

Bord Bia

Sustainability and Quality Assurance Scheme

Food Processor Standard

Revision 01, March 2022



BORD BIA
IRISH FOOD BOARD



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1. Introduction

1.1 Overview

Bord Bia, the Irish State Body responsible for the marketing, promotion and development of the Irish food, drink and horticulture sectors, was set up in 1994 under the An Bord Bia Act (No. 22 of 1994). The Irish Government established the Origin Green - Sustainability and Quality Assurance Division under the separate governance of the Quality Assurance Board (QAB). The responsibility of the QAB is to provide quality assurance services, including the design, development and implementation of sector-specific quality assurance Standards to the Irish food industry.

Bord Bia currently operates Standards at primary production and processing/packing levels for the scopes of beef, dairy, lamb, poultry, pig, egg, feed and horticulture.

The Bord Bia Standards are designed to assess Participants' conformance against a set of sustainability and quality assurance criteria relevant to the sector. This Food Processor Standard (FPS) replaces, and combines into one document, the previous Meat Processor Quality Assurance Standard (2013) and the Prepared Fruit and Vegetable Standard (2008). The fundamental tenets of the FPS are grounded in legislative compliance and best practices in food processing. They include strong foundations in animal and plant health, animal and staff welfare, environmental protection, traceability, and food safety. The Standard addresses the most applicable areas of food law; however, it must not be considered fully comprehensive in this regard. The responsibility for compliance with all relevant legislation remains with the food business owner.

Sustainability is key to the successful future of the European food sector and forms a central element of all Bord Bia Standards. The market is increasingly demanding evidence that suppliers are stepping up to meet the environmental and social challenges that face the food industry and the globe. Members of the FPS are required to participate in a sustainability programme, such as Origin Green, which sets targets for improvement and tracks progress over time, proving the sustainability credentials of the operation.

Certification to this Standard is a testament to the operation's commitment to producing safe, legal products and to meeting international standards in animal and food processing practices.

1.2 Scheme Process Approach

The framework on which the Bord Bia Sustainability and Quality Assurance Scheme is based combines the elements of the Risk Management Framework, as advocated in ISO 31000, with the ISO 22000 Plan-Do-Check-Act (PDCA) cycle. This approach relies heavily on the joint concepts of Preventive PRPs and Preparedness (Traceability and Emergency Response). The PDCA cycle assists the food business operator Member to ensure that the processes they have adopted are adequately planned, resourced, implemented and continuously improved. It is a systematic and iterative approach that is briefly explained below and illustrated in Figure 2.

Plan: Objectives are identified, the processes required to deliver the objectives are established and adequately resourced, and risks and opportunities are identified.

Do: The plan is implemented.

Check: The effectiveness of the process is assessed and analysed, and solutions to problems are identified and implemented.

Act: The results are documented, and recommendations for improving the PDCA cycle are made and implemented.

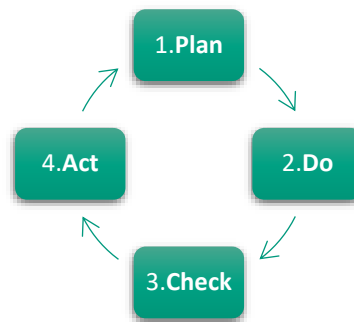


Figure 1: Plan-Do-Check-Act Cycle

The Risk Management framework requires that the senior management of the organisation provide the mandate and commitment for the Food Safety Management Team to design and plan the Food Safety Management System (7 Principles, 12 Codex Steps and PRPs) that manages the risk. The plan is then implemented and checked to ensure that it is fit for purpose.

Finally, the action is taken based on the data generated and, once complete, the cycle of continuous improvement begins again. The PDCA cycle is embedded in the ISO approach to risk management and has been adopted by most of the leading food standards, including those benchmarked to the Global Food Safety Initiative. The following figures illustrate the structure of the Risk Management Framework and how it integrates with the PDCA cycle.

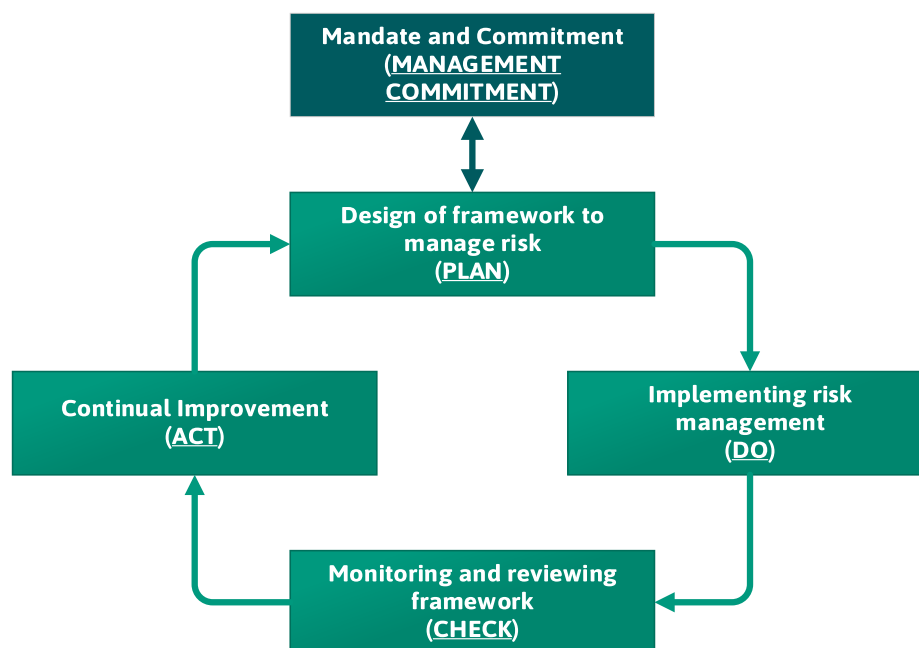


Figure 2: ISO 31000 Risk Management Framework

1.3 Standard Structure

The Food Processor Standard (FPS) is designed to apply to all types of food Processors. The Standard has been structured in a modular fashion, allowing Members to tailor their scope of certification to match their business activities and the products they intend to market as Bord Bia Quality Assured.

This modular approach facilitates the adoption of a more agile and flexible response to changing market and legislative demands with regard to the requirements within the Standard. Important amendments or new modules may be implemented as necessary without the need to make major changes to the overall Standard.

The modules are given below:

