AS ISO/DIS 20001 (Int):2026
ISO/DIS 20001:2025
Interim
Australian Standard®

# Food loss and waste management system — Requirements for the minimization of food loss and waste across the food supply chain



# AS ISO/DIS 20001 (Int):2026

This Australian Interim Standard was prepared by FT-037, Food Loss and Waste. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 16 June 2026.

This Interim Standard was published on 26 June 2026.

The following are represented on Committee FT-037:

- Australasian Institute of Packaging
- Australian Food and Grocery Council
- Australian Industry Group
- Australian Organics Recycling Association
- Consumers' Federation of Australia
- Crop Life Australia
- CSIRO
- Department of Climate Change, Energy, the Environment and Water
- End Food Waste Australia
- Food and Beverage Importers Association
- Foodbank Australia
- Joint Accreditation System of Australia & New Zealand
- Pet Food Industry Association of Australia
- Queensland University of Technology

**Status of this document**

Standards Australia publications are periodically reviewed to ensure their ongoing relevance and accuracy. This document may be withdrawn, revised, or superseded at any time. To verify this document's current status, visit:

*www.standards.org.au*

ISBN: 978 1 76175 867 6

AS ISO/DIS 20001 (Int):2026
ISO/DIS 20001:2025

Interim
Australian Standard®

# Food loss and waste management system — Requirements for the minimization of food loss and waste across the food supply chain

First published as AS ISO/DIS 20001:2026.

© ISO 2026 — All rights reserved
© Standards Australia Limited 2026

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Users must not use the content in this publication in combination with artificial intelligence (AI) tools for any purpose, unless they have the express prior written consent from Standards Australia.

# How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

**Requirements**

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

**Recommendations, permissions and possibilities**

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

**Structure of Standards**

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

# Preface

This Interim Standard was prepared by the Standards Australia Committee FT-037, Food Loss and Waste.

This Interim Standard will have a currency of two years from its date of publication. At the conclusion of that period it will be superseded by another document, confirmed as an interim Standard in its present form for a further two-year period or withdrawn.

This document is identical to, and has been reproduced from, the ISO Draft International Standard (DIS), ISO/DIS 20001, *Food loss and waste management system — Requirements for the minimization of food loss and waste across the food supply chain*. It is intended that on release of the final publication of ISO 20001, if deemed suitable for use in Australia, it will be adopted to supersede this publication.

The objective of this document is to provide procedures to mitigate Food Loss and Waste (FLW) by providing a framework for food organizations throughout the food chain to work actively and effectively to measure and reduce FLW across the whole food supply chain from the farm to the final consumers/ customers. The priority of the SC will be to provide the market with a new Management System Standard. The intention of the proposed MSS is to embrace all food producing organizations wanting to reduce FLW by documenting, monitoring, improving, and reporting their procedures. The MSS should also provide a uniform framework for continual improvement and comparison of results, for use by businesses and other organizations. The MSS is intended also to define measurement methods that might be used and give a comparison of their pros and cons. The overall objective is that all deliverables produced by SC 20 shall respond to dynamic market and stakeholder needs. The MSS specifies the following requirements for a FLW management system standard (FLW-MSS) to enable an organization that is directly involved in the food chain:

(a) To plan, implement, operate, maintain and update a FLW-MS to minimize FLW within its operations.

(b) To contribute to reducing FLW throughout the food chain.

(c) To evaluate and assess stakeholder FLW requirements and demonstrate conformity or compliance with them.

(d) To effectively communicate FLW issues to interested parties within the food chain.

(e) To ensure that the organization conforms to its stated FLW policy.

(f) To demonstrate conformity to relevant interested parties.

(g) To seek certification or registration of its FLW-MS by an external organization or make a self-assessment or self-declaration of conformity to this document.

All requirements of the FLW-MSS will be generic and are intended to be applicable to all organizations in the food chain regardless of size and complexity. Organizations that are directly involved include, but are not limited to farmers, feed producers, animal food producers, harvesters of wild plants and animals, producers of ingredients, food manufacturers, providers of transportation, storage and distribution services, retailers, food banks and organizations providing food services or catering services. This MSS allows any organization, including small and/or less developed organizations (e.g. a small farm, a small packer-distributor, a small retailer or a food service outlet) to implement externally- developed elements in their FLW-MS.

