

## **Explanatory Statement**

### **Marine Order 27 (Safety of navigation and radio equipment) 2016 (Order 2016/9)**

#### **Authority**

1. Subsection 187(1) of the *Navigation Act 2012* (the Navigation Act) provides that the regulations may prescribe matters for reports of dangers to navigation.
2. Paragraph 309(2)(a) of the Navigation Act provides that the regulations may prescribe the entries to be made in an official logbook and when they must be made.
3. Subsection 339(1) of the Navigation Act authorises the Governor-General to make regulations necessary or convenient for carrying out or giving effect to the Navigation Act.
4. Paragraph 339(2)(b) of the Navigation Act provides that the regulations may provide for machinery and equipment to be carried on board vessels including for sending or receiving distress, urgency and other signals, radio installations, radio navigational aids and communication equipment, and compasses.
5. Paragraph 339(2)(c) of the Navigation Act provides that the regulations may provide for the operation, maintenance, checking and testing of this machinery and equipment.
6. Paragraph 339(2)(g) of the Navigation Act provides that the regulations may provide for the equipment to be carried on vessels and measures to be carried out for the saving of life at sea.
7. Paragraph 339(2)(l) of the Navigation Act provides that the regulations may provide for logbooks.
8. Paragraph 339(2)(m) of the Navigation Act provides that the regulations may provide for records for compliance with the Act.
9. Paragraph 340(1)(a) of the Navigation Act provides that the regulations may give effect to the International Convention for the Safety of life at Sea (SOLAS).
10. Subsection 341(1) of the Navigation Act provides that the regulations may provide for the imposition of penalties for a contravention of a provision of the regulations.
11. Subsection 342(1) of the Navigation Act allows the Australian Maritime Safety Authority (AMSA) to make orders for any matter in the Act for or in relation to which provision may be made by regulations.
12. Subsection 33(3) of the *Acts Interpretation Act 1901* provides that a power in an Act to make a legislative instrument includes the power to repeal or amend the instrument, subject to any conditions that apply to the initial power.
13. This Order is a legislative instrument for the *Legislation Act 2003*.

#### **Purpose**

14. This Order provides for navigation safety measures and equipment, radio equipment, and danger, urgency and distress signals and messages. It also gives effect to Chapter IV of SOLAS (Radiocommunications), paragraph 7 of Regulation 10 and paragraph 7 of Regulation 11 of Chapter V of SOLAS (Safety of navigation), and Regulations 15 to 21, 24, 27, 28 and 29, and 31 to 35 of Chapter V of SOLAS.

#### **Overview**

15. This Order specifies a number of measures that implement Australia's obligations under SOLAS in relation to navigation safety. These include voyage planning, ship

reporting systems, cooperation with search and rescue services and requirements about steering systems. The Order implements SOLAS requirements for navigational equipment, bridge design, radio installations, long range tracking of vessels, nautical charts and other equipment.

16. The Order sets out the specifications for radio equipment consistent with SOLAS requirements and provides for safety signals, danger messages, urgency signals and distress messages. The Order also provides for life-saving signals and creates offences for the misuse of distress and safety signals.

17. The Order replaces *Marine Order 27 (Radio equipment) 2009* following a review of the Order. When the Order commences, Schedule 13 of *Marine Order 4 (Transitional modifications) 2013* will cease to have effect because that schedule modifies the previous issue of this Order.

## **Consultation**

18. A draft of this Order was placed on AMSA's website on 23 March 2016 for stakeholders to consider and provide feedback by 30 April 2016. Around 160 stakeholders including shipping and cargo industry bodies, maritime unions and relevant government agencies were contacted by email and invited to comment. No submissions were received. After the consultation period had closed, AMSA received ten submissions concerning compass adjuster requirements. AMSA took these comments into account and prepared a further draft of the Order. AMSA directly consulted with these stakeholders from 14 to 17 June on the further draft and the proposed changes were acceptable to these stakeholders.

