Innovation, Science and Economic Development Canada

Innovation, Sciences et Développement économique Canada

RSS-288
Issue 2
TBD
Draft

Spectrum Management and Telecommunications

Radio Standards Specification

Global Maritime Distress and Safety System (GMDSS)

Aussi disponible en français – CNR-288

Canada

Preface

Radio Standards Specification RSS-288, issue 2, *Global Maritime Distress and Safety System (GMDSS*), replaces RSS-288, issue 1, dated January 2012.

The main changes are listed below:

1. removed the technical documents from the normative publications
2. removed the technical requirements for narrowband direct printing (NBDP) telegraphy
3. added a clarification on the frequencies of operation in section 1
4. modified section 3 regarding the Transport Canada Acceptance letter
5. added a related documents section including a reference to RBR-2, *Technical Requirements for the Operation of Mobile Stations in the Maritime Service*
6. editorial changes and clarifications, as appropriate

Inquiries may be submitted by one of the following methods:

1. Online using the General Inquiry form (in the form, select the Directorate of Regulatory Standards radio button and specify "RSS-288" in the General Inquiry field)

2. By mail to the following address:

   Innovation, Science and Economic Development Canada
   Engineering, Planning and Standards Branch
   Attention: Regulatory Standards Directorate
   235 Queen Street
   Ottawa ON K1A 0H5
   Canada

3. By email to consultationradiostandards-consultationnormesradio@ised-isde.gc.ca

Additional information and guidance are available on the Innovation, Science and Economic Development Canada (ISED) webpages Common Questions and Answers and General Notices.

Comments and suggestions for improving this standard may be submitted online using the Standard Change Request form, or by mail or email to the above addresses.

All ISED publications related to spectrum management and telecommunications are available on the Spectrum Management and Telecommunications website.

Issued under the authority of
the Minister of Industry

_____

Wen Kwan
Director General
Engineering, Planning and Standards Branch

Contents

1. Scope

This Radio Standard Specification (RSS) sets out the requirements for certification of the following shipborne radiocommunication equipment, operating in the 496 kHz – 27,500 kHz and 9.2-9.5 GHz bands, which meets the requirements of the Global Maritime Distress and Safety System (GMDSS):

a) medium frequency radio transmitters and receivers for voice communication, with digital selective calling (DSC);
b) medium frequency and high frequency (MF/HF) radio transmitters and receivers for voice communication, with DSC; and
c) survival craft search and rescue transponder (SART) devices in the band 9.2-9.5 GHz.

The following equipment is not in scope of this RSS.

VHF equipment which meets GMDSS requirements falls under RSS-182, *Maritime Radio Transmitters and Receivers in the Band 156-162.5 MHz*.

The emergency position indicating radio beacon (EPIRB), which is another device of the overall GMDSS, falls under RSS-287, *Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD)*.

2. General requirements and references

This section sets out the general requirements and references related to this RSS.

2.1. Coming into force and transition period

This document will be in force as of the date of its publication on Innovation, Science and Economic Development Canada's (ISED) website.

However, a transition period of six months from the publication date will be provided. During this period, all applications for certification under RSS-288 issue 1 or issue 2 will be accepted. After this period, only applications for the certification of equipment under RSS-288, issue 2, will be accepted, and equipment manufactured, imported, distributed, leased, offered for sale, or sold in Canada shall comply with this present issue.

A copy of RSS-288, issue 1, is available upon request by consultationnormesradio@ised-isde.gc.ca.

2.2. Certification requirements

Equipment covered by this standard is classified as Category I equipment and shall be certified. Either a technical acceptance certificate (TAC) issued by ISED's Certification and Engineering Bureau (CEB) or a certificate issued by a recognized certification body (CB) is required.

2.3. Licensing requirements

Equipment covered by this standard is exempt from licensing requirements pursuant to section 15 of the *Radiocommunication Regulations*.

2.4. RSS-Gen compliance

In addition to the requirements specified in this standard, equipment being certified under this standard shall also comply with the applicable requirements set out in RSS-Gen, *General Requirements for Compliance of Radio Apparatus*.

2.5. References

This section specifies the external documents that are relevant for this RSS.

2.5.1. Related documents

The following document(s) should be consulted together with this RSS:

- RBR-2, Technical Requirements for the Operation of Mobile Stations in the Maritime Service

2.6. Definitions and abbreviations

The following terms are using in this document.

Digital Selective Calling (DSC) is a type of synchronous system developed by the ITU Radiocommunication Sector (ITU-R) that is used to establish contact with a station or groups of stations automatically by means of radio equipment.

The following abbreviations are using in this document.

ETSI European Telecommunications Standards Institute

IEC International Electrotechnical Commission

IMO International Maritime Organization

3. Transport Canada Acceptance

Shipborne radio equipment requires verification from Transport Canada (TC) that it meets TC's operational requirements before the applicant can submit the equipment to ISED for certification under this RSS. Non-shipborne equipment, portable VHF radiotelephone (voice only) and coast station equipment do not require this acceptance letter. TC requirements can be found in the *Navigation Safety Regulations, 2020*.

The acceptance letter issued by TC, confirming that the equipment has met TC requirements, shall be included as part of the certification application sent to the CEB or a recognized CB.

3.1. Inquiries Concerning Transport Canada Requirements

Inquiries concerning Transport Canada requirements should be directed to:

Manager, Navigation Safety and Radiocommunications
Marine Safety, Transport Canada
Tower C, Place de Ville
330 Sparks Street, 10th Floor
Ottawa ON K1A 0N8
Email: TC.NavRadio.TC@Tc.gc.ca

4. Certification requirements

This section sets out the requirements applicable to radio transmitters subject to this standard.

4.1. General

GMDSS equipment requires approval from Transport Canada as meeting that department's operational requirements before the applicant can submit the equipment to ISED for certification (see section 3).

4.2. **Equipment with DSC capability**

Shipborne radio transmitter and receiver systems complete with DSC capability shall comply with the international standards and resolutions as shown in Table 1.

Table 1 - List of Standards and Resolutions for Equipment with DSC

Type of Equipment	Applicable standards
MF radio transmitters and receivers for voice communication with DSC	a. IMO A.694(17), IMO A.804(19), IEC 61097-3, IEC 61097-8, and IEC 61097-9 or b. EN 300 338, EN 300 373, and EN 301 033
MF and HF radio transmitters and receivers for voice communication with DSC	a. IMO A.694(17), IMO A.806(19), IEC 61097-3, IEC 61097-8, and IEC 61097-9 or b. EN 300 338, EN 300 373, and EN 301 033

4.3. **Add-on device for DSC capability**

If the DSC capability is contained in an "add-on" device which is intended for connection to the voice port of a radio terminal model that has already been certified by ISED (e.g. a radio terminal certified to RSS-181 or RSS-182), certification of the add-on device by ISED is not required. However, each type or model of the add-on device shall be tested and shall meet the standards contained in the IMO resolutions listed in Table 1.

The testing can be performed by the manufacturer or the importer.

The test results shall be kept by the manufacturer or the importer and shall be made available to ISED upon request.

The equipment user manual shall provide the following or equivalent notice: "This device meets the GMDSS standard (per IMO Resolution #_____). It may be connected to the voice/data input port of a radio terminal model that has already been certified by Innovation, Science and Economic Development Canada."

140
141 4.4. **Survival Craft Survival Craft Search and Rescue Transponders (SART) in the band**
142 **9.2-9.5 GHz**
143
144 Survival craft SART in the band 9.2-9.5 GHz shall comply with the following standards:
145 a. IMO A.694(17)
146 b. IMO A.802(19) and
147 c. IEC 61097-1