© Standards Australia Limited 2026

# Contents

Page

**Preface** ..... **v**
**Foreword** ..... **viii**
**Introduction** ..... **ix**
**1 Scope** ..... **1**
**2 Normative references** ..... **1**
**3 Terms and definitions** ..... **1**
**4 Context of the organization** ..... **8**
4.1 Understanding the organization and its context ..... 8
4.2 Understanding the needs and expectations of interested parties ..... 9
4.3 Determining the scope of the FLWMS ..... 9
4.4 FLWMS ..... 9
**5 Leadership** ..... **9**
5.1 Leadership and commitment ..... 9
5.2 FLW Policy ..... 10
5.3 Roles, responsibilities and authorities ..... 10
**6 Planning** ..... **11**
6.1 Actions to address risks and opportunities ..... 11
6.2 FLWMS objectives and planning to achieve them ..... 11
6.3 Planning of changes ..... 12
**7 Support** ..... **12**
7.1 Resources ..... 12
7.1.1 General ..... 12
7.1.2 People ..... 12
7.1.3 Infrastructure ..... 12
7.1.4 Work environment ..... 12
7.1.5 Externally developed elements of the FLWMS ..... 13
7.1.6 Control of externally provided processes, products or services ..... 13
7.2 Competence ..... 13
7.3 Awareness ..... 13
7.4 Communication ..... 14
7.4.1 General ..... 14
7.4.2 Internal communication ..... 14
7.4.3 External communication ..... 14
7.5 Documented information ..... 15
7.5.1 General ..... 15
7.5.2 Creating and updating documented information ..... 15
7.5.3 Control of documented information ..... 15
**8 Operation** ..... **16**
8.1 Operational planning and control ..... 16
8.2 Traceability system ..... 16
8.3 Emergency preparedness and response ..... 17
8.3.1 General ..... 17
8.3.2 Handling of emergencies and incidents ..... 17
8.4 FLW control ..... 17
8.4.1 Preliminary steps to enable FLW analysis ..... 17
8.4.2 FLW analysis ..... 19
8.4.3 FLW reduction plan ..... 21
8.5 Updating the information contributing to the FLW reduction plan ..... 23
8.6 Control of monitoring and measuring ..... 23
8.7 Verification related to FLW reduction plan ..... 23
8.7.1 Verification ..... 23

© Standards Australia Limited 2026

8.7.2 Analysis of results of verification activities ... 24
8.8 Control of product and process nonconformities ... 24
8.8.1 General ... 24
8.8.2 Corrections ... 24
8.8.3 Corrective actions ... 24
8.8.4 Management of unexpected FLW occurrences and potentially unsafe by-products and/or waste side streams ... 25
8.8.5 Evaluation for release ... 26
8.8.6 Management of non-conforming products, by-products and/or waste side streams ... 26
8.8.7 Consequence(s) of withdrawal/recall of products, by-products and/or waste side stream on FLW ... 26

**9 Performance evaluation ... 27**
9.1 Monitoring, measurement, analysis and evaluation ... 27
9.1.1 General ... 27
9.1.2 Analysis and evaluation ... 27
9.2 Internal audit ... 27
9.2.1 General ... 27
9.2.2 Internal audit programme ... 28
9.3 Management review ... 28
9.3.1 General ... 28
9.3.2 Management review inputs ... 28
9.3.3 Management review results ... 29

**10 Improvement ... 29**
10.1 Continual improvement ... 29
10.2 Non-conformity and corrective action ... 29
10.3 Update of the FLWMS ... 30

**Appendix A** (informative) **Guidance on actions an organization can take to help consumers reduce FLW ... 31**

**Appendix B** (informative) **Guidance to the use of ISO 20001 for SMEs ... 44**

**Bibliography ... 51**

© Standards Australia Limited 2026

# 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes 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 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. ISO 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.

This document was prepared by Technical Committee ISO/TC 34 Food Products, Subcommittee SC 20, Food Loss and Waste.

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.

© Standards Australia Limited 2026

# Introduction

## 0.1 General

ISO supports in principle and through the development of its standards the implementation of the United Nations' 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). This includes SDG 12 to "Ensure sustainable consumption and production patterns", and its Target 12.3:

"By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses".

In addition to helping to achieve UN SDG Target 12.3, reducing food loss and waste (FLW) supports the delivery of 14 of the other 17 UN SDGs[1].

FLW has significant economic, social and environmental impacts. Various studies have indicated that FLW results – among others - in:

— The loss of a significant amount of food produced for human consumption.

— Major economic losses.

— Increased food insecurity and malnutrition.

— Wasted agricultural resources including water, fertilizer and land use.