19. The Office of Best Practice Regulation (OBPR) was also consulted and considered that changes made by the Order have regulatory impacts of a minor or machinery nature and no regulation impact statement was required. The OBPR reference number is 20369.

## **Documents incorporated by reference**

20. This Order incorporates the following documents by reference:

- Chapter IV of SOLAS (Radiocommunications)
- Paragraph 7 of Regulation 10 and paragraph 7 of Regulation 11 of Chapter V of SOLAS (Safety of navigation)
- Regulations 15 to 21, 24, 27, 28 and 29, and 31 to 35 of Chapter V of SOLAS,
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (the STCW Convention)
- Seafarers' Training, Certification and Watchkeeping Code (the STCW Code)
- IEC 60533:2015 *Electrical and electronic installations in ships – Electromagnetic compatibility (EMC) – Ships with a metallic hull*
- IEC 60945:2002 *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*
- Radio Regulations, annexed to the International Telecommunication Convention, as in force from time to time (Radio Regulations)
- ARPANSA Radiation Protection Standard *Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300GHz* (Radiation Protection Series Publication No.3), as amended from time to time

- *Revised Guidelines for the onboard operational use of shipborne Automatic Identification Systems (AIS)*, adopted by International Maritime Organization (IMO) Resolution A.1106(29), as amended from time to time
- IMO Circular MSC/Circ.891 *Guidelines for the onboard use and application of computers*

21. The IMO resolutions listed in Schedule 2 of this Order are also incorporated by reference, as amended from time to time. Those documents are listed in Annex 1 to this explanatory statement.

22. SOLAS, the STCW Convention and the STCW Code are of treaty status. SOLAS and the STCW Convention are incorporated as in force from time to time (see definition of SOLAS in *Marine Order 1 (Administration) 2013*, and definitions of Safety Convention and STCW Convention in section 14 of the Navigation Act.). The STCW Code is incorporated as adopted by resolution of the 2010 Conference of the Parties to the STCW Convention — see definition of STCW Code in *Marine Order 1 (Administration) 2013*. The original conventions and any amendments in force (including the Manila amendments to the STCW Convention) and the STCW Code can be found in the Australian Treaties Series accessible from the Australian Treaties Library on the AustLII website at <http://www.austlii.edu.au>.

23. International Electrotechnical Commission (IEC) standards mentioned in the Order are available for purchase from the IEC website at <https://webstore.iec.ch/home> or from the SAI Global website at <https://www.saiglobal.com/>. Persons having difficulty obtaining a copy of an IEC standard can contact AMSA. Contact details for AMSA are on the AMSA website at <http://www.amsa.gov.au>.

24. The Radio Regulations are available at the International Telecommunications Union website: <http://www.itu.int>.

25. A copy of the Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA) Radiation Protection Standard Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300GHz (Radiation Protection Series Publication No.3) is available on the ARPANSA website at <http://www.arpansa.gov.au/index.htm>.

26. Information on obtaining access to IMO resolutions and circulars is available on the Marine Orders link on the AMSA website at <http://www.amsa.gov.au>, where AMSA provides information on how to navigate the IMO website to download documents. IMO documents may also be purchased from the IMO — see the IMO website at <http://www.imo.org/publications>.

## **Commencement**

27. This Order commences on 1 July 2016.

## **Contents of this instrument**

28. Section 1 sets out the name of the Order.

29. Section 1A provides for the commencement of the Order.

30. Section 1B repeals the previous issue of the Order.

31. Section 2 states the purpose of the Order, which is to provide for safety of navigation, emergency procedures and atmosphere sampling and measuring, and to give effect to regulations of SOLAS dealing with construction, life-saving appliances and arrangements, safety of navigation and special measures to enhance maritime safety.

