THE ASSEMBLY,

NOTING Article 16(i) of the IMCO Convention concerning the functions of the Assembly,

NOTING FURTHER the contents of Resolution A.161(ES.IV) and in particular with regard to traffic separation schemes in the approaches to New York Harbour and Delaware Bay,

HAVING CONSIDERED relevant recommendations by the Maritime Safety Committee,

ADOPTS, for implementation and inclusion in the publication, as appropriate:

(a) the schemes in the approaches to New York Harbour and Delaware Bay, as described in Annex III to Resolution A.161(ES.IV);

(b) the additional traffic separation schemes and areas to be avoided by ships of certain classes, described in the Annex to this Resolution.
INVITES the Governments concerned to advise ships under their flags to follow the recommended schemes and avoid navigating within the areas which are "areas to be avoided by ships of certain classes".

ANNEX

NEW TRAFFIC SEPARATION SCHEMES
AT BANCO DEL HOYO (REFERENCE CHART: 142)

Description of the scheme

A two-mile wide separation zone is centred upon the following geographical positions:

- (i) 35°55'5 N., 6°6'0 W
- (ii) 35°55'5 N., 6°12'0 W

The outside limits of the scheme are lines passing through the following points:

- (a) Northern limit
  - (i) 35°58'2 N., 6°6'0 W
  - (ii) 35°58'2 N., 6°12'0 W
- (b) Southern limit
  - (i) 35°52'3 N., 6°6'0 W
  - (ii) 35°52'3 N., 6°12'0 W

The main traffic directions are:

090° - 270°

Aids to navigation

A ship proceeding from the Strait and steering course 270°, on passing the radio beacon sectorial (A-N) signal by Cabo Roche would change its course to a new one leading to San Vicente.
A ship proceeding from San Vicente to the Strait would home at Cape Spartel radio beacon. Upon receiving a sectorial signal from Cabo Roche beacon it would change course to 90°, leading to the appropriate lane of the Gibraltar traffic separation scheme.

IN THE APPROACHES TO ROSTOCK (REFERENCE CHART: 2365)

IMPORTANT: This scheme is not ready for implementation at present. It will be brought into operation when the date of coming into force is announced by Notices to Mariners.

PART I

Routing in the NEMEDRI areas

1. In that part of the NEMEDRI "Way 1" which lies between buoys "7c" and "9" the width of the traffic lane situated on the southern side of the axis is expanded to 2 n.m.

2. The approach to Rostock referred to in the NEMEDRI as Warnemünde Approach is abolished.

3. Two new approaches to Rostock, hereafter referred to as western and eastern approaches, are introduced as follows:

   Western approach
   (a) The axis is a line passing through the following points:
       (i) 54°22' N., 11°55'.9 E
       (ii) 54°17'.7 N., 12°00'.0 E
       (iii) 54°15'.2 N., 12°02'.5 E
   (b) A traffic lane, half-a-mile wide, is established on each side of the traffic separation zones described in 4(a) and 4(b).
   (c) Main traffic directions are:
       150°.5 - 330°.5
A VI/Res.186

**Eastern approach**

(d) The axis is a line passing through the following points:

(i) \(54^\circ 23'.4\) N., \(12^\circ 06'.5\) E

(ii) \(54^\circ 20'.5\) N., \(12^\circ 03'.2\) E

(iii) \(54^\circ 17'.7\) N., \(12^\circ 00'.0\) E

(e) A traffic lane, half-a-mile wide, is established on each side of the traffic separation zone described in 4(c).

(f) Main traffic directions are:

\[214^\circ - 34^\circ\]

**Connexion of the Eastern approach with WAY-1**

(g) The outside boundary of traffic lanes in the area between buoy "9" and a buoy referred to in 6(d) is a line connecting the following geographical positions:

(i) \(54^\circ 23'.1\) N., \(12^\circ 08'.9\) E

(ii) \(54^\circ 25'.5\) N., \(12^\circ 10'.9\) E

**PART II**

**Separation of traffic in the area**

4. The traffic separation zones, one-quarter of a mile wide, established on the axes described in 3(a) and 3(d) are centred upon the following geographical positions:

