

**Amendments approved by MSC 86 pending implementation**  
*(MSC 86/6/1, annexes 5 and 6)*

**ANNEX 5**  
(English only)

**AGREED AMENDMENTS**

**TO THE**

**TECHNICAL SPECIFICATIONS FOR THE LRIT SYSTEM**

(as set out in the annex to MSC.1/Circ.1259)

**Amendments to the XML Schemas**

(refer to paragraphs 3.3.1.3 to 3.3.1.7)

1        *The data elements “percentageValueType” and “ priceValueType” of the Types.xsd file, version 1.1, dated 24 Oct 2008 are to be amended to read as follows:*

```
<xs:simpleType name="percentageValueType">
  <xs:restriction base="xs:float">
    <del>xs:pattern value="[0-9]*([0-9]{1,2})?"</del>
    <xs:pattern value="[0-9]+(\.[0-9]{1,2})?"</xs:pattern>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="priceValueType">
  <xs:restriction base="xs:float">
    <del>xs:pattern value="[0-9]*([0-9]{1,4})?"</del>
    <xs:pattern value="[0-9]+(\.[0-9]{1,4})?"</xs:pattern>
  </xs:restriction>
</xs:simpleType>
```

*Note:*

On acceptance of the amendment the version and date and the change log will be amended accordingly.

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## **ANNEX 6**

### **AMENDMENTS TO BE CONSIDERED IN RELATION TO THE REQUEST OF COMSAR 13**

(refer to paragraph 2.17 of MSC 86/8 and paragraph 6.34 of COMSAR 13/14)  
(refer also to paragraphs 3.4.2.1 to 3.4.2.12 of the report)

#### **PART I** (English only)

#### **DRAFT AMENDMENTS**

#### **TO THE**

#### **TECHNICAL SPECIFICATIONS FOR THE LRIT SYSTEM** (as set out in the annex to MSC.1/Circ.1259, subject to the amendments set out in annex 3 of this report)

#### **Amendments to the Technical specifications for communications within the LRIT system**

*1 The existing endnote number 5 after table 3 on Summary of Position request and SAR position request messages should be deleted and replaced by the following:*

*“<sup>5</sup> RequestTypes 1 (one time poll), 7 (archive request) and 9 (most recent position report) are the only valid values for Message 5 (SAR position request).”*

*2 In table 15 on Clarification of valid message parameter combinations for Messages 4 and 5, the text under the column headed “Note” for Access Type 6 and Request Type 7, should be deleted and replaced by the following:*

*“Only valid for message type 5”*

**PART II**  
(English only)

**DRAFT AMENDMENTS**

**TO THE**

**PROTOCOLS AND ARRANGEMENTS FOR THE PROTOTYPE, DEVELOPMENT,  
INTEGRATION AND MODIFICATION TESTING PHASES OF THE LRIT SYSTEM**  
(as set out in the annex 1 to the annex to MSC.1/Circ.1294)

**Amendments  
to**

**Appendix 2 on LRIT Data Centre test procedures and test cases**

*1 In table 2.2.2 on Test cases for test DC-2.1, the following new row should be inserted after the row beginning with “1” under the column headed “Request Type”:*

7	Not valid	Null	Valid	DC1 sends the appropriate position report to DC2 (D).	
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## PART III

### DRAFT AMENDMENTS TO MSC.1/CIRC.1297

(shown as track changes)  
(in addition to those set out in annex 4 of this report)

Ref. T2-OSS/1.4

MSC.1/Circ.~~1297~~[....]  
~~8-December-2008~~[...] June 2009

### GUIDANCE TO SEARCH AND RESCUE SERVICES IN RELATION TO REQUESTING AND RECEIVING LRIT INFORMATION

1 The Maritime Safety Committee (the Committee), at its eighty-~~fifth~~-sixth session (~~26-27 November-May~~ to 5 ~~December-2008~~June 2009), ~~approved~~ a number of amendments to the Technical specifications for communications within the LRIT system which entail a number of amendments to MSC.1/Circ.~~1258-1297~~ on Guidance to Search and Rescue services in relation to requesting and receiving LRIT information in relation to provision of LRIT information to Search and Rescue services and, as a consequence, approved the Guidance to Search and Rescue services in relation to requesting and receiving LRIT information (the Guidance), as set out in the annex.

