

SINGAPORE STANDARD

**Occupational health and safety management
systems — Requirements with guidance for use**

Published by

Enterprise
Singapore

SS ISO 45001 : 2018
ISO 45001 : 2018, IDT
(ICS 13.100)

SINGAPORE STANDARD

**Occupational health and safety management
systems — Requirements with guidance for use**

All rights reserved. Unless otherwise specified, no part of this Singapore Standard may be reproduced or utilised in any form or by any means, electronic or mechanical, including photocopying and microfilming, without permission in writing from Enterprise Singapore. Request for permission can be sent to: standards@enterprisesg.gov.sg.

© ISO 2018 – All rights reserved
© Enterprise Singapore 2018

ISBN 978-981-47-8490-0

This Singapore Standard was approved by the Quality and Safety Standards Committee on behalf of the Singapore Standards Council on 16 March 2018.

First published, 2018

The Quality and Safety Standards Committee, appointed by the Standards Council, consists of the following members:

	Name	Organisation
Chairman	: Er. Go Heng Huat	<i>Individual Capacity</i>
Deputy Chairman	: Mr Seet Choh San	<i>Singapore Institution of Safety Officers</i>
Advisor	: Mr Chan Yew Kwong	<i>Individual Capacity</i>
Secretary	: Ms Kong Wai Yee	<i>Singapore Manufacturing Federation – Standards Development Organisation</i>
Members	: Er. Goh Keng Cheong	<i>Housing & Development Board</i>
	Er. Hashim Bin Mansoor	<i>Building and Construction Authority</i>
	Assoc Prof Hoon Kay Hiang	<i>Nanyang Technological University</i>
	Mr Koh Yeong Kheng	<i>Association of Small and Medium Enterprises</i>
	Mr Lee Kay Chai	<i>Singapore Contractors Association Limited</i>
	Prof Lee Pui Mun	<i>Singapore University of Social Sciences</i>
	Mr Lim Kee Huat/Mr Liow Kin Lian	<i>Society of Loss Prevention in the Process Industries</i>
	Mr Steven Nah	<i>Association of Process Industry</i>
	Mr Ong Liong Chuan	<i>Individual Capacity</i>
	Mr Perianan Radhakrishnan	<i>Singapore Welding Society</i>
	Assoc Prof Simon Poh Siew Beng	<i>National University of Singapore</i>
	Mr Derek Sim	<i>Association of Singapore Marine Industries</i>
	Mr Harnek Singh	<i>Individual Capacity</i>
	Mr Birch Sio	<i>Singapore Manufacturing Federation</i>
	Mr Alvin Soong Kheng Boon	<i>Land Transport Authority</i>
	Mr Tan Kay Chen	<i>The Institution of Engineers, Singapore</i>
	Mr Daniel Tan Kuan Wei	<i>Individual Capacity</i>
	Mr Ronald Tan	<i>Singapore Productivity Association</i>
	Mr Jonathan Wan	<i>Individual Capacity</i>
	Mr Wong Siu Tee	<i>JTC Corporation</i>
	Mr Winston Yew	<i>Workplace Safety and Health Council</i>

The Technical Committee on Quality and Core Business Processes, appointed by the Quality and Safety Standards Committee to oversee the development and promotion of this standard, consists of representatives from the following organisations:

	Name	Organisation
Chairman	: Mr Harnek Singh	<i>Individual Capacity</i>
Deputy Chairman	: Er. Go Heng Huat	<i>Individual Capacity</i>
Secretary	: Mr Harry Chua	<i>Singapore Manufacturing Federation – Standards Development Organisation</i>
Members	: Mr Chia Beng Chye	<i>Individual Capacity</i>
	Prof Goh Thong Ngee	<i>National University of Singapore</i>
	Mr Rama Prasad Mamidi	<i>Project Management Institute, Singapore Chapter</i>
	Prof Rohit Bhatnagar	<i>Nanyang Business School, Nanyang Technological University</i>
	Mr Herdial Singh	<i>Individual Capacity</i>
	Mr Tang Khoon Sin	<i>National University of Singapore</i>
	Mr George Wong	<i>Institute of Management Consultants (Singapore)</i>

The Working Group on Occupational Safety and Health, appointed by the Technical Committee to prepare this standard, comprises the following experts who contribute in their *individual capacity*:

	Name
Co-Convenors	: Er. Go Heng Huat Dr Peck Thian Guan
Members	: Ms Katherine Goh Mr Heng Hoon Jee Mr Loh Yeow Leng Mr Mack Moey Ms Ng Fong Ling Mr Ng Kam Leong Mr Ong Wee Liang Mr P K Raveendran Mr Herdial Singh Mr Birch Sio Mr Jacob Soh Chong Seng Ms Cissie Yeung

The organisations in which the experts of the Working Group are involved are:

Agility Logistics Services Pte Ltd

Association of Safety Auditing Firms

Association of Singapore Marine Industries

Building and Construction Authority

Ministry of Manpower

National Trades Union Congress

National University of Singapore

Singapore Accreditation Council

Singapore Chemical Industry Council

Singapore Contractors Association Limited

Singapore Institution of Safety Officers

Singapore National Employers Federation

Society of Loss Prevention in the Process Industries

Contents	Page
National Foreword	7
Foreword	8
Introduction	9
1 Scope	13
2 Normative references	13
3 Terms and definitions	13
4 Context of the organization	21
4.1 Understanding the organization and its context	21
4.2 Understanding the needs and expectations of workers and other interested parties	21
4.3 Determining the scope of the OH&S management system	21
4.4 OH&S management system	22
5 Leadership and worker participation	22
5.1 Leadership and commitment	22
5.2 OH&S policy	23
5.3 Organizational roles, responsibilities and authorities	23
5.4 Consultation and participation of workers	24
6 Planning	25
6.1 Actions to address risks and opportunities	25
6.1.1 General	25
6.1.2 Hazard identification and assessment of risks and opportunities	26
6.1.3 Determination of legal requirements and other requirements	27
6.1.4 Planning action	28
6.2 OH&S objectives and planning to achieve them	28
6.2.1 OH&S objectives	28
6.2.2 Planning to achieve OH&S objectives	29
7 Support	29
7.1 Resources	29
7.2 Competence	29
7.3 Awareness	30
7.4 Communication	30
7.4.1 General	30
7.4.2 Internal communication	31
7.4.3 External communication	31
7.5 Documented information	31
7.5.1 General	31
7.5.2 Creating and updating	31
7.5.3 Control of documented information	32
8 Operation	32
8.1 Operational planning and control	32
8.1.1 General	32
8.1.2 Eliminating hazards and reducing OH&S risks	33
8.1.3 Management of change	33
8.1.4 Procurement	33
8.2 Emergency preparedness and response	34

9 Performance evaluation 35

9.1 Monitoring, measurement, analysis and performance evaluation.....35

9.1.1 General35

9.1.2 Evaluation of compliance35

9.2 Internal audit.....36

9.2.1 General36

9.2.2 Internal audit programme36

9.3 Management review37

10 Improvement 38

10.1 General38

10.2 Incident, nonconformity and corrective action.....38

10.3 Continual improvement.....39

Annex A (informative) Guidance on the use of this document..... 40

Bibliography 58

National Foreword

This Singapore Standard was prepared by the Working Group on Occupational Safety and Health appointed by the Technical Committee on Quality and Core Business Processes under the direction of the Quality and Safety Standards Committee.

SS ISO 45001 is an identical adoption of ISO 45001 : 2018 – ‘Occupational health and safety management systems – Requirements with guidance for use’, published by the International Organization for Standardization.

SS ISO 45001 is intended to replace SS 506 (Occupational safety and health management systems), Parts 1 and 2.

The references to International Standards shall be replaced by the following Singapore Standards:

International Standard	Corresponding Singapore Standard
ISO 9000	SS ISO 9000
ISO 9001	SS ISO 9001
ISO 14001	SS ISO 14001
ISO 19011	SS ISO 19011
ISO 31000	SS ISO 31000
ISO 45001	SS ISO 45001

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.*
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.*

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Project Committee ISO/PC 283, *Occupational health and safety management systems*.

Introduction

0.1 Background

An organization is responsible for the occupational health and safety of workers and others who can be affected by its activities. This responsibility includes promoting and protecting their physical and mental health.

The adoption of an OH&S management system is intended to enable an organization to provide safe and healthy workplaces, prevent work-related injury and ill health, and continually improve its OH&S performance.