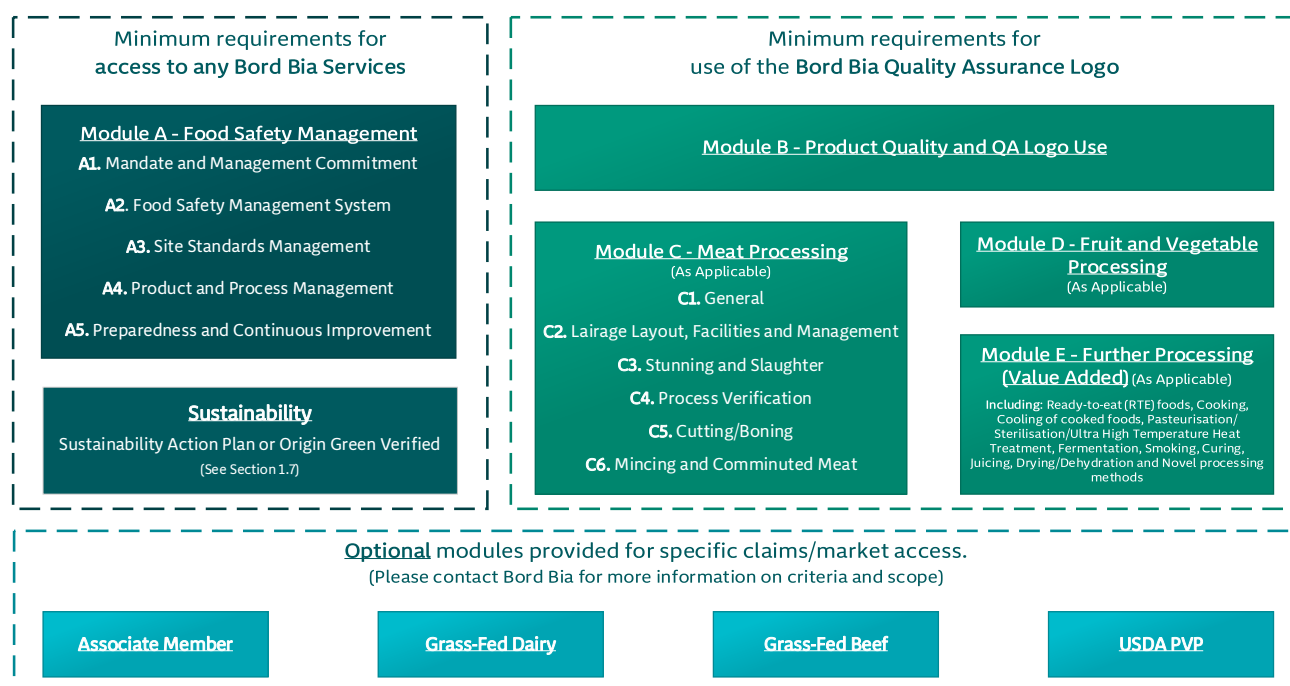
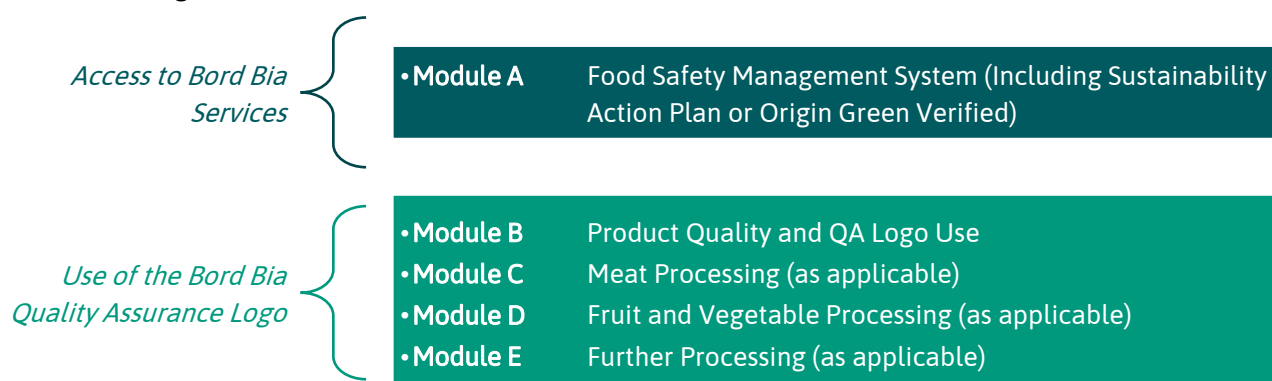


Figure 3: Standard Structure and Module Inter-relationships

1.4 Module Structure

Each module is divided into two sections:

- 1. Introduction:** Background information on the specific module
- 2. Processor Criteria:** The specific requirements against which the Scheme Participant will be audited

Each module also references the additional information given in the Appendices.

1.5 Scheme Rules

The rules governing the Scheme’s delivery are contained in a separate document, ‘Bord Bia Sustainability and Quality Assurance Scheme Rules’, available from Bord Bia. Applicants and Members must be aware of, and agree to, the Scheme rules prior to being accepted onto the Scheme. Where a non-conformance is raised against a Scheme rule, certification to the Standard may be withheld or withdrawn.

1.6 Standard Objectives

The primary objectives of this Standard are:

- To demonstrate to customers that the Processor has been certified to a sustainability and quality assurance scheme by a certification body accredited to ISO 17065;
- To develop and promote a culture of food safety within the food business enterprise;
- To set out the requirements for best practice in the processing of safe food;
- To provide a uniform mechanism for recording and monitoring food processing to achieve continual improvement in sustainability and food standards;
- To underpin the successful marketing of Quality Assured Products;
- To provide a meaningful certification that can showcase sustainability credentials.

1.7 Sustainability

As part of the 'Sustainability' element of this Standard, Participants are required to have an independently verified Sustainability Action Plan in place.

Please contact Bord Bia for a complete list of recognised Sustainability Action Plans (e.g. Origin Green, Bord Bia Sustainability Action Plan).

1.8 Recognition of Other Certification

Module A is designed to apply to all food Processors, and conformance to it is a mandatory requirement for certification to this FPS and verification to Origin Green.

Certification to a third party certification programme meeting the requirements of the Bord Bia Sustainability and Quality Assurance Scheme Rules, Section 2.1 may be acceptable to demonstrate conformance to the criteria of Module A, subject to formal approval by Bord Bia. See the Bord Bia Sustainability and Quality Assurance Scheme Rules for further information.

Where a food Processor holds a recognised third party certification and seeks recognition of conformance to Module A, the following requirements must be met:

- Certification to the recognised third party certification programme must be maintained, and Participants must immediately inform Bord Bia where their 3rd party certification has been suspended or has expired;
- Access must be provided to the third party audit reports from the accredited certification body for the equivalent food safety standard (within one month of the audit being finalised), including a summary of corrective actions taken (where applicable);
- The third party audit reports must be assessed by Bord Bia and approved by the Bord Bia Certification Committee;
- The Processor must agree to abide by the Bord Bia Sustainability and Quality Assurance Scheme Rules, which includes accepting the possibility of an unannounced spot audit.

Note: To be eligible to use the Bord Bia Logo, the food Processor must either be successfully audited against Module A, or hold recognised third party certification and be successfully audited against Module B plus the relevant processing module(s) of this Standard.

Where conformance to Module A is demonstrated through certification to a recognised third party programme, all relevant criteria within Module A may be included in any Bord Bia audit scope.

1.9 Member Responsibility

The onus of responsibility for conformance to this Standard is on the Applicant or Member participating in the Scheme, not on Bord Bia nor its auditors nor other third parties. Conformance with this Standard is verified through an independent audit.

The requirements detailed in this Standard do not replace any statutory obligations of the industry. Members are required to be in full conformance with all legal and statutory requirements relating to this Standard.

1.10 Benefits from Participation in the FPS

Certification provides Members with the following benefits:

- A road map for processing food in line with the highest safety and quality standards;
- An internationally recognised certification required for entry into many markets;
- Assistance in meeting market demands for transparency, traceability and proof of authenticity;
- Proof of sustainability credentials demanded by national and international customers;
- Guidance toward improved sustainable food production and community support;
- Assistance in meeting regulatory, legal and customer requirements;
- Permission to use the Bord Bia Logo for marketing purposes on Quality Assured Product packaging;
- A sense of achievement and pride, and clarity on how to achieve the business's objectives.

1.11 Specific Terms Used and Abbreviations

1.11.1 Definitions of Common Terms

The terms below, all of which are used in this Standard, are commonly used in the food sector. Where appropriate, the source is identified in parentheses.

Action Criterion: A measurable or observable specification for the monitoring of an Operational Prerequisite Programme (oPRP) (ISO 22000:2018).

Allergen: A substance causing an adverse reaction that is mediated by an immunological response. This includes any ingredient or processing aid listed in Annex II of Regulation (EU) No. 1169/2011 of the European Parliament and Council of 25 October 2011, as amended by Commission Delegated Regulation (EU) No. 78/2014 of 22 November 2013, or derived from a substance or product listed in the said Annex, causing allergies or intolerances, used in the manufacture or preparation of a food and still present in the finished product, even if in an altered form.

Animal: Cattle, sheep, pigs and poultry.

Applicant: A food Processor/manufacturer applying for membership of the Bord Bia Sustainability and Quality Assurance Scheme (see Scheme Rules Appendix 1).

Approved Supplier: A supplier that has been evaluated to demonstrate conformance to specific requirements by the audited site (see GFSI version 2020.1).

Audit: A systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled (ISO 22000:2018).

Bord Bia: The Irish Food Board.

Certification Committee: A committee appointed by Bord Bia to which the Bord Bia Quality Assurance Board has devolved responsibility and authority for all certification decisions with regard to membership of the Scheme.

Cleaning: The removal of soil, food residues or other matter that could compromise food hygiene and/or safety (adapted from HSE.ie).

Competence: The ability to apply knowledge and skills to achieve the intended results (ISO 19011, ISO 9000).