(a) The northern zone in the western approach to Rostock:

(i) \(54^\circ 22'. N., 11^\circ 55'.9\) E

(ii) \(54^\circ 18'.5\) N., \(11^\circ 59'.2\) E
(b) The southern zone in the western approach to Rostock:

(i) 54°17' N., 12°00'.3 E
(ii) 54°15'.2 N., 12°02'.5 E

(c) The zone in the eastern approach to Rostock:

(i) 54°18'.5 N., 12°00'.9 E
(ii) 54°23'.4 N., 12°06'.5 E

PART III

Aids to Navigation

5. To support the navigation in the approaches to Rostock, lightbuoys with radar reflectors are established in the following geographical positions:

(a) 54°22'. N., 11°55'.9 E
(b) 54°17'.7 N., 12°00'.0 E
(c) 54°23'.4 N., 12°06'.5 E
(d) 54°20'.5 N., 12°03'.2 E

6. As a result of establishing the buoys in (5) above, the Warnemünde buoys 1 and 2 have been withdrawn.

7. Buoy "3" (with a radar reflector) of the Warnemünde Approach (54°12'.2 N., 12°02'.5 E) remains in the same position as before.

IN THE SOUND (REFERENCE CHART: 2115)

IMPORTANT: This scheme is not ready for implementation at present. It will be brought into operation when the date of coming into force is announced by Notices to Mariners.
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Description of the scheme

(a) The separation line is centred upon the following geographical positions:

(i) 56°06'0 N., 12°34'1 E
(ii) 56°04'6 N., 12°36'6 E
(iii) 56°03'3 N., 12°39'2 E
(iv) 56°01'2 N., 12°40'2 E

(b) The eastern limit of the scheme is a line passing through the following points:

(i) 56°06'4 N., 12°34'9 E
(ii) 56°03'4 N., 12°40'1 E
(iii) 56°01'2 N., 12°41'3 E

(c) The western limit of the scheme is a line passing through the following points:

(i) 56°05'5 N., 12°33'3 E
(ii) 56°03'2 N., 12°38'3 E
(iii) 56°01'2 N., 12°37'7 E

(d) The areas between outside limits of the scheme and the coastlines are considered as inshore traffic zones.

Aids to Navigation

(e) To mark the scheme's basic points referred to in paragraphs (a), (b) and (c) above, the following buoys are established:

In point (a) (i) - Red buoy; Qk.Fl.R
(a) (ii) - Red buoy; Fl.R.3 sec.
(a) (iii) - Red buoy; Gp.Fl(2)R.5 sec.
(a) (iv) - Red buoy; Qk.Fl.R
(b) (i) - Black buoy; Gp.Fl.(2)6 sec.
(b) (ii) - Black buoy; Fl.3 sec.
(b) (iii) - Black buoy; Qk.Fl.
In point (c) (i) - Black buoy; Qk.Fl.
(c) (ii) - Black buoy; Gp.Fl.(2)5 sec.
(c) (iii) - Black buoy; Qk.Fl.

(f) To support the navigation along the southbound lane of the scheme a buoy is established on the northern side of the Disken bank:

Disken N., red/black buoy Gp.Fl.(3)8 sec.
(56°01'.7 N., 12°38'.8 E)

**Cross-channel traffic**

All precautions, including if necessary reduction of speed, should be taken in the area between Helsingborg and Helsingør which is widely used by local cross-channel ferry traffic.

**IN THE GERMANY BIGHT (REFERENCE CHARTS 1875, 3761 AND GERMAN HYDROGRAPHIC OFFICE CHARTS NUMBER 50 AND 53)**

**IMPORTANT:** This scheme is not yet ready for implementation. The date of coming into force will be announced in due course.

**Description of the scheme**

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 53°55'.9 N., 7°40'.1 E
(ii) 53°47'.6 N., 6°22'.0 E
(iii) 53°32'.7 N., 5°04'.0 E

A traffic lane three miles wide is established on each side of the separation zone. The main traffic directions are:

260° - 80°
252° - 72°
A VI/Res.186

An area, approximately 2 1/2 miles wide, situated southwards of that part of the scheme which lies approximately between "Borkumriff" and "Weser" lightvessels is considered as an inshore traffic zone.

