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FINAL  
STANDARD

# ISO 22000:2018

Understanding the changes to the food safety management systems standard

Includes Mapping Guide

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# ISO 22000:2018 Food safety management systems

Used by organizations across the food chain to help deliver food that's safe to eat to consumers, ISO 22000:2018 is an excellent framework to help implement a food safety management system (FSMS).

How food is grown, transported, manufactured and even consumed has changed significantly since the original standard was published over a decade ago. The new standard considers these changes and aims to help organizations reduce food safety hazards.

## The key changes to the standard include:

- A stronger emphasis on the responsibility of leadership
- Applies a risk-based approach to the development of the FSMS
- Clarification of key concepts including:
  - › The Plan-Do-Check-Act cycle, by having two separate cycles in the standard working together with one covering the management system and the other covering the principles of HACCP
  - › The differentiation of key terms including critical control points (CCPs), operational prerequisite programmes (ORPs) and prerequisite programmes (PRPs)
- Improved compatibility with other ISO management system standards through the realignment of the content of the standard to the high level structure



### An integrated approach

ISO 22000:2018 is based on Annex SL – the ISO high level structure (HLS) that brings a common framework to all management systems. This helps to keep consistency, align different management system standards, offer matching sub-clauses against the top-level structure and apply common language across all standards. With the new standard in place, organizations will find it easier to incorporate their food safety management system into core business processes and get more involvement from senior management.

### Leadership and empowerment

There is a much greater focus on top management to demonstrate leadership and commitment with respect to the FSMS and food safety policy. Additionally, top management needs to make sure that all responsibilities have been assigned, communicated and understood across your organization. Top management have a responsibility to ensure that the importance of effective food safety is communicated and understood by all parties and ensuring that the FSMS achieves its intended outcomes.

# Process and risk-based thinking

In addition to making ISO 22000 and the resulting FSMS easier to integrate with other ISO management systems, the new version of the standard also introduces the Plan-Do-Check-Act (PDCA) cycle and risk-based thinking. By combining PDCA and risk-based thinking to manage business risk with HACCP to identify, prevent and control food safety hazards, ISO 22000 helps organizations to reduce exposure to risk and improve safety.

This combines both organizational and operational risk management into one management system. Organizationally, this approach provides the opportunity to consider all the different things that might impact your company, both good and bad. This allows you to prioritize the objectives of your FSMS so that it is implemented in a way that can accommodate the effects of these risks. On the operational side, risk-based thinking and implementation is based on the principles of HACCP that are often associated with food safety management. How they interrelate can be seen in the diagram below.<sup>[1]</sup>

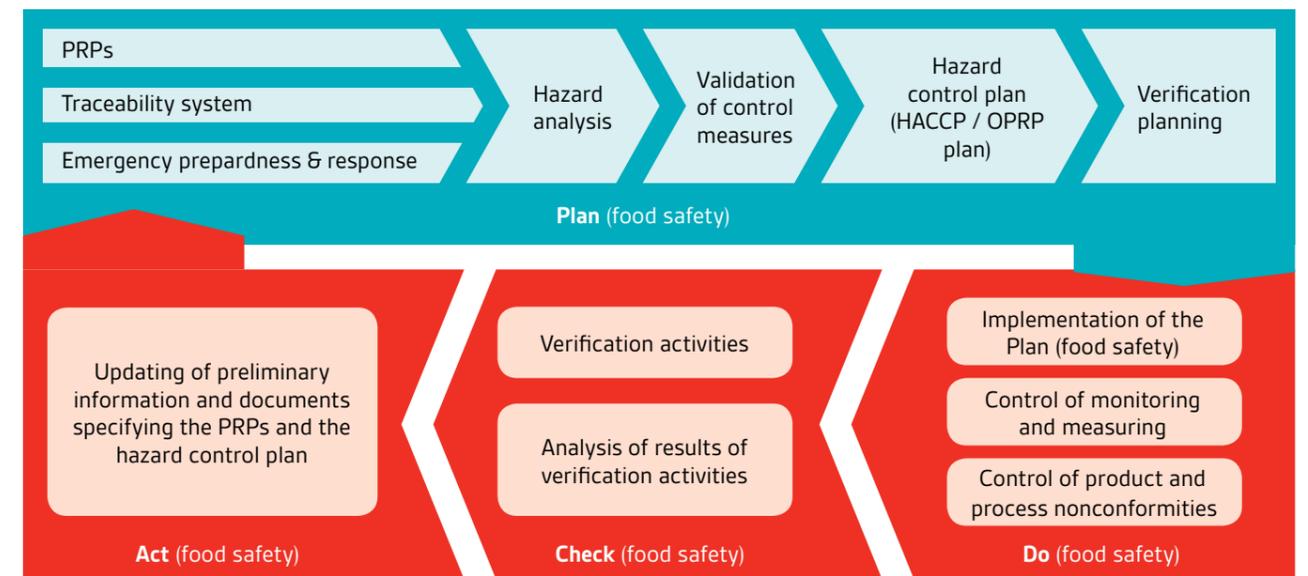
The potential benefits of combining risk-based thinking, PDCA and the process approach include:

