

**SS ISO 22301 : 2020**  
**ISO 22301:2019, IDT**  
(ICS 03.100.01; ICS 03.100.70)

**SINGAPORE STANDARD**

**Security and resilience – Business  
continuity management systems –  
Requirements**



**SS ISO 22301 : 2020**  
ISO 22301:2019, IDT  
(ICS 03.100.01; ICS 03 100.70)

---

SINGAPORE STANDARD

**Security and resilience – Business continuity  
management systems – Requirements**

---

Published by Enterprise Singapore

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](mailto:standards@enterprisesg.gov.sg).

© ISO 2019 – All rights reserved  
© Enterprise Singapore 2020

ISBN 978-981-48-9489-0

The content of this Singapore Standard was approved on 1 April 2020 by the Quality and Safety Standards Committee (QSSC) under the purview of the Singapore Standards Council.

First published, 2012

First revision, 2020

QSSC consists of the following members:

	<b>Name</b>	<b>Representation</b>
<b>Chairman</b>	: Er. Go Heng Huat	<i>Individual Capacity</i>
<b>Deputy Chairman</b>	: Mr Seet Choh San	<i>Singapore Institution of Safety Officers</i>
<b>Advisor</b>	: Mr Chan Yew Kwong	<i>Individual Capacity</i>
<b>Secretary</b>	: Ms Dorothy Er	<i>Singapore Manufacturing Federation – Standards Development Organisation</i>
<b>Members</b>	: Er. Goh Keng Cheong	<i>Housing &amp; 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	<i>Society of Loss Prevention in the Process Industries</i>
	Mr Steven Nah	<i>Association of Process Industry</i>
	Er. Ngiam Tong Yuen	<i>Individual Capacity</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 Jonathan Wan	<i>Individual Capacity</i>
	Mr Wong Siu Tee	<i>JTC Corporation</i>
	Mr Winston Yew	<i>Workplace Safety and Health Council</i>
<b>Co-opted Member</b>	: Dr Lee Tong Kooi	<i>Individual Capacity</i>

QSSC sets up the Technical Committee on Enabling Processes to oversee the preparation of this standard. The Technical Committee consists of the following members:

	<b>Name</b>	<b>Representation</b>
<b>Chairman</b>	: Mr Ong Liong Chuan	<i>Individual Capacity</i>
<b>Secretary</b>	: Mr She Long Huai	<i>Singapore Manufacturing Federation – Standards Development Organisation</i>
<b>Members</b>	: Prof Mark Goh	<i>National University of Singapore</i>
	Mr Daniel Tan Kuan Wei	<i>Risk &amp; Insurance Management Association of Singapore (RIMAS)</i>
	Mr Thomas Thomas	<i>ASEAN CSR Network</i>

The Technical Committee sets up the Working Group on Business Continuity Management to prepare this standard. The Working Group consists of the following experts who contribute in their *individual capacity*:

	<b>Name</b>
<b>Convenor</b>	: Mr Ong Liong Chuan
<b>Secretary</b>	: Mr She Long Huai
<b>Members</b>	: Mr Henry Ee Seow Keong
	Ms Margaret Heng Chee Bee
	Mr Lim Meng Wee
	Mr Clifford Seow
	Mr Daniel Steele
	Mr Roland Teo
	Mr Yam Guan Shyh

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

*Business Continuity Planning Asia Pte Ltd*  
*GlobalFoundries*  
*Marsh & McLennan Companies Inc.*  
*National University of Singapore*  
*Singapore Hotel Association*  
*SP Consulting (International) Pte Ltd*

(blank page)