32. Section 3 sets out the powers in the Navigation Act that enable the Order to be made.

33. Section 4 sets out definitions of terms used in the Order.
34. Section 5 explains the use of the term Administration for the Order.
35. Section 6 describes the application of the Order to regulated Australian vessels and foreign vessels. For provisions giving effect to Chapter IV of SOLAS, this Order applies to a foreign vessel only if Chapter IV of SOLAS applies to the vessel.
36. Section 7 provides a process for applications for an exemption of a regulated Australian vessel from a requirement of the Order. An exemption may only be given if AMSA is satisfied that compliance with the requirement would be unnecessary or unreasonable and giving the exemption would not contravene SOLAS.
37. Section 8 provides for applications for approval to use an equivalent to a requirement of the Order. Approval may only be given if AMSA is satisfied that use of the equivalent would be at least as effective as compliance with the requirement to which the equivalent is an alternative.
38. Division 2 is about navigation safety.
39. Section 9 provides that the master of a vessel must ensure that voyage planning has been carried out in accordance with Regulation 34 of Chapter V of SOLAS.
40. Section 10 provides that a person must not prevent or restrict the master of a vessel from taking or executing any decision that the master says is necessary for safe navigation and protection of the marine environment.
41. Section 11 provides that an owner of a passenger vessel to which Chapter I of SOLAS applies must ensure that there is on board the vessel a plan, developed in accordance with paragraph 3 of Regulation 7 of Chapter V of SOLAS, for cooperation with search and rescue services in an emergency. It also provides that the master of the vessel must conduct periodic exercises in accordance with the plan.
42. Section 12 provides that the master of a vessel must comply with paragraph 7 of Regulation 11 of Chapter V of SOLAS which deals with requirements about ship reporting systems.
43. Section 13 provides that the master of a vessel must ensure that manual control of the vessel's steering can be established immediately when heading or track control systems are in use on the vessel. The section also provides that the master has responsibilities regarding a change from automatic to manual control and from manual to automatic control of a vessel's steering, and the testing of the manual steering of a vessel. Section 13 provides that the officer of the watch must ensure that a person who has an approved steering certificate is available to immediately take manual control of the vessel's steering if the vessel is operating in an area where navigation requires special caution.
44. Section 14 provides that the master of a vessel must ensure navigational activities and incidents of importance to safety of navigation on the vessel are recorded with sufficient detail and that the records are available for inspection.
45. Section 15 provides that the owner of a vessel must make decisions about bridge design, bridge procedures and the design and arrangements of navigational equipment in accordance with Regulation 15 of Chapter V of SOLAS.
46. Section 16 provides that the master of a vessel must take all reasonable steps to have navigational equipment maintained in efficient working order. The owner of a vessel must ensure that manufacturer recommended spare parts and repair tools for navigational equipment fitted on the vessel are available on the vessel. If a defect in navigational equipment is discovered on the vessel at a place where repair facilities are not available, the master of the vessel may, if AMSA agrees, proceed to a port

where repairs can take place. In planning and making the voyage to the port, the master of the vessel must ensure that inoperative equipment or the unavailability of information is taken into account.

47. Section 17 provides that the owner of a vessel must ensure that information and instructions about use and maintenance of navigational equipment on the vessel are on the vessel, and that the information and instructions are written in English or, for a foreign vessel, the working language of the vessel.

48. Section 18 requires the master of a vessel more than 100 GT to ensure a compass deviation book is kept on the vessel and the information in Schedule 1 recorded in that book. The master must also ensure compasses are adjusted to correct deviations, that certain information about deviations since the last adjustment is made available and that specified details about magnets and soft iron correctors in a compass fitted on the vessel are recorded by the compass adjuster. If a compass is required to be adjusted this task must be performed by a qualified compass adjuster or the master of the vessel. If a compass is adjusted, details of the deviations in the approved form must be prepared by the master (if the compass is adjusted by the master) or given to the master by the qualified compass adjuster. The master of the vessel may be directed by an inspector to have a compass adjusted in certain circumstances.