Competent Authority: 'Competent Authority' refers to the state authority with responsibility for the relevant official controls and is defined as follows: (a) the central authority of a Member State responsible for the organisation of official controls and of other official activities, in accordance with this Regulation and the rules referred to in Article 1(2); (b) any other authority to which that responsibility has been conferred; (c) where appropriate, the corresponding authorities of a third country (Regulation (EU) 2017/625 Art 3(3)).

Complaint: An expression of dissatisfaction made to an organisation in relation to its product or service, or the complaints-handling process itself, where a response or resolution is explicitly or implicitly expected (ISO 9000).

Consumer: A member of the public who takes possession of food, is not functioning in the capacity of an operator of a food establishment or food processing plant, and does not offer the food for resale (GFSI version 2020.1).

Contaminant: Any physical, biological or chemical agent (including an allergen) or other substance not intentionally added to food which may compromise food safety or suitability (adapted from the WHO Codex CAC/RCP 58-2005).

Contamination: The introduction or occurrence of a contaminant in the food.

Control Measure: An action or activity that is essential to prevent a significant failure in controls of a hazard or reduce it to an acceptable level (adapted from ISO 22000:2018).

Corrective Action: The action required to eliminate detected non-conformances and their causes and to prevent their recurrence (adapted from ISO 22000:2018).

Crisis Management (Incident Management): A process of identifying and managing any event where, based on the information available, there are concerns about threats to the food safety of product that could require intervention to protect consumers' interests, such as isolation and removal from the supply chain (GFSI version 2020.1).

Critical Control Point: A step in the process at which control measure(s) is (are) applied to prevent or reduce a significant food safety hazard to an acceptable level, where defined critical limit(s) and measurement enables the application of corrections (ISO 22000:2018).

Critical Limit: A measurable value which separates acceptability from unacceptability. Where a critical limit is exceeded, the products affected are to be handled as potentially unsafe (ISO 22000:2018).

Customer: A person or organisation that could or does receive a product or a service intended for or required by this person or organisation (ISO 9000).

DAFM: The Department of Agriculture, Food and the Marine.

Disinfection: The reduction by means of heat, chemical and/or physical means of the number of micro-organisms in the environment to a level that does not compromise food safety or suitability (adapted from WHO Codex CAC/RCP 1-1969).

Emergency: A situation in which the company deviates from standard operating procedures under defined conditions.

Environmental Monitoring Programme: Evaluation of the effectiveness of controls on preventing contamination from the site environment.

Establishment: Any building or area in which food is handled and the associated buildings or areas under the control of the management.

FBO (Food Business Operator): The natural or legal persons responsible for ensuring that the requirements of food law are met within the food business under their control.

Feed: Single or multiple products, whether processed, semi-processed or raw, that is/are intended to be fed to food-producing animals (ISO22000, WHO Codex CAC / GL 81-2013).

Field Officer: A person appointed by a Scheme Participant whose role is to evaluate and report the on-going conformance of the Participant, as well as to liaise with the Participant in closing out non-conformances. All such Field Officers receive special training in the relevant Standard criteria from Bord Bia and are formally registered with Bord Bia (ISO / IEC 22000, WHO Codex CAC / GL 81-2013).

FIFO / FEFO: First In First Out / First Expiring First Out (a procedure used in stock control).

Food: A substance/ingredient (whether processed, semi-processed or raw) that is intended for human consumption; this includes drink, chewing gum and any substance which has been used in the manufacture, preparation or treatment of 'food' but does not include cosmetics or tobacco or substances (ingredients) used only as drugs.

Food Defence: The procedures adopted to assure the security of food, food ingredients, feed or food packaging and their supply chains from malicious and ideologically motivated attack leading to contamination or supply disruption (adapted from GFSI version 2020.1).

Food Fraud: A collective term encompassing the deliberate and intentional substitution, addition, tampering or misrepresentation of food, food ingredients, feed, food packaging or labelling, product information or false or misleading statements made about a product for economic gain that could impact consumer health (GFSI version 2020.1).

Food Hygiene: The measures and conditions necessary to control hazards and to ensure fitness for human consumption of a foodstuff, taking into account its intended use (Regulation (EC) No. 852/2004).

Formal Training: Training that was received by a national or public body, or from a Bord Bia approved organisation/individual, with a certificate available.

Food Handler: Any person who comes into direct contact with packaged or unpackaged food, food equipment, utensils, or food contact surfaces. Such persons are required to comply with food hygiene requirements.

Food Safety: The assurance that food will not cause an adverse health effect for the consumer when it prepared and/or consumed according to its intended use (ISO 22000:2018).

Food Safety Culture: Food Safety Culture enhances food safety by increasing awareness and improving the behaviour of employees in food establishments. Senior management may use elements of the Food Safety Management System to drive the food safety culture within the company, including but not limited to:

- Communication about food safety policies and responsibilities;
- Training;
- Employee feedback on food safety-related issues;
- Performance measurement.

Food Safety Management System (FSMS): A system designed to establish policy and objectives concerning food safety within an organisation, and to achieve those objectives.

FSAI: The Food Safety Authority of Ireland.

GHP (Good Hygiene Practice): The combination of process, personnel and/or service control procedures intended to ensure that products and/or services consistently achieve appropriate levels of hygiene.

GMP (Good Manufacturing Practice): The implemented procedures and practices undertaken using best-practice principles

HACCP: Hazard Analysis Critical Control Point: a system that identifies, evaluates and controls hazards relating to food safety, as specified by Codex Alimentarius (WHO Codex CAC / RCP1-1969).

Hazard (in Food): A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect (ISO 22000:2018).

Hazard Control Plan (HACCP/oPRP Plan): A document prepared according to HACCP principles to ensure control of hazards that are significant for food safety in the segment of the food chain under consideration (WHO Codex CAC / RCP1-1969, Codex 2003).

INAB: The Irish National Accreditation Board.

Labelling: Any words, particulars, trademarks, brand name, pictorial matter or symbol relating to a foodstuff and placed on any packaging, document, notice, label, ring or collar accompanying or referring to such foodstuff.

Logo / QA Logo: The Bord Bia Quality Assurance (QA) and/or grass fed Logos included within the Bord Bia Logo use Policy, which extends to any statement of certification status made on any product or promotional materials.

MAP (Modified Atmosphere Packaging): A packaging system that makes use of gas mixtures to improve shelf life.

Member: A Producer or Processor certified under the relevant Bord Bia Standard and shown on the Bord Bia Sustainability and Quality Assurance Scheme Public Members List.

MPQAS: The Bord Bia Meat Processor Quality Assurance Scheme (now revoked).

Operational Prerequisite Programme (oPRP): A control measure or combination of control measures applied to prevent or reduce a significant food safety hazard to an acceptable level, where action criteria and measurement or observation enable effective control of the process and/or product (ISO 22000:2018).

PRCD (Pesticides Registration and Control Division): A subsection of DAFM responsible for implementing the regulatory system for all pesticides (plant protection products and biocides). Approved products bear a PCS (for pesticides) or BPA (for biocides) number. See <http://www.pcs.agriculture.gov.ie/>

Prerequisite Programmes (PRPs): Basic conditions and activities that are necessary within the organisation and throughout the food chain to maintain food safety (ISO 22000:2018).

Preventive Action: The action required to eliminate the cause of a potential nonconformity or other undesirable potential situation and thereby prevent it from occurring.

Primary Production: The production of basic agricultural or horticultural commodities (animals, crops) under the following Bord Bia Standards:

- **SBLAS:** The Bord Bia Sustainable Beef and Lamb Assurance Standard (or Scheme);
- **SEAS:** The Bord Bia Sustainable Egg Assurance Standard (or Scheme);
- **SDAS:** The Bord Bia Sustainable Dairy Assurance Standard (or Scheme);
- **SHAS:** The Bord Bia Sustainable Horticultural Assurance Standard (or Scheme);
- **SPPAS:** The Bord Bia Sustainable Poultry Products Assurance Standard (or Scheme);
- **SPAS:** The Bord Bia Sustainable Pig Assurance Standard (or Scheme).

Procedure: A documented set of instructions that outlines a sequence of actions to complete a specified task and assigns responsibilities for carrying out those actions.