Aids to navigation

The northern outside limit of the scheme is marked by radar reflecting buoys as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Lightbuoy</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.r.</td>
<td>Lightbuoy 1, Occ.</td>
<td>53°51'.2 N.</td>
<td>6°21'.8 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 2, Gp. Occ(2)</td>
<td>53°52'.2 N.</td>
<td>6°31'.4 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 3, Gp. Fl.(2)</td>
<td>53°53'.1 N.</td>
<td>6°40'.8 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 4, Qk. Fl.</td>
<td>53°54'.1 N.</td>
<td>6°50'.2 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 5, Gp. Occ(2)</td>
<td>53°55'.0 N.</td>
<td>6°59'.6 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 6, Gp. Fl.(2)</td>
<td>53°56'.0 N.</td>
<td>7°08'.9 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 7, Qk. Fl.</td>
<td>53°57'.0 N.</td>
<td>7°18'.4 E</td>
</tr>
<tr>
<td>r.w.</td>
<td>&quot; 8, Gp. Occ(2)</td>
<td>53°58'.0 N.</td>
<td>7°27'.8 E</td>
</tr>
<tr>
<td>b.r.b.</td>
<td>&quot; 9, Int. Qk. Fl.</td>
<td>53°59'.0 N.</td>
<td>7°37'.3 E</td>
</tr>
</tbody>
</table>

The southern outside limit of the scheme is marked by radar reflecting buoys as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Lightbuoy</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>b.w.</td>
<td>Lightbuoy A, Int. Qk. Fl</td>
<td>53°44'.4 N.</td>
<td>6°24'.9 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; B, Fl.</td>
<td>53°45'.4 N.</td>
<td>6°34'.2 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; D, Fl.</td>
<td>53°47'.4 N.</td>
<td>6°52'.9 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; E, Gp. Fl.(3)</td>
<td>53°48'.3 N.</td>
<td>7°02'.3 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; F, Fl.</td>
<td>53°49'.3 N.</td>
<td>7°11'.7 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; G, Gp. Fl.(3)</td>
<td>53°50'.3 N.</td>
<td>7°21'.0 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; H, Fl.</td>
<td>53°51'.2 N.</td>
<td>7°30'.4 E</td>
</tr>
<tr>
<td>b.w.</td>
<td>&quot; I, Int. Qk. Fl</td>
<td>53°52'.2 N.</td>
<td>7°39'.7 E</td>
</tr>
</tbody>
</table>
The southern limit of the inshore traffic zone referred to above is marked by radar reflecting buoys as follows:

- b.r. Lightbuoy **HUBERTGATT WESTEREMS** Occ. 53°37'.7 N., 6°09'.6 E
- b.r. " **RIFFGATT** Occ. 53°41'.0 N., 6°26'.5 E
- b.r. " **OSTEREMS** Occ. 53°42'.0 N., 6°36'.2 E
- b.w.b. " **JUISTER RIFF-N** Fl. 53°43'.0 N., 6°45'.8 E
- b.w.b. " **JUIST-N** Gp. Occ(3) 53°44'.0 N., 6°55'.5 E
- b.r. " **SCHLUCHTER** Occ. 53°45'.0 N., 7°05'.2 E
- b.r. " **DOVE TIEF** Occ. 53°45'.3 N., 7°07'.9 E
- b.w.b. " **NORDERNEY-N** Fl. 53°46'.2 N., 7°16'.7 E
- b.r. " **ACCUMER EE** Occ. 53°47'.2 N., 7°25'.6 E
- b.r. " **OTZUMER BALJE** Occ. 53°48'.3 N., 7°37'.0 E

The point where the eastern and western parts of this scheme meet is marked by the lightvessel "BORKUMRIFF" (53°47'.6 N., 6°22'.0 E).

**THE SOUTH AFRICAN ROUTEING SYSTEM**

**General**

Although the schemes described below were primarily designed for laden tankers carrying cargo oil in excess of one-half (½) per cent of their dead-weight tonnage they also may be used by other ships.