49. Section 19 provides that owner of a vessel must ensure that electrical and electronic equipment on or near the bridge of a vessel constructed after 30 June 2002 is tested for electromagnetic compatibility in accordance with the relevant IEC standard. The owner of a vessel must also ensure equipment installed after this date does not affect the vessel's navigational systems and equipment. A person must not operate portable electrical or electronic equipment on a vessel if it may affect navigational systems and equipment on the vessel.

50. Section 20 provides that the owner of a vessel must ensure that shipborne navigational equipment and systems and voyage data recorders specified in SOLAS for the vessel are type approved and installed. The radio equipment mentioned in SOLAS must also be installed. The owner must also ensure that systems and equipment, back-up arrangements, replacements and additions for systems and equipment and radio installations comply with each applicable IMO Resolution, as amended from time to time, mentioned in Schedule 2. For a vessel carrying an electronic chart display and information system, the owner of the vessel has responsibilities for approval of the system and back-up arrangements while the master and watchkeepers must be trained in accordance with the STCW Code. The owner and master also have responsibilities for automatic identification systems used on the vessel.

51. Section 21 provides that the owner of a vessel to which Regulation 19-1 of Chapter V of SOLAS applies must ensure that equipment meeting certain standards is fitted to enable long range identification and tracking of vessels. Specified information about the vessel and its location must be transmitted automatically.

52. Section 22 provides that the owner of a vessel must ensure that a copy of the latest edition of the International Code of Signals and a copy of Volume III (Mobile facilities) of the IAMSAR Manual are kept on the vessel and available for inspection.

53. Section 23 provides that the owner of a vessel must ensure nautical charts and nautical publications on board for an intended voyage comply with specified requirements, including requirements for electronic versions and software and hardware used for accessing official electronic versions of nautical publications. The master of a vessel must ensure that nautical charts and nautical publications and any electronic version of a nautical chart or nautical publication are on board before embarking on a voyage.

54. Section 24 provides that the owner of a vessel must ensure that the vessel has on board equipment in good working condition that will, if an electronic system fails, enable an adequate lookout to be maintained and safe navigation of the vessel. The section also provides that the master has responsibilities for the use of on board equipment and for ensuring the vessel has on board specified flags of the International Code of Signals.

55. Section 25 provides that every vessel to which Chapter IV of SOLAS applies, while at sea, must be able to comply with requirements set out in SOLAS for transmitting and receiving certain information including distress alerts and search and rescue communications. It provides that every vessel to which Chapter IV of SOLAS does not apply, while at sea, must be able to meet the functional requirements relating to ship-to-shore distress alerting, ship to ship distress alerting, on-scene communications, locating signals and receipt of maritime safety information as set out in the section. The section also provides that a radio installation on a vessel must be capable of assisting other vessels in distress, including having the ability to receive shore-to-ship and ship-to-ship distress alerting.

56. Section 26 provides that radio installations, equipment, watchkeeping arrangements, sources of energy, performance standards, maintenance requirements, personnel and record-keeping of a vessel to which Chapter IV of SOLAS applies must comply with specified regulations of SOLAS, the STCW Convention and the STCW Code and with the Radio Regulations, annexed to the International Telecommunication Convention, (Radio Regulations). A vessel to which SOLAS does not apply must meet the functional requirements mentioned and comply with the relevant provisions of the Radio Regulations, the STCW Convention and the STCW Code. The section also provides for requirements on MF/HF radiotelephone equipment and VHF equipment, radio log books, satellite EPIRB (an approved emergency position indicating radio beacon) and the testing of radio equipment and battery installations. The section requires a vessel to carry on board specified documentation and publications.

57. Section 27 provides that an EPIRB must be fitted, maintained, transported and disposed of in accordance with the manufacturer's instructions.

58. Section 28 prescribes the safety signal and requirements for the message following the safety signal. It also prescribes the person to whom a report to shore must be made if the master encounters any serious danger to navigation.

