## Calibration of Equipment by the Code on Noise Levels On Board Ships

### **Object of Amendment**

Rules for Approval of Manufacturers and Service Suppliers Rules for the Survey and Construction of Steel Ships Part B

#### **Reason for Amendment**

The Society has already incorporated requirements for noise on board ships specified in the *Code on Noise Levels On Board Ships* (IMO Resolution MSC.337(91)) into Part B of its Rules for the Survey and Construction of Steel Ships and requirements for service suppliers carrying out noise measurements in accordance with the code into it Rules for Approval of Manufacturers and Service Suppliers.

The code makes reference to IEC standards as performance specifications for sound level meters and calibrators (hereinafter referred to as "instruments") used for noise measurement and requires calibration of such instruments every two years.

Although service supplier carrying out such calibrations are required to provide documentation (e.g. certificates) clearly stating that the calibration has been carried out in accordance with the appropriate standard (i.e. the standard to which the equipment conforms and the details of the results of the calibration) IACS has identified several calibration certificates that do not clearly indicate such information.

In response, IACS has drafted a unified interpretation (UI) requiring that the calibration of equipment carried out in accordance with the code be carried out in accordance with IEC standards that specify the procedures for the periodic testing of such equipment, and that the equipment be stamped or otherwise documented to show that it continues to maintain compliance with said standards. The draft UI was discussed at the 10<sup>th</sup> Session of Sub-Committee on Ship Design and Constructions (SDC10) held in January 2024 and was approved at the 108<sup>th</sup> Session of the IMO Maritime Safety Committee (MSC 108) held in May 2024.

Accordingly, relevant requirements are amended based on the aforementioned unified interpretation.

### **Outline of Amendment**

- (1) Specifies that the calibration of instruments carried out in accordance with the Code on Noise Levels On Board ships is to be carried out in accordance with IEC 61672-3 for sound level meters and IEC 60942 Annex B for calibrators.
- (2) Specifies that the standards to which the sound level meters or calibrators referred to in (1) above comply are to be clearly indicated by either marks on the instrument itself or by entries in calibration records, together with the results of periodic tests and information on performance classes confirmed by the calibration.

# **Effective Date and Application**

Effective date of this amendment is the date on which the unified interpretation for the calibration of sound level meters and calibrators subject to the Code on Noise Levels On Board Ships (IMO Resolution MSC.337(91)) enters into force.

ID: DX22-10

Amended-Original Requirements Comparison Table (Calibration of Equipment by the Code on Noise Levels On Board Ships)

Amended-Original Requirements Comparison Table (Calibration of Equipment by the Code on Noise Levels On Board Ships)			
Amended	Original	Remarks	
RULES FOR APPROVAL OF	RULES FOR APPROVAL OF		
MANUFACTURERS AND SERVICE	MANUFACTURERS AND SERVICE		
SUPPLIERS	SUPPLIERS		
Part 3 REQUIREMENTS FOR APPROVAL OF SERVICE SUPPLIERS  Chapter 14 FIRMS ENGAGED IN MEASUREMENTS OF NOISE LEVEL ONBOARD SHIPS	Part 3 REQUIREMENTS FOR APPROVAL OF SERVICE SUPPLIERS  Chapter 14 FIRMS ENGAGED IN MEASUREMENTS OF NOISE LEVEL ONBOARD SHIPS		
14.4 Equipment	14.4 Equipment		
14.4.1 Equipment  2 Sound calibrators and sound level meters are to be verified at least every two years in accordance with An 2.2.2, Annex 2.3.1-2, Part B of the Rules for the Survey and Construction of Steel Ships by a national standard laboratory or a competent laboratory accredited according to ISO 17025 (2005), as amended. A record with a complete description of the equipment used is to be kept, including a calibration log.	<b>14.4.1</b> Equipment <b>2</b> Sound Calibrators and sound level meters are to be verified at least every two years by a national Standard laboratory or a competent laboratory accredited according to <i>ISO</i> 17025 (2005), as amended. A record with a complete description of the equipment used is to be kept, including a calibration log.		
14.5 Reporting to the Society	14.5 Reporting to the Society		
14.5.2 Reporting  A noise survey report is to be made for each ship. The report is to comprise information on the noise levels in the various spaces on board. The report is to show the reading at each specified measuring point. The points are to be marked on general	A noise survey report is to be made for each ship. The report is to comprise information on the noise levels in the various spaces on board. The report is to show the reading at each specified measuring point. The points are to be marked on a general		

