

# ST. VINCENT AND THE GRENADINES

#### MARITIME ADMINISTRATION

#### **CIRCULAR N° SOL 068**

#### **ESCAPE ROUTE SIGNS AND EQUIPMENT LOCATION MARKING**

TO: SHIPOWNERS, SHIPS' OPERATORS, MANAGING

**COMPANIES, MASTERS AND RECOGNIZED** 

**ORGANIZATIONS** 

APPLICABLE TO: All ships constructed on or after 01 January 2019,

and which undergo repairs, alterations,

modifications and outfitting within the scope of SOLAS Chapters II-2 and/or III as applicable, on or

after 01 January 2019.

**EFFECTIVE AS FROM:** 1<sup>st</sup> January 2019

25<sup>th</sup> March 2019

The IMO assembly in its 30<sup>th</sup> session has adopted resolution A.1116(30) regarding Escape Route Signs and Equipment Location Markings. The resolution harmonizes the requirement of SOLAS regulations II-2/13, II-2/15, III/9, III/11, III/20 taking into account the ISO standard 24409.

These signs and markings are applicable to ships constructed on or after 1<sup>st</sup> January 2019 and existing ships undergoing repairs, alterations, modifications and outfitting within the scope of SOLAS chapter II-2 and/or III as applicable, on or after 1<sup>st</sup> January 2019.

The resolution includes, in Tables 1 and 2, updated signs and graphical symbols that should be used to mark the location of:

- Means of escape (Table 1, MES);
- Life-saving systems (Table 1, LSS); and
- Mandatory action signs for launching lifesaving equipment (Table 2).

These are required to comply with the mandatory requirements of SOLAS regulations II-2/13.7 (ro-ro passenger ship escape routes), III/9 (LSA operating instructions), III/11 (survival craft muster and embarkation arrangements) and III/20.10 (marking of LSA stowage locations).

The Resolution also includes non-mandatory signs for:

- emergency equipment signs which provide use and location of first aid facilities and portable safety equipment (Table 1, EES);
- fire-fighting equipment signs which provide use and location of fire-fighting equipment (Table 1, FES);
- prohibition signs which provide prohibited actions (Table 1, PSS);
- hazard warning signs which provide identification of hazards to avoid (Table 1, WSS) and
- mandatory action signs which provide obligatory notices and instructions (Table 1, MSS).

The Resolution also contains, in Table 3, symbols that should be used in conjunction with IMO Resolution A.952(23) when preparing the shipboard fire control plans required by SOLAS regulation II-2/15.2.4. With the exception of the symbols for 'Safety Plan' and 'Fire and Safety Plan', the symbols are the same as those already contained in IMO Resolution A.953(23).

All interested parties are requested to refer attached IMO resolution for details and ensure that while preparing fire control plans new resolution is used in conjunction with resolution A.952(23) on Graphical symbols for fire control plans.

Annex:

IMO resolution A.1116(30)

Resolution A.1116(30) Adopted on 5 December 2017 ESCAPE ROUTE SIGNS AND EQUIPMENT LOCATION MARKINGS



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ASSEMBLY 30th session Agenda item 9 A 30/Res.1116 6 December 2017 Original: ENGLISH

# Resolution A.1116(30)

# Adopted on 5 December 2017 (Agenda item 9)

# **ESCAPE ROUTE SIGNS AND EQUIPMENT LOCATION MARKINGS**

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety and the prevention and control of marine pollution from ships,

BEARING IN MIND the requirements of regulations II-2/15.2.4 (Fire control plans), II-2/13.3.2.5.1 (Marking of escape routes), II-2/13.7 (Additional requirements for ro-ro passenger ships), III/9 (Operating instructions), III/11 (Survival craft muster and embarkation arrangements) and III/20.10 (Marking of stowage locations) of the International Convention for the Safety of Life at Sea (SOLAS), 1974, as amended,

RECALLING resolutions A.760(18) on *Symbols related to life-saving appliances and arrangements*, as amended by resolution MSC.82(70), and A.952(23) on *Graphical symbols for shipboard fire control plans*,

RECOGNIZING the need for uniform international symbols to indicate the location of emergency equipment as well as muster stations and that the Assembly had urged Contracting Governments to ensure that the symbols annexed to the aforementioned Assembly resolutions were used, where appropriate,