Process Inputs: Purchased food materials and ingredients that are incorporated in the food produced, including wrapping/packaging, water, processing aids, additives, etc.

Processor: A food business operator that is processing food for sale to the public.

Producer: A Bord Bia certified Producer with a valid Flock/Herd/Producer/Grower number.

Product (food): A saleable substance to be consumed as food.

Product Quality Control Plan (PQCP) MODULE B ONLY: A tool to be used within the QMS to ensure that non-food safety related product quality controls are identified and implemented. See Figure 4 below.

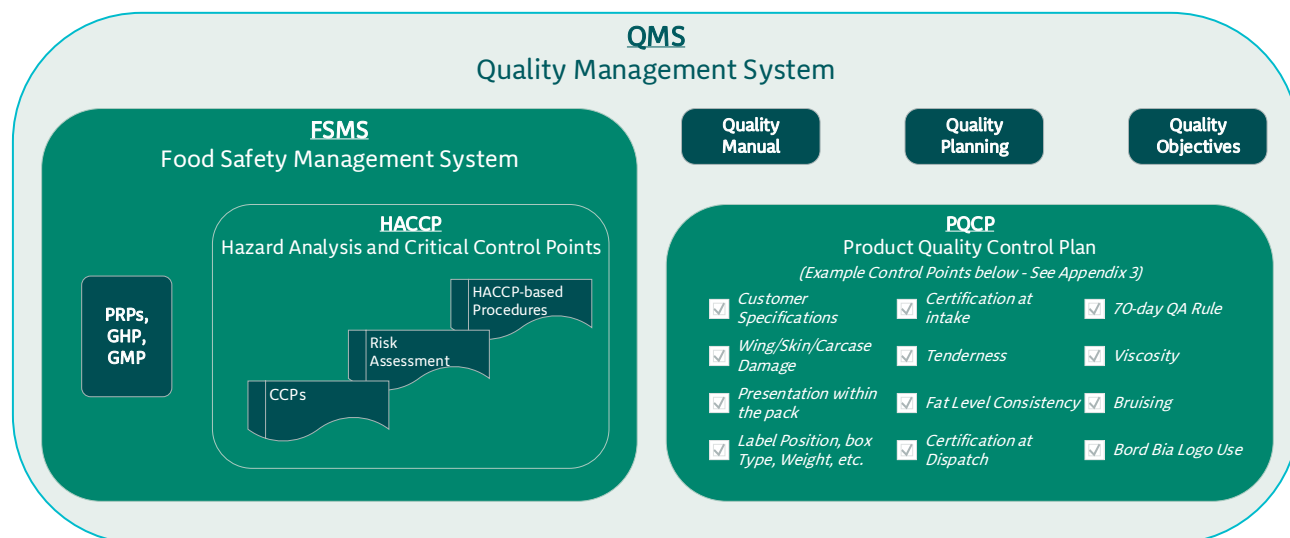


Figure 4: Terminology Example (as applicable to Beef Processing)

Product Recall: The removal of unsafe food from the marketplace after it has left the immediate control of the food business operator that has produced it.

Product Withdrawal: The removal of unsafe food before it has left the immediate control of the food business operator that has produced it.

Public Members List: The Bord Bia register that includes details of the current Members, audit reports and membership status.

Quality Assurance Board (QAB): An independent subsidiary Board within Bord Bia with overall responsibility for policy in relation to the operation of the Bord Bia Sustainability and Quality Assurance Scheme.

Quality Assured Product/QA Product: Finished product (including meat, meat preparations and meat product) that meets the requirements of Appendix 2: Eligible Products (for product and residency), is sourced from Bord Bia certified farms and is processed by an appropriately scoped Bord Bia certified Processor. Refer to the Logo Use Policy for further specifications regarding specific permissible value-added products.

Quality Management System (QMS): The complete set of procedures and records that describes how the food processing system is managed to ensure quality and food safety. See Figure 4 above.

Records: All forms of verifiable information (including paper, electronic and other means) that can be used to demonstrate conformance with the Standard.

Residue: A trace of substances that have a pharmacological action, of their metabolites or of other substances transmitted to food products likely to be harmful to human health (adapted from Regulation (EC) No 396/2005).

Risk: The likelihood of occurrence of harm from a hazard.

Senior Management: The group consisting of the MD or CEO, Production or Operations Manager, Quality Manager and Heads of Functions.

Significant Food Safety Hazard: A food safety hazard, identified through the hazard assessment, that needs to be controlled by control measures (ISO 22000:2018).

Site: The area within the delineated boundary (as shown in the site map) of all areas associated with the operation of the Processing facility, including ancillary buildings (e.g. storage, personnel facilities, vehicular traffic and waste).

Sustainability (food): Protecting and improving the natural environment and the socio-economic conditions of farmers and local communities, while safeguarding the health and welfare of all farmed species (as stated in www.SAIplatform.org of which Bord Bia is an affiliate member).

TACCP (Threat Assessment Critical Control Point): A management process designed to defend a food supply chain from intentional contamination.

Teagasc: The Agricultural and Food Development Authority.

Traceability: The ability to trace a food, feed, food-producing animal or substance intended to be, or expected to be, incorporated into a food or feed, through all stages of production, processing and distribution (Regulation (EC) No 178/2002).

USDA PVP (United States Department of Agriculture Process Verified Points): A programme run by Bord Bia to facilitate the marketing of beef in the United States using clearly defined, implemented and transparent process points (or claims) that have been independently verified.

VACCP (Vulnerability Assessment and Critical Control Point): A management process designed to defend a manufacturing process from dishonest conduct that compromises the quality, authenticity or integrity of the product for financial or other gain.

1.11.2 Zoning

High Risk Area/Zone: A physically segregated area, designed to a high standard of hygiene, where practices relating to personnel, ingredients, equipment, packaging and environment aim to prevent product contamination by pathogenic micro-organisms.

High Care Area/Zone: An area designed to a high standard where practices relating to personnel, ingredients, equipment, packaging and environment aim to minimise product contamination by pathogenic micro-organisms.

1.11.3 Food Classification under the Standard

Fresh food: Food that has been prepared with physical processing (harvesting, cleaning, slaughter, cutting, comminution) but with no other treatment except refrigeration to preserve the food microbiologically.

Frozen food: Fresh food that has been frozen to -12°C or below.

Ready-to-eat food: Food that is designed to be consumed without the need for cooking or other processes to eliminate or reduce to an acceptable level micro-organisms of concern.

Ready-to-heat food: Food that is designed to be safe to be consumed without the need for a full cook; the reheating of the product is intended to make it more palatable and is not a microbiological kill step.

Ready-to-cook food: Food that is designed to be safe to consume after a full cook that eliminates or reduces to an acceptable level micro-organisms of concern.

1.11.4 Membership Certification Types

Certified: The status (as shown on the Public Members List) that indicates conformance with the requirements of the Standard.

Not Certified: The status of a Processor that has not applied for membership, or of an Applicant that has not yet been granted certification, or of a Processor that was previously a Member but was withdrawn or whose certification was suspended.

Suspended: The status of a Processor that has been temporarily removed from the Scheme pending investigation or submission of corrective action.

Withdrawn: The status of a Member who has been removed from the Scheme.

1.12 Normative Documents

The FPS was developed to replace the revoked Meat Products Quality Assurance Standard (MPQAS) and the Prepared Fruit and Vegetable Standard (PFVS). It is linked to the various requirements of the relevant Producer Standards (pigs, poultry, beef and lamb, dairy and horticulture).

This Standard has been designed to include the key legislative requirements and industry codes of practice relevant to food processing industry. Appendix 1 contains the full titles of the documents used as reference information including legislation, standards and codes of practice that have been considered in the creation of this Standard. Conformance with this Standard does not guarantee compliance with all relevant legislation.

As part of the Standard development process, the criteria contained in other national and international standards, guidelines and codes of practice have been taken into account to ensure that the new Standard is positioned appropriately in relation to international best practice in the sector.

A Food Safety Management Module

Introduction

This module of the Food Processor Standard (FPS) contains the Food Safety Management criteria applicable to all Participants intending to gain access to any Bord Bia services.

Participants must demonstrate conformance to the criteria below along with any other applicable modules. The figure below illustrates the modules of this Standard.

