Regulation of 17 December 2004 No. 1856 concerning radiocommunication for cargo ships

§ 1

Scope of application

(1) This Regulation applies to Norwegian cargo ships, with the specifications referred to in the second to fourth paragraphs.

(2) This Regulation applies to all cargo ships of 15 metres or more in overall length, holding certificates for trade area 1 or greater trade.

(3) Cargo ships (commercial vessels) of less than 15 metres, which due to the nature of their service must maintain operational radio communication (tugs, pilot vessels, etc.), shall satisfy the same provisions regarding radio equipment and radio safety certificates that apply to ships of 15 metres or more in the same trade area, except for auxiliary vessels operating in concert with their mother vessels.

(4) Pleasure craft of 50 gross tonnage and above shall comply with the same provisions as mentioned in the first paragraph.

Amended by Regulations of 29 April 2005 No. 399 and 29 June 1997 No. 1006 (in force on 1 July 2007).

§ 2

Definitions

For the purposes of this Regulation:

a. Recognized classification society means classification societies with which the Ministry has entered into an agreement pursuant to Section 41 of the Ship safety and Security Act:
   1. Det Norske Veritas (DNV);
   2. Lloyd's Register of Shipping (LRS);
   3. Bureau Veritas (BV);
   4. Germanischer Lloyd (GL);
   5. American Bureau of Shipping (ABS).

b. Gross tonnage means the numeric value indicated as gross tonnage in the Tonnage Certificate. If safety tonnage is entered in the "Remarks" column of the Tonnage Certificate, the numeric value for such tonnage shall apply as gross tonnage.


d. EGC receiver means a receiver for maritime safety information in the Inmarsat system (Inmarsat Enhanced Group Call SafetyNet Receiver).

e. EMC – Electromagnetic Compatibility means the capability of an item of equipment to function adequately in its electromagnetic environment without causing unacceptable electromagnetic disturbance to other items of equipment.


g. Trade area means trade areas as specified in the regulations currently in force concerning trade areas.

h. GMDSS means the Global Maritime Distress and Safety System.

i. GMDSS Identities (Global Maritime Distress and Safety System Identities) means identities, such as call signals, MMSI numbers and/or other identities that are programmed into the ship’s emergency and safety equipment.

j. General radio communication means radio communication that is not distress messages, urgent messages and/or safety messages.

k. Main source of electrical power means an electrical power source that supplies electrical power to the main switchboard for distribution to electrical units necessary for maintaining the ship in operation.

l. Hand-held VHF means a two-way VHF telephone.

m. IAMSAR (International Aeronautical and Maritime Search and Rescue Manual) means guidelines for administrations, rescue co-ordination centres and ships during rescue operations.

n. Inmarsat ship-earth station means a mobile earth station of the maritime mobile satellite service, localized to ships, that at least can:
   1. transmit and receive:
      1.1. distress communications and safety communications;
      1.2. priority distress calls; and
      1.3. general radio communications;
   2. maintain listening watches for shore-to-ship distress alerts.

o. Continuous radio watch means a radio watch that is only interrupted for short periods when the ship’s radio equipment is used for its own communications or when the equipment is inspected and/or maintained.

p. Cargo ship means any ship that is not a passenger ship, fishing vessel, lighter or pleasure craft. For the purposes of this Regulation:
1. **Passenger ship** means a ship for which a passenger certificate or a passenger ship safety certificate is required pursuant to the provisions of Chapter VIII of the Act of 9 June 1903 No. 7 relating to Public Control of the Seaworthiness of Ships, etc.;

2. **Fishing vessel** means a vessel used commercially for catching fish, including whales, seals, seaweed and sea tangle or other living resources of the sea;

3. **Pleasure craft** means any floating device intended for and capable of movement on water and not used for commercial purposes;

4. **Lighter** means a hull or ship without propulsion machinery which is towed or pushed for all movements, and which is used for carrying cargo.

q. **MSI (Maritime Safety Information)** means navigational warnings, gale warnings, meteorological forecasts and other messages of significance for the safety at sea.