HAVING NOTED that, through the *Shipboard escape route signs and emergency equipment location markings* (MSC.1/Circ.1553), Contracting Governments had been invited to bring standard ISO 24409-2:2014, which generally conforms to the corresponding symbols set out in the annex to resolution A.760(18) on *Symbols related to life-saving appliances and arrangements*, as amended, and in the annex to resolution A.952(23) on *Graphical symbols for fire control plans*, to the attention of ship designers, shipbuilders, shipowners, ship operators, ship masters, shore-based firefighting personnel and other parties concerned, so that they might use it, on a voluntary basis, for shipboard signage, in compliance with the relevant requirements of SOLAS chapters II-2 and III, pending the adoption of the revised resolution,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee, at its ninety-eighth session,



# Resolution A.1116(30) Adopted on 5 December 2017 ESCAPE ROUTE SIGNS AND EQUIPMENT LOCATION MARKINGS

A 30/Res.1116 Page 2

- 1 ADOPTS the *Escape route signs and equipment location markings*, set out in the annex to the present resolution;
- 2 URGES Contracting Governments to bring the aforementioned escape route signs and equipment location markings to the attention of shipbuilders, shipowners, ship operators, shipmasters, shore-based firefighting personnel and other parties concerned with the safety of life at sea for their use within the framework of SOLAS chapters II-2 and III;
- 3 REQUESTS the Maritime Safety Committee to keep this resolution under review and to amend it as necessary;
- INVITES Contracting Governments to note that these escape route signs and equipment location markings should take effect on ships constructed on or after 1 January 2019 or ships which undergo repairs, alterations, modifications and outfitting within the scope of SOLAS chapters II-2 and/or III, as applicable, on or after 1 January 2019, and that they should be used, as appropriate, in combination with resolution A.952(23) for the preparation of the shipboard fire control plans required by SOLAS regulation II-2/15.2.4.

#### Annex<sup>1</sup>

#### **ESCAPE ROUTE SIGNS AND EQUIPMENT LOCATION MARKINGS**

IMPORTANT – The colours represented in this annex can be neither viewed on screen nor printed as true representations. Although the signs and symbols in this annex have been reproduced to correspond (with an acceptable tolerance as judged by the naked eye) to the requirements of standard ISO 3864-4, it is not intended that the signs and symbols shown in this annex be used for colour matching.

For a definitive version of all safety symbols in this annex, please consult standard ISO 7010 and the ISO Online Browsing Platform (http://www.iso.org/obp/ui/). For a definitive version of all fire control symbols in this annex, please consult standard ISO 17631. These are the source documents from which to create safety and fire control plans signs.

#### 1 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3864 (all parts), Graphical symbols – Safety colours and safety signs

ISO 7010, Graphical symbols – Safety colours and safety signs – Registered safety signs

ISO 17631, Ships and marine technology – Shipboard plans for fire protection, life-saving appliances and means of escape

ISO 17724, Graphical symbols – Vocabulary

ISO 24409-1, Ships and marine technology – Design, location, and use of shipboard safety signs, safety-related signs, safety notices and safety markings – Part 1: Design principles

#### 2 Terms and definitions

For the purposes of this document, the terms and definitions given in standards ISO 17724, ISO 24409-1, and the following apply.

# 2.1 Fire control signs

Signs for specialists, used to identify and locate fire control equipment, not designed according the rules for safety signs.

Note 1 to entry: These signs are related to the symbols in standard ISO 17631; see 3.1 h) below.

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This annex is based on the standard ISO 24409-2:2014.

### 2.2 Image content

Written description of the elements of a graphical symbol or safety sign and their relative disposition.

[ISO 17724:2003, 38]

#### 2.3 Referent

Idea or object that a graphical symbol is intended to represent.

[ISO 17724: 2003, 61]

# 2.4 Safety sign

Sign giving a general safety message, obtained by a combination of a colour and geometric shape and which, by the addition of a graphical symbol, gives a particular safety message.

# 3 Categorization of shipboard signs

- 3.1 Signs in this standard are categorized according to their function as follows:
  - a) **MES** means of escape signs which provide escape route identification.
  - b) **EES** emergency equipment signs which provide use and location of first aid facilities and portable safety equipment.
  - c) **LSS** life-saving systems and appliances signs which provide use and location of life-saving systems and appliances.
  - d) **FES** fire-fighting equipment signs which provide use and location of fire-fighting equipment.
  - e) **PSS** prohibition signs which provide prohibited actions.
  - f) **WSS** hazard warning signs which provide identification of hazards to avoid.
  - g) **MSS** mandatory action signs which provide mandatory notices and instructions.
  - NOTE The PSS, WSS and MSS categories are based on the P, W and M categories of standard ISO 7010.
  - h) **SIS** safety and operating instructions for trained personnel.
- 3.2 Table 1 summarizes the standardized shipboard safety signs used in workplaces and public areas in terms of functional category, referent number, referent, graphical symbol as well as geometric shape and colour.