— A negative effect on climate including increased emissions from global food systems.

Reducing FLW therefore has a financial benefit for businesses in the food supply chain, alleviates world hunger and reduces the pressure on climate and natural resources.

## 0.2 Adoption of a FLW management system

The adoption of a food loss and waste management system (FLWMS) is a strategic decision for an organization that can help to improve its overall performance in mitigating FLW.

The potential users of this document are all those organizations directly or indirectly involved in the food supply chain regardless of their size and complexity (refer 1. Scope)

The potential benefits to an organization of implementing a FLWMS based on this document are:

— the ability to facilitate quantification, measurement, calculating the economic value, monitoring, prevention and minimization of their FLW;

— the ability to communicate and report on their FLW and the actions they are taking to prevent and reduce FLW;

— improve existing production and processing methods and enrich and add value to by-products;

— the production of products and services that meet customer and applicable statutory and regulatory requirements;

— identifying and addressing risks and opportunities associated with its FLW objectives;

— the ability to demonstrate conformity to specified food loss and waste requirements, and the objectives set out in an organization's sustainability, Environment, Social and Governance (ESG) or circular economy strategy.

This document employs the process approach (see 0.5), which incorporates the Plan-Do-Check-Act (PDCA) cycle (see 0.5.2) and risk-based thinking (see 0.5.3).

[1] WRI – Reducing Food Loss and Waste – Setting a Global Action Agenda (2019).

© Standards Australia Limited 2026

All requirements of the FLWMS are generic and are intended to be applicable to all organizations in the food supply chain regardless of size and complexity.

In this document, the following verbal forms are used:

— "shall" indicates a requirement;

— "should" indicates a recommendation;

— "may" indicates a permission;

— "can" indicates a possibility or a capability.

"NOTES" provide guidance in understanding or clarifying the requirements in this document.

### 0.3 FLWMS principles

Risks of FLW and opportunities for the mitigation of FLW exist at each stage of the food supply chain and within each food organization. Therefore, FLW prevention and minimization actions throughout the food supply chain are essential and mitigation is ensured through the combined efforts of all the parties involved in the food supply chain. In some cases, governments and non-profit organizations may also be able to support the overarching objective of reducing FLW. Measures to reduce the risk of FLW should not compromise food safety.

This document specifies the requirements for a FLWMS that is based on the principles that are common to ISO management system standards.

### 0.4 The FLW prevention and minimization hierarchy

The FLW prevention and minimization hierarchy (see Figure 1) – hereinafter referred to as "FLW hierarchy" - provides a useful framework to help organizations prioritise their FLW prevention and minimization actions in their own operations and/or food supply chains in a way that maximizes the economic and societal benefits of those actions, at the same time as minimizing the environmental impacts of FLW.

The hierarchy is an internationally recognised approach that prioritises 'non-waste' destinations, with the most preferable option being the prevention of excess food and FLW. The other FLW reduction actions that keep food in the human food supply chain are the repurposing and upcycling of food that would otherwise be lost or wasted, into new food ingredients and products, and the redistribution and donation of safe food for direct human consumption (e.g. food relief). When food is not suitable for direct human consumption, the next best option is to use previously lost or wasted food as or in animal feed, if suitable. All of these options (prevention, repurposing/upcycling, redistribution, and feed) allow food to remain in the food supply chain and are preferable over FLW destinations lower in the hierarchy that result in food leaving the human food supply chain.

The FLW hierarchy encourages organizations to prevent and minimize their excess food and FLW and to move food up the FLW hierarchy to deliver better economic, societal and environmental outcomes without compromising food safety. Any actions by organizations that move FLW up the hierarchy out of landfill, that add value to FLW and reduce its environmental impact should still be considered as a positive step. Organizations will need to use the FLW hierarchy flexibly. The factors influencing organizations' decisions can include the type, nature, marketability, edibility and perishability of the food, their position in the food supply chain, the geography in which they operate, the regulations that apply to them, and the infrastructure and resources available to them.

Organizations should seek to engage with relevant interested parties to prevent the generation of excess food and FLW that may occur upstream and downstream in their food supply chains. For example, organizations can collaborate with suppliers and customers to find ways to maximize the utilization of crops or donate food to food redistribution organizations - and facilitate the movement of food or FLW up the FLW hierarchy.