r. **MF/DSC radio installation** means a radio installation in the MF band that can:
   1. transmit and receive:
      1.1 DSC on the frequency of 2187.5 kHz;
      1.2 radio telephony on the frequency of 2182 kHz; and
      1.3 general radio communications on relevant working frequencies.
   2. Maintain a continuous DSC listening watch on the frequency of 2187.5 kHz by means of a separate watch receiver. The watch receiver may be a separate unit.

s. **MF/HF DSC radio installation**: A radio installation that can:
   1. transmit and receive distress and safety communications at all distress and safety frequencies in the bands between 1605-4000 kHz and 4000-27,500 kHz by means of:
      1.1 DSC;
      1.2 radio telephony;
      1.3 radio telex;
      1.4 general radio communications on relevant working frequencies.
   2. Maintain a continuous DSC listening watch on the frequencies 2187.5 kHz and 8414.5 kHz, and – depending on the time of day and the vessel’s geographical position - at least one of the DSC distress frequencies 4207.5 kHz - 6312 kHz - 12,577 kHz - 16,804.5 kHz by means of a dedicated watch receiver.

t. **MMSI (Maritime Mobile Service Identity)** means a nine-digit number, which identifies the vessel on, inter alia, DSC equipment and EPIRB.

u. **NAVTEX receiver** means a receiver for the reception of maritime safety information by means of a telex on 518 kHz (international messages) and 490 kHz (national messages).

v. **Emergency source of electrical power** means an electrical power source that provides power to the emergency switchboard if the main source of electrical power should fail.


x. **Sea area A1** means areas within radio coverage of at least one VHF/DSC coastal station.

y. **Radio inspection company** means a company which is authorized to perform radio surveys on Norwegian and foreign vessels on behalf of the Norwegian Maritime Directorate.

z. **Sea area A2** means areas outside sea area A1, but within the radio coverage area of at least one MF/DSC coastal station.

æ. **Sea area A3** means areas outside sea areas A1 and A2, but within range of an Inmarsat geostationary satellite that can receive and relay distress alerts.

ø. **Sea area A4** means areas outside sea areas A1, A2 and A3.

á. **Radio regulations** means the radio regulations of the International Telecommunication Union. The regulations for ships are set out in the “Manual for use by the Maritime Mobile and Maritime Mobile-Satellite Services”.

aa. **Reserve source of energy** means a battery or other power source which can provide sufficient electrical power to operate the radio installations for distress and safety radio communications, in addition to the ship’s main and emergency source of electrical power.

bb. **SART (Search and Rescue Transponder)** means a radar transponder in the 9 GHz band for survival craft for use in emergencies.

cc. **SOLAS Convention** means the International Convention for the Safety of Life at Sea, 1974 (SOLAS 74), as subsequently amended, adopted by the IMO.

dd. **Overall length** means the maximum length from the foreshore of the forwardmost part of the hull to the outside of the aftermost part of the hull.

ee. **VHF/DSC radio installation** means a radio installation in the VHF band that can:
   1. Transmit and receive:
      1.1 DSC on VHF channel 70 (156.525 MHz);
      1.2 radiotelephony VHF channel 6 (156.300 MHz), channel 13 (156.650 MHz) and channel 16 (156.800 MHz);
      1.3 general radio communications on relevant working channels.
2. Maintain a continuous listening watch on VHF channel 70 (156.525 MHz). The watch receiver may be a separate unit.

Amended by Regulations of 11 December 2006 No. 1492 (in force on 1 January 2007) and 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 3

Duties

The company, master and other persons working on board shall perform their duties in accordance with the Ship Safety and Security Act and the supplementary provisions laid down in this Regulation.

Amended by Regulation of 29 June 2007 No. 1006 (in force on 1 July 2007).

§ 4

Exemptions

The Norwegian Maritime Directorate may, in individual cases and upon written application, grant exemption from the requirements of this Regulation. There must be special reasons that make the exemption necessary and it must be justifiable in terms of safety. Exemptions can only be granted where they do not contravene international agreements to which Norway has acceded.

