

**ANNEX 22**

**RESOLUTION MSC.230(82)**

**(adopted on 5 December 2006)**

**ADOPTION OF AMENDMENTS TO THE EXISTING MANDATORY SHIP  
REPORTING SYSTEM “IN THE STOREBÆLT (GREAT BELT) TRAFFIC AREA”**

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO regulation V/11 of the International Convention for the Safety of Life at Sea (SOLAS), 1974, in relation to the adoption of mandatory ship reporting systems by the Organization,

RECALLING FURTHER resolution A.858(20) resolving that the function of adopting ship reporting systems shall be performed by the Committee on behalf of the Organization,

TAKING INTO ACCOUNT the Guidelines and criteria for ship reporting systems, adopted by resolution MSC.43(64), as amended by resolutions MSC.111(73) and MSC.189(79),

HAVING CONSIDERED the recommendations of the Sub-Committee on Safety on Navigation, at its fifty-second session,

1. ADOPTS, in accordance with SOLAS regulation V/11, the amendments to the existing mandatory ship reporting system “In the Great Belt Traffic Area”, set out in the Annex to the present resolution;
2. DECIDES that the said amendments to the existing mandatory ship reporting system “In the Storebælt (Great Belt) Traffic Area (BELTREP)” will enter into force at 0000 hours UTC on 1 July 2007;
3. REQUESTS the Secretary-General to bring this resolution and its Annex to the attention of the Member Governments and SOLAS Contracting Governments to the 1974 SOLAS Convention.

## ANNEX

### **MANDATORY SHIP REPORTING SYSTEM “IN THE STOREBÆLT (GREAT BELT) TRAFFIC AREA (BELTREP)”**

#### **1 Categories of ships required to participate in the system**

1.1 Ships required to participate in the ship reporting system:

1.1.1 ships with a gross tonnage of 50 and above; and

1.1.2 all ships with an air draught of 15 m or more.

#### **2 Geographical coverage of the system and the number and edition of the reference chart used for delineation of the system**

2.1 The operational area of BELTREP covers the central and northern part of the Storebælt (Great Belt) and the Hatter Barn area north of Storebælt (Great Belt) as shown below and on the chartlet given in Appendix 1. The area includes the routeing systems in the Storebælt (Great Belt) area and at Hatter Barn.

##### 2.1.1 Northern borderlines

Fyn: 55° 36'.00 N, 010° 38'.00 E (Korshavn)

Samsø: 55° 47'.00 N, 010° 38'.00 E (East coast of Samsø)

56° 00'.00 N, 010° 56'.00 E (At sea near Marthe Flak)

Sjælland: 56° 00'.00 N, 011° 17'.00 E (Sjællands Odde)

##### 2.1.2 Southern borderlines

Stignæs: 55° 12'.00 N, 011° 15'.40 E (Gulf Oil's Pier)

Omø: 55° 08'.40 N, 011° 09'.00 E (Ørespids, Omø)

55° 05'.00 N, 011° 09'.00 E (At sea South of Ørespids)

Langeland E: 55° 05'.00 N, 010° 56'.10 E (Snøde Øre)

Langeland W: 55° 00'.00 N, 010° 48'.70 E (South of Korsebølle Rev)

Thurø Rev: 55° 01'.20 N, 010° 44'.00 E (Thurø Rev Light buoy)

2.1.3 The area is divided into two sectors at latitude 55° 35'.00 N; each sector has an assigned VHF channel as shown in appendix 2.

2.2 The reference charts which include the operational areas of BELTREP are Danish charts Nos. 112 (11th edition 2005), 128 (8th edition 2005) 141 (18th edition 2006), 142 (15th edition 2006), 143 (16th edition 2005) and 160 (6th edition 2006) (Datum: World Geodetic System 1984, WGS 84), which provide large-scale coverage of the VTS area.