Table 1 — Summary of safety signs for shipboard use

CATEGORY						
MES	EES	LSS	FES	PSS	WSS	MSS
Means of Escape Signs	Emergency Equipment Signs	Lifesaving Signs	Fire-fighting Equipment Signs	Prohibition Signs	Warning Signs	Mandatory Signs
MES001 (ISO 7010- E032) Shipboard assembly station	EES001 (ISO 7010- E003) First Aid	LSS001 (ISO 7010- E036) Lifeboat	FES001 (ISO 7010- F001) Fire extinguisher	PSS001 (ISO 7010-P001) General prohibition	WSS001 (ISO 7010- W001) General warning	MSS001 (ISO 7010- M001) General Mandatory action
MES002 (ISO 7010- E001) Emergency exit (left hand)	EES002 (ISO 7010- E004) Emergency telephone	LSS002 (ISO 7010- E037) Rescue boat	FES002 (ISO 7010- F002) Fire hose reel	PSS002 (ISO 7010- P002) No smoking	WSS002 (ISO 7010- W002) Warning: Explosive material	MSS002 (ISO 7010- M002) Refer to instruction manual or booklet
MES003 (ISO 7010- E002) Emergency exit (right hand)	EES003 (ISO 7010- E011) Eyewash station	LSS003 (ISO 7010- E038) Liferaft	FES003 (ISO 7010- F004) Collection of firefighting equipment	PSS003 (ISO 7010-P003) No open flame; fire, open ignition source and smoking prohibited	WSS003 (ISO 7010- W003) Warning: Radioactive material or ionizing radiation	MSS003 (ISO 7010- M003) Wear ear protection

CATEGORY							
MES	EES	LSS	FES	PSS	WSS	MSS	
MES004 (ISO 7010- E033) Door slides right to open	EES004 (ISO 7010- E012) Safety shower	LSS004 (ISO 7010- E039) Davit- launched liferaft	FES004 (ISO 7010- F005) Fire alarm call point	PSS004 (ISO 7010- P004) No thoroughfar e	WSS004 (ISO 7010- W004) Warning: Laser beam	MSS004 (ISO 7010- M004) Wear eye protection	
MES005 (ISO 7010- E034) Door slides left to open	EES005 (ISO 7010- E013) Stretcher	LSS005 (ISO 7010- E040) Lifebuoy	FES005 (ISO 7010- F008) Fixed fire extinguishing battery	PSS005 (ISO 7010- P005) Not drinking water	WSS005 (ISO 7010- W005) Warning: Non-ionizing radiation	MSS005 (ISO 7010- M005) Connect an earth terminal to the ground	
MES 006 (ISO 7010- E018) Turn anti- clockwise to open	EES006 (ISO 7010- E027) Medical grab bag	LSS006 (ISO 7010- E041) Lifebuoy with line	FES006 (ISO 7010- F009) Wheeled fire extinguisher	PSS006 (ISO 7010-P006) No access for fork lift trucks and other industrial vehicles	WSS006 (ISO 7010- W006) Warning: Magnetic field	MSS006 (ISO 7010- M006) Disconnect mains plug from electrical outlet	

CATEGORY							
MES	EES	LSS	FES	PSS	WSS	MSS	
MES007 (ISO 7010- E019) Turn clockwise to open	EES007 (ISO 7010- E028) Oxygen resuscitator	LSS007 (ISO 7010- E042) Lifebuoy with light	FES007 (ISO 7010- F010) Portable foam applicator unit	PSS007 (ISO 7010-P007) No access for people with active implanted cardiac devices	WSS007 (ISO 7010- W007) Warning: Floor level obstacle	MSS007 (ISO 7010- M007) Opaque eye protection must be worn	
MES008 (ISO 7010- E057) Door opens by pulling on left-hand side	EES008 (ISO 7010- E029) Emergency escape breathing device	LSS008 (ISO 7010- E043) Lifebuoy with line & light	FES008 (ISO 7010- F011) Water fog applicator	PSS008 (ISO 7010- P008) No metallic articles or watches	WSS008 (ISO 7010- W008) Warning: Drop (fall)	MSS008 (ISO 7010- M008) Wear safety footwear	
MES009 (ISO 7010- E058) Door opens by pulling on the right- hand side	EES009 (ISO 7010- E009) Doctor	LSS008.1 Lifebuoy with light and smoke	FES009 (ISO 7010- F012) Fixed fire extinguishing installation	PSS009 (ISO 7010- P010) Do not touch	WSS009 (ISO 7010- W009) Warning: Biological hazard	MSS009 (ISO 7010- M009) Wear protective gloves	