- Focussing your FSMS and activities on higher-risk processes
- Understanding how processes within your organization are interdependent
- More effective use of resources
- Improved agility in meeting the requirements of new customers and/or meet new requirements established by existing customers

## Organizational planning and control



## Operational planning and control



[1] Reproduction from ISO 22000 Food safety management system requirements.

## An important new clause

### Clause 4: Context of the organization

The intent of this clause is to provide a high-level, strategic understanding of the important issues that can affect, either positively or negatively, the way your organization manages food safety. It gives your organization the opportunity to identify and understand factors and parties that affect the intended outcome(s) of the FSMS. It also addresses the concept of preventive action.

Your organization will need to determine external and internal issues that are relevant to its purpose: what are the relevant internal and external issues that could have an impact or effect on the FSMS in achieving its intended outcome(s)?

The term 'issue' covers not only problems, but also important topics for the FSMS to address, such as compliance obligations that the organization might set for the FSMS. Importantly, those issues should include not only conditions that the organization affects but also those that it is affected by. Some further general guidance on 'issues' is given in Clause 5.3 of ISO 31000:2009.

Secondly, you will also need to identify the 'interested parties' relevant to your FSMS. These groups could include customers, consumers, suppliers and even

non-government organizations. Determining their relevant needs and expectations is now part of establishing the context for your FSMS. Each organization will have their own unique set of 'interested parties' and these may change overtime.

Once the context has been established, the scope of the FSMS has to be determined in relation to various additional factors.

Finally, the last requirement of Clause 4 is to establish, implement, maintain and continually improve the FSMS. This requires the adoption of a process approach and although each organization's will be different, documented information such as process diagrams or written procedures can be used to support this.



## Preparing for ISO 22000 Five steps for a successful transition

### Don't delay – start today

BSI has identified a step-by-step journey to help you understand and realize the benefits of the revised ISO 22000. We have mapped out a framework which guides you through the options and support available from BSI to ensure you have the knowledge and information you require.

- 1 **Talk to your BSI Client Manager**
  - Discuss your challenges and timelines
  - Review the latest content on the BSI website for background information
- 2 **Attend BSI's Training Academy**
  - Delivered by experts, understand the new requirements faster and in greater detail by attending one of our training courses
- 3 **Communicate with your organization**
  - Talk to your leadership team about the new requirements
  - Communicate the revision to your wider organization to gain buy in
  - Send regular updates on progress
- 4 **Set up an internal project team**
  - Create an implementation plan and monitor progress
  - Take a fresh look at your FSMS
  - Implement the new requirements on leadership, risk and context of the organization
  - Adapt your documentation to reflect the new structure
- 5 **Gap Assessment**
  - To help you prepare for ISO 22000 our experts can complete a gap analysis to identify your strengths and weaknesses.

### ISO 22000 Transition Timeline

2018                      2019                      2020                      2021

June 2018: Updated standard published marking the start of the three-year transition period to June 2021



# ISO 22000:2005 to ISO 22000:2018 Mapping Guide

The following table has been designed to help you identify how the clauses of the final standard align with the structure of the 2005 version