Amended-Original Requirements Comparison Table (Calibration of Equipment by the Code on Noise Levels On Board Ships)

Amended	Original	Remarks
arrangement plan or on accommodation drawings attached to the report, and are to otherwise be identified. Noise survey reports are to be made in accordance with Form 1 of Annex B2.3.1-2, Part B of the Rules for the Survey and Construction of Steel Ships.  EFFECTIVE DATE AND APPLICATION  1. The effective date of the amendments is the date on which the unified interpretation for the calibration of sound level meters and calibrators subject to the Code on	arrangement plan, or on accommodation drawings attached to the report, or are to otherwise be identified. The noise survey report is to be made in accordance with Form 1 of Annex B2.3.1-2, Part B of the Rules for the Survey and Construction of Steel Ships.	Remarks
Noise Levels On Board Ships (IMO Resolution MSC.337(91)) enters into force.		

Amended-Original Requirements Comparison Table	(Calibration of Equipment b	by the Code on Noise	Levels On Board Ships)
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Amended	Original		Remark	
RULES FOR THE SURVEY AND	RULES FOR THE SURVEY AND			
CONSTRUCTION OF STEEL SHIPS	CONSTRUCTION OF STEEL SHIPS			
Part B CLASS SURVEYS	Part B CLASS SURVEYS			
Annex 2.3.1-2 PROCEDURES FOR ON BOARD NOISE MEASUREMENTS	Annex 2.3.1-2 PROCEDURES FOR ON BOARD NOISE MEASUREMENTS			
Chapter 2 MEASURING EQUIPMENT	Chapter 2 MEASURING EQUIPMENT			
An2.1 Equipment Specifications	An2.1 Equipment Specifications			
An2.1.1 Sound Level Meters	An2.1.1 Sound Level Meters			
Measurement of sound pressure levels is to be carried out	Measurement of sound pressure levels is to be carried out			
using precision integrating sound level meters subject to the	using precision integrating sound level meters subject to the			
requirements of this chapter. Such meters are to be manufactured to	requirements of this chapter. Such meters are to be manufactured to			
IEC 61672-1(2002-05) type/class 1 standard as applicable, or to an	11			
equivalent standard acceptable to the Society.	equivalent standard acceptable to the Society. Class/Type 1 sound			
	level meters manufactured according to IEC 651/IEC 804 may be			
	used until 1 July 2016.			
An2.2.2 Check of Measuring Instrument and Calibrator	An2.2.2 Check of Measuring Instrument and Calibrator			
Calibrator and sound level meter (hereinafter referred to as	Calibrator and sound level meter is to be verified at least			
"instruments") are to be verified at least every two years by a	every two years by a national standard laboratory or a competent			
national standard laboratory or a competent laboratory accredited	laboratory accredited according to ISO 17025 (2005) as corrected by			
according to ISO 17025 (2005) as corrected by (Cor 1:2006) in	(Cor 1:2006).			
accordance with (1) and (2) below.		Draft	IACS	Unified
(1) Calibration is to be carried out in accordance with IEC	(Newly added)	Interpreta	ation	

Amended-Original Requirements Comparison Table (Calibration of Equipment by the Code on Noise Levels On Board Ships)

Amended	Original	Remarks
61672-3 or the equivalent thereto for sound level meters and <i>IEC</i> 60942 Appendix B or the equivalent thereto for field calibrators. The edition of the calibration standard is to correspond with the edition of the manufacturing standard for the instruments.  (2) Measurement companies are to provide documentation about the standards being met if not clearly marked on sound level meters or field calibrators, and such documentation or markings are to include a clear statement of the results of periodic tests and the performance class instruments meet after calibration.	(Newly added)	
<ol> <li>EFFECTIVE DATE AND APPLICATION</li> <li>The effective date of the amendments is the date on which the unified interpretation for the calibration of sound level meters and calibrators subject to the Code on Noise Levels On Board Ships (IMO Resolution MSC.337(91)) enters into force.</li> </ol>		