



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 22000:2005

# Food safety management systems - Requirements for any organization in the food chain (ISO 22000:2005)

## I.S. EN ISO 22000:2005

*Incorporating amendments/corrigenda issued since publication:*

<i>This document replaces:</i>	<i>This document is based on:</i> EN ISO 22000:2005	<i>Published:</i> 1 September, 2005
This document was published under the authority of the NSAI and comes into effect on: 7 September, 2005		ICS number: 67.020
<b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W <b>NSAI.ie</b>	<b>Sales:</b> T +353 1 857 6730 F +353 1 857 6729 W standards.ie <b>Price Code:</b> <b>J</b>
Údarás um Chaighdeáin Náisiúnta na hÉireann		

# INTERNATIONAL STANDARD

**ISO**  
**22000**

First edition  
2005-09-01

---

---

## **Food safety management systems — Requirements for any organization in the food chain**

*Systèmes de management de la sécurité des denrées alimentaires —  
Exigences pour tout organisme appartenant à la chaîne alimentaire*



Reference number  
ISO 22000:2005(E)

© ISO 2005

## ISO 22000:2005(E)

### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Contents

	Page
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>2</b>
<b>4 Food safety management system .....</b>	<b>4</b>
4.1 General requirements .....	4
4.2 Documentation requirements .....	5
<b>5 Management responsibility .....</b>	<b>5</b>
5.1 Management commitment .....	5
5.2 Food safety policy .....	6
5.3 Food safety management system planning .....	6
5.4 Responsibility and authority .....	6
5.5 Food safety team leader .....	6
5.6 Communication .....	7
5.7 Emergency preparedness and response .....	8
5.8 Management review .....	8
<b>6 Resource management .....</b>	<b>8</b>
6.1 Provision of resources .....	8
6.2 Human resources .....	9
6.3 Infrastructure .....	9
6.4 Work environment .....	9
<b>7 Planning and realization of safe products .....</b>	<b>9</b>
7.1 General .....	9
7.2 Prerequisite programmes (PRPs) .....	10
7.3 Preliminary steps to enable hazard analysis .....	11
7.4 Hazard analysis .....	13
7.5 Establishing the operational prerequisite programmes (PRPs) .....	14
7.6 Establishing the HACCP plan .....	14
7.7 Updating of preliminary information and documents specifying the PRPs and the HACCP plan .....	15
7.8 Verification planning .....	16
7.9 Traceability system .....	16
7.10 Control of nonconformity .....	16
<b>8 Validation, verification and improvement of the food safety management system .....</b>	<b>18</b>
8.1 General .....	18
8.2 Validation of control measure combinations .....	19
8.3 Control of monitoring and measuring .....	19
8.4 Food safety management system verification .....	19
8.5 Improvement .....	20

## ISO 22000:2005(E)

<b>Annex A</b> (informative) <b>Cross references between ISO 22000:2005 and ISO 9001:2000 .....</b>	<b>22</b>
<b>Annex B</b> (informative) <b>Cross references between HACCP and ISO 22000:2005 .....</b>	<b>27</b>
<b>Annex C</b> (informative) <b>Codex references providing examples of control measures, including prerequisite programmes and guidance for their selection and use .....</b>	<b>28</b>
<b>Bibliography .....</b>	<b>32</b>

## **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 22000 was prepared by Technical Committee ISO/TC 34, *Food products*.

## ISO 22000:2005(E)

### Introduction

Food safety is related to the presence of food-borne hazards in food at the point of consumption (intake by the consumer). As the introduction of food safety hazards can occur at any stage of the food chain, adequate control throughout the food chain is essential. Thus, food safety is ensured through the combined efforts of all the parties participating in the food chain.

Organizations within the food chain range from feed producers and primary producers through food manufacturers, transport and storage operators and subcontractors to retail and food service outlets (together with inter-related organizations such as producers of equipment, packaging material, cleaning agents, additives and ingredients). Service providers are also included.

This International Standard specifies the requirements for a food safety management system that combines the following generally recognized key elements to ensure food safety along the food chain, up to the point of final consumption:

- interactive communication;
- system management;
- prerequisite programmes;
- HACCP principles.

Communication along the food chain is essential to ensure that all relevant food safety hazards are identified and adequately controlled at each step within the food chain. This implies communication between organizations both upstream and downstream in the food chain. Communication with customers and suppliers about identified hazards and control measures will assist in clarifying customer and supplier requirements (e.g. with regard to the feasibility and need for these requirements and their impact on the end product).

