BS ISO 23678-2:2022

BSI Standards Publication

Ships and marine technology — Service personnel for the maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear

Part 2: Service personnel initial training

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National foreword

This British Standard is the UK implementation of ISO 23678-2:2022. It supersedes PD ISO/PAS 23678-2:2020, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SME/32, Ships and marine technology - Steering committee.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Ships and marine technology — Service personnel for the maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear —

Part 2: Service personnel initial training

Navires et technologie maritime — Personnel de maintenance pour l'entretien, l'examen approfondi, la mise à l'essai en cours d'exploitation, la révision et la réparation des embarcations de sauvetage et des canots de secours, des engins de mise à l'eau et des dispositifs de largage —

Partie 2: Formation initiale du personnel de maintenance

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 1, *Maritime safety.*

This first edition cancels and replaces ISO/PAS 23678-2:2020, which has been technically revised.

The main changes are as follows:

— text has been editorially revised in accordance with the ISO/IEC Directives, Part 2, 2021.

A list of all parts in the ISO 23678 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

A major objective of the maritime industry is to prevent accidents and incidents from occurring. A global network of competent personnel employed by authorized service providers is vital for lifesaving appliances to remain fit for purpose, sustaining crew confidence and contributing to the prevention of incidents and accidents.

The need to develop an International Standard for this objective is evident from the new requirements in IMO Resolution MSC.402 (96)[5], entitled "requirements for maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances, and release gear" (henceforth referred to as the "IMO Requirements") adopted 19 May 2016 and entering into force 1 January 2020. This necessity is based on the IMO Requirements, paragraph 7.1.1.

This document and associated documents ISO 23678-1, ISO 23678-3 and ISO 23678-4 have been developed to achieve three key objectives:

— develop training documents that would support the IMO Requirements, section 7, paragraph 7.1.1.

— provide a consistent, reliable, and standardised approach to training and provide a clear auditable trail for interested parties to grant authorization supporting the IMO Requirements, section 3, to service providers.

— establish a competency framework that would enable personnel certified by service providers to develop and maintain competencies identified by industry experts to a level that enables them to competently work unsupervised on equipment covered by this document.

This document has been developed by identifying common training objectives in relation to survival craft, davits, winches and release gear makes and types for which service is to be provided. This has been achieved by conducting professional discussions with disciplined experts, to obtain the appropriate information to develop a training programme that is fit for purpose. Successfully completing the service technician training in ISO 23678-2, ISO 23678-3 and ISO 23678-4 enables personnel certified by an authorized service provider to meet the IMO requirements, section 7, paragraph 7.1.1, and section 8.

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Ships and marine technology — Service personnel for the maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear —

Part 2:
Service personnel initial training

1 Scope

This document establishes a uniform, safe and consistent approach to training and assessment of personnel to enable them to establish and maintain the required competencies in relation to maintenance, thorough examination, operational testing, overhaul and repair of lifeboats, rescue boats, launching appliances and release gear.

It also provides the necessary information for interested parties to grant authorization and effectively evaluate and audit training, supporting the IMO Requirements, section 3.

It specifies the initial training programme for personnel certified by a manufacturer or by an authorized service provider to carry out maintenance, thorough examination, operational testing, overhaul and repair of lifeboats (including free-fall lifeboats) and rescue boats (including fast rescue boats), launching appliances and release gear. This document specifies the training requirements for initial service technician training only.

This document is intended to be used in conjunction with ISO 23678-1, ISO 23678-3 and ISO 23678-4.

This document is applicable to the following types of lifeboats (including free-fall lifeboats), rescue boats (including fast rescue boats), launching appliances and release gear.

— Survival craft types:

a) single fall totally enclosed lifeboats with sprinkler and air systems;

b) twin fall totally enclosed lifeboats with sprinkler and air systems;

c) partially enclosed lifeboats;

d) tender lifeboats;

e) freefall lifeboats;

f) open lifeboat;

g) inflatable rescue boats;

h) rigid rescue boats;

i) semi-ridged inflatable rescue boats;

j) rigid fast rescue boats;

k) rigid inflatable fast rescue boats.

— Survival craft propulsion system types:

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a) inboard diesel engines;

b) outboard engines;

c) propeller drives;

d) jet drives.

— Davit types:

a) gravity single and twin fall outrigger;

b) hydraulic single pivoting/luffing;

c) hydraulic multi pivot/luffing;

d) telescopic;

e) gravity roller track;

f) gravity free fall primary;

g) free fall hydraulic secondary;

h) A-frame hydraulic;

i) single arm slewing (manual, electric);

j) davits with stored power systems.

— Winch types:

a) twin drum;

b) single drum;

c) gravity lowering, electric hoisting;

d) gravity lowering, hydraulic hoisting;

e) hydraulic hoisting and lowering.

— Hook release system types:

a) on-load/off load (load not over centre);

b) on-load/offload (load over centre);

c) off load;

d) freefall hydraulic;

e) automatic off load.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 23678-1, *Service personnel for the maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear — General requirements for training providers*

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3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 23678-1 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Initial service technician training

4.1 General

This programme is designed to meet the initial training and assessment requirements for all prospective service technicians. The initial service technician training explains how competence shall be assessed and certified.

4.2 Candidate pre-requisites

Candidates shall hold or be working towards a nationally recognized qualification in engineering or mechanics, but not unduly excluding similar qualifications.

4.3 Aims and objectives

4.3.1 Aim

The aim of this programme is to give individuals who have little or no experience as a service technician the theoretical and practical knowledge of the operations of the manufacturer or the authorized service provider (ASP) at an entry level that enables them to progress through the level 1 and level 2 service technician training.

4.3.2 Key objectives

The key objectives are to ensure candidates:

a) have been introduced to and are familiarized with the terminology and equipment;

b) have an awareness of the functions and roles of the various organizations within the maritime and offshore industry, in relation to manufacturer/ASP operations;

c) can identify the types, components, role, function, design and construction requirements for lifeboats (including free-fall lifeboats), rescue boats and fast rescue boats, including on-load release gear and launching appliances;

d) can identify and explain the key causes of lifeboat and rescue boat accidents;

e) understand the roles and responsibilities of a manufacturer/ASP service technician;

f) can identify, interpret and apply to their role key legislation, industry guidelines, rules, regulations and conventions applicable to ASP/manufacturer operations;

g) can identify the procedures for maintenance thorough examination, operational testing, repair and overhaul of lifeboat (including free-fall lifeboats), rescue boats and fast rescue boats, launching appliances and on-load release gear, as applicable;

h) can identify the requirements for reports and records;

i) understand and can demonstrate in their working environment basic safety and awareness.

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