ISO 22000:2005		ISO 22000:2018	
Introduction		Introduction	
Scope	1	1	Scope
Normative references	2	2	Normative references
Terms and definitions	3	3	Terms and definitions
		4	Context of the organization
		4.1	Understanding the organization and its context
Food safety management system	4		
General requirements	4.1	4.3	Documented information
		4.4	Food safety management system
Documentation requirements	4.2	7.5	Determining the scope of the food safety management system
		7.5.1	General
		7.5.2	Creating and updating
		7.5.3	Control of documented information
Management responsibility	5	5	Leadership
Management commitment	5.1	5.1	Leadership and commitment
Food safety policy	5.2	5.2	Policy
		5.2.1	Establishing the food safety policy
		5.2.2	Communicating the food safety policy
Food safety management system planning	5.3	6.2	Objectives of the food safety management system and planning to achieve them
		6.3	Planning of changes
Responsibility and authority	5.4	5.3	Organizational roles, responsibilities and authorities
Food safety team leader	5.5		
Communication	5.6	7.4	Communication (title only)
		7.4.1	General
		7.4.2	External communication
		7.4.3	Internal communication
Emergency preparedness and response	5.7	8.4	Emergency preparedness and response
		8.4.1	General
		8.4.2	Handling of emergencies and response
Management review	5.8	9.3	Management review
		9.3.1	General
		9.3.2	Management review input
		9.3.3	Management review output

ISO 22000:2005		ISO 22000:2018	
Resource management	6	7.1	Resources
Provision of resource	6.1	7.1.1	General
Human resources	6.2	7.1	Resources
		7.1.1	General
		7.1.2	People
		7.3	Awareness
Infrastructure	6.3	7.1	Resources
		7.1.3	Infrastructure
Work environment	6.4	7.1.4	Work environment
Planning and realization of safe products	7		
General	7.1	8.1	Operational planning and control
Prerequisite programmes (PRPs)	7.2	8.2	Prerequisite programmes (PRPs)
Preliminary steps to enable hazard analysis	7.3	8.5.1	Preliminary steps to enable hazards
Hazard analysis	7.4	8.5	Hazard control
		8.5.1	Preliminary steps to enable hazard analysis
		8.5.2	Hazard analysis
Establishing the prerequisite programmes (PRPs)	7.5		
Establishing the HACCP plan	7.6	8.5.4	Hazard control plan (HACCP/OPRP plan)
Updating of preliminary information and documents specifying the PRPs and the HACCP plan	7.7	8.6	Updating the information specifying the PRPs and the hazard control plan
Verification planning	7.8	8.8	Verification related to the PRPs and the hazard control plan
Traceability system	7.9	8.3	Traceability system
Control of nonconformity	7.1	8.9	Control of product and process nonconformities
		8.9.1	General
		8.9.2	Corrections
		8.9.3	Corrective actions
		8.9.4	Handling of potentially unsafe products
		8.9.5	Withdrawal/recall
Validation, verification and improvement of the food safety management system	8	8.8	Verification related to PRPs and the hazard control plan
General	8.1		
Validation of control measure combinations	8.2	8.5.3	Validation of control measure(s) and combination(s) of control measure(s)
Control of monitoring and measuring	8.3	8.7	Control of monitoring and measuring
Food safety management system verification	8.4	9.2	Internal audit
Improvement	8.5	10	Improvement
Continual improvement	8.5.1	10.3	Update of the food safety management system
Updating the food safety management system	8.5.2	10.2	Continual improvement

# Why BSI?

The food industry impacts every person on the planet. Though what the world's population may eat may differ depending on the geography, wealth, age, gender and availability of goods, no other sector plays such a vital role in all of our day-to-day lives and culture. Economically, food represents 10% of Global GDP (valued at US\$48 trillion by the World Bank).

But the food sector also faces significant challenges. Each year, food-borne illness makes one in ten people ill and is the cause of death for millions around the world. Population growth projections and an increasing middle class suggest that the demand for food will increase 70% by 2050. And, consumers are increasingly conscious about what goes into their food, how it's made, its impact on ecosystems and where it comes from.

BSI believes the world deserves food that is safe, sustainable and socially responsible. We support the food sector by developing and publishing standards of best practice, supply chain solutions as well as training and certification to not only the most popular food safety standards, but other business improvement standards that work together to make organizations more resilient.

Working in 172 countries, we pride ourselves on the expertise, integrity and professionalism of our people. Our mission is to help our 80,000 clients, ranging from high-profile global brands to small local companies, survive and prosper in today's world.



# Our products and services

## Knowledge

The core of our business centres on the knowledge that we create and impart to our clients.

In the standards arena we continue to build our reputation as an expert body, bringing together experts from industry to shape standards at local, regional and international levels.

## Assurance

Independent assessment of the conformity of a process or product to a particular standard ensures that our clients perform to a high level of excellence. We train our clients in world-class implementation and auditing techniques to ensure they maximize the benefits of standards.

## Compliance

To experience real, long-term benefits, our clients need to ensure ongoing compliance to a regulation, market need or standard so that it becomes an embedded habit. We provide a range of services and differentiated management tools which help facilitate this process.