§ 5

Documentation that shall be kept on board

The following documentation shall be kept on board:

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Small coasting and lesser trade areas</th>
<th>Great coasting and greater trade areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAMSAR volume III</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Instruction manuals for each individual item of radio equipment</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Channel plan and frequency tables for the trade area in question</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Permit for the use of frequencies (licence)¹</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Radio log. The deck log book may be employed as radio log.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Drawings pursuant to Section 8.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>GMDSS sea area diagrams (may, among other places, be found in Admiralty List of Radio Signals, Vol. 5)²</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>GMDSS Operating Guidance for Masters of Ships in Distress Situations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>ITU Manual for use by the Maritime Mobile and Maritime Mobile-Satellite Services, including documentation as described in Appendix 16 (AP 16), Section VA</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>GMDSS emergency procedures (shall be posted at the radio station)</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

¹ Permits for the use of frequencies is managed by the Norwegian Post and Telecommunications Authority through Telenor Networks Maritim Radio, Licence Department.

² Published by The United Kingdom Hydrographic Office.
§ 6

Permit for the use of frequencies

Ships shall have a valid permit for the use of frequencies (licence)\(^1\) before a safety certificate as referred to in Section 7 may be issued, endorsed or renewed.

\(^1\) Permits for the use of frequencies is managed by the Norwegian Post and Telecommunications Authority through Telenor Networks Maritim Radio, Licence Department.

§ 7

Radio safety certificate

(1) All cargo ships shall hold a radio safety certificate or a cargo ship safety certificate where radio installation surveys are included in the certificate.
(2) Radio safety certificates are issued for a period of up to five years, with annual endorsements.
(3) Radio safety certificates are issued by:
   a. an approved radio inspection company\(^1\) for vessels which are not delegated to a recognized classification society;
   b. a recognized classification society.
(4) Before a safety certificate as mentioned in the first paragraph can be issued, endorsed or renewed, the radio installations shall be inspected by an approved radio inspection company, or by a recognized classification society if the ship is covered by a classification agreement.
(5) The survey shall be carried out in accordance with IMO Resolution A.948(23) – “Survey Guidelines under the Harmonized System of Survey and Certification.”
(6) An annual radio test shall be carried out within a time window of 3 months prior to, to 3 months following the anniversary of the validity date (± 3 months).
(7) A radio safety certificate will be considered invalid if the annual endorsement has not been carried out within the time window (± 3 months). The certificate becomes valid again when the annual endorsement has been carried out, but the anniversary for the next periodical control(s) and the certificate’s validity date will remain unchanged.

\(^1\) Information about approved radio inspection companies can be found on the Norwegian Maritime Directorate’s homepage, http://www.sjofartsdir.no, or obtained by contacting the Norwegian Maritime Directorate.

§ 8

Documentation

(1) Ships that are covered by a classification agreement shall comply with the recognized classification society’s instructions.
(2) For new installations or conversions, ships that are not covered by a classification agreement shall submit copies of as built drawings displaying the radio arrangement (drawings of antenna, drawings of the location of the radio equipment in the wheelhouse and cabling diagram) to the Norwegian Maritime Directorate. Copies of the drawings shall be kept on board.

§ 9

Functional requirements and equipment requirements

(1) Ships shall be able to transmit distress alerts by means of at least two separate and independent radio systems (primary and secondary means of distress alerting). Duplicated radio equipment, manual satellite EPIRB and free-float satellite EPIRB may be employed as secondary means of distress alerting.
(2) In trade areas 1 and 2, a hand-held VHF may be accepted as a secondary means of distress alerting.
(3) Ships shall be equipped with radio installations as mentioned in table 1. Table 2 describes sea areas and equipment/frequencies used in each individual area.
Table 1 – Minimum requirements for radio equipment in each sea area