59. Section 29 provides that a person may transmit the safety signal only to give notice that the calling radio station has a danger message to transmit about an important navigational or meteorological warning. The section also provides that the master of a vessel must ensure that the safety signal is sent in accordance with the Radio Regulations, and that after sending the danger message, the master must make the observations and reports required by SOLAS.

60. Section 30 provides that a person who operates a radio station on a vessel and hears the safety signal must listen on the radio frequency used for the transmission of the danger message until he or she is satisfied that the message is of no concern to the vessel. It also provides that a person must not interfere with the transmission of a danger message that follows the transmission of the safety signal.

61. Section 31 provides that a danger message preceded by the safety signal has priority over all communications other than distress and urgency communications.

62. Section 32 provides that the master of a vessel must ensure that specified matters relating to dangers to navigation and danger messages are recorded in the vessel's official log book.

63. Section 33 provides that the urgency signal is the words ‘pan pan’. The urgency signal may be transmitted only on the distress frequency and only in specified situations. The section also provides that an urgency signal or urgency traffic has priority over all other radio communication except distress traffic.
64. Section 34 sets out requirements for urgency messages and provides that a person must not interfere with the transmission of an urgency message. The master of a vessel who sent an urgency message must ensure that a further message is transmitted cancelling the urgency message once the action sought by the message is no longer necessary.
65. Section 35 provides that a person on board a vessel may transmit an urgency signal or message only if he or she is authorised by the master of the vessel to do so.
66. Section 36 provides that the signal of distress is the spoken word ‘mayday’.
67. Section 37 provides that a person may transmit a signal of distress only in specified circumstances.
68. Section 38 provides a defence for a radio operator prosecuted under the Order if the Order cannot be complied with and the operator uses any means available to attract attention to the fact the vessel is in distress.
69. Section 39 provides that the master of a vessel must meet obligations and follow procedures mentioned in Regulation 33 of Chapter V of SOLAS. This SOLAS regulation requires the master of a vessel to proceed with speed to assist persons in distress at sea. The obligation to provide assistance applies regardless of the nationality or status of the persons in distress or the circumstances in which they are found.
70. Section 40 provides for requirements to be followed when the distress frequency watch receiver or Inmarsat EGC receiver distress alarm on a vessel is activated.
71. Section 41 sets out the duties of a person who hears an urgency or distress signal and describes the circumstances in which the person in charge of the vessel radio station may resume normal communication.
72. Section 42 provides that the owner of a vessel must ensure that an illustrated table describing the life-saving signals to be used when communicating with life-saving stations, maritime rescue units and aircraft engaged in search and rescue operations is available to the officer of the watch at all times.
73. Section 43 provides that a person may transmit or display a signal of distress, transmit an urgency signal or send out a danger message only if permitted by a Marine Order. It also sets out the circumstances in which a person may use a flare, rocket or shell that could be mistaken for a prescribed signal of distress coming from a vessel.
74. Section 44 provides that the manufacturer’s requirements for inspection, testing, maintenance and replacement of navigation safety or radio equipment mentioned in the Order must be followed unless the Order requires another method of inspection, testing, maintenance or replacement.
75. Section 45 provides for the continuation of exemptions in force on 30 June 2016 that were given or continued under *Marine Order 21 (Safety of navigation and emergency procedures) 2012* from the requirements of section 21 or 22 of that Order, or given or continued under *Marine Order 27 (Radio equipment) 2009*.
76. Section 46 provides that an approval for use of an equivalent is taken to be approved under the Order if it was for an equivalent that was in use on a vessel on 30 June 2016 and was given or continued in force under *Marine Order 21 (Safety of*

*navigation and emergency procedures*) 2012 for a requirement of section 19 of that Order, or given or continued in force under *Marine Order 27 (Radio equipment)* 2009.