2 The Committee also agreed, having considered the proposal of the ~~Sub-Sub-Committee on Radiocommunications and Search and Rescue~~, at its thirteenth session (19 to 23 January 2009), and notwithstanding the provisions of SOLAS regulation V/19-1.12 in relation to the provision of LRIT information to Search and Rescue (SAR) services of SOLAS Contracting Governments for the search and rescue of persons in distress at sea, that SAR services are permitted to request LRIT information transmitted by a specific ship when an uncertainty or alert phase, as defined in the annex to the 1979 SAR Convention, might need to be declared or has been declared in relation to the ship in question or those onboard.

23 The Committee also agreed to keep the Guidance under review and to amend it, as and when the circumstances warrant.

34 SOLAS Contracting Governments are invited to bring the present circular and its annex to the attention of their ~~Search and Rescue services~~ (SAR services) and to provide them with any necessary further guidance and instruction so as to ensure that the objectives of this circular are achieved.

45 SOLAS Contracting Governments are invited to bring the present circular and its annex to the attention of those engaged in the implementation of the provisions of SOLAS regulation V/19-1 and/or the development, ~~and establishment~~ or operation of their LRIT Data Centres ~~and/or the initial establishment of the LRIT system.~~

5 The United States, having agreed to provide the International LRIT Data Exchange on an interim basis, is invited to bring the present circular to the attention of those engaged in the development and establishment operation of the International LRIT Data Exchange.

6 SOLAS Contracting Governments, international organizations, non-governmental organizations with consultative status, the LRIT Coordinator, LRIT Data Centres acting through the SOLAS Contracting Government(s) which have established them, the International LRIT Data Exchange acting through the United States and SAR services acting through their SOLAS Contracting Government(s), are also invited to bring to the attention of the Committee, at the earliest opportunity, the results of the experience gained from the use of the Guidance for consideration of action to be taken.

7 The circular revokes MSC.1/Circ.~~4258~~[....] and any reference to MSC.1/Circ.1296 should be read as reference to the present circular.

## ANNEX

### GUIDANCE TO SEARCH AND RESCUE SERVICES IN RELATION TO REQUESTING AND RECEIVING LRIT INFORMATION

#### 1 Purpose

1.1 This note provides guidance to Search and Rescue services<sup>1</sup> of Contracting Governments<sup>2</sup> in relation to requesting and receiving LRIT information<sup>3</sup> transmitted by ships<sup>4</sup>.

1.2 Search and Rescue services (SAR services) of Contracting Governments are entitled, pursuant to the provisions of regulation<sup>5</sup> V/19-1.12, to request and receive LRIT information for the search and rescue of persons in distress at sea.

1.3 SAR services of Contracting Governments are also permitted to request and receive LRIT information transmitted by a specific ship when an uncertainty<sup>6</sup> or alert<sup>7</sup> phase might need to be declared or has been declared in relation to the ship in question or those onboard.

#### 2 Related documents

2.1 This note should always be read in conjunction with the salient provisions of:

- .1 Regulation<sup>8</sup> V/19-1 on Long-range identification and tracking of ships;
- .2 Revised performance standards and functional requirements for the long-range identification and tracking of ships (the Revised performance standards) adopted by resolution MSC.263(84); and
- .3 Technical specifications for communications within the LRIT system<sup>9</sup>.

<sup>1</sup> Regulation V/2.5 defines *Search and rescue service* as the performance of distress monitoring, communication, coordination and search and rescue functions, including provision of medical advice, initial medical assistance, or medical evacuation, through the use of public and private resources including cooperating aircraft, ships, vessels and other craft and installations.

<sup>2</sup> *Contracting Government* means a Contracting Government to the International Convention for the Safety of Life at Sea, 1974, as amended.

<sup>3</sup> Refer to regulation V/19-1.5.

<sup>4</sup> *Ship* refers to ships, high-speed craft and mobile offshore drilling units which are required to comply with the provisions of regulation V/19-1.

<sup>5</sup> Unless expressly provided otherwise *Regulation* means a regulation of the annex to the International Convention for the Safety of Life at Sea, 1974, as amended.

