

**Translation. Only the Danish document has legal validity.**

*Order no. 939 of 29 August 2011 issued by the Danish Maritime Authority*

## **Order on radio tests and certificates in GMDSS**

In pursuance of section 29, cf. section 45(2) of act no. 475 of 12 June 2009 on radio frequencies (*lov om radiofrekvenser*), and in pursuance of section 2 and section 4(1), cf. sections 12-14 of the on maritime training programmes (*lov om maritime uddannelser*), cf. consolidated act no. 207 of 4 March 2011, as well as by authority granted under order no. 143 of 1 March 2000 on the transfer of powers as regards the regulation of certain tests to the Danish Maritime Authority and the Danish Civil Aviation Administration, the following provisions are laid down:

### *Application*

**Section 1.** This order stipulates regulations on the training, tests and GOC, ROC and LRC certificates for operating radio systems in the maritime field. The regulations include the approval of the training programme, the contents of the training programme and the examination as well as the issuance and validity of certificates.

### *Definitions*

**Section 2.** For the purposes of this order, the following terms and abbreviations shall be used:

- 1) GMDSS (Global Maritime Distress and Safety System) is the global maritime distress and safety system.
- 2) GOC is an abbreviation for General Operator's Certificate.
- 3) ROC is an abbreviation for Restricted Operator's Certificate.
- 4) LRC is an abbreviation for Long Range Certificate.
- 5) MF is an abbreviation for Medium Frequency (medium wave).
- 6) HF is an abbreviation for High Frequency (short wave).
- 7) VHF is an abbreviation for Very High Frequency.
- 8) ECTS is an abbreviation for European Credit Transfer System.

### *Certificates*

**Section 3.** The Danish Maritime Authority shall issue the following certificates after completed tests:

- 1) General certificate as radio operator in GMDSS (GOC).
- 2) Restricted certificate as radio operator in GMDSS (ROC).
- 3) Certificate for operating maritime MF, HF and VHF radio systems (LRC).

*Subsection 2.* The test requirements for GOC, LRC and ROC certificates are stipulated in accordance with the ITU radio regulations, article 47, and the IMO STCW Convention, table A-IV/2, and are shown in annex 1.

**Section 4.** It is possible to issue GOC and ROC certificates to persons who have turned 18 years of age. It is possible to issue LRC certificates to persons who have turned 16 years of age. It

shall be possible to sit for a test no earlier than three months before the person turns 18 or 16 years, respectively.

*Subsection 2.* Foreign certificates issued in accordance with joint European decisions and recommendations from the ECC Committee of the European Conference of Postal and Telecommunications Administrations (CEPT) acceded to by Denmark shall be equal to certificates under this order if they have been endorsed by the issuing authority that they are in accordance with the decisions and recommendations mentioned above.

*Subsection 3.* The Danish Maritime Authority may recognise other foreign certificates that may be considered equal to certificates issued by the Danish Maritime Authority for the operation of radio systems in Danish ships. The recognition shall be conditional upon the certificate meeting the provisions on certificates of the international radio regulations and being valid in pursuance of the provisions of the foreign authority.

### *Approval of training programme*

**Section 5.** The training and test for acquiring a certificate shall be carried out at a school approved by the Danish Maritime Authority.

*Subsection 2.* Schools may be approved either:

- 1) in accordance with the order on the approval and quality control, etc. of maritime training programmes issued by the Danish Maritime Authority, or
- 2) if the school documents that:
  - a) the teacher has the professional knowledge and skills corresponding to at least the requirements that the test is intended to prove have been met;
  - b) the teacher has the relevant professional competence within the maritime radio field;
  - c) the teacher knows the possibilities of using the training programme; and
  - d) the necessary teaching facilities and up-to-date and operational radio systems are available, cf. section 7.

*Subsection 3.* In order to be approved under subsection 2(ii), the school shall also make a brief account of the planned training for the test.

*Subsection 4.* The Danish Maritime Authority may require the account for the training to be elaborated, cf. subsection 3.

*Subsection 5.* The Danish Maritime Authority may withdraw an approval of a school, cf. subsection 2(ii), if the school does not follow the written instructions given by the Danish Maritime Authority.

**Section 6.** In order to be approved, the training programme shall have a duration corresponding to at least 3 ECTS points concerning GOC, 2 ECTS points concerning LRC, and 1 ECTS point concerning ROC.

**Section 7.** For use in the teaching and in connection with practical tests, up-to-date, operational, maritime radio equipment shall be available of the categories that the relevant certificate covers the operation of.