## **Statement of compatibility with human rights**

77. This statement is made for subsection 9(1) of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

### **Overview of the legislative instrument**

78. This Order specifies a number of measures that implement Australia's obligations under the International Convention for the Safety of life at Sea (SOLAS) in relation to navigation safety. These include voyage planning, ship reporting systems, cooperation with search and rescue services and requirements about steering systems. The Order implements SOLAS requirements for navigational equipment, bridge design, radio installations, long range tracking of vessels, nautical charts and other equipment. The Order sets out the specifications for radio equipment in line with SOLAS requirements and provides for safety signals, danger messages, urgency signals and distress messages. The Order also provides for life-saving signals and creates offences for the misuse of distress and safety signals.

### **Human rights implications**

79. Sections 10, 12, 16, 17, 18, 19, 24, 27, 29, 30, 33, 34, 37, 39, 40, 41, 42 and 43 of the Order create offences to which strict liability applies. They also create civil penalties. Strict liability offences may engage and limit the presumption of innocence mentioned in Article 14 of the International Covenant on Civil and Political Rights (ICCPR). Civil penalty provisions may engage the criminal process provisions under Articles 14 and 15 of the ICCPR.

80. Strict liability is imposed to protect life at sea through measures on safe navigation, navigation equipment, radio equipment, and danger, urgency and distress messages. The offences ensure compliance with SOLAS obligations including those for ship reporting systems and navigational equipment.

81. The penalties for these offences are relatively low (50 penalty units) and are within the limitation imposed by paragraph 341(1)(a) of the Navigation Act. The civil penalty provisions are mainly directed at owners of vessels and seafarers rather than the community at large and are regulatory in nature.

82. Where a strict liability offence or a civil penalty provision is directed at a person in general, the offence or penalty provision relates to matters necessary to ensure maritime safety including the facilitation of search and rescue services, non-interference with the master's decisions on safe navigation and protection of the marine environment and matters relating to urgency and distress messages.

83. The civil penalty provisions are authorised by paragraph 341(1)(b) of the Navigation Act. Having regard to the objectives of the civil penalty provisions (which are protective, preventative, disciplinary or regulatory in nature), and the relatively low level of penalty, the civil penalties should not be considered to be criminal matters for human rights law.

## **Conclusion**

84. This instrument is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011* because to the extent that it may limit human rights, those limitations are reasonable, necessary and proportionate for ensuring maritime safety.



## **Making the instrument**

85. This instrument has been made by the Chief Executive Officer of the Australian Maritime Safety Authority, in accordance with subsection 49(4) of the *Australian Maritime Safety Authority Act 1990*.

## Annex 1

## IMO Resolutions adopted by reference

- *General requirements for shipborne radio equipment forming part of the global maritime distress and safety systems (GMDSS) and for electronic navigational aids set out in IMO Resolution A.694(17)*
- *Performance standards for INMARSAT-C ship earth stations capable of transmitting and receiving direct-printing communications set out in IMO Resolution A.807(19)*
- *Performance standards for ship earth stations capable of two-way communication set out in IMO Resolution A.808(19)*
- *Revised performance standards for enhanced group call (EGC) equipment set out in MSC Resolution MSC.306(87)*
- *Annex II of Magnetic compasses carriage and performance standards set out in IMO Resolution A.382(X) (Recommendation on performance standards for magnetic compasses)*
- *Performance standards for gyro-compasses set out in IMO Resolution A.424(XI)*
- *Annex 2 of Adoption of new and amended performance standards for navigational equipment set out in MSC Resolution MSC.86(70) (Recommendation on performance standards for marine transmitting magnetic heading devices (TMHDs))*
- *Performance standards for transmitting heading devices (THDs) set out in MSC Resolution MSC.116(73)*
- *Annex 4 of Adoption of new and amended performance standards set out in MSC Resolution MSC.64(67) (Recommendation on performance standards for radar equipment)*
- *Adoption of the revised performance standards for radar equipment set out in MSC Resolution MSC.192(79)*
- *Annex to Performance standards for automatic radar plotting aids (ARPAs) set out in IMO Resolution A.823(19) (Recommendation on performance standards for automatic radar plotting aids (ARPAs))*
- *Performance standards for electronic chart display and information systems (ECDIS) set out in IMO Resolution A.817(19)*
- *Adoption of the revised performance standards for electronic chart display and information systems (ECDIS) set out in MSC Resolution MSC.232(82)*
- *Performance standards for shipborne Decca navigator receivers set out in IMO Resolution A.816(19)*
- *Performance standards for shipborne Loran-C and Chayka receivers set out in IMO Resolution A.818(19)*
- *Performance standards for shipborne global positioning system (GPS) receiver equipment set out in IMO Resolution A.819(19)*
- *Performance standards for shipborne GLONASS receiver equipment set out in MSC Resolution MSC.53(66)*