<sup>6</sup> Uncertainty phase is defined in paragraph 1.3.11 of the annex to the International Convention on Maritime Search and Rescue, 1979, as amended as a situation wherein uncertainty exists as to the safety of a person, a vessel or a craft.

<sup>7</sup> Alert phase is defined in paragraph 1.3.11 of the annex to the International Convention on Maritime Search and Rescue, 1979, as amended, as a situation wherein apprehension exists as to the safety of a person, a vessel or a craft.

<sup>8</sup> Unless expressly provided otherwise *Regulation* means a regulation of the annex to the International Convention for the Safety of Life at Sea, 1974, as amended.

<sup>9</sup> Refer to MSC.1/Circ.1259 on Interim revised technical specifications for the LRIT system.

### 3 Definitions

3.1 Unless expressly indicated otherwise the terms used in this note have the meaning assigned to them in the related documents listed above.

### 4 Requesting LRIT information

4.1 A ~~Search and Rescue service (SAR service) of Contracting Governments~~ should request, pursuant to the provisions of regulation V/19-1.12 or paragraph 1.3, the provision of LRIT information ~~for the search and rescue of persons in distress at sea~~ only via the LRIT Data Centre serving the Contracting Government in whose territory the service is located (the LRIT Data Centre).

4.2 SAR services should request the Contracting Governments in whose territory the service is located to advise them which LRIT Data Centre they should use and to provide them with the contact details of the centre.

4.3 SAR services should also request the Contracting Governments in whose territory the service is located to provide them with any related guidance and instructions the Contracting Government concerned has established in relation to the provision of LRIT information to them.

4.4 SAR services are advised to establish with the LRIT Data Centre they will be using working procedures and arrangements so as to ensure easy and efficient communications and the expedient processing of their requests for LRIT information.

4.5 Regulation V/19-1.12 and paragraph 1.3 specifies-specify that the SAR service of Contracting Governments shall be entitled or are allowed to request and receive LRIT information ~~for the search and rescue of persons in distress at sea~~. Thus, the right to request LRIT information is not limited to SAR services established by Parties to the 1979 SAR Convention.

4.5.1 However, SAR services will be able to request and receive LRIT information only if the Contracting Government which has established them has communicated the relevant information<sup>10</sup> to the Organization and the related details have been included in the Radiocommunications and Search and Rescue module<sup>11</sup> of the Global Integrated Shipping Information System (GISIS) of the Organization.

4.5.2 All LRIT Data Centres other than the centre serving the SAR service concerned and the International LRIT Data Exchange are able to process requests for LRIT information only if the LRIT Data Centre serving the SAR service indicates in the request for information the LRIT ID of the LRIT Data User requesting the information. The LRIT Data Distribution Plan, which assigns the LRIT IDs for LRIT Data Users, is able to assign LRIT IDs to SAR services only if the necessary information is provided in the Radiocommunications and Search and Rescue module of GISIS.

<sup>10</sup> Refer to COMSAR/Circ.27 on Data format for new combined SAR.2 and SAR.3 circulars concerning information on the current availability of SAR services.

<sup>11</sup> Radiocommunications and Search and Rescue module is a non-public module.



4.6 The provisions of regulation V/19-1.9.1 in relation to the right of an Administration to limit the provision of LRIT information to a Contracting Government requesting such information pursuant to the provisions of regulation V/19-1.8.1.3 do not apply in relation to request of such information by SAR services.

4.7 Regulation V/19-1.12 does not draw any distinction between maritime and aeronautical search and rescue incidents and allows SAR services to request LRIT information, as long as it is for the purpose of the search and rescue of persons in distress at sea.

4.8 A request for the provision of LRIT information for the search and rescue of persons in distress at sea is initiated by the LRIT Data Centre serving the SAR service transmitting a SAR SURPIC message via the International LRIT Data Exchange for broadcast to all LRIT Data Centres. This message requests the most recent data from the databases within all LRIT Data Centres in order to provide the SAR services with the ability to obtain a picture of ships within the geographical area specified by the SAR service requesting the information. In order to determine whether ships within the geographical area specified by the SAR service are transiting towards or away from the specific location the SAR service can request up to the last 4 preset transmission LRIT information from of all ships within the geographical area. All LRIT information which would be provided to the SAR service would be located within the geographical area specified by the SAR service. From that information the SAR service can identify which ships are more favourably positioned to respond to the situation and can poll those ships directly to determine their current locations.