### **3 Format, content of reports, times and geographical positions for submitting reports, Authority of whom reports should be sent and available services**

3.1 Reports to the VTS authority should be made using VHF voice transmissions. However ships equipped with AIS (automatic identification system) can fulfil certain reporting requirements of the system through the use of AIS approved by the Organization.

3.2 A ship must give a full report when entering the mandatory ship reporting area. The full report may be combined by voice or by non-verbal means. A ship may select, for reason of commercial confidentiality, to communicate that section of the report, which provides information on next port of call by non-verbal means prior to entering the ship reporting area.

#### *3.3 Format*

3.3.1 The ship report shall be drafted in accordance with the format shown in appendix 3. The information requested from ships is derived from the Standard Reporting Format shown in paragraph 2 of the appendix to IMO resolution A.851(20).

#### *3.4 Content*

3.4.1 A full report from a ship to the VTS Authority by voice or by non-verbal means should contain the following information:

- A Name of the ship, call sign and IMO identification number (if available)
- C Position expressed in latitude and longitude
- I Next port of call
- L Route information on the intended track through the Storebælt (Great Belt) area.
- O Maximum present draught
- Q Defects and deficiencies
- U Deadweight tonnage and air draught

3.4.2 A short report by voice from a ship to the VTS authority should contain the following information:

- A Name of the ship, call sign and IMO identification number (if available)
- C Position expressed in latitude and longitude

**Note:** On receipt of a report, operators of the VTS Authority will establish the relation to the ship's position and the information supplied by the facilities available to them. Information on position will help operators to identify a ship. Information on current in specific parts of the VTS area will be provided to the ship.

#### *3.5 Geographical position for submitting reports*

3.5.1 Ships entering the VTS area shall submit a full report when crossing the lines mentioned in paragraph 2.1, 2.1.1 and 2.1.2 or on departure from a port within the VTS area.

3.5.2 Ships passing the reporting line between sector 1 and sector 2 at latitude 55° 35'.00 N. shall submit a short report.

3.5.3 Further reports should be made whenever there is a change in navigational status or circumstance, particularly in relation to item Q of the reporting format.

### 3.6 *Crossing traffic*

3.6.1 Recognizing that ferries crossing Samsø Bælt from Århus, Ebeltoft and Samsø to Odde and Kalundborg generally operate in accordance with published schedules special reporting arrangements can be made on a ship-to-ship basis.

### 3.7 *Authority*

3.7.1 The VTS Authority for the BELTREP is Great Belt VTS.

## **4 Information to be provided to ships and procedures to be followed**

4.1 Ships are required to keep a continuous listening watch in the area.

4.2 BELTREP provides information to shipping about specific and urgent situations, which could cause conflicting traffic movements as well as other information concerning safety of navigation for instance, information about weather, current, ice, water level, navigational problems or other hazards.

4.2.1 Information of general interest to shipping in the area will be given by request or will be broadcasted by BELTREP on VHF channel as specified by the VTS operator. A broadcast will be preceded by an announcement on VHF channel 16. All ships navigating in the area should listen to the announced broadcast.

4.2.2 If necessary BELTREP can provide individual information to a ship particularly in relation to positioning and navigational assistance or local conditions.

4.3 If a ship needs to anchor due to breakdown, low visibility, adverse weather, changes in the indicated depth of water, etc. BELTREP can recommend suitable anchorages and place of refuge within the VTS area. The anchorages are marked on the nautical charts covering the area and are shown on the chartlet in appendix 1.

## **5 Communication required for the system, frequencies on which reports should be transmitted and information reported**

5.1 *Radio communications required for the system is as follows:*

5.1.1 The reports to the VTS authority can be made by voice on VHF radio using:

- In sector 1: Channel 74
- In sector 2: Channel 11

5.1.2 Information of commercial confidential nature may be transmitted by non-verbal means.

5.1.3 Broadcast by BELTREP and individual assistance to ships will be made on channel 10 or on any other available channel as assigned by BELTREP.