*Subsection 2.* Equipment of the categories emergency positioning indication radio beacons (EPIRBs) and radar transponders (SARTs) may be so-called “dummy” versions of the equipment.

*Subsection 3.* As regards satellite equipment, it is merely a requirement that up-to-date, operational maritime Inmarsat-C equipment is available.

*Subsection 4.* Equipment requirements shall not apply to the categories SSAS (Ship Security Alert System) and LRIT (Long-range identification and tracking of ships).

### *Teacher qualifications*

**Section 8.** The teachers at the training programmes shall, in general, have a qualification level that is higher than the graduate level for the training programmes. Qualification level shall, in addition to educational competence, mean documented theoretical, expert and/or professional competence.

### *Examination*

**Section 9.** Tests shall be held in accordance with the provisions of the order on examinations and the evaluation of participants at the maritime training programmes issued by the Danish Maritime Authority unless stipulated otherwise in this order.

*Subsection 2.* Tests at schools approved in accordance with section 5(2)(ii) shall be held as external tests for which the external examiners are appointed by the Danish Maritime Authority.

**Section 10.** Tests shall be taken in front of the teacher and an external examiner, cf. section 14.

*Subsection 2.* The test shall be held as an oral test, a part of which shall be a practical performance test. A part of the test may have the form of a written test.

**Section 11.** Tests at schools approved in accordance with section 5(2)(ii) shall be requested from the Danish Maritime Authority no later than 30 days before the test.

*Subsection 2.* The place and time of a test, cf. subsection 1, shall be determined by the Danish Maritime Authority upon the request of a school.

**Section 12.** At the test, a form drawn up by the Danish Maritime Authority, “Presentation for radio test” (“Indstilling om aflæggelse af radioprøve”), shall be available to be filled in at the school where the test will take place.

*Subsection 2.* Together with the presentation, a declaration shall be signed to the effect that the applicant is aware of the provision of the international radio regulation on professional secrecy.

*Subsection 3.* In order to participate in a test, valid identification with a photo shall be presented in the form of a passport, discharge book, certificate of competency, driver’s license or the like. In connection with tests held at schools approved under section 5(2)(ii), the identification shall be presented to the external examiner.

### *Evaluation*

**Section 13.** All evaluations of radio tests shall have the form of a test. At the tests, the evaluation “passed” or “not passed” shall be used.

*Subsection 2.* The evaluation shall be made by the external examiner together with the teacher.

### *External examiners*

**Section 14.** External examiners at radio tests shall have detailed knowledge about GMDSS, hold a valid GOC certificate and, furthermore, comply with the provisions on external examiners stipulated in the order on examinations and the evaluation of participants at the maritime training programmes issued by the Danish Maritime Authority.

**Section 15.** External examiners at radio tests at schools approved in accordance with section 5(2)(ii) shall be appointed and authorised by the Danish Maritime Authority. The authorisation shall normally be granted for a period of two years, and in connection with the application for authorisation as an external examiner it shall be documented that the applicant complies with the requirements of section 14.

*Subsection 2.* The Danish Maritime Authority may decide that external examiners authorised by the Danish Maritime Authority as external examiners for radio tests at schools approved in accordance with section 5(2)(ii) cannot participate at radio tests at schools approved in accordance with section 5(2)(i).

### *Certificate validity*

**Section 16.** It is possible to issue the GOC certificate for a period of up to five years after a passed test with a validity of five years from the date of issue.

*Subsection 2.* Holders of GOC certificates which have, in accordance with subsection 1, lost their validity may be issued with a LRC certificate upon application. Holders of LRC certificates shall be considered holders of ROC certificates.

*Subsection 3.* In order to have a GOC certificate renewed with a validity of an additional five years, it is required that the holder documents to have:

- 1) served in sea-going ships as a radio operator under conditions where such a certificate is required for at least one year during the previous five years;
- 2) served in sea-going ships as a radio operator under conditions where such a certificate is required for at least three months during the previous six months; or
- 3) performed work that may, after an assessment by the Danish Maritime Authority in each individual case, be considered equal to the service required under item (i) or (ii).

*Subsection 4.* In order to reacquire a GOC certificate for a new five-year period for persons who do not meet the requirements of subsection 3, it is required that the person in question passes a reacquisition test, consisting of an oral and a practical part.

*Subsection 5.* The test requirements for the reacquisition test, cf. subsection 4, are shown in annex 1.

*Subsection 6.* When applying for renewal of certificates, a special form available from the webpage of the Danish Maritime Authority shall be used.

*Subsection 7.* The renewal shall have the form of a new certificate.