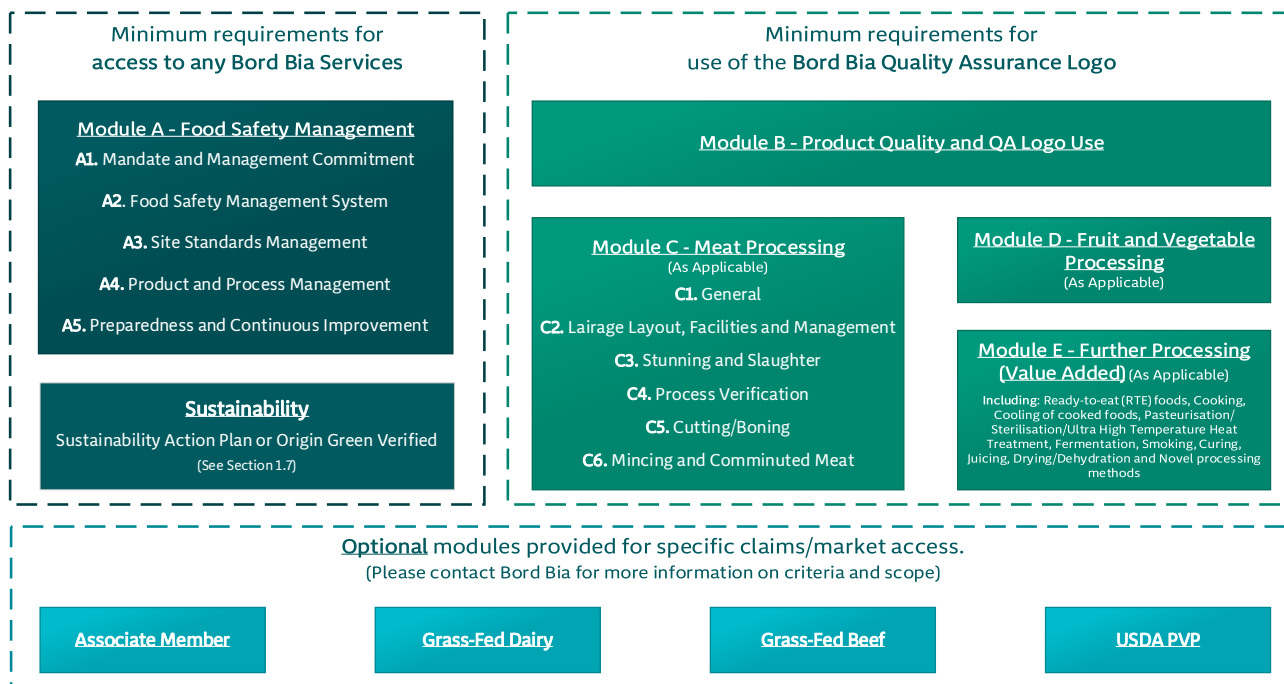


Figure 5: Standard Structure (Food Safety Management module highlighted)

A.1 Mandate and Management Commitment

A.1.1 Management Responsibility and Commitment

- a) Senior management must be able to demonstrate their commitment to the implementation of the requirements of this Standard and to the fostering of best practice food safety culture¹ within the food business based on a process of continuous improvement (Fundamental).
- b) Senior management must allocate the necessary resources to ensure the processing of safe food to the specified quality and the effective implementation of this Standard.
- c) A formal Quality Management System (QMS) incorporating a Food Safety Management System addressing all food safety, quality and operational aspects of the process and all elements of this Standard must be in place.
- d) Senior management must put in place, implement and maintain procedures necessary to keep informed of relevant industry practices and developments and to ensure compliance with relevant legislation both in countries of production and countries into which the product is being imported.

A.1.2 Regulatory Approvals

- a) The Processor must be registered with the relevant Competent Authority.
- b) The Processor must hold current regulatory approval for the specific activities being conducted by the food establishment that are to be included in the Bord Bia scope of certification.

A.1.3 Food Safety and Quality Policy

- a) A documented Food Safety and Quality policy must be in place, which describes the objective to produce safe food that meets the necessary regulatory, quality and customer requirements.
- b) The Processor must be able to demonstrate that the Food Safety and Quality Policy is:
 - i. Approved by senior management;
 - ii. Communicated to all relevant personnel on-site (employees, contractors, visitors, etc.);
 - iii. Reviewed annually for effectiveness and relevance.

A.1.4 Responsibilities and Authority

- a) An organisation chart must be maintained showing the company's overall structure with clear lines of communication, key personnel, and their responsibilities.
- b) The responsibilities of all staff members must be communicated and understood, and work instructions that are in place must be made available to the relevant personnel.
- c) Job descriptions must be in place for all personnel with supervisory responsibilities or higher. Management must identify the person(s) with responsibility for any area which affects food safety, legality and quality.
- d) The absence of key staff must be managed through a documented procedure to ensure continuity of safe food processing that meets the specified quality.

¹ Please see Commission Regulation (EU) 2021/382 amending the Annexes to Regulation (EC) No 853/2004 of the European Parliament and of the Council on the hygiene of foodstuffs as regards food allergen management, redistribution of food and food safety culture.

- e) The Processor must officially identify in writing the management representative who, irrespective of other responsibilities, has operational responsibility for ensuring that the requirements of this Standard are met.

A.2 Food Safety Management System

The following risk-based approach is based on Hazard Analysis and Critical Control Point (HACCP) principles, which are considered the necessary measures to prevent or reduce hazards to acceptable levels for the processing of safe food. The decisions taken in the development of a HACCP system are based on science and are free from bias.

A.2.1 Food Safety Management System

- a) An effective Food Safety Management System (FSMS) with established objectives supported by Management and HACCP procedures must be established, implemented and maintained, ensuring product safety (Fundamental).**

Note: For further information, see FSAI Guidance Note 27 on the enforcement of Commission Regulation (EC) No. 2073/2005 on microbiological criteria for foodstuffs.

- b)** The FSMS objectives must be consistent with the food safety and quality policy, measurable where appropriate, in line with regulatory and customer requirements, communicated to staff and reviewed annually for effectiveness and relevance.
- c)** The site must identify how the FSMS objectives are to be achieved, by whom, when, and the resources needed.

A.2.2 Codex Step 1: Food Safety Management Team

- a)** A multidisciplinary Food Safety Management Team (FSMT) must be established with responsibility for developing, implementing and reviewing the FSMS.
- b)** The FSMT must meet according to a defined schedule, the meetings must be documented and all actions recommended must be assigned and tracked.
- c)** All members of the FSMT must have received documented internal training, and the team leader must have up to date formal external training in food safety and HACCP principles.
- d)** A defined leader of the FSMT must be responsible for ensuring that the FSMS is correctly designed, implemented and verified. The team leader must also ensure that the minutes of all team meetings are documented. Where the required expertise is not available in-house, an external expert may be appointed to advise; however, ownership must remain with the Food Business Operator and the FSMT.

A.2.3 Pre-Requisite Programme (PRP)

- a)** The Processor must establish, implement and maintain an effective Pre-Requisite Programme (PRP) that enables safe food processing through the prevention and/or reduction of contaminants in the product, process and manufacturing environment.
- b)** The PRP must be approved by the FSMT.
- c)** The Processor must take into account statutory, regulatory and customer requirements when establishing the PRP.

- d)** When implementing the PRP, the Processor must consider:
- i. Appropriate building location, construction and layout;
 - ii. Internal layout, including zoning;
 - iii. Plant and equipment suitability, including equipment installation, commissioning, cleaning, calibration and on-going maintenance (both remedial and preventive);
 - iv. Appropriate layout and organisation of workspace and employee facilities;
 - v. Appropriate services, including electrical, water (including ice and steam), ventilation, air and other utilities;
 - vi. Supplier approval and purchasing;
 - vii. Pest control, waste and sewage systems management;
 - viii. Prevention of cross-contamination (including contamination by allergens) via process inputs, products, contact surfaces, equipment and ventilation;
 - ix. Cleaning and sanitising for equipment and facilities;
 - x. Personnel hygiene;
 - xi. Incoming materials, storage, warehousing, distribution and transport;
 - xii. Customer requirements and product information;
 - xiii. Non-conforming product and rework;
 - xiv. Food defence;
 - xv. Training and supervision;
 - xvi. Other areas (as appropriate).
- e)** For each pre-requisite, the documentation must provide information on selection, establishment, monitoring, verification, as well as the outcomes to be achieved.