Recognition of the organization's role and position within the food chain is essential to ensure effective interactive communication throughout the chain in order to deliver safe food products to the final consumer. An example of the communication channels among interested parties of the food chain is shown in Figure 1.

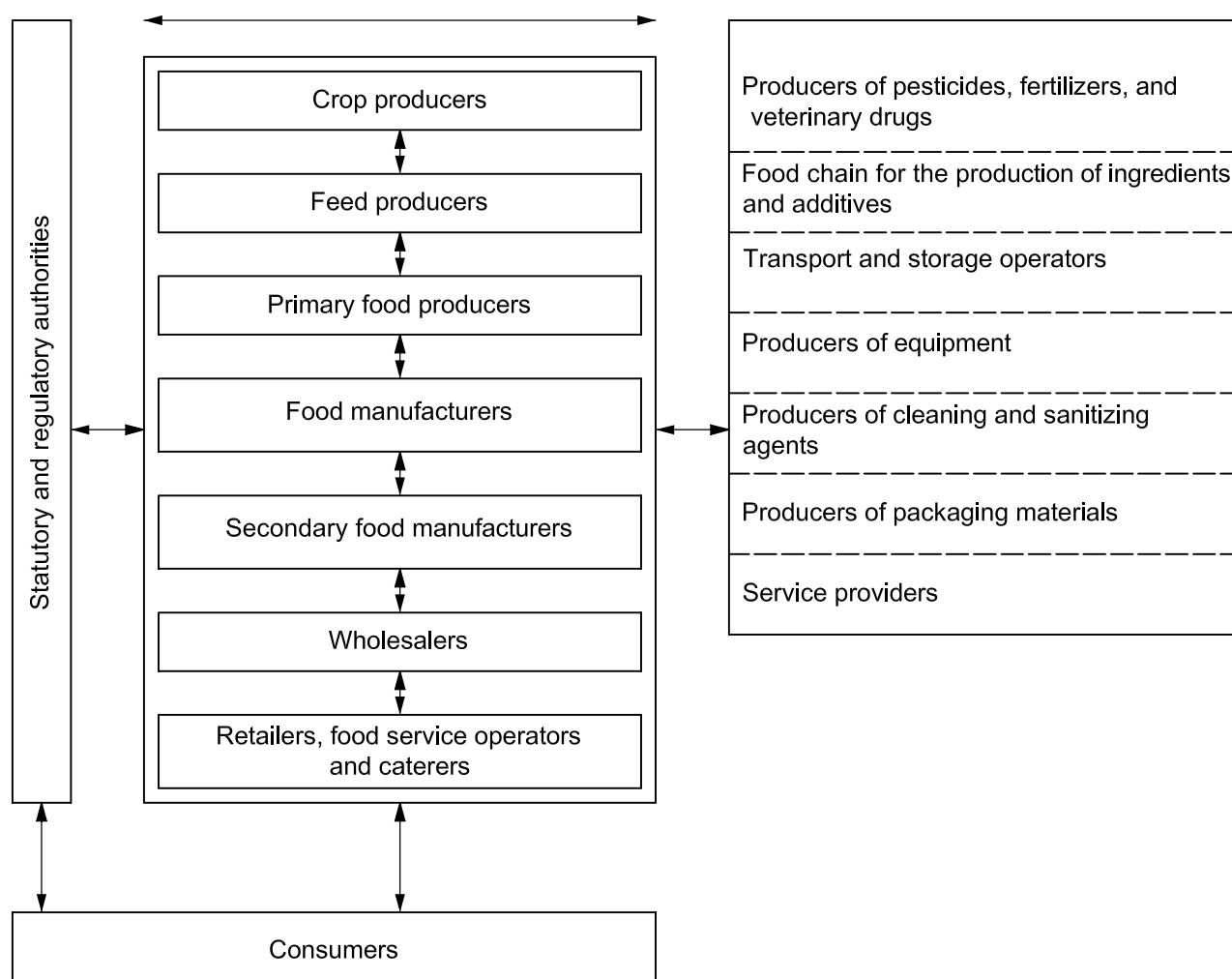
The most effective food safety systems are established, operated and updated within the framework of a structured management system and incorporated into the overall management activities of the organization. This provides maximum benefit for the organization and interested parties. This International Standard has been aligned with ISO 9001 in order to enhance the compatibility of the two standards. Cross-references between this International Standard and ISO 9001 are provided in Annex A.