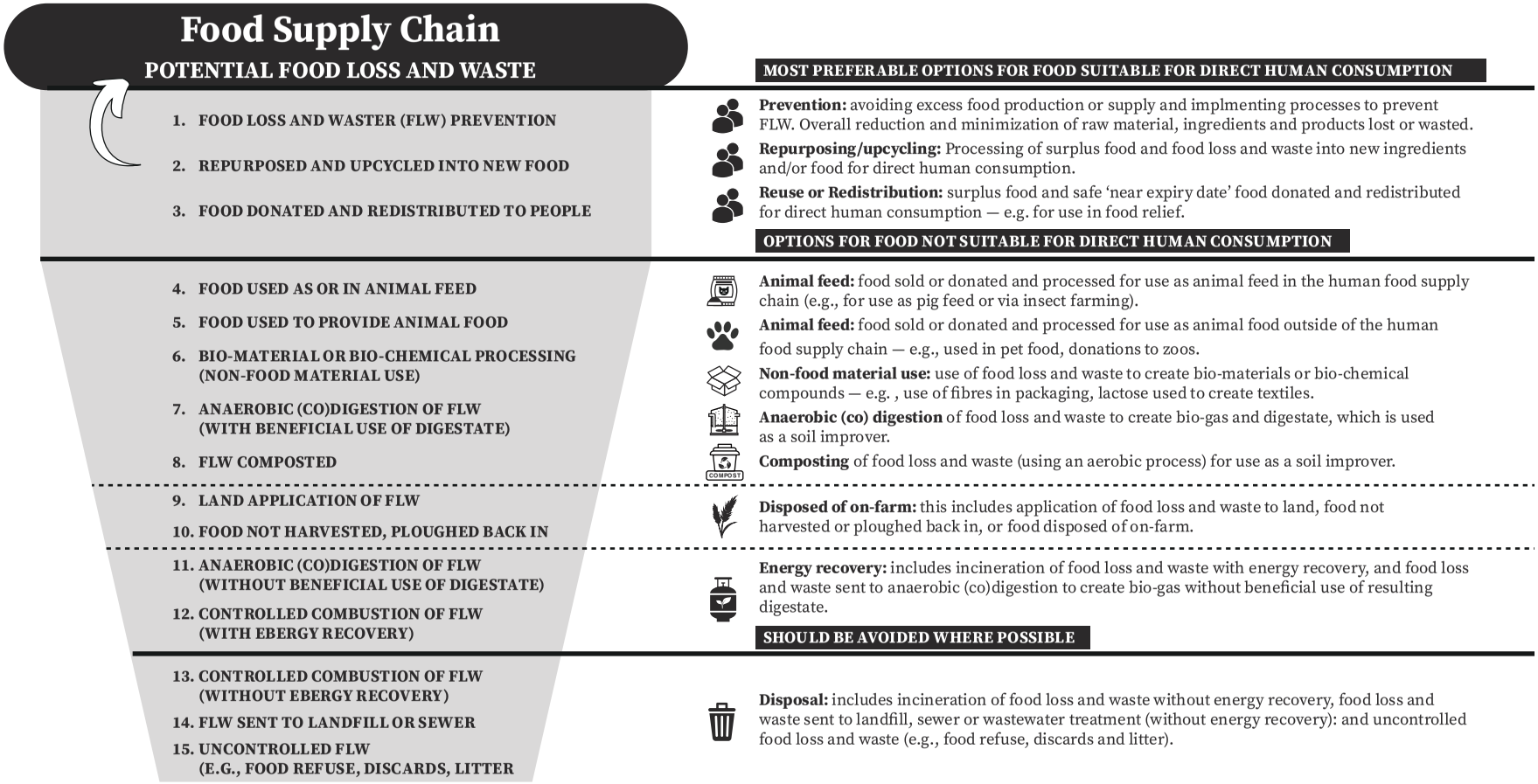
Organizations can also use the FLW hierarchy to quantify, monitor and report their total FLW and the quantity of FLW that occurs in their own operations or food supply chains at each level of the FLW

© Standards Australia Limited 2026

hierarchy. This will help them to demonstrate the progress they are making to prevent or reduce their FLW and to identify opportunities to move FLW up the hierarchy over time.

Organizations can also identify which of their business functions is best suited to implement FLW prevention or minimization actions at each level of the FLW hierarchy. For example, new product development teams may be best placed to bring to market new products or services that result in less food being lost or wasted, whilst community or ESG teams can support food donation to food redistribution organizations, and waste management teams can select the most appropriate or beneficial FLW destination for any food that is lost or wasted.