**Section 17.** The ROC certificate shall be issued with a validity of five years from the date of issue, whereafter it shall be possible to renew it for an additional five-year period upon application.

**Section 18.** The LRC certificate has no expiry as regards validity.

**Section 19.** Irrespective of the provisions of sections 16-18, the Danish Maritime Authority may, in case there is reason to believe that the holder of a valid certificate does no longer have the knowledge or skills required at the original test, ask the holder of the certificate to sit for a new test.

*Withdrawal, etc.*

**Section 20.** The Danish Maritime Authority may withdraw a certificate if the holder does not turn up for or pass a new test in accordance with section 19.

*Subsection 2.* The Danish Maritime Authority may withdraw a certificate or withdraw the recognition of a certification, cf. section 4(3), if the holder grossly or repeatedly contravenes the provisions on confidentiality or on the operation and use of radio systems.

*Subsection 3.* The Danish Maritime Authority may withdraw the recognition of a foreign certificate in case there is reason to believe that the holder of the recognised certificate does not have the knowledge or skills required of the holder of similar certificates in Denmark.

*Subsection 4.* A certificate that has been withdrawn shall be submitted to the Danish Maritime Authority.

*Entry into force, etc.*

**Section 21.** This order shall enter into force on 1 September 2011.

*Subsection 2.* Order no. 861 of 12 August 2004 on radio tests and certificates in GMDSS shall be repealed.

*Subsection 3.* GOC certificates issued in pursuance of provisions in force until now without any date of expiry shall be considered invalid.

*Subsection 4.* Except for the certificates mentioned in subsection 3, other certificates issued in pursuance of provisions in force until now shall remain valid, cf. however sections 16-18.

*Danish Maritime Authority, 29 August 2011*  
Sune Rahn / Hans Aage Nielsen

## Test requirements for acquiring GOC, LRC and ROC certificates

A. In order to pass the GOC test, the person in question shall:

- 1) *have knowledge about* fundamental principles of the maritime radio services, incl. satellite communication, including:
  - a) communication types;
  - b) station types;
  - c) frequencies and frequency bands;
  - d) the distribution of radio waves;
  - e) communication methods;
  - f) transmission and modulation types;
  - g) antennas;
  - h) power supplies, incl. batteries; and
  - i) the risk of high voltages;
- 2) *be able to use*:
  - a) watch-keeping receivers;
  - b) VHF radio systems;
  - c) MF/HF radio systems;
  - d) antennas;
  - e) batteries;
  - f) radio life-saving appliances, such as emergency position indicating radiobeacons (EPIRBs), search and rescue transponders (SARTs) and portable VHF radio systems;
  - g) digital selective call, DSC
  - h) NAVTEX receivers;
  - i) satellite communication (equipment or simulator); and
  - j) radio telex equipment;
- 3) *be able to carry out* elementary fault finding by means of built-in measuring instruments as well as elementary error recovery, such as changing of fuses, indicator lamps and the like;
- 4) *be able to use* operational procedures for:
  - a) emergency, urgent and safety communication in GMDSS, incl. the provisions of the IMO IAMSAR manual;
  - b) the use of radio equipment in emergencies, for example if the ship is deserted, in case of fire on board, or radio equipment breakdown;
  - c) emergency, urgent and safety communication with ships not fitted with GMDSS equipment;
  - d) receipt of maritime safety information (MSI); and
  - e) avoidance and remedy of inadvertent alarms;
- 5) *have an understanding of* the practical operation of:
  - a) GMDSS;
  - b) the function of Inmarsat in GMDSS, including:
    - 1) Inmarsat /B/F;
    - 2) Inmarsat C; and
    - 3) Inmarsat EGC;
  - c) search and rescue services (SAR);
  - d) ship reporting systems;
  - e) Radio Medical services;

- f) Ship Security Alert System – SSAS; and
- g) long-range identification and tracking of ships – LRIT;
- 6) *be able to use* the English language, both in writing and spoken, for satisfactory exchange of the communication that is relevant to safety of life at sea;
- 7) *be able to use* the regulations and instructions required on board ships, including the international signal code and standard phrases in connection with communication as well as keeping of radio records;
- 8) *have knowledge about* general communication procedures, including;
  - a) the choice of suitable communication methods in various situations;
  - b) traffic lists;
  - c) radio telephone conversations;
  - d) charges;
  - e) practical traffic routines;
  - f) the most important shipping routes;
  - g) the location of Inmarsat coast-earth stations; and
  - h) the location of the most important coast radio stations;
- 9) *have knowledge about* regulations on continuous maintenance of routines and maintenance of knowledge about GMDSS at radio operators in ships (familiarization).