This International Standard can be applied independently of other management system standards. Its implementation can be aligned or integrated with existing related management system requirements, while organizations may utilize existing management system(s) to establish a food safety management system that complies with the requirements of this International Standard.

This International Standard integrates the principles of the Hazard Analysis and Critical Control Point (HACCP) system and application steps developed by the Codex Alimentarius Commission. By means of auditable requirements, it combines the HACCP plan with prerequisite programmes (PRPs). Hazard analysis is the key to an effective food safety management system, since conducting a hazard analysis assists in organizing the knowledge required to establish an effective combination of control measures. This International Standard requires that all hazards that may be reasonably expected to occur in the food chain, including hazards that may be associated with the type of process and facilities used, are identified and assessed. Thus it provides the means to determine and document why certain identified hazards need to be controlled by a particular organization and why others need not.

During hazard analysis, the organization determines the strategy to be used to ensure hazard control by combining the PRP(s), operational PRP(s) and the HACCP plan.





NOTE The figure does not show the type of interactive communications along and across the food chain that by-pass immediate suppliers and customers.

**Figure 1 — Example of communication within the food chain**

Cross-references between the Codex Alimentarius Commission HACCP principles and application steps (see Reference [11]) and this International Standard are provided in Annex B.

To facilitate the application of this International Standard, it has been developed as an auditable standard. However, individual organizations are free to choose the necessary methods and approaches to fulfil the requirements of this International Standard. To assist individual organizations with the implementation of this International Standard, guidance on its use is provided in ISO/TS 22004.

This International Standard is intended to address aspects of food safety concerns only. The same approach as provided by this International Standard can be used to organize and respond to other food specific aspects (e.g. ethical issues and consumer awareness).

This International Standard allows an organization (such as a small and/or less developed organization) to implement an externally developed combination of control measures.

The aim of this International Standard is to harmonize on a global level the requirements for food safety management for businesses within the food chain. It is particularly intended for application by organizations that seek a more focused, coherent and integrated food safety management system than is normally required by law. It requires an organization to meet any applicable food safety related statutory and regulatory requirements through its food safety management system.



# Food safety management systems — Requirements for any organization in the food chain

## 1 Scope

This International Standard specifies requirements for a food safety management system where an organization in the food chain needs to demonstrate its ability to control food safety hazards in order to ensure that food is safe at the time of human consumption.

It is applicable to all organizations, regardless of size, which are involved in any aspect of the food chain and want to implement systems that consistently provide safe products. The means of meeting any requirements of this International Standard can be accomplished through the use of internal and/or external resources.

This International Standard specifies requirements to enable an organization

- a) to plan, implement, operate, maintain and update a food safety management system aimed at providing products that, according to their intended use, are safe for the consumer,
- b) to demonstrate compliance with applicable statutory and regulatory food safety requirements,
- c) to evaluate and assess customer requirements and demonstrate conformity with those mutually agreed customer requirements that relate to food safety, in order to enhance customer satisfaction,
- d) to effectively communicate food safety issues to their suppliers, customers and relevant interested parties in the food chain,
- e) to ensure that the organization conforms to its stated food safety policy,
- f) to demonstrate such conformity to relevant interested parties, and
- g) to seek certification or registration of its food safety management system by an external organization, or make a self-assessment or self-declaration of conformity to this International Standard.

All requirements of this International Standard are generic and are intended to be applicable to all organizations in the food chain regardless of size and complexity. This includes organizations directly or indirectly involved in one or more steps of the food chain. Organizations that are directly involved include, but are not limited to, feed producers, harvesters, farmers, producers of ingredients, food manufacturers, retailers, food services, catering services, organizations providing cleaning and sanitation services, transportation, storage and distribution services. Other organizations that are indirectly involved include, but are not limited to, suppliers of equipment, cleaning and sanitizing agents, packaging material, and other food contact materials.

This International Standard allows an organization, such as a small and/or less developed organization (e.g. a small farm, a small packer-distributor, a small retail or food service outlet), to implement an externally developed combination of control measures.

NOTE Guidance on the application of this International Standard is given in ISO/TS 22004.

## 2 Normative references

The following referenced documents are indispensable for the application 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 9000:2000, *Quality management systems — Fundamentals and vocabulary*

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-