**Contents**

	<b>Page</b>
National Foreword.....	7
Foreword .....	8
Introduction.....	9
1 Scope.....	12
2 Normative references .....	12
3 Terms and definitions.....	12
4 Context of the organization .....	19
4.1 Understanding the organization and its context .....	19
4.2 Understanding the needs and expectations of interested parties.....	19
4.2.1 General .....	19
4.2.2 Legal and regulatory requirements .....	19
4.3 Determining the scope of the business continuity management system.....	19
4.3.1 General .....	19
4.3.2 Scope of the business continuity management system.....	20
4.4 Business continuity management system .....	20
5 Leadership.....	20
5.1 Leadership and commitment.....	20
5.2 Policy.....	21
5.2.1 Establishing the business continuity policy .....	21
5.2.2 Communicating the business continuity policy .....	21
5.3 Roles, responsibilities and authorities.....	21
6 Planning.....	21
6.1 Actions to address risks and opportunities.....	21
6.1.1 Determining risks and opportunities.....	21
6.1.2 Addressing risks and opportunities.....	22
6.2 Business continuity objectives and planning to achieve them .....	22
6.2.1 Establishing business continuity objectives.....	22
6.2.2 Determining business continuity objectives.....	22
6.3 Planning changes to the business continuity management system.....	23
7 Support.....	23
7.1 Resources.....	23
7.2 Competence.....	23
7.3 Awareness.....	23
7.4 Communication .....	24
7.5 Documented information .....	24
7.5.1 General.....	24
7.5.2 Creating and updating .....	24
7.5.3 Control of documented information .....	24
8 Operation .....	25
8.1 Operational planning and control.....	25
8.2 Business impact analysis and risk assessment .....	25
8.2.1 General.....	25
8.2.2 Business impact analysis.....	26

8.2.3	Risk assessment .....	26
8.3	Business continuity strategies and solutions.....	26
8.3.1	General .....	26
8.3.2	Identification of strategies and solutions .....	27
8.3.3	Selection of strategies and solutions .....	27
8.3.4	Resource requirements.....	27
8.3.5	Implementation of solutions.....	27
8.4	Business continuity plans and procedures .....	28
8.4.1	General .....	28
8.4.2	Response structure .....	28
8.4.3	Warning and communication .....	29
8.4.4	Business continuity plans.....	29
8.4.5	Recovery.....	30
8.5	Exercise programme .....	30
8.6	Evaluation of business continuity documentation and capabilities.....	31
9	Performance evaluation.....	31
9.1	Monitoring, measurement, analysis and evaluation .....	31
9.2	Internal audit.....	32
9.2.1	General .....	32
9.2.2	Audit programme(s).....	32
9.3	Management review .....	32
9.3.1	General .....	32
9.3.2	Management review input.....	32
9.3.3	Management review outputs .....	33
10	Improvement.....	34
10.1	Nonconformity and corrective action .....	34
10.2	Continual improvement.....	34
	Bibliography .....	35

## National Foreword

This Singapore Standard was prepared by the Working Group on Business Continuity Management set up by the Technical Committee on Enabling Processes under the purview of QSSC.

This standard is identical with ISO 22301:2019, “Security and resilience – Business continuity management systems – Requirements”, published by International Organization for Standardization.

NOTE – Reference to International Standards are replaced by applicable Singapore Standards/Technical References.

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. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as “Mature Standards”. Mature Standards will not be subject to further review, unless there are requests to review such standards.*
- 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 and the Singapore Standards Council 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. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.*
- 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](http://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](http://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 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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 292, *Security and resilience*.

This second edition cancels and replaces the first edition (ISO 22301:2012), which has been technically revised. The main changes compared with the previous edition are as follows:

- ISO's requirements for management system standards, which have evolved since 2012, have been applied;
- requirements have been clarified, with no new requirements added;
- discipline-specific business continuity requirements are now almost entirely within Clause 8;
- Clause 8 has been re-structured to provide a clearer understanding of the key requirements;
- a number of discipline-specific business continuity terms have been modified to improve clarity and to reflect current thinking.

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](http://www.iso.org/members.html).

## Introduction

### 0.1 General

This document specifies the structure and requirements for implementing and maintaining a business continuity management system (BCMS) that develops business continuity appropriate to the amount and type of impact that the organization may or may not accept following a disruption.

The outcomes of maintaining a BCMS are shaped by the organization's legal, regulatory, organizational and industry requirements, products and services provided, processes employed, size and structure of the organization, and the requirements of its interested parties.

