), (edition 3, planned 2014/15, will include an inset at a scale of 1:45,000 covering Jomard Entrance as part of the depiction of the Two-way route.), AU220150 (edition 3, 2013).

Paper charts: Aus62x (Planned for 2014/15), Aus510 (edition 1, 2007), Aus4621(INT 621) (edition 4, 2011).

Note: All charts above and geographical positions are based on WGS 84.

Description of the Two-Way Routes and Precautionary Area

The ships' routing system consists of four recommendatory Two-way routes and a precautionary area through Jomard Entrance, aligned with and centred upon the existing charted preferred route. At the shoalest point within the proposed route, depths are in excess of 200 metres. In the area immediately south of Jomard Entrance, three existing Coral Sea shipping routes converge (and diverge) at Jomard Entrance. A precautionary area will assist with improving the safety of navigational interaction in the region.

A list of geographical coordinates of the four recommendatory two-way routes and precautionary area are provided below.

Two-way route at Jomard Entrance (aligned 005°-185°)

(1)	11° 10'.00S	152° 06'.42E	(16)	11° 20'.00S	152° 07'.14E
(2)	11° 18'.00S	152° 05'.72E	(17)	11° 18'.00S	152° 06'.76'E
(3)	11° 20'.00S	152° 04'.97E	(18)	11° 10'.00S	152° 07'.46E

Precautionary Area

(3)	11° 20'.00S	152° 04'.97E	(15)	11° 22'.50S	152° 07'.59E
(4)	11° 22'.50S	152° 02'.88E	(16)	11° 20'.00S	152° 07'.14E

South-western Two-way route (aligned 040°-220°)

(4)	11° 22'.50S	152° 02'.88E	(6)	11° 26'.00S	152° 01'.18E
(5)	11° 26'.00S	151° 59'.90E	(7)	11° 22'.50S	152° 04'.14E

Southern Two-Way route (aligned 005°-185°)

(8)	11° 22'.50S	152° 05'.33E
(9)	11° 26'.00S	152° 05'.00E
(10)	11° 26'.00S	152° 06'.05E
(11)	11° 22'.50S	152° 06'.35E

South-eastern Two-way route (aligned 350°-170°)

(12)	11° 22'.50S	152° 06'.56E
(13)	11° 26'.00S	152° 07'.22E
(14)	11° 26'.00S	152° 08'.24E
(15)	11° 22'.50S	152° 07'.59E