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Trade areas:</th>
<th>1+2</th>
<th>3+4+</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>↓</td>
<td>VHF</td>
<td>VHF</td>
<td>MF</td>
<td>SAT</td>
<td>HF</td>
<td>HF</td>
</tr>
<tr>
<td>References ↓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VHF-DSC radio installation</td>
<td>§ 2dd</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MF-DSC radio installation</td>
<td>§ 2q</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Inmarsat ship-earth station with EGC receiver</td>
<td>§ 2m</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MF/HF-DSC radio installation</td>
<td>§ 2r</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>NAVTEX receiver 518/490 kHz</td>
<td>§ 2t</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MSI receiver</td>
<td>§ 2p</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Free-float satellite EPIRB</td>
<td>§§ 2f, 9(1), 10(5), 14(3)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Manual satellite EPIRB</td>
<td>§§ 2f, 10(7)</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SART on ships of less than 100 GT</td>
<td>§§ 2.aa, 10(8)</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SART on ships between 100 and 500 GT</td>
<td>§ 2.aa</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>SART on ships of 500 GT and above</td>
<td>§ 2.aa</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hand-held VHF on ships of less than 500 GT</td>
<td>§ 2.1.b</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hand-held VHF on ships of 500 GT and above</td>
<td>§ 2.1.b</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Duplicated VHF radio installation 2)</td>
<td>§ 14(2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Duplicated Inmarsat ship-earth station</td>
<td>§ 14(2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Duplicated MF/HF with DSC and radio telex</td>
<td>§ 14(2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
1) Trade areas include trade on lakes and rivers in Norway and voyages on the Norwegian coast, apart from Svalbard and Jan Mayen.

Trade area 1: Voyage in completely sheltered waters.
Trade area 2: Voyage in protected waters.
Trade area 3: Voyage in sheltered waters where the unsheltered stretches do not exceed 5 nautical miles.
Trade area 4: Voyage in sheltered waters where the unsheltered stretches do not exceed 25 nautical miles.
Small coasting: Voyage on the Norwegian coast where the unsheltered stretches exceed 25 nautical miles.

2) The dedicated DSC watch receiver function may be left out in duplicated VHF and HF radio installations.
<table>
<thead>
<tr>
<th>Sea area</th>
<th>Range</th>
<th>Radio</th>
<th>Frequencies</th>
<th>EPIRB</th>
<th>Radio life-saving appliances</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Within the sea area of shore-based VHF/DSC radio coastal stations</td>
<td>Depending on the antenna height of the shore-based station</td>
<td>VHF</td>
<td>DSC/Ch.-70 (156.525 MHz) Ch.-16 (156.8 MHz) Ch.-13 (156.650 MHz) Ch.-6 (156.300 MHz)</td>
<td>Either L band (1.6 GHz) (^1) or 406 MHz COSPAS-SARSAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9 GHz radar transponder, two-way VHF radio for Ch.-16 + another channel</td>
</tr>
<tr>
<td>A2</td>
<td>Within the sea area of shore-based MF/DSC radio coastal stations</td>
<td>Approximately 50-250 n. miles</td>
<td>MF + VHF</td>
<td>As mentioned above plus 2187.5 kHz DSC 2182 kHz for telephony 518 kHz for NAVTEX 490 kHz for NAVTEX</td>
<td>L band 1.6 GHz (^1) or 406 MHz COSPAS-SARSAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>As mentioned above</td>
</tr>
<tr>
<td>A3</td>
<td>Within geostationary satellite range of the Inmarsat system</td>
<td>70°N – 70°S</td>
<td>HF or satellite MF VHF</td>
<td>As mentioned above plus 1.5-1.6 GHz alerting or as A1+A2+all HF frequencies</td>
<td>L band 1.6 GHz (^1) or 406 MHz COSPAS-SARSAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>As mentioned above</td>
</tr>
<tr>
<td>A4</td>
<td>Outside Inmarsat coverage</td>
<td>North of 70°N or south of 70°S</td>
<td>HF MF VHF</td>
<td>As for A1+A2, and all HF frequencies</td>
<td>406 MHz COSPAS-SARSAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>As mentioned above</td>
</tr>
</tbody>
</table>
1) The emergency position-indicating radio beacon service of the Inmarsat system will be phased out (closed) as of 1 December 2006
Amended by Regulation of 11 December 2006 No. 1492 (in force on 1 January 2007).