CATEGORY							
MES	EES	LSS	FES	PSS	WSS	MSS	
MES 010 (ISO 7010- E023) Push door on the right- hand side to open	EES010 (ISO 7010- E010) Automated external heart defibrillator	LSS009 (ISO 7010- E044) Lifejacket	FES010 (ISO 7010- F013) Fixed fire extinguishing bottle	PSS010 (ISO 7010- P011) Do not extinguish with water	WSS010 (ISO 7010- W010) Warning: Low temperature	MSS010 (ISO 7010- M010) Wear protective clothing	
MES 011 (ISO 7010- E022) Push door on the left- hand side to open	EES011 Safety Equipment	LSS010 (ISO 7010- E045) Child's lifejacket	FES011 (ISO 7010- F014) Remote release station	PSS011 (ISO 7010- P013) No activated mobile phones	WSS011 (ISO 7010- W011) Warning: Slippery surface	MSS011 (ISO 7010- M011) Wash your hands	
	EES012 (ISO 7010- E031) Shipboard general alarm	LSS011 (ISO 7010- E046) Infant's lifejacket	FES012 (ISO 7010- F015) Fire monitor	PSS012 (ISO 7010- P014) No access for people with metallic implants	WSS012 (ISO 7010- W012) Warning: Electricity	MSS012 (ISO 7010- M012) Use handrail	
	EES013 (ISO 7010- E008) Break to obtain access	LSS012 (ISO 7010- E047) Search and rescue transponder		PSS013 (ISO 7010- P015) No reaching in	WSS013 (ISO 7010- W013) Warning: Guard dog	MSS013 (ISO 7010-M013) Wear a face shield	

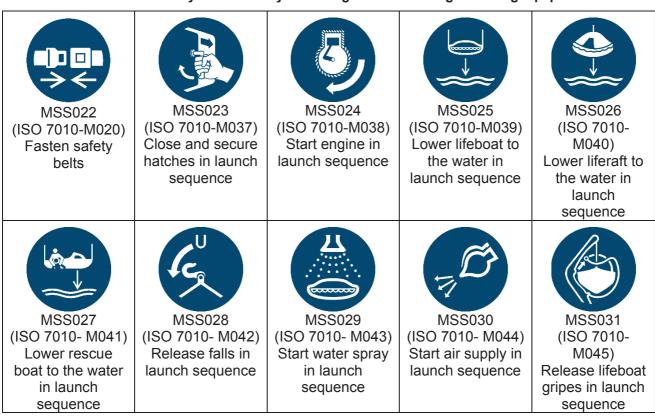
CATEGORY							
MES	EES	LSS	FES	PSS	WSS	MSS	
		LSS013 (ISO 7010- E048) Survival craft distress signal		PSS014 (ISO 7010- P017) No pushing	WSS014 (ISO 7010- W014) Warning: Forklift trucks and other industrial vehicles	MSS014 (ISO 7010- M014) Wear head protection	
		LSS014 (ISO 7010- E049) Rocket parachute flare		PSS015 (ISO 7010- P018) No sitting	WSS015 (ISO 7010- W015) Warning: Overhead load	MSS015 (ISO 7010- M015) Wear high visibility clothing	
		LSS015 (ISO 7010- E050) Line- throwing appliance		PSS016 (ISO 7010- P019) No stepping on surface	WSS016 (ISO 7010- W016) Warning: Toxic material	MSS016 (ISO 7010- M016) Wear a mask	
		LSS016 (ISO 7010- E051) Two-way VHF radio- telephone apparatus		PSS017 (ISO 7010- P020) Do not use lift in the event of fire	WSS017 (ISO 7010- W017) Warning: Hot surface	MSS017 (ISO 7010- M017) Wear respiratory protection	

	CATEGORY								
MES	EES	LSS	FES	PSS	WSS	MSS			
		LSS017 (ISO 7010- E052) Emergency position indicating radio beacon		PSS018 (ISO 7010- P021) No dogs	WSS018 (ISO 7010- W018) Warning: Automatic start-up	MSS018 (ISO 7010- M018) Wear a safety harness			
		LSS018 (ISO 7010- E053) Embarkation ladder		PSS019 (ISO 7010- P022) No eating or drinking	WSS019 (ISO 7010- W019) Warning: Crushing	MSS019 (ISO 7010- M019) Wear a welding mask			
		LSS019 (ISO 7010- E054) Marine evacuation slide		PSS020 (ISO 7010- P023) Do not obstruct	WSS020 (ISO 7010- W020) Warning: Overhead obstacle				
		LSS020 (ISO 7010- E055) Marine evacuation chute		PSS021 (ISO 7010- P024) Do not walk or stand here					