© Standards Australia Limited 2026




NOTE The position of each destination may vary depending on contextual factors such as food type, perishability, supply chain position, geography, regulations and available infrastructure. Any action moving FLW up the hierarchy is a positive step.

**Figure 1 — The FLW prevention and minimization hierarchy**

© Standards Australia Limited 2026

## 0.5 Process approach

### 0.5.1 General

This document adopts a process approach when developing and implementing a FLWMS and improving its effectiveness to enhance production of food products and services with less FLW, while meeting applicable safety and other requirements. Understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its intended results. The process approach involves the systematic definition and management of processes, and their interactions, to achieve the intended results in accordance with the organization's FLW policy and the strategic direction of the organization. Management of the processes and the system as a whole can be achieved using the Plan-Do-Check-Act (PDCA) cycle, with an overall focus on risk-based thinking aimed at taking advantage of opportunities and preventing undesirable results.

The recognition of the organization's role and position within the food supply chain is essential to ensure effective interactions and communication between organizations throughout the food supply chain.

### 0.5.2 Plan-Do-Check-Act cycle

The PDCA cycle can be described briefly as follows:

— **Plan**: establish the objectives of the system and its processes, provide the resources needed to deliver the results, and identify and address risks and opportunities;

— **Do**: implement what was planned;

— **Check**: monitor and (where relevant) measure processes and the resulting products and services, analyse and evaluate information and data from monitoring, measuring and verification activities, and report results;

— **Act**: take actions to improve performance, as necessary.

In this document, and as illustrated in Figure 2, the process approach uses the concept of the PDCA cycle at two levels. The first covers the overall frame of the FLWMS (Clause 4 to Clause 7 and Clause 9 to Clause 10). The other level (operational planning and control) covers the operational processes within the FLWMS as described in Clause 8. Communication between the two levels is therefore essential.