§ 10
Installation and placement of equipment

(1) Radio installations shall be installed so that they are easily accessible for inspection and maintenance and so that they are not exposed to damaging effects from moisture, extreme temperatures or other environmental factors.
(2) Radio installations shall be installed in such a way that they are not affected by mechanical, electric or electromagnetic disturbances and likewise do not cause any such disturbances.
(3) Radio installations shall be labelled with a call signal and other GMDSS identities and codes that are necessary in order to identify the installation.
(4) It shall be possible to operate VHF radiocommunication for safe navigation from the ship’s conning and manoeuvring positions including the bridge wings. Portable radio equipment may be used for communication from the bridge wings.
(5) The free-float satellite EPIRB shall be installed so that it will have the greatest possible chance of floating freely up to the surface without risk of being caught by obstructions such as railings, superstructures, etc. if the ship should sink.
(6) The manual satellite EPIRB shall be installed in the wheelhouse so that it may easily be activated and taken along to a survival craft.
(7) The manual satellite EPIRB, as referred to in the sixth paragraph, may be left out if the free-float satellite EPIRB may be activated by remote control from the wheelhouse and has been installed in such a way as to allow:
   a. manual activation; and
   b. a person to bring it to a survival craft, without exposing that person to danger.
(8) The SART shall be installed in the wheelhouse. If the ship is required to carry two SART units, they shall be placed on either side of the vessel, preferably by the exit doors in the wheelhouse, so that they can easily be brought along to a survival craft. For ships with free-fall lifeboats, one of the mandatory SART units shall be placed in the free-fall lifeboat.
(9) The radio installation’s antenna must be placed and installed in such a way as to achieve optimum efficiency as well as to avoid negative electromagnetic interference (EMC) of radio equipment and other electronic equipment, navigational equipment in particular.
(10) All external cabling and connections shall be kept clean from salt, soot and other pollution, and shall be inspected regularly and changed when necessary.

Amended by Regulation of 11 December 2006 No. 1492 (in force on 1 January 2007).
1) It is advised that radio equipment is installed in accordance with COMSAR/Circ.32 “Harmonization of GMDSS Requirements for Radio Installations on board SOLAS Ships”

§ 11
Electrical power sources

(1) The radio installation shall be connected to the ship’s main source of electrical power and, if necessary, its emergency source of electrical power, as well as a reserve source of energy.
(2) The reserve source of energy shall have an operational capacity of:
   1. 1 hour, if the ship is equipped with an emergency generator with an operational capacity of 18 hours;
   2. 6 hours, if the ship is equipped with an emergency generator with an operational capacity of less than 18 hours;
   3. 6 hours, if the ship is not equipped with an emergency generator or has an emergency source of electrical power with an operational capacity of less than 18 hours.
(3) The reserve source of energy shall be capable of being charged from the ship’s main source of electrical power, as well as from the ship’s emergency generator, if it has been installed on board.
(4) The reserve source of energy shall be located in a protected environment above the uppermost continuous deck, preferably in a well ventilated battery room or battery case. The location shall provide easy and safe access for maintenance and control, taking the guidelines of the manufacturer into consideration, in order to allow the power source to operate also in extreme conditions.
(5) The reserve source of energy shall as a minimum provide electrical power to the operation of the ship’s VHF radio installation, and, in addition:
   a. the MF radio installation in sea area A2;
   b. the MF/HF radio installation or the Inmarsat ship-earth station in sea area A3;
   c. the MF/HF radio installation in sea area A4;
d. duplicated radio equipment shall also, in addition to the basic equipment, be capable of being operated from the radio installation’s reserve source of energy; 
e. the navigation receiver is permitted to be connected to the vessel’s reserve source of energy.