**Description of the System**

**Cooper Point** (Reference chart: 2087)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 30°11'.8 S., 31°23'.5 E
(ii) 30°21'.3 S., 31°15'.0 E
A traffic lane, three miles wide is established on each side of the separation zone.

The main traffic directions are:

038° - 218°

South Sand Bluff (Reference chart: 2087)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 31°25'.7 S., 30°17'.3 E
(ii) 31°30'.8 S., 30°12'.7 E
(iii) 31°35'.4 S., 30°07'.5 E

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

The main traffic directions are:

038° - 218° and
044° - 224°

Bashee Point (Reference chart: 2086)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 32°22'.0 S., 29°14'.2 E
(ii) 32°26'.6 S., 29°08'.8 E
(iii) 32°31'.0 S., 29°03'.0 E

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

The main traffic directions are:

044° - 224° and
048° - 228°
Hood Point (Reference chart: 2086)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 33°11'.2 S., 28°11'.7 E
(ii) 33°15'.2 S., 28°06'.3 E
(iii) 33°18'.6 S., 28°00'.4 E

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

The main traffic directions are:

048° - 228° and
055° - 235°

Great Fish Point (Reference chart: 2085)

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 33°41'.7 S., 27°22'.0 E
(ii) 33°45'.1 S., 27°16'.0 E
(iii) 33°47'.6 S., 27°09'.6 E

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

The main traffic directions are:

055° - 235° and
068° - 246°
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Cape Recife (Reference chart: 2085)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 34°14'.3 S., 25°53'.5 E
(ii) 34°16'.7 S., 25°46'.9 E
(iii) 34°17'.7 S., 25°39'.8 E

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

The main traffic directions are:

068° - 246° and
080° - 260°

Seal Point (Reference chart: 2084/2085)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 34°23'.3 S., 25°59'.7 E
(ii) 34°24'.3 S., 25°52'.6 E
(iii) 34°25'.1 S., 24°45'.4 E

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

The main traffic directions are:

080° - 260° and
082° - 262°

Cape Agulhas - Quoin Point - Slangkop Point (Reference chart: 2082)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) 35°01'.1 S., 20°08'.2 E
(ii) 35°03'.4 S., 19°59'.7 E
(iii) 34°57'.2 S., 19°32'.5 E
(iv) 34°25'.1 S., 18°10'.2 E
A traffic lane, one and a half miles wide, is established on each side of the separation zone.

The main traffic directions are:

- $073^\circ - 253^\circ$
- $105^\circ - 285^\circ$
- $115^\circ - 295^\circ$

Slangkop Point (Reference chart: 2082)

A one-mile wide separation zone is centred upon the following geographical positions:

(i) $34^\circ 25'.1$ S., $18^\circ 10'.2$ E
(ii) $34^\circ 09'.0$ S., $17^\circ 52'.7$ E

The south-east bound traffic lane lies between the separation zone and the line joining the following geographical positions:

(iii) $34^\circ 16'.0$ N., $17^\circ 42'.3$ E
(iv) $34^\circ 27'.8$ N., $18^\circ 09'.2$ E

The north-west bound traffic lane lies between the separation zone and a line joining the following geographical positions:

(v) $34^\circ 02'.5$ S., $18^\circ 03'.0$ E
(vi) $34^\circ 23'.2$ S., $18^\circ 11'.1$ E

Area to be avoided at Alphard Banks

All vessels should avoid the area contained within a circle of six miles radius, centred at $35^\circ 01'.7$ S., $20^\circ 51'.2$ E.

The main reason for establishing this area is insufficient aids to navigation in the area near to traffic routes in the vicinity of shallow water.
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IN THE SANTA BARBARA CHANNEL

(Reference chart: 899, and also
United States C & GS 5101 and 5202)

Description of the scheme

A two-mile wide separation zone is centred upon the following geographical positions:

(i) 34°20' .1 N., 120°30'.4 W
(ii) 34°04' .6 N., 119°19'.6 W
(iii) 33°44'.1 N., 118°36'.3 W

A traffic lane, one mile wide, is established on each side of the separation zone.

The main traffic directions are:

300° - 120° and
105° - 285°

Port Hueneme Fairway

The fairway at Port Hueneme is extended to meet the eastern edge of the north bound lane.