5.2 BELTREP is monitoring VHF channels 10, 11, 74 and 16.

5.3 The language used for communication shall be English, using IMO Standard Marine Communication Phrases, where necessary.

## **6 Rules and regulations in force in the area of the system**

### *6.1 Regulations for preventing collisions at sea*

6.1.1 The International Regulations for Preventing Collisions at sea are applicable throughout the operational area of BELTREP.

### *6.2 Traffic separation scheme "Between Korsoer and Sprogø"*

6.2.1 The Traffic separation scheme "Between Korsoer and Sprogø", situated in the narrows of the Eastern Channel between the islands of Fyn and Sjælland, has been adopted by IMO, and rule 10 of the International Regulations for Preventing Collisions at Sea therefore applies.

### *6.3 Traffic separation scheme "At Hatter Barn"*

6.3.1 The separation scheme "At Hatter Barn" situated north of the Storebælt (Great Belt) between the islands of Sjælland and Samsø, has been adopted by IMO, and rule 10 of the International Regulations for Preventing Collisions at Sea therefore applies.

6.3.2 The minimum depth in the traffic separation scheme is 15 metres at mean sea level. Ships with a draught of more than 13 meters should use the deep-water route, which lies west of the traffic separation scheme.

### *6.4 The Great Belt Bridges*

6.4.1 Passage through the marked spans at the West Bridge is allowed only for ships below 1,000 tonnes deadweight and with an air draught of less than 18 metres.

6.4.2 Passage through the traffic separation scheme under the East Bridge is allowed only for ships with an air draught of less than 65 metres. There is a recommended speed limit of 20 knots in the traffic separation scheme.

### *6.5 IMO resolution MSC.138(76)*

6.5.1 IMO resolution MSC.138(76) on Recommendation on Navigation through the entrances to the Baltic Sea, adopted on 5 December 2002, recommends that ships with a draught of 11 metres or more or ships irrespective of size or draught, carrying a shipment of irradiated nuclear fuel, plutonium and high-level radioactive wastes (INF-cargoes) should use the pilotage services locally established by the coastal States.

### *6.6 Mandatory pilotage*

6.6.1 Harbours within the BELTREP area are covered by provisions about mandatory pilotage for certain ships bound for or coming from Danish harbours.

## **7 Shore based facilities to support the operation of the system**

### *7.5.1 System capability*

7.1.1 The control centre is situated at the Naval Regional Centre at Korsør. The VTS system comprises several remote sensor sites. The sites provide surveillance of the VTS area using a combination of radar, radio direction finding, Automatic Identification System (AIS) and electro-optic sensors. An integrated network of seven radar systems integrated with AIS provides surveillance of the VTS area.

7.1.2 All the sensors mentioned will be controlled or monitored by the VTS operators.

7.1.3 There are five operator consoles in the control centre, one of which is intended for system maintenance and diagnostic purposes, which allows these activities to be carried out without disruption of the normal operations. The operator can from each of the consoles control and display the status of the sensors. The VTS centre will at all times be manned with a duty officer and three operators.

7.1.4 Recording equipment automatically stores information from all tracks, which can be replayed. In case of incidents the VTS authority can use records as evidence. VTS operators have access to different ship registers, pilot information and hazardous cargo data.

### *7.2 Radar, electro-optic facilities and other sensors*

7.5.2 Information necessary to evaluate the traffic activities within the operational area of BELTREP is compiled via VTS area remote controlled sensors comprising:

- High-resolution radar systems;
- infra-red sensor systems;
- daylight TV systems;
- VHF communications systems; and
- DF systems.

### *7.3 Radio communication facilities*

7.5.3 Radio communication equipment in the control centre consists of six VHF radios including DSC facilities. The VHF channels used are:

- Channel 74 Working channel
- Channel 11 Working channel
- Channel 10 Broadcast channel and reserve channel

### *7.4 AIS facilities*

7.4.1 BELTREP is linked to the national shore based AIS network and can continually receive messages broadcast by ships with transponders to gain information on their identity and position. The information is displayed as part of the VTS system and is covering the VTS area.