(6) The reserve source of energy shall:

a. provide lighting to the radio installations as mentioned in the fourth paragraph;
b. be capable of being charged automatically to minimum capacity within 10 hours if the reserve source of energy is rechargeable batteries;
c. be independent of the ship’s propulsion machinery;
d. be checked:
   1. every week by the ship’s radio operator;
   2. annually, in connection with radio tests (cf. Section 7, sixth paragraph) in regard to battery capacity;
e. be maintained in compliance with the manufacturer’s instructions. The batteries shall be replaced as soon as they show signs of reduced capacity. Lead accumulators shall in any case be replaced every five years at the latest.

1 Cf. IMO resolution A.702 No. 2.3.
2 One method for checking battery capacity, is to discharge the battery and then recharge it to full capacity, using normal operating power and recharge time (for instance 10 hours). This method may only be used when the ship is safely moored in port.

§ 12
Radio watch

(1) All ships not safely moored in port shall keep a continuous radio watch on the following radio channels, frequencies and systems, depending on their radio equipment and sea area:
   1. VHF channel 16 and VHF/DSC channel 70;
   2. MF/DSC frequency 2187.5 kHz;
   3. DSC frequencies 2187.5 kHz and 8414.5 kHz, as well as at least one of the emergency and safety frequencies 4207.5 kHz, 6312 kHz, 12577 kHz or 16804.5 kHz, depending on the time of day and the vessel’s geographical position. These watchkeeping duties may be performed by means of a scanner;
   4. Inmarsat ship-earth station.

(2) All ships not safely moored in port shall keep a radio watch for the reception of maritime safety information (MSI) by means of:
   1. NAVTEX receiver;
   2. EGC SafetyNet receiver in areas outside NAVTEX coverage; and
   3. HF radio telex in areas outside EGC SafetyNet coverage.

§ 13
Requirements for approval

(1) Equipment that is required to be installed on vessels following the entry into force of this Regulation, shall be approved and wheel-marked pursuant to the Regulation of 29 December 1998 No. 1455 concerning marine equipment (the Marine Equipment Regulation).

(2) The Norwegian Maritime Directorate may decide that new radio equipment shall be installed on board in connection with major conversions, modifications, or repairs of the ship.

(3) GMDSS radio equipment which is not required pursuant to this Regulation, but which is voluntarily installed on board, shall either satisfy the requirements of this Section or the requirements of Directive 2004/71/EC.

1 Amended by regulation of 29 April 2005 No. 399.

§ 14
Spare parts and maintenance

(1) There shall be sufficient spare parts and tools on board to maintain the radio equipment.

(2) The following maintenance methods shall be used to ensure that radio installations at all times are capable of transmitting distress alerts and carry out follow-up emergency communication:
   a. Shore-based maintenance for ships equipped with radio equipment for sea areas A1 and A2.
   b. Shore-based maintenance combined with the duplication of radio equipment for ships equipped with radio installations for sea areas A3 and A4, cf. table 2 of Section 9.

(3) The satellite EPIRB, as referred to in the fifth paragraph of § 10, shall be tested by a shore-based company (the manufacturer or the manufacturer’s representative) at least every five years. When emergency positioning indicators are submitted for service or shore-based maintenance, the battery must be disconnected.

(4) Defects and deficiencies of radio equipment which entail that the vessel is unable to carry out relevant emergency and safety functions, may lead to detention.

Amended by Regulation of 11 December 2006 No. 1492 (in force on 1 January 2007).
Reference is made to IMO resolution A.702(17), concerning radio maintenance guidelines for the GMDSS.

§ 15
Radio personnel

(1) Ships shall have a radio operator present at every navigational watch. This function may be combined with a position as navigator in charge of the watch. The radio operator shall, as a minimum, hold the following radio operator certificates:
   a. Sea area A1: Minimum ROC (Radio Operator’s Certificate). If the vessel has GMDSS radio equipment beyond the minimum requirements for the sea area, one of the radio operators shall hold a GOC (General Operator’s Certificate), or better.
   b. Sea areas A2, A3 and A4: Minimum GOC (General Operator’s Certificate) or better.