0.2 Aim of an OH&S management system

The purpose of an OH&S management system is to provide a framework for managing OH&S risks and opportunities. The aim and intended outcomes of the OH&S management system are to prevent work-related injury and ill health to workers and to provide safe and healthy workplaces; consequently, it is critically important for the organization to eliminate hazards and minimize OH&S risks by taking effective preventive and protective measures.

When these measures are applied by the organization through its OH&S management system, they improve its OH&S performance. An OH&S management system can be more effective and efficient when taking early action to address opportunities for improvement of OH&S performance.

Implementing an OH&S management system conforming to this document enables an organization to manage its OH&S risks and improve its OH&S performance. An OH&S management system can assist an organization to fulfil its legal requirements and other requirements.

0.3 Success factors

The implementation of an OH&S management system is a strategic and operational decision for an organization. The success of the OH&S management system depends on leadership, commitment and participation from all levels and functions of the organization.

The implementation and maintenance of an OH&S management system, its effectiveness and its ability to achieve its intended outcomes are dependent on a number of key factors, which can include:

- a) top management leadership, commitment, responsibilities and accountability;
- b) top management developing, leading and promoting a culture in the organization that supports the intended outcomes of the OH&S management system;
- c) communication;
- d) consultation and participation of workers, and, where they exist, workers' representatives;
- e) allocation of the necessary resources to maintain it;
- f) OH&S policies, which are compatible with the overall strategic objectives and direction of the organization;
- g) effective process(es) for identifying hazards, controlling OH&S risks and taking advantage of OH&S opportunities;

- h) continual performance evaluation and monitoring of the OH&S management system to improve OH&S performance;
- i) integration of the OH&S management system into the organization's business processes;
- j) OH&S objectives that align with the OH&S policy and take into account the organization's hazards, OH&S risks and OH&S opportunities;
- k) compliance with its legal requirements and other requirements.

Demonstration of successful implementation of this document can be used by an organization to give assurance to workers and other interested parties that an effective OH&S management system is in place. Adoption of this document, however, will not in itself guarantee prevention of work-related injury and ill health to workers, provision of safe and healthy workplaces and improved OH&S performance.

The level of detail, the complexity, the extent of documented information and the resources needed to ensure the success of an organization's OH&S management system will depend on a number of factors, such as:

- the organization's context (e.g. number of workers, size, geography, culture, legal requirements and other requirements);
- the scope of the organization's OH&S management system;
- the nature of the organization's activities and the related OH&S risks.

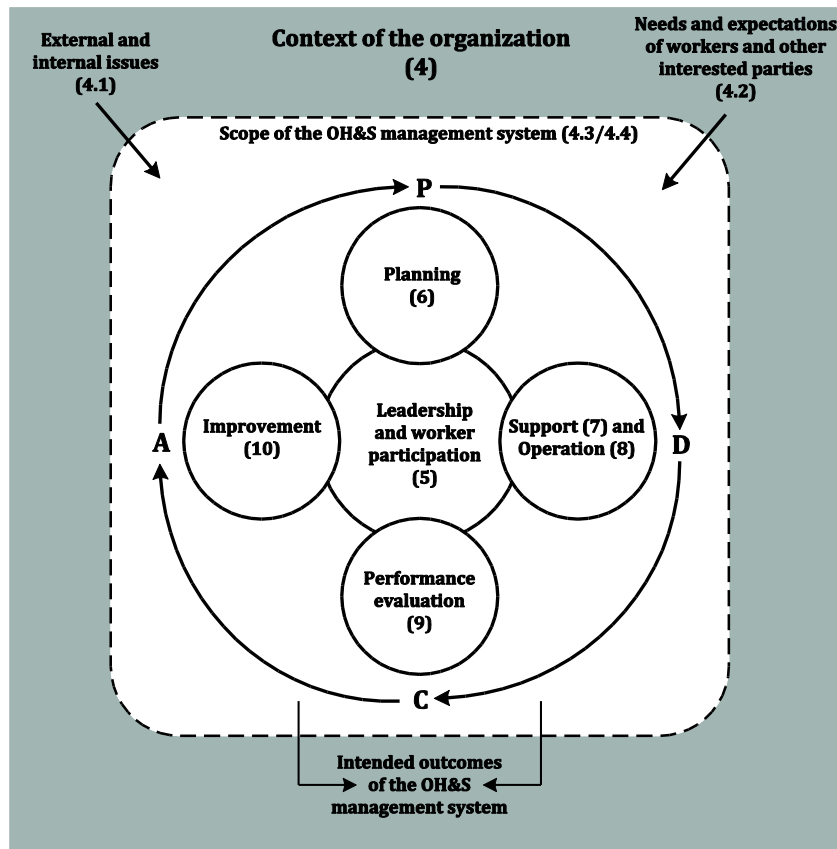
0.4 Plan-Do-Check-Act cycle

The OH&S management system approach applied in this document is founded on the concept of Plan-Do-Check-Act (PDCA).