## 7.5 *Personnel qualifications and training*

7.5.4 The VTS centre is staffed with civilian personnel all experienced as officers at a competency level required in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers chapter II, section A-II/1 or A-II/2.

7.5.2 Training of personnel will meet the standards recommended by IMO. Furthermore it will comprise an overall study of the navigation safety measures established in Danish waters and in particular the operational area of BELTREP including a study of relevant international and national provisions with respect to safety of navigation. The training also includes real-time training in simulators.

7.5.5 Refresher training is carried out at least every third year.

## **8 Information concerning the applicable procedures if the communication facilities of shore-based Authority fail**

8.1 The system is designed with sufficient system redundancy to cope with normal equipment failure.

8.2 In the event that the radio communication system or the radar system at the VTS centre breaks down, the communications will be maintained via a standby VHF system. To continue the VTS operation in order to avoid collisions in the bridge area, Great Belt VTS has two options. Either to man the VTS emergency centre at Sprogø or to hand over the responsibility to the VTS Guard vessel, which at all times is stationed in the BELTREP operational area.

8.3 The VTS emergency centre is equipped with radar, VHF radio sets and CCTV cameras.

8.4 The VTS Guard vessel is equipped with VHF and radars with ARPA and AIS. Furthermore, it is equipped with ECDIS, which displays radar targets.

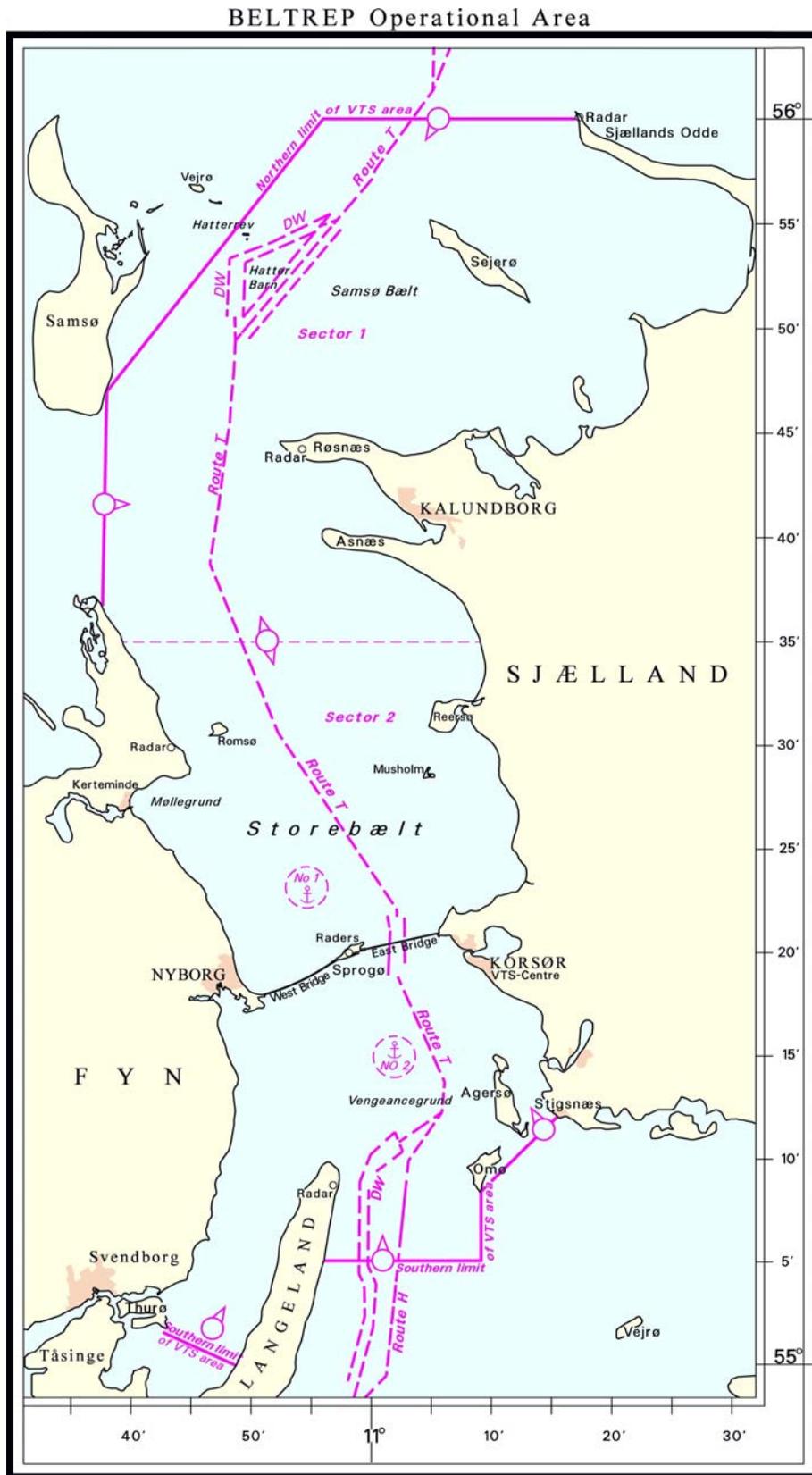
## **9 Measures to be taken if a ship fails to comply with the requirements of the system**

