Technical Specification

ISO/IEC TS 20000-16

First edition
2025-02

Information technology — Service management —

Part 16: Guidance on sustainability within a service management system based on ISO/IEC 20000-1

Technologies de l'information — Gestion des services —

Partie 16: Lignes directrices pour un système de management des services durable basé sur l'ISO/IEC 20000-1

Reference number
ISO/IEC TS 20000-16:2025(en)

© ISO/IEC 2025



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**
1.1 General 1
1.2 Application 1

2 Normative references **2**

3 Terms and definitions **2**

4 Context of the organization **5**
4.1 Understanding the organization and its context 5
4.2 Understanding the needs and expectations of interested parties 5
4.3 Determining the scope of the service management system 6
4.4 Service management system 6

5 Leadership **6**
5.1 Leadership and commitment 6
5.2 Policy 6
5.2.1 Establishing the service management policy 6
5.2.2 Communicating the service management policy 6
5.3 Organizational roles, responsibilities and authorities 7

6 Planning **7**
6.1 Actions to address risks and opportunities 7
6.2 Service management objectives and planning to achieve them 7
6.2.1 Establish objectives 7
6.2.2 Plan to achieve objectives 7
6.3 Plan the service management system 8

7 Support of the service management system **8**
7.1 Resources 8
7.2 Competence 8
7.3 Awareness 8
7.4 Communication 8
7.5 Documented information 8
7.5.1 General 8
7.5.2 Creating and updating documented information 9
7.5.3 Control of documented information 9
7.5.4 Service management system documented information 9
7.6 Knowledge 9

8 Operation of the service management system **9**
8.1 Operational planning and control 9
8.2 Service portfolio 9
8.2.1 Service delivery 9
8.2.2 Plan the services 9
8.2.3 Control of parties involved in the service lifecycle 9
8.2.4 Service catalogue management 10
8.2.5 Asset management 10
8.2.6 Configuration management 10
8.3 Relationship and agreement 10
8.3.1 General 10
8.3.2 Business relationship management 11
8.3.3 Service level management 11
8.3.4 Supplier management 11
8.4 Supply and demand 12
8.4.1 Budgeting and accounting for services 12
8.4.2 Demand management 12

© ISO/IEC 2025 – All rights reserved

8.4.3 Capacity management 12
8.5 Service design, build and transition 13
8.5.1 Change management 13
8.5.2 Service design and transition 13
8.5.3 Release and deployment management 13
8.6 Resolution and fulfilment 13
8.6.1 Incident management 13
8.6.2 Service request management 14
8.6.3 Problem management 14
8.7 Service assurance 14
8.7.1 Service availability management 14
8.7.2 Service continuity management 14
8.7.3 Information security management 14
9 Performance evaluation 15
9.1 Monitoring, measurement, analysis and evaluation 15
9.2 Internal audit 15
9.3 Management review 15
9.4 Service reporting 15
10 Improvement 15
10.1 Nonconformity and corrective action 15
10.2 Continual improvement 15
Annex A (informative) **Sustainability dimensions and examples 17**
Annex B (informative) **Sustainability questions for potential suppliers 18**
Annex C (informative) **Example competencies for sustainability 19**
Bibliography 20

© ISO/IEC 2025 – All rights reserved

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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 document 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 or www.iec.ch/members_experts/refdocs).

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents and https://patents.iec.ch. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

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. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information Technology*, SC 40, *IT Service Management and IT Governance*.

A list of all parts in the ISO/IEC 20000 series can be found on the ISO and IEC websites.

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 and www.iec.ch/national-committees.

© ISO/IEC 2025 – All rights reserved

Introduction

Climate change and the decline of biodiversity in the last few decades have highlighted the effect of human actions on the planet and life. Recognizing this impact, the United Nations (UN) has called for a global partnership for sustainable development to improve human life and protect the environment. Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The UN 2030 Agenda for Sustainable Development, which is adopted by all member states, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. This agenda includes 17 Sustainable Development Goals (SDGs) across three interdependent dimensions of sustainability, which are:

— environmental;

— social; and

— economic.

Many national and international standards, guidelines and documents have been published on how to better address environmental, social and economic world issues. In response to an ISO initiative (the London Declaration[23]), ISO/IEC 20000-1 is an example of where sustainability can be built into the existing structure. Information technology (IT) has a critical role to play in the operation of services within any organization and has great potential to drive sustainable development.

