#### Title

### MSC.1/Circ.1368 22 June 2010

## INTERIM CLARIFICATIONS OF SOLAS CHAPTER II-2 REQUIREMENTS REGARDING INTERRELATION BETWEEN THE CENTRAL CONTROL STATION, NAVIGATION BRIDGE AND SAFETY CENTRE

1 The Maritime Safety Committee, at its eighty-seventh session (12 to 21 May 2010), having considered the proposal by the Sub-Committee on Fire Protection, at its fifty-fourth session, approved the Interim Clarifications of SOLAS chapter II-2 requirements regarding interrelation between the central control station, navigation bridge and safety centre, set out in the annex, to provide additional guidance for the uniform implementation of SOLAS regulation II-2/23 which was adopted by resolution MSC.216(82) and are due to enter into force on 1 July 2010.

2 Member Governments are invited to bring the annexed Interim Clarifications to the attention of passenger ship owners, shipbuilders, ship designers and other parties concerned.

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#### ANNEX

# INTERIM CLARIFICATIONS OF SOLAS CHAPTER II-2 REQUIREMENTS REGARDING INTERRELATION BETWEEN THE CENTRAL CONTROL STATION, NAVIGATION BRIDGE AND SAFETY CENTRE

1 The functionality of the safety systems stated in SOLAS regulation II-2/23.6 should be available from the safety centre systems under any envisaged emergency situation (other than casualty affecting the safety centre itself) and should be efficiently managed from the safety centre without distracting the bridge team\*. The functionality of these systems within the safety centre is specified in appendix 1.

\* For the purpose of these clarifications the term "bridge team" identifies the team on the bridge in charge of the navigation of the ship, i.e. performing navigational duties.

2 The safety centre may or may not be part of the navigation bridge. The safety centre may be considered as part of the navigation bridge when it is arranged as examples indicated in diagrams (a), (b) and (c) of the illustration in appendix 4. In case of arrangements such as in diagram (d) in appendix 4, the safety centre should be considered as not being part of the navigation bridge.

- 3 Where the safety centre is part of the bridge:
  - .1 it is acceptable to consider nearby members of the bridge team as being sufficient to make the safety centre "continuously manned":
  - .2 alarms in the safety centre should be audible at the conning position for responsible members of the bridge team to make them aware of an alarm condition; and
  - .3 at least one member of the on-watch bridge team should be properly trained and authorized to take appropriate initial and interim actions in the event of an emergency or in response to an alarm, until the safety centre is fully manned.
- 4 Where the safety centre is not part of the navigation bridge, it may or may not be continuously manned.
  - 4.1 When the safety centre is continuously manned the functionality of the systems listed in appendix 2 should be duplicated on the Navigating Bridge.
  - 4.2 When the safety centre is not continuously manned, there should be the capability on the navigation bridge to alert the bridge team of developing shipboard emergencies, to respond to them appropriately by taking initial and interim actions and to allow necessary monitoring functions after the safety centre is manned by properly trained persons. Therefore, the functionality of the systems listed in appendix 3 should be duplicated on the navigation bridge.
- 5 The hierarchy of control between the navigation bridge and safety centre should be specified within the shipboard safety management system. In this respect:
  - .1 an adequate number of properly trained personnel should be available for immediate response to the safety centre in an emergency while maintaining an effective navigational watch;
  - .2 the duties of the safety centre personnel and navigation bridge personnel should not overlap; and
  - .3 coordination of emergency management actions and communications should be assured through established emergency procedures, harmonized with the onboard decision support system required by SOLAS regulation III/29.
- 6 In carrying out the various functions on the navigation bridge and safety centre an integrated computer technology may be used.
- 7 When such a system is utilized:
  - .1 the hierarchy of control of the various computer stations and locations should be clearly documented;
  - .2 the computer system and programming should be designed to assure that failure of the system does not cause the loss of any of the ship's safety systems; and
  - .3 the operational status and failures of the computer system or its communications should be indicated.
- 8 Controls and monitoring of safety and security related systems other than those listed under SOLAS regulation II-2/23.6 may also be located in the safety centre.