**B.** At the GOC reacquisition test under section 16(4) and (5) of this order, the test participant shall, however, in accordance with the requirements for the GOC test under item A, be examined only in the subjects related to emergency, urgency and safety under item (ii), paras a-i, item (iv), item (v), item (vi) and item (ix).

**C.** In order to pass the ROC test, the person in question shall:

- 1) *have knowledge about* fundamental principles of the maritime radio services, including:
  - a) communication types;
  - b) station types;
  - c) VHF and UHF frequencies (channels); as well as
  - d) the distribution of VHF and UHF radio waves;
  - e) antennas; and
  - f) power supplies, including batteries;
- 2) *be able to use:*
  - a) VHF radio systems;
  - b) antennas;
  - c) batteries;
  - d) radio life-saving appliances, such as emergency position indicating radiobeacons (EPIRBs), search and rescue transponders (SARTs) and portable VHF radio systems;
  - e) digital selective call, DSC; and
  - f) NAVTEX receivers;
- 3) *be able to use* operational procedures for:
  - a) emergency, urgent and safety communication in GMDSS, incl. the provisions of the IMO IAMSAR manual;
  - b) the use of radio equipment in emergencies, for example if the ship is deserted, in case of a fire on board or radio equipment breakdown;
  - c) emergency, urgent and safety communication with ships not fitted with GMDSS equipment;
  - d) receipt of maritime safety information (MSI); and

- e) avoidance and remedy of inadvertent alarms;
- 4) *have an understanding of* the practical operation of:
  - a) GMDSS;
  - b) search and rescue services (SAR); and
  - c) Radio Medical services;
- 5) *be able to use* the English language, both in writing and spoken, for satisfactory exchange of the communication that is relevant to safety of life at sea;
- 6) *be able to use* the regulations and instructions required on board ships, including the keeping of radio records;
- 7) *have knowledge about* general communication procedures in sea area A1, including:
  - a) traffic lists;
  - b) radio telephone conversations;
  - c) charges;
  - d) practical traffic routines;
  - e) the most important shipping routes in Northern Europe; and
  - f) the location of the most important VHF coast radio stations in Northern Europe;
- 8) *have knowledge about* the regulations on continuous maintenance of routines and maintenance of knowledge about GMDSS at radio operators in ships (Familiarization).

**D.** In order to pass the LRC test, the person in question shall:

- 1) *have knowledge about* fundamental principles of the maritime radio services, including satellite communication, including:
  - a) communication types;
  - b) station types;
  - c) frequencies and frequency bands;
  - d) the distribution of radio waves;
  - e) communication methods;
  - f) transmittance and modulation types;
  - g) antennas; and
  - h) power supplies, including batteries;
- 2) *be able to use:*
  - a) watch-keeping receivers;
  - b) VHF radio systems;
  - c) MF/HF radio systems;
  - d) antennas;
  - e) batteries;
  - f) radio life-saving appliances, such as emergency position indicating radiobeacons (EPIRBs), search and rescue transponders (SARTs) and portable VHF radio systems;
  - g) digital selective call, DSC;
  - h) NAVTEX receivers; and
  - i) Inmarsat-C systems.
- 3) *be able to use* operational procedures for:
  - a) emergency, urgent and safety communication in GMDSS, incl. the provisions of the IMO IAMSAR manual;
  - b) the use of radio equipment in emergencies, for example if the ship is deserted, in case of fire on board or breakdown of radio equipment;
  - c) emergency, urgent and safety communication with ships not fitted with GMDSS equipment;

- d) receipt of maritime safety information (MSI); and
- e) avoidance and remedy of inadvertent alarms;
- 4) *have an understanding of* the practical operation of:
  - a) GMDSS;
  - b) the functioning of Inmarsat in GMDSS, including
    - 1) Inmarsat B/F;
    - 2) Inmarsat C; and
    - 3) Inmarsat EGC; and
  - c) search and rescue services (SAR);
  - d) Radio Medical services;
- 5) *be able to use* the English language both in writing and orally for satisfactory exchange of the communication that is relevant to safety of life at sea;
- 6) *be able to use* the regulations and instructions required on board ships, including the keeping of radio records;
- 7) *have knowledge about* general communication procedures, including;
  - a) choice of suitable communication methods in various situations;
  - b) traffic lists;
  - c) radio telephone conversations;
  - d) charges;
  - e) practical traffic routines;
  - f) the location of the most important coast radio stations;
- 8) *have knowledge about* regulations on the maintenance of routines and the maintenance of knowledge about GMDSS at radio operators in ships (Familiarization).