4.9 A request for the provision of LRIT information transmitted by a specific ship when an uncertainty or alert phase might need to be declared or has been declared in relation to the ship in question or those onboard is initiated by the LRIT Data Centre serving the SAR service transmitting a LRIT message (which provides the relevant information) via the International LRIT Data Exchange for broadcast to all LRIT Data Centres. This message can request the most recent LRIT information transmitted by the ship in question or request the polling of the ship or archived LRIT information relating to the specific ship.

## **5 Information to be provided when requesting LRIT information**

5.1 A SAR service, when wishing to receive LRIT information should indicate to the LRIT Data Centre the criteria to be used by the centre when providing the requested information.

5.2.1 For the purposes of regulation V/19-1.12 (i.e. for the search and rescue of persons in distress at sea), the criteria to be provided, subject to the provisions of paragraphs 5.3 to 5.4.2, are:

- .1 the geographical area within which LRIT information is requested; and
- .2 the number of LRIT information transmissions requested.

5.2.2 For the purposes of paragraph 1.3 (i.e. when an uncertainty or alert phase might need to be declared or has been declared in relation to a specific ship and there is a need to ascertain its whereabouts) the criteria to be provided, subject to the provisions of paragraphs 5.3 and 5.5.1 to 5.5.3, are:

- .1 the name of the ship in question;
- .2 the IMO ship identification number of the ship;
- .3 the Contracting Government whose flag the ship is entitled to fly;
- .4 the nature of the LRIT information requested (i.e. the provision of the most recent LRIT information; the polling or on on-demand transmission of LRIT information; or the provision of archived LRIT information transmitted by the ship during a specified period together with the dates and times between which the information is requested).

5.3 All LRIT Data Centres are required to provide to SAR services LRIT information irrespective of the location of the geographical area within which the information is requested. Thus, SAR services are able to request LRIT information for geographical areas which are located outside the search and rescue regions which are under their responsibility.

5.3.1 The geographical area may be either circular or rectangular and for these the Technical specifications for communications within the LRIT system use the terms SAR circular area and SAR rectangular area, respectively. SAR services are advised to take into account the information provided in paragraphs 5.4 to 5.4.2 below when defining the geographical areas within which they are requesting the provision of LRIT information. In addition, SAR services, when formulating their initial request for the provisions of LRIT information, are advised to define the geographical area within which they are requesting the provision of LRIT information in a manner that is larger than the search area they have identified for search and rescue purposes, so as to be able to easily identify which ships are transiting towards or away from the specific location.

5.3.2 When requesting LRIT information within a SAR circular area the geographical position of the centre of the area should be indicated in latitude and longitude and the radius in nautical miles. The radius of the SAR circular area should not exceed 999 nautical miles. Any requests which include a radius in excess of 999 nautical miles would be rejected by the LRIT Data Centres which are asked to process them.

5.3.3 When requesting LRIT information within a SAR rectangular area the geographical position of the Southwest corner of the area should be indicated in latitude and longitude and the North and East offsets in degrees and minutes. Each offset should not exceed 2,000 nautical miles. Any requests which include an offset in excess of 2,000 nautical miles would be rejected by the LRIT Data Centres which are asked to process them.

5.3.4 The LRIT system operates using WGS 84 datum and thus all geographical positions should be with reference to the WGS 84 datum.

5.3.5 All geographical positions (latitude and longitude) should be in degrees and minutes, with a single space between the coordinates and no other spaces, without punctuation, with leading zeros for single number minutes, but not for degrees and with the minutes tick following the minutes part, for example 51°42' N 5°07' E.

5.4 The number of LRIT information transmissions requested relates to the LRIT information received within the LRIT system during the 24 hours preceding the time the LRIT Data Centre will lodge the request of the SAR service for LRIT information and for these the Technical specifications for communications within the LRIT system use the term number of position

reports. In this respect, it should be noted that, unless there is a demand for the transmission of LRIT information at more frequent intervals, the shipborne equipment are preset to transmit LRIT information at 6-hour intervals.