- Annex 2 of *Recommendation on new and amended performance standards set out in MSC Resolution MSC.64(67) (Recommendation on performance standards for shipborne DGPS and DGLONASS maritime radio beacon receiver equipment)*
- Annex I of *Adoption of new and amended performance standards set out in MSC Resolution MSC.74(69) (Recommendation on performance standards for shipborne combined GPS/GLONASS receiver equipment)*
- *Adoption of the revised performance standards for shipborne combined GPS/GLONASS receiver equipment set out in MSC Resolution MSC.115(73)*
- *Adoption of the performance standards for shipborne Galileo receiver equipment set out in MSC Resolution MSC.233(82)*
- *Performance standards for Shipborne Beidou Satellite Navigation System (BDS) receiver equipment set out in MSC Resolution MSC.379(93)*
- *Performance standards for multi-system shipborne radionavigation receivers set out in MSC Resolution MSC.401(95)*
- Annex 3 of *Adoption of new and amended performance standards set out in MSC Resolution MSC.64(67) (Recommendation on performance standards for heading control systems)*
- Annex 2 of *Adoption of new and amended performance standards set out in MSC Resolution MSC.74(69) (Recommendation on performance standards for track control systems)*
- *Performance standards for rate-of-turn indicators set out in IMO Resolution A.526(13)*
- *Performance standards for echo sounding equipment set out in IMO Resolution A.224(VII)*
- *Performance standards for devices to indicate speed and distance set out in IMO Resolution A.824(19)*
- Annex 3 of *Adoption of new and amended performance standards set out in MSC Resolution MSC.74(69) (Recommendation on performance standards for an universal shipborne automatic identification system (AIS))*
- *Revised performance standards and functional requirements for the long range identification and tracking of ships (LRIT) set out in MSC Resolution MSC.263(84)*
- *Performance standards for shipborne voyage data recorders (VDRs) set out in IMO Resolution A.861(20)*
- *Performance standards for shipborne simplified voyage data recorders (S-VDRs) set out in MSC Resolution MSC.163(78)*
- *Adoption of revised performance standards for shipborne voyage data recorders (VDRs) set out in MSC Resolution MSC.333(90)*
- *Performance standards for electronic inclinometers set out in MSC Resolution MSC.363(92)*
- *Unification of performance standards for navigational equipment set out in IMO Resolution A.575(14)*

- *Annex I of Adoption of new and amended performance standards set out in MSC Resolution MSC.64(67) (Recommendation on performance standards for integrated bridge systems (IBS))*
- *Annex 3 of Adoption of new and amended performance standards for navigational equipment set out in MSC Resolution MSC.86(70) (Recommendation on performance standards for an integrated navigation system (INS))*
- *Adoption of the revised performance standards for integrated navigation systems (INS) set out in MSC Resolution MSC.252(83)*
- *Performance standards for a bridge navigational watch alarm system (BNWAS) set out in MSC Resolution MSC.128(75)*
- *Recommendation on methods of measuring noise levels at listening posts set out in IMO Resolution A.343(IX)*
- *Annex I of Adoption of new and amended performance standards for navigational equipment set out in MSC Resolution MSC.86(70) (Recommendation on performance standards for sound reception systems)*
- *Performance standards for daylight signalling lamps set out in MSC Resolution MSC.95(72).*