A.2.4 Codex Step 2: Product Information

- a)** A full description of each product produced on-site must be available (e.g. on a product data-sheet) that provides information on the following:
- i. Composition of the product (including presence or absence of allergens, or other known hazards associated with the food) and manufacture recipe where relevant;
 - ii. Origin of ingredients/inputs;
 - iii. Physical and chemical properties;
 - iv. The production process for each product, including the controls that must be met within each process;
 - v. Specification of packaging (e.g. modified atmosphere packaging (MAP) or vacuum) and labelling;
 - vi. Storage and distribution conditions (e.g. specification of temperature and humidity levels);
 - vii. Durability and required shelf-life, including associated conditions of storage as relevant;
 - viii. Instructions for use.
- b)** Each specification must be authorised by both parties (Processor HACCP senior member and customer) and reviewed at least every three years or upon the occurrence of change.

A.2.5 Codex Step 3: Intended Use

- a)** The product's intended use must be described, target users identified and (where relevant) the product's suitability for vulnerable groups outlined.

A.2.6 Codex Step 4: Constructing Flow Diagram and Process Description

- a) A documented flow diagram must be in place for each product, product category or process from purchasing through to final product dispatch.
- b) The flow diagram(s) must describe the operation and outline the sequence of steps required to process the product safely and to meet legal and customer requirements. Each diagram should include at a minimum:
 - i. A map of the facility including the location of equipment and the identification of Low risk/High risk/High Care areas;
 - ii. The sequence and the interactions of each process step;
 - iii. All inputs, including utilities, raw materials, processing aids, Work in Progress (WIP) and packaging;
 - iv. A description of each process step;
 - v. A description of how rework and waste is managed;
 - vi. An identification of outsourced processes or sub-contracted work;
 - vii. An identification of the potential for process delay;
 - viii. A description of how finished product is managed.

A.2.7 Codex Step 5: Verification of the Flow Diagram

- a) The FSMT must verify the on-site accuracy of the flow diagram(s) on an annual basis and adjust as needed to ensure that they remain accurate. Records of this annual verification must be maintained.
- b) The FSMT must support the flow diagram by describing the processes and the process environment required to conduct the hazard analysis. This information must include:
 - i. The layout of the premises (both food and non-food areas);
 - ii. All equipment and food contact materials/aids used in the processing with the flow of materials indicated;
 - iii. Any process parameters, controls, PRPs and procedures that may impinge on the safety of the food;
 - iv. Any external requirements necessary to meet regulatory or customer requirements.

A.2.8 Codex Step 6: Conduct a Hazard Analysis (Principle 1)

- a) The FSMT must identify and document all likely hazards that may occur at each process step. Each identified hazard must be risk assessed and control measures implemented to reduce the risk to an acceptable level. All relevant information on which the process is based must be documented and kept up to date.
- b) The hazards (as listed below) that may be present in raw material and those that could occur during the manufacturing process must be considered:
 - i. Microbiological (contamination, growth, survival);
 - ii. Chemical and radiological;
 - iii. Physical contamination;
 - iv. Allergen cross-contact.
- c) The FSMT must evaluate each identified food safety hazard to:
 - i. Determine the probability of its presence in the end product before implementing control measures;

- ii. Establish the severity of the adverse health effect on consumer safety in relation to the intended use of the product.
- d) For each hazard, the FSMT must determine the acceptable level of risk for the final product. The food business must maintain documented evidence regarding the justification of the acceptable level.
- e) The methodology used to undertake the hazard analysis must be documented and supporting evidence maintained to justify the decisions made.
- f) As a result of the hazard assessment, the food business must implement appropriate control measures that are capable of reducing the risk associated with the hazards to an acceptable level.

A.2.9 Codex Step 7: Determine Critical Control Points (CCPs) and Operational Pre-requisite Programmes (oPRPs) (Principle 2)

- a) The Hazard Analysis must identify hazards that need to be controlled either through CCPs or oPRPs.
- b) The food business must categorise the identified control measures as CCPs or oPRPs. The identification of a CCP/oPRP requires a logical approach and may be facilitated by using a decision tree and risk matrix, or other methods as determined by the knowledge and experience of the FSMT.
- c) The food business must establish, implement and maintain a hazard control plan for each CCP or oPRP identified.

A.2.10 Codex Step 8: Establish Limits for each CCP and Action Criteria for each oPRP (Principle 3)

- a) There must be a clear specification of the critical limits that must be met to ensure control of each CCP.
- b) The critical limits must be validated to demonstrate that they are suitable for meeting the food safety objectives, with the validation data recorded and maintained.

A.2.11 Codex Step 9: Establish Monitoring System for CCP/oPRPs (Principle 4)

- a) A monitoring procedure must be established, implemented and maintained for each CCP and oPRP to ensure compliance with the critical limits or action criteria as applicable.
- b) The monitoring system established must identify the staff member responsible, specify the methodology to be used, require that only calibrated devices be used and define the frequency of monitoring based on the level of risk.
- c) Records associated with the monitoring of each CCP must be maintained.

A.2.12 Codex Step 10: Establish Corrective Action (Principle 5)

- a) The corrective action to be taken where a non-conformance occurs at any CCP or oPRP must be defined and at a minimum ensure that:
 - i. Unsafe food is prevented from being placed on the market;
 - ii. The non-conformance is investigated and the cause established;
 - iii. The cause of the non-conformance is addressed and the parameters returned within the critical limits or action criteria;
 - iv. Action is taken to prevent reoccurrence.

A.2.13 Codex Step 11: Establish Verification Procedures (Principle 6)

- a) A system to verify that the CCPs and oPRPs are working effectively must be established and implemented according to a schedule.
- b) The verification activity must ensure that:
 - i. PRPs are implemented and effective;
 - ii. Critical limits and action criteria have been maintained within acceptable parameters;
 - iii. The Hazard Control plan remains effective.
- c) The FSMS must be reviewed at a minimum annually in the event of a legal or process change, Product Recall or other significant food safety issue that may arise during the year to confirm that it remains effective. Detailed minutes of all reviews must be maintained.
- d) Internal and external trends and other data (including microbiological results, results of audits, analysis of product, evaluation of complaints and other relevant supply chain issues) must be considered at the annual FSMS review, with trends analysed so that appropriate preventive or corrective actions can be incorporated into the hazard analysis.

A.2.14 Codex Step 12: Documentation and Record Keeping (Principle 7)

- a) Records must be in place to show that the controls identified through the hazard analysis are maintained and are effective.

A.2.15 Final Product Release

- a) Procedures must be in place to ensure that finished product meets all required food safety, quality and customer requirements (see A.5.5).

A.2.16 Food Defence Vulnerability Assessment

- a) The Processor must have systems in place which mitigate against the procurement of adulterated raw materials and the engaging of fraudulent suppliers.
- b) A food defence vulnerability assessment (TACCP and VACCP) must be conducted to evaluate the level of risk of adulteration, substitution or fraud associated with each raw material and input. The assessment must be based on all available information, including the previous history of adulteration, economic vulnerability, ease of access to the raw material along the supply chain, market and price pressures etc.
- c) A Food Defence Plan based on the vulnerability assessment must be put in place that identifies the appropriate measures (including testing and supply chain assessment and monitoring) that will reduce the potential risk of food adulteration, substitution or fraud. The plan must include:
 - i. All the risks identified during the risk assessment of food adulteration, substitution and fraud at each stage of the supply chain;
 - ii. The measures implemented to mitigate these risks;
 - iii. Monitoring of the effectiveness of controls in place and the person responsible.
- d) The Food Defence Plan must be reviewed annually (or when issues of concern arise in the supply chain) for relevance and effectiveness and must be included as part of the internal audit programme.
- e) The Food Defence Plan must be supported by the Food Safety Management System.