5.4.1 When a SAR service indicates a value of 2 in relation to the number of positions it is requesting, it will receive the last two LRIT information transmissions from all ships within the defined geographical area during the previous 24 hours.

5.4.2 SAR services are advised to indicate to the LRIT Data Centre the number of positions they are requesting as it will provide them information in relation to the direction the various ships are heading. However, the number of positions to be requested should not exceed 4.

5.5.1 When requesting the provision of the most recent LRIT information transmitted by the ship in question, the LRIT Data Centre serving the SAR service will lodge the request and the LRIT Data Centre to which the ship was instructed to transmit LRIT information will provide the LRIT information it received from the ship immediately before the time the request was lodged. For these the Technical specifications for communications within the LRIT system use the term most recent position report. In this respect, it should be noted that, unless there is a demand for the transmission of LRIT information at more frequent intervals, the shipborne equipment are preset to transmit LRIT information at 6-hour intervals. In addition, it should be noted that, in case the last available transmission of LRIT information from the ship in question occurred more than 6 hours prior to the time the request was lodged, the LRIT information may need to be retrieved from the archives of the LRIT Data Centre to which the ship was instructed to transmit LRIT information.

5.5.2 When requesting the polling or on-demand transmission of LRIT information from the ship in question, the LRIT Data Centre serving the SAR service will lodge the request and the LRIT Data Centre to which the ship has been instructed to transmit LRIT information will transmit to the ship the relevant commands and await its response. For these the Technical specifications for communications within the LRIT system use the term one time poll of ship. In this respect, it should be noted that the Revised performance standards stipulate that on-demand LRIT information should be provided to an LRIT Data User (i.e. in the case the SAR service requesting the information) within 30 min of the time the LRIT Data User requested the information.

5.5.3 When requesting the provision of archived LRIT information transmitted during a specified period by the ship in question, the LRIT Data Centre serving the SAR service will lodge the request specifying the dates and times between which the information is requested and the LRIT Data Centre to which the ship was instructed to transmit LRIT information will retrieve the archived LRIT information transmitted by the ship during the timeframe specified in the request it received. For these the Technical specifications for communications within the LRIT system use the term archived LRIT information request. In this respect, it should be noted that the Revised performance standards stipulate that for LRIT information archived within the last 4 days these should be sent to the requestor within 30 min of receiving the request; if archived between 4 and 30 days previously within 1 h of receiving the request; and if archived more than 30 days previously within 5 days of receiving the request.

## 6 Processing of initial requests for LRIT information

6.1 The LRIT Data Centre serving the SAR service will, using the criteria provided by the SAR service, formulate a request for the provision of LRIT information for search and rescue purposes, in accordance with the provisions of the Technical specifications for communications within the LRIT system, and will forward it to the other LRIT Data Centres through the International LRIT Data Exchange.

6.2 The LRIT Data Centres receiving the request for such information will process it using the criteria provided in the request and will forward, through the International LRIT Data Exchange, to the LRIT Data Centre which requested the information which is available to them.

6.3 The LRIT Data Centre will also process the request in relation to the LRIT information which is transmitted to it and will provide the SAR service with the information it has received from the other LRIT Data Centres and the information it has available.

6.4 Requests for the provision of LRIT information for search and rescue purposes are not assigned, within the LRIT system, any form of handling or processing priority over other requests for LRIT information.

6.5 The LRIT information which will be provided to a SAR service upon request will indicate ~~the all the~~ positions of ~~the various~~ ships, including the one for which specific information may have been requested, in degrees, minutes and decimals of a minute (to 2 decimals), with a single space between the coordinates and no other spaces, without punctuation, with a stop or a comma as a decimal separator, with leading zeros for single number minutes, but not for degrees and with the minutes tick following the fractional part, for example 51°42.03'N 5°07.14'E.

## 7 Requesting additional LRIT information

7.1 A SAR service, after it has assessed the LRIT information it has received following its initial request, is able to request the provision of additional LRIT information, ~~on demand (i.e., for example~~ to request the polling of ships in a geographical area or to request archived LRIT information transmitted by the ship for which an uncertainty or alert phase might need to be declared or has been declared).