9.1 The objective of the VTS Authority is to facilitate the exchange of information between the shipping and the shore in order to ensure safe passages of the bridges, support safety of navigation and protection of the marine environment.

9.2 The VTS Authority seeks to prevent collisions with the bridges crossing Storebælt (Great Belt). When a ship appears to be on a collision course with one of the bridges, the VTS guard vessel will be sent out to try to prevent such a collision.

9.3 All means will be used to encourage and promote the full participation of ships required to submit reports under SOLAS regulation V/11. If reports are not submitted and the offending ship can be positively identified, then information will be passed to the relevant Flag State Authority for investigation and possible prosecution in accordance with national legislation. Information will also be made available to Port State Control inspectors.

### Appendix 1



## Appendix 2

Assigned VHF channels for sectors in the mandatory reporting system

### IN THE STOREBÆLT (GREAT BELT) AREA (BELTREP)

Sector	VHF Channel	Authority receiving the report
Sector 1	VHF Channel 74	Great Belt VTS
Sector 2	VHF Channel 11	Great Belt VTS

## Appendix 3

Drafting of radio reports to the mandatory ship reporting system  
In the Storebælt (Great Belt) Area (BELTREP)

Designator	Function	Information required
A	Ship	Name of the ship, call sign and IMO identification number (if available)
C	Position	A 4-digit group giving latitude in degrees and minutes suffixed with N and a 5-digit group giving longitude in degrees and minutes suffixed with E
I	Next port of call	The name of the expected destination
L	Route	A brief description of the intended route as planned by the master (see below)
O	Draught	A 2 or 3-digit group giving the present maximum draught in metres (E.g.: 8.7 metres or 10.2 metres)
Q	Defects and deficiencies	Details of defects and deficiencies affecting the equipment of the ship or any other circumstances affecting normal navigation and manoeuvrability
U	Deadweight tonnage and air draught	

### Examples of routes as given under designator L

*Example 1. A southbound ship with a draught of 13.2 metres:*

DW route at Hatter Barn

Route T

DW route off east coast of Langeland

*Example 2. A northbound ship with a draught of 5.3 metres:*

Route H

Route T at Agersø Flak

TSS at Hatter Barn

*Example 3. A small southbound ship:*

Coastal east of Fyn

West Bridge

Between Fyn and Langeland

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