© Standards Australia Limited 2026

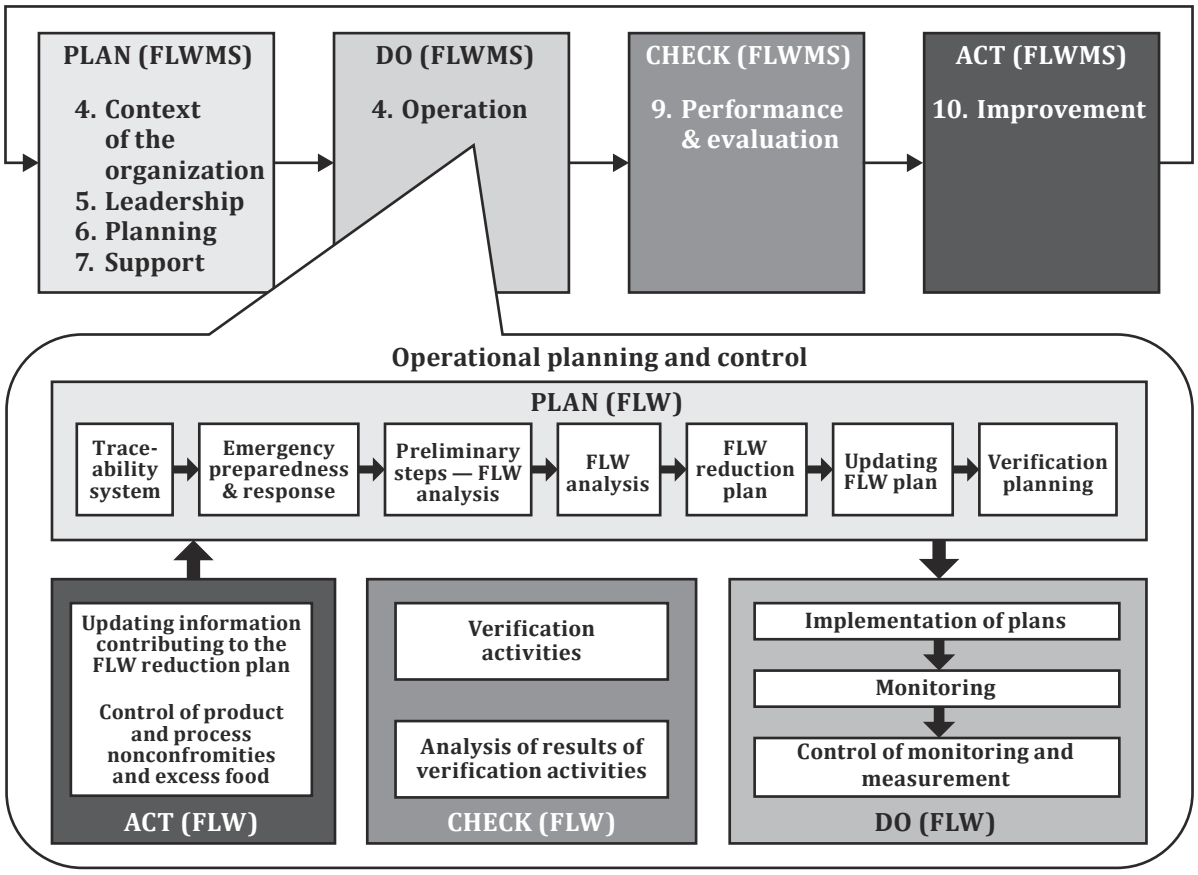



**Figure 2 — Illustration of the Plan-Do-Check-Act cycle at the two levels (adapted PDCA model from ISO 22000)**

### 0.5.3 Risk-based thinking

#### 0.5.3.1 General

Risk-based thinking is essential for achieving an effective FLWMS. In this document, risk-based thinking is addressed on two levels, organizational (see 0.3.3.2) and operational (see 0.3.3.3), which is consistent with the process approach described in 0.3.2.

#### 0.5.3.2 Organizational risk management

Risk is the effect of uncertainty, and any such uncertainty can have positive or negative effects. In the context of organizational risk management, a positive deviation arising from a risk can provide an opportunity, but not all positive effects of risk result in opportunities.

To conform to the requirements of this document, an organization plans and implements actions to address organizational risks (Clause 6). Addressing risks establishes a basis for increasing the effectiveness of the FLWMS, achieving improved results and preventing negative effects.

#### 0.5.3.3 Operational processes

The concept of risk-based thinking based on risk analysis principles at the operational level is implicit in this document.

The approach adopted is similar to that used in ISO 22000:2018. This approach was chosen as many food businesses will already have in place a food safety management system and, as a result, will be familiar with the key steps in the approach and will have in hand most of the required information for the analysis.

Decisions taken in the application of the FLW analysis should be based on science, free from bias and documented. The documentation should include any key assumptions in the decision-making process.

© Standards Australia Limited 2026

## 0.6 Relationship with other management system standards

This document has been prepared using the harmonized structure (i.e. clause sequence, identical core text and common terms and core definitions) provided in Annex SL, Appendix 2 of the ISO/IEC Directives, Part 1, Consolidated ISO Supplement - Procedures specific to ISO.

This is intended to enhance alignment among ISO management system standards, and to facilitate their implementation for organizations that need to meet the requirements of two or more such standards.

© Standards Australia Limited 2026

# Interim
# Australian Standard®

# Food loss and waste management system — Requirements for the minimization of food loss and waste across the food supply chain

## 1 Scope

This document specifies requirements for a Food Loss and Waste Management System (FLWMS) to enable an organization that is involved in the food supply chain:

a) to plan, implement, operate, maintain, review, improve and update a FLWMS to minimize FLW within its operations and/or its supply chain;

b) to put in place arrangements to quantify, measure, monitor, document and report the FLW;

c) to contribute to reducing FLW throughout the food supply chain;

d) to evaluate and assess interested parties within the food supply chain;

e) to effectively communicate FLW issues to interested parties within the food supply chain;

f) to ensure that the organization conforms to its stated FLW policy;

g) to demonstrate continual improvement in its efforts to reduce FLW to relevant interested parties; and

h) to seek certification or registration of its FLWMS by an external organization or make a self-assessment or self-declaration of conformity to this document.

All requirements of the FLWMS are generic and are intended to be applicable to all organizations in the food supply chain regardless of size and complexity. Organizations that are directly or indirectly involved include, but are not limited to farmers, feed producers, animal food producers, harvesters of wild plants and animals, producers of ingredients, food manufacturers, providers of transportation, storage and distribution services, wholesalers, retailers, food charities, organizations providing food services or catering services and organizations providing food waste management services.

This FLWMS allows any organization, including small and/or less developed organizations (e.g. a small farm, a small packer-distributor, a small retailer or a food service outlet) to implement externally developed elements in their FLWMS.

NOTE 1 Organizations can also choose to address or take steps to reduce consumer food waste within their FLWMS should this be considered a significant FLW hotspot (see Annex A).

NOTE 2 Competent authorities seeking to reduce FLW within their jurisdictions can incorporate this document within their activities.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

© Standards Australia Limited 2026