#### APPENDIX 1

#### FUNCTIONALITY OF SYSTEMS TO BE LOCATED IN ONBOARD SAFETY CENTRE FUNCTIONAL REQUIREMENTS

System	Operation and control	Monitoring	Alarm
Powered ventilation systems	X	X	X*
Fire doors	X	X	

General emergency alarm system	X		
Public address system	Х		
Electrically-powered evacuation guidance systems	X		
Watertight and semi-watertight doors	X	X	X
Indicators for shell doors, loading doors and other closing appliances		Х	Х
Water leakage of inner/outer bow doors, stern doors and any other shell door		Х	Х
Television surveillance system		X	
Fire detection and alarm system	X	X	X
Fixed fire-fighting local application system(s)		X	X
Sprinkler and equivalent systems		X	X
Water-based systems for machinery spaces		X	X
Alarm to summon the crew	X		
Atrium smoke extraction system	X		
Flooding detection systems			X
Fire pumps and emergency fire pumps	X	X	

<sup>\*</sup>For ro-ro ships, SOLAS regulation II-2/20.3.1.3 applies.

#### **APPENDIX 2**

# DUPLICATION ON NAVIGATING BRIDGE OF FUNCTIONALITY OF SYSTEMS LOCATED IN CONTINUOUSLY MANNED ONBOARD SAFETY CENTRE

System	Operation and control	Monitoring	Alarm
Powered ventilation systems			X*
Fire doors		X	
General emergency alarm system	X		
Public address system	X		
Watertight and semi-watertight doors	Х	X	X
Indicators for shell doors, loading doors and other closing appliances (ro-ro ships)		Х	Х
Water leakage of inner/outer bow doors, stern doors and any other shell door (ro-ro ships)		Х	х
Television surveillance system (ro-ro ships)		Х	
Fire detection and alarm system	X**	X	X
Sprinkler and equivalent systems		X	X
Alarm to summon the crew	X		
Flooding detection systems			X
Fire pump (ships less than 1,000 gross tonnage)***	X		
Fire doors leading to or from the special category spaces (ro-ro ships)		Х	Х
Ventilation systems for vehicle, special category and ro-ro spaces		Х	Х

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#### **APPENDIX 3**

# DUPLICATION ON NAVIGATION BRIDGE OF FUNCTIONALITY OF SYSTEMS LOCATED IN ONBOARD SAFETY CENTRE NOT CONTINUOUSLY MANNED

System	Operation and control	Monitoring	Alarm
Powered ventilation systems	Х		X*
Fire doors	X**	Х	
General emergency alarm system	X		
Public address system	Х		
Watertight and semi-watertight doors	Х	Х	Х
Indicators for shell doors, loading doors and other closing appliances		Х	Х
Water leakage of inner/outer bow doors, stern doors and any other shell door		Х	Х
Television surveillance system		Χ	
Fire detection and alarm system	X***	Χ	Х
Sprinkler and equivalent systems		Х	Х
Alarm to summon the crew	Х		
Flooding detection systems			Х
Fire pump (ships less than 1,000 gross tonnage) ****	Х		

<sup>\*</sup> For ro-ro ships, SOLAS regulation II-2/20.3.1.3 applies.

<sup>\*\*</sup> Activation of the fire alarm should be possible from the navigating bridge.

 $<sup>\</sup>ensuremath{^{***}}$  Unless the automatic start of one fire pump is provided.

Fire doors leading to or from the special category	v	v
spaces (ro-ro ships)	^	^

<sup>\*</sup> For ro-ro ships, SOLAS regulation II-2/20.3.1.3 applies.

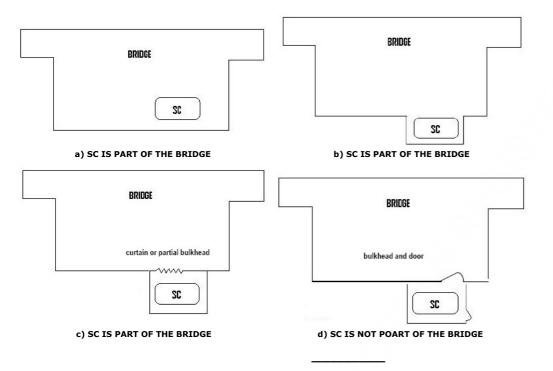
the management of the emergency situation is transferred to the safety centre. This implies duplication  ${\sf S}$ 

of the systems and a function to transfer the commands and controls (bridge  $\leftrightarrow$  safety centre).

- \*\*\* Activation of the fire alarm is to be possible from the navigation bridge.
- $\ensuremath{^{****}}$  Unless the automatic start of one fire pump is provided.

#### **APPENDIX 4**

# ILLUSTRATIONS AS TO WHEN A SAFETY CENTRE MAY OR MAY NOT BE CONSIDERED AS PART OF THE NAVIGATION BRIDGE



<sup>\*\*</sup> Operation and control of the systems from the navigation bridge when the safety centre is unmanned, until