The PDCA concept is an iterative process used by organizations to achieve continual improvement. It can be applied to a management system and to each of its individual elements, as follows:

- a) Plan: determine and assess OH&S risks, OH&S opportunities and other risks and other opportunities, establish OH&S objectives and processes necessary to deliver results in accordance with the organization's OH&S policy;
- b) Do: implement the processes as planned;
- c) Check: monitor and measure activities and processes with regard to the OH&S policy and OH&S objectives, and report the results;
- d) Act: take actions to continually improve the OH&S performance to achieve the intended outcomes.

This document incorporates the PDCA concept into a new framework, as shown in Figure 1.



NOTE The numbers given in brackets refer to the clause numbers in this document.

Figure 1 — Relationship between PDCA and the framework in this document

0.5 Contents of this document

This document conforms to ISO’s requirements for management system standards. These requirements include a high level structure, identical core text and common terms with core definitions, designed to benefit users implementing multiple ISO management system standards.

This document does not include requirements specific to other subjects, such as those for quality, social responsibility, environmental, security or financial management, though its elements can be aligned or integrated with those of other management systems.

This document contains requirements that can be used by an organization to implement an OH&S management system and to assess conformity. An organization that wishes to demonstrate conformity to this document can do so by:

- making a self-determination and self-declaration, or
- seeking confirmation of its conformity by parties having an interest in the organization, such as customers, or
- seeking confirmation of its self-declaration by a party external to the organization, or
- seeking certification/registration of its OH&S management system by an external organization.

Clauses 1 to 3 in this document set out the scope, normative references and terms and definitions which apply to the use of this document, while Clauses 4 to 10 contain the requirements to be used to assess conformity to this document. Annex A provides informative explanations to these requirements. The terms and definitions in Clause 3 are arranged in conceptual order, with an alphabetical index provided at the end of this document.

In this document, the following verbal forms are used:

- a) “shall” indicates a requirement;
- b) “should” indicates a recommendation;
- c) “may” indicates a permission;
- d) “can” indicates a possibility or a capability.

Information marked as “NOTE” is for guidance in understanding or clarifying the associated requirement. “Notes to entry” used in Clause 3 provide additional information that supplements the terminological data and can contain provisions relating to the use of a term.

Occupational health and safety management systems — Requirements with guidance for use

1 Scope

This document specifies requirements for an occupational health and safety (OH&S) management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance.

This document is applicable to any organization that wishes to establish, implement and maintain an OH&S management system to improve occupational health and safety, eliminate hazards and minimize OH&S risks (including system deficiencies), take advantage of OH&S opportunities, and address OH&S management system nonconformities associated with its activities.

This document helps an organization to achieve the intended outcomes of its OH&S management system. Consistent with the organization's OH&S policy, the intended outcomes of an OH&S management system include:

- a) continual improvement of OH&S performance;
- b) fulfilment of legal requirements and other requirements;
- c) achievement of OH&S objectives.

This document is applicable to any organization regardless of its size, type and activities. It is applicable to the OH&S risks under the organization's control, taking into account factors such as the context in which the organization operates and the needs and expectations of its workers and other interested parties.

This document does not state specific criteria for OH&S performance, nor is it prescriptive about the design of an OH&S management system.

This document enables an organization, through its OH&S management system, to integrate other aspects of health and safety, such as worker wellness/wellbeing.

This document does not address issues such as product safety, property damage or environmental impacts, beyond the risks to workers and other relevant interested parties.

This document can be used in whole or in part to systematically improve occupational health and safety management. However, claims of conformity to this document are not acceptable unless all its requirements are incorporated into an organization's OH&S management system and fulfilled without exclusion.

2 Normative references

There are no normative references in this document.