

LONG RANGE IDENTIFICATION AND TRACKING (LRIT) OF SHIPS SOLAS Ch.V/R19-1

**Information for Ship-owners, Operators, Ships Technical Management Companies,
Classification Societies and Ship Masters**

A. General

The concept of LRIT is in the Resolution MSC.202(81) and establishes the new Rule 19-1 Chapter V from SOLAS, which entered into force on the 1st of January 2008.

B. Ships that shall transmit LRIT

The obligation of transmitting the LRIT information applies to the following types of ships when making international voyages¹, in which this Bulletin, they will be referred as the “ship”.

In international voyages the LRIT information shall be transmitted by:

- Passenger ships, including high speed craft – HSC;
- Cargo ships, including HSC, with a tonnage equal or superior to 300, and;
- Mobile offshore drilling units – MODU

C. The LRIT information shall be automatically transmitted by the equipment on board and shall have the following specification:

- Identity of the ship (identification of the equipment on board);
- Position of the ship – latitude and longitude (GNSS position – Global Navigation Satellite System – based on datum WGS 84) and;
- Date and time of transmission (associated to GNSS position).

D. The LRIT system implementation

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The chart below establishes the implementation according to the operation areas of the ships.

| Ships (tonnage higher or equal to 300) | Certified operation area GMDSS (defined on Chapter V of SOLAS) | Date of the LRIT implementation |
|---|---|--|
| Ships built on or after the 31 st December 2008* | Any area | Since construction date |
| Ships built before the 31 st December 2008 | A1 + A2 or A1 + A2 + A3 | Until the first survey of the Radio-electric Safety Certificate , made after the 31 st December 2008 |
| Ships built before the 31 st December 2008 | A1 + A2 + A3 + A4** | Until the first survey of the Radio-electric Safety Certificate , made after the 1 st July 2009 |
| <p>* To ships that, no matter what the construction date is, operate exclusively on the area A1 and have AIS, it's not required the transmission of the LRIT information.</p> <p>** When ships operate within A1+A2+A3 area only, they shall fulfil with what's defined for the certified ships to operate within the above mentioned area, that is, until the first survey of the Radio-electric Safety Certificate, made after the 31st December 2008.</p> | | |

E. GMDSS areas

The four GMDSS areas, according to Chapter IV of SOLAS Convention, are:

- Area A1 – sea area within reach of a VHF coast station that has a DSC digital selective call on channel 70 (30-40 miles);
- Area A2 – sea area within reach of a MF station that has a DSC digital selective call (excluding area A1) (150 miles);
- Area A3 – area covered by an INMARSAT geostationary satellite (between 76°N and 76°S approximately), excluding areas A1 and A2;
- Area A4 – the remaining areas and the ones outside A1, A2 and A3 (polar regions).

F. Equipment installed on board

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The LRIT data can be supplied through the use of the already installed equipment on board. There can be other satellite systems that use alternative networks to INMARSAT and specially conceived to work inside the LRIT infra-structure.

The ship-owners or the ships technical management companies will be responsible to reassure that the equipment on board fully fulfils the requirements defined by the LRIT performance standards, as defined on Resolution MSC.210(81).

The equipment installed on board shall be capable of:

- Transmitting, without the intervention of any operator, in automatic mode, information to a LRIT Data Centre with 6 hour intervals;
- Being remotely configured to transmit LRIT information with variable intervals, maximum 15 minutes, within transmissions;
- Transmitting LRIT information, upon request, after the reception of polling commands;
- Having a direct interface with the navigation by satellite system equipment, or carry that capacity, internally;
- Being provided by the main energy source and by the emergency² energy source; and
- Being tested the electromagnetic compatibility, having in consideration the recommendations developed by the Organization.³

G. Transmission costs

The LRIT transmissions do not have any additional cost for the ships, once they will be fully supported by the Contracting Governments (SOLAS) which asks for such support.