A BCMS emphasizes the importance of:

- understanding the organization's needs and the necessity for establishing business continuity policies and objectives;
- operating and maintaining processes, capabilities and response structures for ensuring the organization will survive disruptions;
- monitoring and reviewing the performance and effectiveness of the BCMS;
- continual improvement based on qualitative and quantitative measures.

A BCMS, like any other management system, includes the following components:

- a) a policy;
- b) competent people with defined responsibilities;
- c) management processes relating to:
  - 1) policy;
  - 2) planning;
  - 3) implementation and operation;
  - 4) performance assessment;
  - 5) management review;
  - 6) continual improvement;
- d) documented information supporting operational control and enabling performance evaluation.

### 0.2 Benefits of a business continuity management system

The purpose of a BCMS is to prepare for, provide and maintain controls and capabilities for managing an organization's overall ability to continue to operate during disruptions. In achieving this, the organization is:

- a) from a business perspective:

- 1) supporting its strategic objectives;
  - 2) creating a competitive advantage;
  - 3) protecting and enhancing its reputation and credibility;
  - 4) contributing to organizational resilience;
- b) from a financial perspective:
- 1) reducing legal and financial exposure;
  - 2) reducing direct and indirect costs of disruptions;
- c) from the perspective of interested parties:
- 1) protecting life, property and the environment;
  - 2) considering the expectations of interested parties;
  - 3) providing confidence in the organization's ability to succeed;
- d) from an internal processes perspective:
- 1) improving its capability to remain effective during disruptions;
  - 2) demonstrating proactive control of risks effectively and efficiently;
  - 3) addressing operational vulnerabilities.

### **0.3 Plan-Do-Check-Act (PDCA) cycle**

This document applies the Plan (establish), Do (implement and operate), Check (monitor and review) and Act (maintain and improve) (PDCA) cycle to implement, maintain and continually improve the effectiveness of an organization's BCMS.

This ensures a degree of consistency with other management systems standards, such as ISO 9001, ISO 14001, ISO/IEC 20000-1, ISO/IEC 27001 and ISO 28000, thereby supporting consistent and integrated implementation and operation with related management systems.

In accordance with the PDCA cycle, Clauses 4 to 10 cover the following components.

- Clause 4 introduces the requirements necessary to establish the context of the BCMS applicable to the organization, as well as needs, requirements and scope.
- Clause 5 summarizes the requirements specific to top management's role in the BCMS, and how leadership articulates its expectations to the organization via a policy statement.
- Clause 6 describes the requirements for establishing strategic objectives and guiding principles for the BCMS as a whole.
- Clause 7 supports BCMS operations related to establishing competence and communication on a recurring/as-needed basis with interested parties, while documenting, controlling, maintaining and retaining required documented information.

- Clause 8 defines business continuity needs, determines how to address them and develops procedures to manage the organization during a disruption.
- Clause 9 summarizes the requirements necessary to measure business continuity performance, BCMS conformity with this document, and to conduct management review.
- Clause 10 identifies and acts on BCMS nonconformity and continual improvement through corrective action.

#### **0.4 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 management systems, 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 a BCMS 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 BCMS by an external organization.

Clauses 1 to 3 in this document set out the scope, normative references and terms and definitions that apply to the use of this document. Clauses 4 to 10 contain the requirements to be used to assess conformity to 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.

# Security and resilience — Business continuity management systems — Requirements

## 1 Scope

This document specifies requirements to implement, maintain and improve a management system to protect against, reduce the likelihood of the occurrence of, prepare for, respond to and recover from disruptions when they arise.

The requirements specified in this document are generic and intended to be applicable to all organizations, or parts thereof, regardless of type, size and nature of the organization. The extent of application of these requirements depends on the organization's operating environment and complexity.

This document is applicable to all types and sizes of organizations that:

- a) implement, maintain and improve a BCMS;
- b) seek to ensure conformity with stated business continuity policy;
- c) need to be able to continue to deliver products and services at an acceptable predefined capacity during a disruption;
- d) seek to enhance their resilience through the effective application of the BCMS.

This document can be used to assess an organization's ability to meet its own business continuity needs and obligations.

## 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 22300, *Security and resilience — Vocabulary*