

REVISED PERFORMANCE STANDARDS – VOYAGE DATA RECORDERS AND EMERGENCY POSITION INDICATING RADIO BEACONS

The IMO has adopted Resolutions MSC.471(101) and MSC.494(104) for EPIRBs and VDRs, updating performance standards for equipment installed on or after July 1, 2022.

REVISED PERFORMANCE STANDARDS FOR FLOAT-FREE EMERGENCY POSITION INDICATING RADIO BEACONS (EPIRB) OPERATING ON 406 MHZ

Resolution MSC.471(101) (adopted June 14, 2019) details an updated standard governing the performance of float-free emergency position indicating radio beacons (EPIRBs) operating on 406 MHz, which form part of the Global Maritime Distress and Safety System (GMDSS). The resolution standardizes the physical attributes of these devices, the ambient conditions in which they are expected to perform, as well as the technical characteristics of the transmitted signal.

Part A Updated General requirement:

1. The EPIRB should be capable of transmitting a distress alert, including encoded position information from a receiver using a recognized GNSS with global coverage, to satellites equipped with a search and rescue 406 MHz processor or repeater.
2. The EPIRB should be provided with a GNSS receiver for position fixes and an associated indication that GNSS signal reception is satisfactory or unsatisfactory; and be provided with an AIS locating signal in accordance with the Recommendation ITU-R M.1371, technical characteristics for an AIS using time division multiple access in the VHF maritime mobile frequency band.
3. When the EPIRB is activated: the GNSS position fix shall be updated at intervals of no more than five minutes; and, when an updated fix is transmitted in the AIS message for the first time, the error between the transmitted and the actual position shall not exceed 30 m assuming a drift rate of 3 kn.

Part B: Updated from A.810(19) “Satellite Signals” to MSC.471(101) “Radio-Frequency signals”

Part C: Added the updated “A.696(17) -Type approval of EPIRBs operating in the Cospas-Sarsat system” to this resolution.

KEY NOTES

- Installed Date: July 1, 2022
- Applicable Vessel Types: All ships \geq 300 gt
- References:
 - IMO Resolution MSC.471(101)
 - IMO Resolution MSC.493(104)
 - IMO Resolution MSC.494(104)
 - IACS UI SC261 Rev.1
 - IACS UI SC295

Installed date	Applicable Standards
On or after July 1, 2022	EPIRBs should conform to performance standards and type-approval standards not inferior to those specified in the annex to resolution MSC.471(101).
Before July 1, 2022	EPIRBs should conform to performance standards not inferior to those specified in the annex to resolution A.810(19), as amended by resolutions MSC.56(66) and MSC.120(74) and be type-approved to standards not inferior to those specified in resolution A.696(17).

IACS UI SC295 INTERPRETATION OF RESOLUTION MSC.471(101)

IACS has established an interpretation of Operative paragraph 2 of resolution MSC.471(101) which will be uniformly implemented by IACS Societies from July 1, 2022, as follows:

For application of resolution MSC.471(101), the phrase "installed on or after 1 July 2022" shall be interpreted as follows:

1. for ships for which the building contract is placed on or after July 1, 2022, or in the absence of the contract, constructed on or after July 1, 2022, "installed on or after 1 July 2022" means any installation on the ship; and
2. for ships other than those ships prescribed in (a) above, "installed on or after 1 July 2022" means a contractual delivery date for the equipment or, in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after July 1, 2022.

AMENDMENTS TO THE PERFORMANCE STANDARDS FOR SHIPBORNE SIMPLIFIED VOYAGE DATA RECORDERS (S-VDRS) (RESOLUTION MSC.163(78), AS AMENDED)

Resolution MSC.493(104) (adopted 7 October 2021) recommends that S- VDRs should be constructed to minimize risk of damage during recovery operations to the same extent as that required by MSC.471(101) for float-free EPIRBs. The float-free type protective capsule should:

1. be fitted with means to facilitate grappling and recovery.
2. be capable of transmitting an initial satellite distress alerting signal and further locating and homing signals over a period of not less than seven days/168 hours.

Installed date	Applicable Standards
On or after July 1, 2022	S-VDRs should conform to performance standards not inferior to those specified in the annex to resolution MSC.163(78), as amended by resolution MSC.214(81) and the present resolution;
On or after June 1, 2008, and before July 1, 2022	S-VDRs should conform to performance standards not inferior to those specified in the annex to resolution MSC.163(78), as amended by resolution MSC.214(81); and
Before June 1, 2008	S-VDRs should conform to performance standards not inferior to those specified in the annex to resolution MSC.163(78).

AMENDMENTS TO THE PERFORMANCE STANDARDS FOR SHIPBORNE VOYAGE DATA RECORDERS (VDR) (RESOLUTION MSC.333(90))

Resolution MSC 494(104) (adopted October 7, 2021) recommends that VDRs in addition to the above S-VDR requirement, the VDRs' float-free recording medium should be installed in a float-free capsule which should:

1. maintain the recorded data for a period of at least six months following termination of recording.
2. be capable of being accessed following an incident but secure against a physical or electronically manipulated change or deletion of recorded data.

Installed date	Applicable Standards
On or after July 1, 2022	VDRs should conform to performance standards not inferior to those specified in the annex to resolution MSC.333(90), as amended by the present resolution.
On or after July 1, 2014, and before July 1, 2022	VDRs should conform to performance standards not inferior to those specified in the annex to resolution MSC.333(90);
On or after June 1, 2008, and before July 1, 2014	VDRs should conform to performance standards not inferior to those specified in the annex to resolution A.861(20), as amended by resolution MSC.214(81); and
Before June 1, 2008	VDRs should conform to performance standards not inferior to those specified in the annex to resolution A.861(20).

IACS UI SC261 REV.1 INTERPRETATION OF RESOLUTION MSC.494(104)

IACS has established an interpretation of operative paragraph 2 of resolution MSC.494(104) which will be uniformly implemented by IACS Societies not later than July 1, 2022, as follows:

For application of resolution MSC.494(104), the phrase “installed on or after 1 July 2022” shall be interpreted as follows:

- for ships for which the building contract is placed on or after July 1, 2022, or in the absence of the contract, constructed on or after July 1, 2022, "installed on or after 1 July 2022" means any installation on the ship; and
- for ships other than those ships prescribed in (a) above, "installed on or after 1 July 2022" means a contractual delivery date for the equipment or, in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after July 1, 2022.

FLAG ACCEPTANCE

The following table includes flag Administrations' acceptance on IACS UI SC295:

Flag State Information	
Bahamas, Barbados, Belize, Malta, Cyprus, Isle of Man, Philippines Liberia, Marshall Islands, Panama	IACS UI SC295 is accepted.
Singapore	IACS UI SC295 shall be considered an interim acceptance until the Resolution is further submitted, discussed, and approved by IMO.
Cayman Island	The term “installed” shall be taken as meaning set in position, connected to relevant peripheral equipment, tested and ready for use and evidence of proper operation is verifiable by the Flag/RO or its representative.
Hong Kong, Denmark	The actual installation date when the equipment was placed on board should be used in all cases.

Note:1. Flag Administrations shall be approached individually if not listed in the table. 2. IACS revised SC261 to reflect the application of the VDR performance standards based on the recommended installation dates as per MSC.494(104), which amends MSC.333(90). SC261 (rev.1) and is therefore completely in line with MSC.494(104).

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