A.3 Site Standards Management

- a) **The site and the buildings where food is processed must be fit for purpose and managed to ensure the food produced is safe and meets the required quality specification (Fundamental).**

A.3.1 External Site Standard, Security and Defence

- a) The site must be of appropriate size, layout and construction to permit safe and legal food processing.
- b) An assessment of the possible risks posed by the site's location must be undertaken and measures taken to mitigate against the identified risks. This assessment must be reviewed on an annual basis. Sites must not be established in a location that poses an ongoing risk to food safety.
- c) The buildings and surrounding site environment must be well maintained and kept in good repair so as not to be the source of contamination.
- d) A map must be kept of the site that includes:
 - i. Site boundaries;
 - ii. All buildings used for storage of food or food contact materials (including packaging), with their purpose indicated;
 - iii. Access points for personnel and raw materials;
 - iv. Waste collection, storage and removal areas;
 - v. Areas designated for traffic flow and parking;
 - vi. Loading and delivery areas.

A.3.2 Site Security and Visitor Control

- a) There must be a system in place to ensure authorised access to the site through clearly indicated entrances.
- b) A risk assessment must be undertaken to evaluate possible security threats that may pose a risk to the safe and legal processing of food. All necessary measures identified through the risk assessment must be controlled, implemented and maintained.
- c) External storage facilities (e.g. stores, tanks, silos etc.) must be locked when unattended.
- d) The protocols for entry to and requirements for the various zones, especially those relating to the potential for product cross-contamination (including allergens), must be documented and communicated to visitors and contractors before entry.
- e) Mezzanine floors and suspended/elevated walkways in production areas or over production lines should be safeguarded to ensure they do not present a contamination risk to products below.
- f) Visitors and contractors must be supervised to ensure that the correct protocol is followed.
- g) A record of all visitors and contractors entering and leaving the site must be maintained.

A.3.3 Internal Layout and Zoning, Fabrication, Employee Facilities

A.3.3.1 Internal Layout and Zoning

- a) The internal layout and the movement and flow of product, personnel, raw materials, utilities and waste through the facility must be designed and operated in a manner that ensures that the safety and quality of the product is not compromised.
- b) The Processor must maintain up to date maps illustrating the zones/areas within the facility that operate under different contamination risk levels, which may include:
 - i. High Risk areas;
 - ii. High Care areas;
 - iii. Ambient areas;
 - iv. Low-risk areas;
 - v. Enclosed product areas;
 - vi. Non-food areas.
- c) The zoning map must show how products are segregated in each zone to prevent cross-contamination and must indicate:
 - i. The production process flow;
 - ii. Access points for personnel;
 - iii. Location of wash stations, employee facilities and toilets;
 - iv. Flow of raw materials (fresh, frozen, dry and packaging), product, utilities and waste;
 - v. Flow of personnel handling the food;
 - vi. Drainage, showing the direction of flow;
 - vii. Airflow and pressure differential, if appropriate.
- d) A risk assessment must be conducted for each zone to identify and address the potential for cross-contamination posed in that zone by personnel, fabrication, drains, equipment, airborne contaminants and other raw materials and products.
- e) Access to all zoned processing areas must be restricted or controlled in a manner appropriate to the zoning, with the procedures for access documented, which must include:
 - i. The practices that must be undertaken at entry and exit to each zone (e.g. washing procedures);
 - ii. The type of clothing and footwear required for entry to each zone;
 - iii. The correct manner of gowning and removal of protective clothing.
- f) High Risk and High Care areas must be entered via a designated changing facility (see Section A3.2.3) and, where possible, must be separated from other parts of the facility by a physical barrier. Where a physical barrier is not possible, the risks identified through the risk assessment must be controlled through effective and validated processes.
- g) Equipment used in each High Risk or High Care area (including processing, handling, maintenance and cleaning) must be confined to that area and, if removed, must undergo a documented decontamination procedure before being allowed to re-enter that area.

A.3.3.2 Fabrication

Walls, Floors, Ceilings, Contact Surfaces

- a) Floor, wall and ceiling surfaces must be designed, constructed and maintained so that they are smooth, easily cleaned, made of durable and impermeable materials, and do not pose a risk to food safety.
- b) All joints (e.g. wall to ceiling) must be sealed and impermeable.
- c) False or cavity ceilings must have access to the void above to enable cleaning and inspection.
- d) Floors must be non-slip and, where process water does not go directly into a drain, the floor must be designed with an adequate fall to allow wash water to flow toward drainage.
- e) The drainage within the food production facility must be designed and maintained to prevent contamination of the product.
- f) A map of the drainage system showing the direction of flow from clean areas towards dirty areas and the location of any device fitted to prevent the back-flow of wastewater must be available for High Risk or High Care areas.
- g) All surfaces in contact with food must be of food-grade materials and comply with legislative requirements.

Windows and Doors

- h) Internal and external doors must be constructed of durable and impermeable material, be tight-fitting and adequately proofed, have a smooth, easily cleanable finish and be maintained in good repair.
- i) Glass must not be used in doors opening into storage or production areas (other clear, shatterproof material may be used) or where it is used, it must be protected.
- j) All external and internal doors (excluding emergency doors) leading into product areas must be either self-closing or otherwise manually operated and controlled to prevent pest ingress.
- k) Windows must be fixed, shatterproof or protected against breakage, easy to clean and fitted with removable and cleanable insect-proof screens.

Ventilation and Air Flow

- l) The zoning cross-contamination risk assessment (see criteria A3.3.1.d) must determine the appropriate ventilation and extraction system to prevent airborne contaminants from posing a risk to food safety.
- m) The ventilation and extraction systems must be fit for purpose and sufficient to prevent condensation, mould growth or excessive dust accumulation.
- n) The ventilation and extraction systems must be designed so that airflow direction does not cause a contamination risk.
- o) Air intake points must be:
 - i. Located to minimise the risk of drawing in airborne contaminants,
 - ii. Appropriately screened to prevent pest ingress.
- p) The ventilation system in High Risk and High Care areas must be adequately filtered (at a frequency based on risk) to reduce the risk of airborne contaminants, including micro-organisms.
- q) Effective cleaning, maintenance and monitoring programmes that include microbiological testing and filtered air changes for High Risk zones must be in place for the ventilation and extraction systems.

Lighting

- r) Lighting in production areas must be designed to be permanently fixed and easily cleaned, and must be protected by shatterproof covering.
- s) Lighting must be suitable and adequate to achieve effective process control, cleaning and product inspection.

A.3.3.3 Employee facilities

- a) Employee facilities (e.g. canteen, changing facilities, toilets and washing facilities) must be sufficient to accommodate the number of staff members in the facility and be maintained and managed in such a way as to ensure that there is no risk to product safety.
- b) There must be a dedicated changing facility for all personnel (including visitors and subcontractors entering the processing areas) which provides facilities for separating and storing outdoor from production clothing/footwear, and dirty from clean clothing.
- c) Employees involved in the production process or any food handling activity must be provided with a locker for the storage of personal items, including medicines.
- d) A documented procedure must be established, implemented and maintained that provides clear instructions on how personnel can prevent cross-contamination of the personal protective equipment (PPE) and the processing areas. The procedure must contain information on:
 - i. Controlled access to employee facilities;
 - ii. The requirement to change into clean, visually distinctive PPE before entering any processing or other food handling area;
 - iii. The order of changing to prevent contamination of PPE;
 - iv. The washing of hands prior to changing and again on entering the processing area;
 - v. The prohibition on using site-allocated footwear outside;
 - vi. Sanitising of footwear through footbaths or changing prior to entry into the processing area;
 - vii. Restriction on the wearing of jewellery (only wedding bands).
- e) Toilet facilities must:
 - i. Be sufficient for the number of personnel;
 - ii. Be adequately ventilated directly to the exterior;
 - iii. Be equipped with suitable handwashing and drying facilities;
 - iv. Have signage for proper handwashing;
 - v. Be separated from the processing and storage areas by a lobby that is also ventilated directly to the exterior.
- f) Hand washing points must be located on entry to the production area and strategically placed throughout the facility. Each station must have:
 - i. Clear instructions on correct handwashing technique;
 - ii. Hand-free taps;
 - iii. Water at an appropriate temperature for handwashing;
 - iv. Fragrance-free liquid soap in mounted soap dispensers;
 - v. Hand sanitiser;
 - vi. Single-use hand drying paper and wastebaskets, or hand driers suitable for food production areas.

