



Radio – Radio Regulations Amendments and GMDSS Radio Equipment Updates

Notice to all Ship Builders, Vessel Owners, Vessel Operators, Masters, Skippers, Officers, Certifying Authorities and to Marine Radio Companies.

This notice should be read with the ITU Radio Regulations as amended, Admiralty List of Radio Signals (ALRS), IMO MSC.1/Circ. 1460/Rev 2, Guidance on the validity of radiocommunication equipment installed and used on ships, and IMO MSC.1/Circ. 1389, Guidance on procedures for updating shipborne navigation and radiocommunication equipment.

Summary

This Marine Guidance Notes draws attention to the changes made in the Radio Regulations (Appendix 17 and 18) which came into force 1st January 2017 affecting VHF and HF radio communications and equipment. The Maritime and Coastguard Agency does not require the replacement of marine radio equipment installed and used on board. It is, however, the responsibility of a vessel's owner to consider, based upon the area of operation, whether an update or replacement of the on-board radio equipment is necessary.

1. Introduction

- 1.1 Some changes have been made to the international VHF and HF channels with an in force date of 01/01/2017, refer to the Radio Regulations 2016, Appendix 17 and 18 for details. They are necessary to protect future maritime digital communications services.
- 1.2 These changes do not have a safety impact as the designated distress or calling frequencies and the bridge to bridge communications channel are unchanged.
- 1.3 Some coast stations may change their operating channel designations or frequencies as a result of changes to the Radio Regulations, but the timing of any change is a local matter.
- 1.4 Software or firmware changes may be available to update radio equipment to implement some or all the changes.



1.5 The IMO has issued MSC.1/Circ. 1460/Rev 2, Guidance on the validity of radiocommunication equipment installed and used on ships in order to ensure that radio equipment on board is updated and vessels can maintain communications during the transition period.

2. Vessel Voyage Radio Planning

2.1 Prior to any passage the Radio Operator / Owner should review radio channel / frequency requirements for the vessel's area of operation, ensuring the radiocommunication equipment has the required capability.

3. SOLAS Convention Vessel

3.1 Annex 1 contains additional guidance for SOLAS Convention vessels.

4. Non-SOLAS Convention vessels

4.1 Annex 2 contains additional guidance for non-SOLAS Convention vessels, these include Domestic Passenger Ships, Fishing Vessels, Code Boats, UK Loadline Exempt Vessels, and Pleasure Vessels.

More Information

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Annex 1 SOLAS Convention Vessels

1. Radio Operators should be aware of the following:

- 1.1 Where a frequency is supported by an equipment in accordance with regulation, but the channel indication is no longer correct, a cross reference table should be displayed at the operating station(s).
- 1.2 VHF
 - 1.2.1 A small number of 4-digit channel numbers are now explicitly stated in the radio regulations. Radio operators should be aware of these new channels and correspondence with older 2-digit channel designations. Existing 2-digit, international, simplex channels are unchanged.
 - 1.2.2 Some new simplex channels will only carry coast station transmissions, so these effectively become broadcast channels, possibly to be used for MSI. You can listen using the corresponding duplex channel even if the on-board equipment does not support the simplex channel. This information should be included in the displayed cross-reference table.
 - 1.2.3 Digital marine communications are unlikely to be used before 2020, and on those few channels, digital will have priority over voice. Radio operators should refer to ALRS to know where the use of a channel for voice is no longer possible.
 - 1.2.4 Radio operators should refer to ALRS to ensure that the on-board equipment is capable of operating on the frequencies necessary for the vessel's area of operation.
 - 1.2.5 Avoid using channels contrary to Appendix 18 of the Radio Regulations.
- 1.3 HF and MF/HF
 - 1.3.1 The HF frequency bands for maritime use remain but some channels and their associated frequencies and uses (voice, NBDP or data) have changed.
 - 1.3.2 Some existing equipment will be capable of operating on all the new frequencies, however they may need to be fitted with the latest software or firmware. Other equipment which cannot comply fully with these amendments may ultimately need replacing.
 - 1.3.3 Excepting communication with coast stations that are restricted to their licensed frequencies, operators should, as far as possible, avoid using frequencies contrary to Appendix 17 of the Radio Regulations.
 - 1.3.4 DSC is unaffected as it uses frequencies and not channel numbers for call setup.
 - 1.3.5 Reference to HF channel numbers rather than frequencies may not achieve required results.