This document provides guidance for sustainability within a service management system (SMS). Sustainability actions can span across diverse areas, including eco-responsibility, eco-labelling of products and services, moving to net zero greenhouse gas (GHG) emissions (i.e. negating the amount of greenhouse gases produced by human activity), social responsibility, circular economy, long-term viability and organizational culture change to deal with the present and prepare for the future. As sustainability is applied to an SMS, this guidance will focus on the three sustainability dimensions and not the specific actions to support sustainable operations (e.g. eco-responsibility, GHG). An SMS aligned to the sustainability strategy of the organization extends the focus from service resilience to sustainable service delivery and operations.

Organizations, through strategic planning and top management commitment, can directly minimize the environmental, social and economic adverse effects of service delivery throughout the service lifecycle. This strategy is reflected in the service management objectives, service management plan and ongoing activities/ operations needed for service delivery.

An SMS focused on sustainability will provide opportunities for ongoing visibility, control of services and continual improvement, leading to greater effectiveness, efficiency and reduction of the impact on global resources. These benefits can arise from optimized IT asset utilization, responsible procurement, sustainable supplier management, improving data centre facilities, and operations management in terms of electricity, water, HVAC (Heating, Ventilation, Air Conditioning), hardware components, etc.

ISO/IEC 20000-1 has been written generically, which means that the type, size or nature of the services delivered makes no difference when applying the requirements. This document, following the structure of ISO/IEC 20000-1, focuses on which areas to consider for improving sustainability within an SMS. It does not state any performance criteria across the dimensions of sustainability. The complexity of an SMS focused on sustainability will depend solely on the context of the organization, the scope of operation, compliance obligations, and the nature of the organizational activities, products and services.

Figure 1 illustrates an SMS showing the clause content of ISO/IEC 20000-1. Numbers in parentheses in Figure 1 indicate ISO/IEC 20000-1 clause numbers.