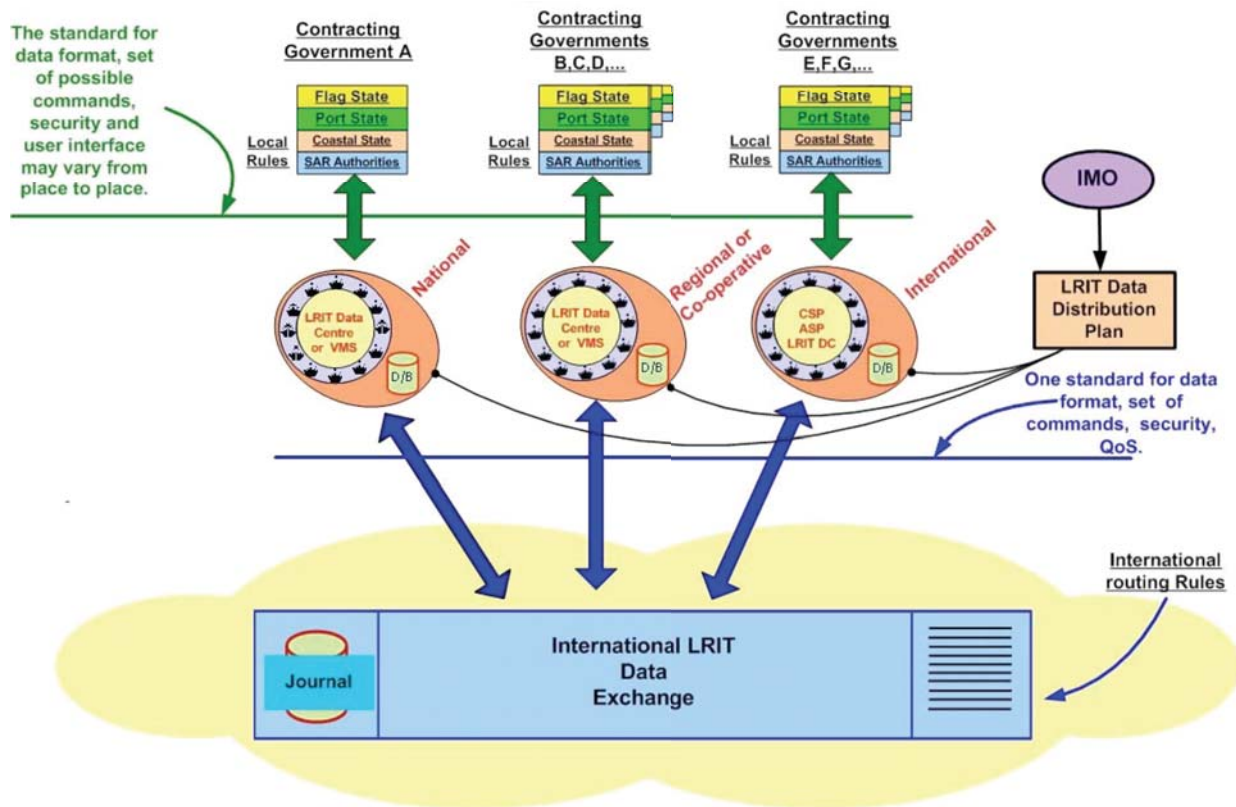
² This requirement shall not be applicable to ships that use, for LRIT information, any of the radio communications equipment to comply with Chapter IV. In these cases, the equipment on board shall be provided by energy sources, as specified by Rule IV/13.

³ It is referred the Assembly Resolution A.812(19) about the general requirements for the electromagnetic compatibility of all the electric and electronic devices on board.

H. LRIT information secrecy

V/19-1 SOLAS Rule establishes the possibility of a multilateral agreement between the Contracting Governments for the share of LRIT information for security and SAR purposes, allowing Flag States the right to protect, when appropriated, their own ships, allowing at the same time, the coastal States the access to the information on their ships out of their own waters. It hasn't been changed any of the rights, jurisdiction, duties or obligations of the Contracting Governments stated in the United Nations Convention about Law of the Sea (UNCLOS).

I. System architecture



The Long Range Identification and Tracking of Ships – LRIT, is formed by the following elements:

- Transmitting equipment on board
- CSP – communications service provider(s)

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- ASP – application service provider(s)
- LRIT Data Centre
- LRIT distribution data plan
- IDE – LRIT international data exchange

For more information, please contact:

IPTM – Instituto Marítimo Portuário

Direcção de Serviços de Segurança Marítima

Ed. Vasco da Gama –Rua General Gomes Araújo – 1399-005 Lisboa

e-mail: Irit@imarpor.pt