(2) Personnel that are not a radio operator/navigator in charge of the watch, but who might be expected to use the vessel’s VHF/DSC, shall as a minimum hold a “Restricted Operator’s Certificate” (ROC).

§ 16
Radio records

(1) In accordance with the Radio regulations, Appendix 16, Section VA, third paragraph and the Regulations of 27 April 1999 No. 537 concerning watchkeeping on passenger ships and cargo ships, ships shall record the following:
   a. a summary of distress, urgency and safety radiocommunications;
   b. important incidents relating to the radio service;
   c. the position of the ship at the time of the incidents;
   d. a summary of the maintenance of the radio equipment and the sources of energy;
   e. daily/monthly function test of the radio station, carried out by the radio operator in charge.

(2) The records mentioned in the first paragraph may either be entered in the radio log or the ship’s deck log book.

§ 17
Position updating

Ships in trade area 3 or greater, shall automatically update the position of any radio equipment that may transmit a distress alert, either by means of an internal navigation receiver or by connecting the equipment to an external navigation receiver.

§ 18
Entry into force

(1) This Regulation enters into force on:
   a. 1 January 2005 for new cargo ships, irrespective of their trade area;
   b. 1 January 2005 for existing cargo ships of 300 gross tonnage and above in trade area great coasting and greater trade areas;
   c. 1 February 2006 for existing cargo ships irrespective of their size in trade area 3 or greater trade.
   d. 1 February 2007 for existing cargo ships irrespective of their size in trade areas 1 and 2.
Sections 1 - 8, 10 - 13, third paragraph of Section 14, Sections 16, 18 and 19 of this Regulation enter into force on 1 January 2005 for existing cargo ships as mentioned in the first paragraph, subparagraphs c. and d.

As of 1 January 2005 the following regulations are repealed:

a. Regulation of 12 November 2002 No. 1314 concerning conditions for periodical maintenance of free-float emergency position-indicating radio beacons (repealed with respect to cargo ships, fishing vessels and mobile offshore units);

b. Regulations of 27 January 1999 No. 149 concerning radio installations and radio services on passenger ships and cargo ships to which the International Convention for the Safety of Life at Sea (SOLAS 1974) applies, repealed with respect to cargo ships;


§ 19

Transitional provisions

(1) The following provisions shall apply for existing cargo ships as mentioned in the first paragraph, subparagraph c. of Section 19, until this Regulation enters into force in its entirety for such ships.

(2) All non-convention ships in trade area 1 and greater trade shall be equipped with a VHF radio telephone installation which comply with the provisions as specified in Regulation IV/17 of the International Convention for the Safety of Life at Sea (SOLAS 1974, as amended 1981 and 1983). Ships which pursuant to this provision are equipped with a VHF installation, shall moreover comply with the provisions specified in Regulation IV/8 of the International Convention for the Safety of Life at Sea (SOLAS 1974, as amended 1981 and 1983) for VHF watchkeeping.

(3) All non-convention ships in greater trade than trade area great coasting, shall moreover be equipped with an MF radio telephone installation which complies with the provisions as specified in Regulation IV/15 and IV/16 of the International Convention for the Safety of Life at Sea (SOLAS 1974, as amended 1981 and 1983). Ships which pursuant to this provision are equipped with a MF system, shall moreover comply with the provisions for watchkeeping and radio telephone operator(s) specified in Regulation IV/7 of the International Convention for the Safety of Life at Sea (SOLAS 1974, as amended 1981 and 1983).

(4) All non-convention ships in greater trade than European trade shall moreover be equipped with a shortwave radio telephone installation. The shortwave installation may be combined with the FM station required by the second paragraph. Ships in trade areas completely covered by the Inmarsat system, may procure an Inmarsat ship-earth station in stead of the shortwave installation.

(5) All cargo ships in trade area small coasting and greater trade areas shall moreover be equipped with a free-float emergency position-indicating beacon.

(6) Existing ships in small coasting shall as of 1 January 2005 be equipped with 2 sets of VHF radio telephones (hand-held VHF), as described in Section 9, Table 1.

Amended by regulation 4 February 2005 No. 112.