© ISO/IEC 2025 – All rights reserved

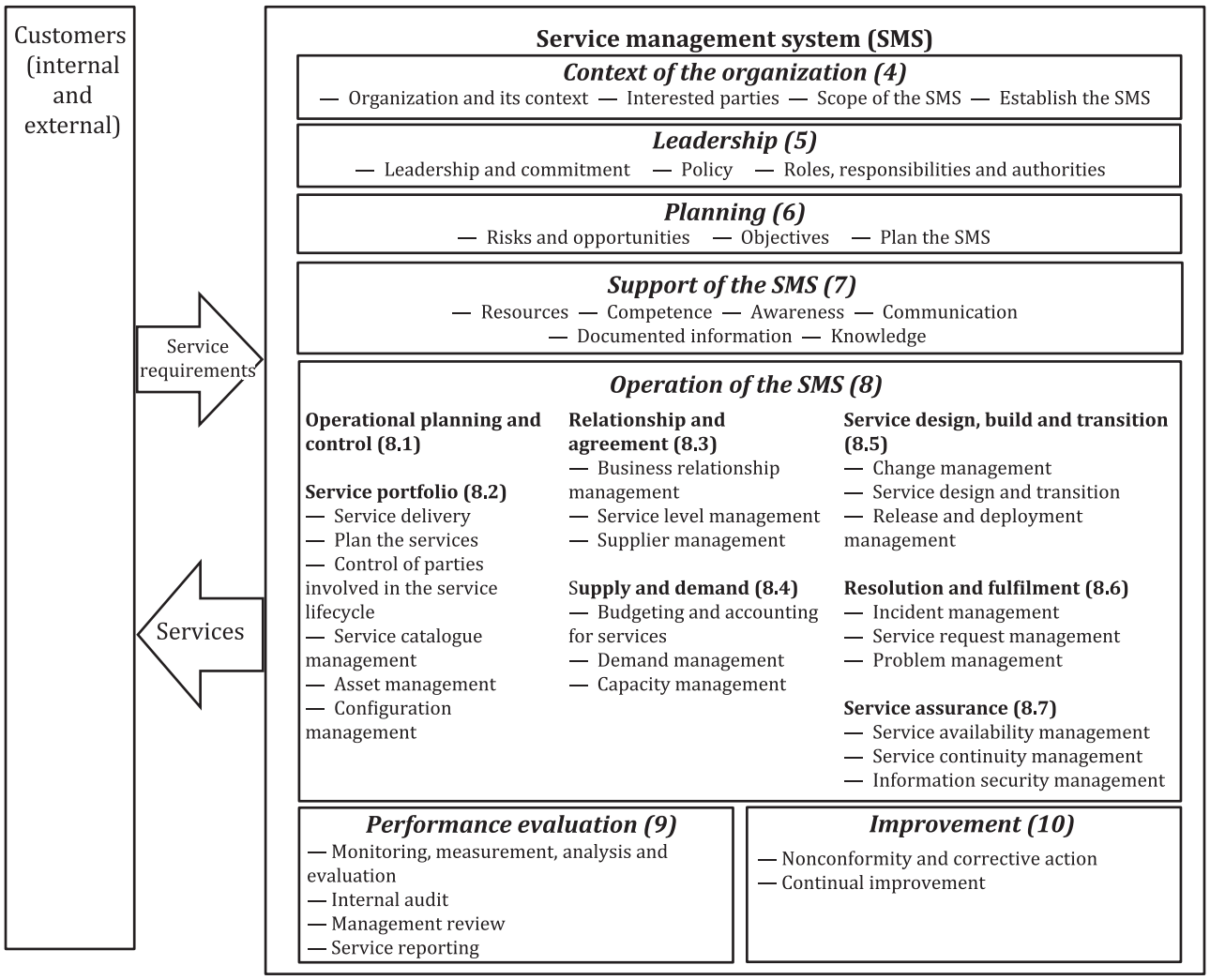


Figure 1 — Service management system (SMS)

© ISO/IEC 2025 – All rights reserved

Information technology — Service management —

Part 16: Guidance on sustainability within a service management system based on ISO/IEC 20000-1

1 Scope

1.1 General

This document provides guidance for including sustainability within a service management system (SMS) based on the requirements defined in ISO/IEC 20000-1. It is aimed at:

— organizations that are intending to implement the requirements of ISO/IEC 20000-1 and directly address sustainability;

— organizations that intend to leverage their existing SMS to enable sustainability actions and sustainable delivery;

— consultants, trainers and other experts supporting organizations that utilize ISO/IEC 20000-1, so that they can be informed on how to include sustainability actions in an SMS.

Sustainability in this context has three interdependent dimensions, which are environmental, social and economic. Annex A expands on the three dimensions with examples of each.

The guidance provided in this document aims to help organizations consider and address sustainability objectives as well as challenges related to their services. The complexity and detail surrounding the inclusion of sustainability within an SMS will vary and be dependent on the context of the organization, the scope of the SMS, compliance obligations and the nature of the services within the scope of the SMS.

1.2 Application

This document is intended to be used in conjunction with ISO/IEC 20000-1 to address sustainability objectives related to specific requirements in ISO/IEC 20000-1. As such, it is anticipated that the user of this document is aware of the requirements in ISO/IEC 20000-1. The suggestions included across clauses in this document will be most effective when applied to an SMS which is implemented according to the corresponding clauses in ISO/IEC 20000-1. Application of this guidance to an SMS according to ISO/IEC 20000-1 is therefore recommended.

This document supports and is an addition to the guidance already provided in ISO/IEC 20000-2, ISO/IEC 20000-3, ISO/IEC TS 20000-5 and other parts of the ISO/IEC 20000 series.

Organizations can use the guidance in this document to also address the new requirements identified in ISO/IEC 20000-1:2018/Amd 1:2024 and ISO's objectives to address climate change.

The recommendations in this document for improving sustainability within an SMS are not exclusive and can be implemented along with other sustainability initiatives.

© ISO/IEC 2025 – All rights reserved

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/IEC 20000-1, *Information technology — Service management — Part 1: Service management system requirements*

ISO/IEC 20000-10, *Information technology — Service management — Part 10: Concepts and vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 20000-1, ISO/IEC 20000-10 and the following 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/

3.1
adaptation
adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects or impacts

Note 1 to entry: Adaptation refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change.

[SOURCE: ISO/IWA 42:2022, 3.1.5]

3.2
bribery
offering, promising, giving, accepting or soliciting of an undue advantage of any value (which could be financial or non-financial), directly, or indirectly, and irrespective of location(s), in violation of applicable law, as an inducement or reward for a person acting or refraining from acting in relation to the performance of that person's duties

Note 1 to entry: The above is a generic definition. The meaning of the term "bribery" is as defined by the anti-bribery law applicable to the organization and by the anti-bribery management system designed by the organization.

[SOURCE: ISO 37001:2016, 3.1]

3.3
climate
statistical description of weather in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years

Note 1 to entry: The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization.

Note 2 to entry: The relevant quantities are most often near-surface variables such as temperature, precipitation and wind.

[SOURCE: ISO Guide 84:2020, 3.1.1]

3.4
climate change
change in climate that persists for an extended period, typically decades or longer

Note 1 to entry: Change in climate can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties.

© ISO/IEC 2025 – All rights reserved