2. Owners should be aware of:

- 2.1 In accordance with MSC.1/Circ. 1389, Guidance on procedures for updating shipborne navigation and radiocommunication equipment, owners should ensure that such equipment is fitted with the latest firmware and software available from the equipment manufacturer.
- 2.2 With respect to changes to frequency channelization, the Marine Equipment Directive requires the manufacturer to:
 - 2.2.1 Declare that the software update maintains the equipment within its existing approval;
 - 2.2.2 Otherwise, the notified body for the original equipment's approval would need to be consulted for any additional approval that may be needed.
 - 2.2.3 It is expected that any software modification for frequency channelization will maintain the equipment within the existing certification and will therefore be considered as maintenance.
- 2.3 In accordance with MSC.1/Circ. 1460/Rev 2, radiocommunication installations should meet the channelling arrangements reflected in appendices 17 and 18 to the Radio Regulations:
 - 2.3.1 By the first radio survey after 01/01/2024, for HF NBDP equipment;
 - 2.3.2 By the first radio survey after 01/01/2024 for VHF and MF NBDP equipment. Prior to 01/01/2024 radio installations should continue to provide at least the channelisation as detailed in appendix 18 to the Radio Regulations 2009, other channels may be provided so long as they are permitted by the latest version of the Radio Regulations.



Annex 2 Non-SOLAS Convention Vessels

1. Foreword

- 1.1 This section refers to all Non-SOLAS Convention Vessels, including Domestic Passenger Ships, Fishing Vessels, Code Boats, UK Loadline Exempt Vessels and Pleasure Vessels.
- 1.2 All vessel owners and operators of maritime radio installations should be aware of the changes to the Radio Regulations (Appendix 17 & 18).
- 1.3 Where a frequency is supported by an equipment in accordance with regulation, but the channel indication is no longer correct, a cross reference table should be displayed at the operating station(s).

2. VHF

- 2.1 Operators should, as far as is practicable, avoid using channels contrary to Appendix 18 of the Radio Regulations except when communicating with coast stations.
- 2.2 Radio operators should refer to updated reference documents to ensure that the on-board equipment is capable of operating on the frequencies necessary for the vessel's area of operation.
- 2.3 Digital marine communications are unlikely to be used before 2020, on those few channels, digital will have priority over voice. Radio operators should consult publications to confirm where the use of a channel for voice is no longer possible.
- 2.4 A small number of 4-digit channel numbers are now explicitly stated in the radio regulations. Radio operators should be aware of these new channels and correspondence with older 2-digit channel designations. Existing 2-digit, international, simplex channels are unchanged.

3. HF and MF/HF

- 3.1 Operators should, as far as is practicable, avoid using frequencies contrary to Appendix 17 of the Radio Regulations except when communicating with coast stations.
- 3.2 The HF frequency bands for maritime use remain but some channels and their associated frequencies and uses (voice, NBDP or data) have changed.
- 3.3 DSC is unaffected as it uses frequencies and not channel numbers for call setup at HF.
- 3.4 Some existing equipment will be capable of operating on all the new frequencies, however they may need to be fitted with the latest software or firmware.

4. Updating equipment

- 4.1 Any update to equipment should be approved by the manufacturer and in accordance with manufacturer instructions and guidance.
- 4.2 Where your vessel relies upon a 'wheelmarked' equipment to fulfil a mandatory carriage requirement any update should comply with the rules for updating equipment under the Marine Equipment Directive see Annex 1 Section 2.2.