	CATEGORY									
MES	EES	LSS	FES	PSS	WSS	MSS				
		LSS021 (ISO 7010- E056) Survival clothing			WSS021 (ISO 7010- W021) Warning: Flammable material					
		LSS022 (ISO 7010- E035) Liferaft Knife			WSS022 (ISO 7010- W022) Warning: Sharp element					

3.3 Signs in table 2 may be displayed together to form a sequence of critical mandatory actions to safely launch a lifeboat, rescue boat, or liferaft.

Table 2 — Summary of mandatory action signs for launching lifesaving equipment



3.4 Table 3 summarizes the SIS catalogue primarily adapted from resolution A.952(23) and standard ISO 17631 with the exception of the SIS signs listed in paragraph 3.1. Table 3 summarizes the standardized shipboard fire control plan signs used in workplaces and public areas to assist trained persons in the operation and management of shipboard fire control systems. The standardized symbols used in these signs are in accordance with the symbols found in the standard ISO 17631.

Table 3 — Summary of shipboard fire control plan signs (SIS) for shipboard use

	<u> </u>		-			
Fire Plan  SIS001 Fire control plan	SIS009 Remote control for fire doors	SIS017 Closing device for ventilation inlet or outlet (machinery spaces)	SIS025 Emergency fire pump	SIS033 International shore connection	SIS041 Inert gas installation	SIS049 Emergency source of electrical power (battery)
Safety Plan SIS002 Safety plan	SIS010 Fire damper (accommodation and service spaces)	SIS018 Closing device for ventilation inlet or outlet (cargo spaces)	SIS026 Fuel pump(s) remote shut-off	SIS034 Fire hydrant	SIS042 Space or group of spaces protected by a water fire-extinguishing system	SIS050 Emergency switchboard
Plan SIS003 Fire and safety plan	SIS011 Fire damper (machinery spaces)	SIS019 Remote control for closing device for ventilation inlet and outlet (accommodatio n and service space)	SIS027 Lube oil pump(s) remote shut-off	SIS035 Fire main section valve	SIS043 Space or group of spaces protected by a foam fire-extinguishing system	SIS051 Air compressor for breathing devices
SIS004 Ventilation remote control or shut-off (accommodation and service spaces)	SIS012 Fire damper (cargo spaces)	SIS020 Remote control for closing device for ventilation inlet and outlet	SIS028 Remote control for bilge pump(s)	SIS036 Sprinkler- section valve	SIS044 Space or group of spaces protected by a gas other than CO <sub>2</sub> fire-	SIS052  Control panel for fire detection and alarm system

		(machinery spaces)			extinguishing system	
SIS005 Ventilation remote control or shut-off (machinery spaces)	SIS013 Remote control for fire damper (accommodation and service spaces)	SIS021 Remote control for closing device for ventilation inlet and outlet (cargo spaces)	SIS029 Remote control for emergency bilge pump	SIS037 Powder-section valve	SIS045 Space or group of spaces protected by a powder fire-extinguishing system	
SIS006 Ventilation remote control or shut-off (cargo spaces)	SIS014 Remote control for fire damper (machinery spaces)	SIS022 Remote control for fire pump(s)	SIS030 Remote control for fuel oil valves	SIS038 Foam-section valve	SIS046 Space or group of spaces protected by a CO <sub>2</sub> fire-extinguishing system	
SIS007 Remote control for skylight	SIS015 Remote control for fire damper (cargo spaces)	SIS023 Fire pump(s)	SIS031 Remote control for lube oil valves	SIS039 High expansion foam supply trunk (outlet)	SIS047 Space or group of spaces protected by a sprinkler or high-pressure water fire-extinguishing system	
SIS008 Remote control for watertight doors	SIS016 Closing device for ventilation inlet or outlet (accommodation and service spaces)	SIS024 Remote control for emergency fire pump or fire pump supplied by the emergency source of power	SIS032 Remote control for fire pump valves	* * * * *  SIS040 Water spray system valves	SIS048 Emergency source of electrical power (generator)	

Resolution A.1116(30) Adopted on 5 December 2017 ESCAPE ROUTE SIGNS AND EQUIPMENT LOCATION MARKINGS