## 8 Limitations during the phased-in implementation

8.1 SAR services should note that, in simplified terms, regulation V/19-1.4.1 specifies that ships constructed on or after 31 December 2008 shall transmit LRIT information as from the date they enter service and for ships constructed before 31 December 2008 provides a phased-in implementation schedule which is dependant, *inter alia*, on the date on which the first survey of the radio installation of the ship becomes due after 31 December 2008 and in the case of ships which operate exclusively in sea area A4 after 1 July 2009.

8.1.1 Thus for ships constructed before 31 December 2008:

- .1 other than those operating exclusively within sea area A4, the phased-in implementation will end on 31 December 2009. However, in such cases if the Contracting Government is also a State Party to the 1988 SOLAS Protocol the phased in implementation will end on 31 March 2010; and

- .2 operating exclusively within sea area A4, the phased in implementation will end on 1 July 2010. However, in such cases if the Contracting Government is also a State Party to the 1988 SOLAS Protocol the phased-in implementation will end on 1 October 2010.

8.2 As a result SAR services are advised that until the end of the phased-in implementation there might be ships within the geographical area within which they are requesting the provision of LRIT information which might have not yet been integrated in the LRIT system. Thus, SAR services should not rely on the LRIT system to provide them a complete picture of the ships in a geographical area during the phased-in implementation.

## **9 Ship reporting systems**

9.1 SAR services should note that the LRIT system does not replace any existing or new ship reporting system.

## **10 Obligations of SAR services**

10.1 Regulation V/19-1.10 specifies that Contracting Governments shall, at all times:

- .1 recognize the importance of long-range identification and tracking information;
- .2 recognize and respect the commercial confidentiality and sensitivity of any long-range identification and tracking information they may receive;
- .3 protect the information they may receive from unauthorized access or disclosure;  
and
- .4 use the information they may receive in a manner consistent with international law.

10.2 SAR services shall consider themselves obliged to adhere, *mutatis mutandis*, to provisions of regulation V/19-1.10.

10.3 The attention of SAR services is drawn to regulation V/19-1.13 which states that Contracting Governments may report to the Organization any case where they consider that provisions of the regulation or of any other related requirements established by the Organization have not been or are not being observed or adhered to.

## **11 Cost of the LRIT information provided to SAR services**

11.1 Regulation V/19-1.12 provides that SAR services shall be entitled to receive, free of any charges, LRIT information in relation to the search and rescue of persons in distress at sea. In addition, when an uncertainty or alert phase might need to be declared or has been declared, LRIT information will also be provided free of any charges.

11.2 SAR services should note that the provision of LRIT information to them entails expenditures and costs for the LRIT Data Centres and the International LRIT Data Exchange which needs to be paid by the other LRIT Data Users as an overhead on the charges they have to pay for the provision of LRIT information to them.

11.3 SAR services are strongly urged, notwithstanding the purpose for which they might be requesting the provision of LRIT information, to exercise the right to request LRIT information with due care and to avoid excessive requests.

## **12 Performance review and audit of the LRIT system**

12.1 SAR services are, subject to the provisions of the national legislation of the Contracting Government in whose territory they are located, expected to provide, when requested by the LRIT Coordinator, information, to enable the holistic review of the performance of the LRIT system and for the investigation of any disputes.

12.2 SAR services are thus expected to maintain the necessary records identifying the cases for which they have requested the provision of LRIT information; what information they have requested and when, what LRIT information they have received and when; and how the information was used.

| 12.2.1 Such records may form part of the operational records maintained by the SAR services.

| 12.2.2 SAR services should note that all LRIT Data Centres are required to archive LRIT information for at least one year and until such time as the Committee reviews and accepts the annual report of the audit of their performance by the LRIT Coordinator. Thus, SAR services are expected to retain the related records until the Committee reviews and accepts the annual report of the audit of their performance of the LRIT Data Centre providing services to them.

12.3 SAR services are also expected to provide, when requested by the LRIT Coordinator, information on the arrangements they have in place in order to protect the LRIT information they may receive from unauthorized access or disclosure.

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