- g)** Handwashing notices must be prominently posted in appropriate areas directing personnel to wash hands before entering the production area and after any activity that might cause contamination.

A.3.4 Laboratory Competence

- a)** On-site laboratories must be located, designed and operated in a manner to prevent the risk of product contamination.
- b)** Operating procedures must be in place for on-site laboratories, and must include the following at a minimum:
 - i.** Identification of recognised test methods used or documented testing procedures;
 - ii.** Description of a system designed to verify the accuracy of results;
 - iii.** Specification of staff competency requirements.
- c)** The laboratory must not open directly to the processing or storage areas, and access to the laboratory must be controlled.
- d)** Where testing of regulatory parameters is outsourced or conducted in-house, the laboratories must be independently accredited to ISO 17025 for the specific accredited test method or justification must be available where non-accredited tests are used.

A.3.5 Utilities: water, ice, air and other gases

- a)** All water, steam or ice that can come in direct or indirect contact with the food or food surfaces must be potable and be of sufficient quantity to meet the process requirements.
- b)** Water testing must be carried out at least annually by laboratories accredited to ISO17025 for the specific test, with results of tests retained for three years.
- c)** A risk assessment must be conducted to determine the necessary scope, sampling locations, timing and frequency of water analysis.
- d)** A water distribution system map or drawing must be in place for the facility that shows the water source, water treatment systems, water quality (potable/non-potable), water storage, hot and cold water lines, and the locations of sampling points.
- e)** Non-potable water must be clearly identified and must not connect to or mix with the potable water supply used directly in food production.
- f)** Where non-potable clean water is legally permitted to be used in the production process (e.g. initial cleaning in fish), documentation must be available showing that the water meets with legal requirements.
- g)** Where air or other gases are used in the production process, they must be suitable for contact with food and a documented, scheduled monitoring system must be in place to ensure that the gas does not pose a risk to food safety.
- h)** Compressed air and gases must be filtered before the point of use.

A.3.6 Pest control

- a)** A documented and effective preventive pest control programme, based on a site risk assessment and developed in consultation with the pest control contractor where relevant, must be established, implemented and maintained.

Note: Please see the recommendations made in the Campaign for Responsible Rodenticide Use and best practice requirements for rodent control available from <https://iasis.ie/>

- b)** Where an independent licensed contractor operates the pest control programme, the supplier's competency must be established and documented.
- c)** Where Processors wish to self-administer the pest control programme, the person applying professional-use pesticides on-site must be adequately trained and be registered with DAFM as a Professional User.
- d)** All pest control products used on site must be approved by the Pesticide Registration and Control Division² of DAFM or the equivalent Competent Authority in each Member State for that use.
- e)** The location of bait points/monitoring equipment must not pose a risk to the product. Toxic bait points are prohibited in areas where open food is handled or stored (captive devices must be used instead where required).
- f)** The following documentation and records for the pest control programme must be maintained on site:
 - i.** Description of measures implemented to ensure the bait is not exposed to non-target species and does not contaminate product or water;
 - ii.** Description of measures implemented to ensure that all bait stations are secured and identified on a site map;
 - iii.** Identification of the personnel responsible for pest control on the site;
 - iv.** Information on all pest control products, including their suitability for use in a food premise, instructions for use and actions to take in an emergency (e.g. current material safety data sheet (MSDS));
 - v.** Records of pest activity, infestations and corrective actions, including treatments carried out;
 - vi.** Records of regular inspections, including replenishment and clearing of bait points as well as investigations into missing bait stations;
 - vii.** A suitable procedure for recording the proper disposal of dead rodents.
- g)** An annual review or risk assessment of the pest control programme must be conducted to establish its continuing suitability and effectiveness, the results must be communicated to management and corrective action must be implemented if required.
- h)** The site (including permanent and temporary structures) must be managed, kept tidy and kept clear of redundant equipment, rubbish and debris so that harbourage for pests is not provided.
- i)** All air vents and air intake points (including windows, doors, ceilings, etc.) in areas where product is handled must be covered with screens to prevent pest ingress.
- j)** Where Electronic Fly Killers or other insect-killing equipment are in use, they must be operated in a manner that does not risk food safety and at a minimum:
 - i.** They must be located away from packaging equipment or packaging operations;
 - ii.** They must not be located close to or above exposed unpacked product;
 - iii.** Light tubes must be shatterproof;
 - iv.** Bulbs must be changed at a frequency determined by the manufacturer's instructions.
- k)** Personnel must be trained to recognise the presence of pests and report incidences to management.

² See the PCS website www.pcs.agriculture.gov.ie

A.3.7 Waste Management

- a) A documented and legally compliant waste management procedure must be established, implemented and maintained to prevent a build-up of waste on the site, potential contamination of the product and the attraction of pests.
- b) The procedure should provide information on the following areas at a minimum:
 - i. Methods and approach to source separation in line with the current legislation (i.e. S.I. 508/2009);
 - ii. Details on the hygienic and environmentally sound management of segregated waste that remains on the Processor's site pending collection or treatment;
 - iii. Details on the collection, treatment and/or disposal of all waste materials (food and non-food, dry, wet and liquid) by authorised waste collectors, along with records of removal;
 - iv. Criteria on the vehicles to be used to remove waste.
- c) Areas for handling waste must be appropriately designed and identified.
- d) The Processor must maintain documentary evidence on the treatment of the food waste at the selected authorised facility.
- e) Waste containers for use inside food processing and handling areas (i.e. inside the plant) must be:
 - i. Identified so that they cannot be mistaken for food use containers;
 - ii. Designated according to the type of waste to be disposed of;
 - iii. Available at appropriate locations;
 - iv. Emptied and cleaned at a frequency that ensures they do not become a source of contamination or an attraction for pests.
- f) Waste containers in use outside food processing and handling areas (e.g. skips and bins) must be:
 - i. Covered at all times except when being filled and located as far as practicable from the food processing/ handling areas;
 - ii. Sited on a concrete surface that ensures that any leakage is contained and disposed of safely;
 - iii. Emptied and cleaned at a frequency that ensures they do not become a source of contamination or an attraction for pests.
- g) Branding must be removed from product waste before disposal unless the customer agrees to have it remain.

A.3.8 Equipment Suitability Maintenance and Calibration

A.3.8.1 Equipment Suitability

- a) Evidence must be available to demonstrate that all equipment and materials that come in contact with food comply with legislation concerning materials in contact with food (see Appendix 1: Reference Information).
- b) Equipment used in the processing of food must be suitable for the intended purpose and used in a manner that will not pose a risk to food safety.

A.3.8.2 Cleaning Design

- a) Equipment must be designed and positioned so that effective cleaning can take place and must be made of materials suitable for contact with food.

- b) Where a 'clean in place' (CIP) system is in operation, the following must be available:
 - i. Schematics and specifications illustrating the system's suitability for the operating conditions;
 - ii. Safety measures and maintenance requirements.
- c) A documented procedure must be established, implemented and maintained to manage the CIP system and must include at a minimum:
 - i. The safe use/reuse of cleaning fluids;
 - ii. The establishment and scheduling of a documented monitoring system based on risk to confirm that the process and equipment are working correctly;
 - iii. Validation of the system prior to use and at a frequency based on risk;
 - iv. Safe management of alterations.

A.3.8.3 Preventive Maintenance

- a) An effective preventive maintenance procedure must be established, implemented and maintained to ensure that the processing environment and equipment remains consistently fit for purpose and functions at a high level, and that unexpected breakdowns and risks to food safety are minimised or eliminated.
- b) Maintenance schedules must be documented and records maintained of all maintenance operations. Upon the commissioning of new equipment, the maintenance schedule must be amended.
- c) The preventive maintenance procedure must identify the precautions taken to ensure that the product is not contaminated by the maintenance activity (including temporary repairs), whether carried out by in-house or contracted personnel.
- d) The maintenance activity must be followed by a completion procedure that requires signed approval that all possible contamination hazards have been removed before the equipment is put back into use, with this approval recorded.
- e) Mobile equipment (including hand trucks, forklifts, portable heaters or fans, mobile pumps, ladders, etc.) must:
 - i. Be identified and maintained in a state of cleanliness;
 - ii. Be maintained so as to prevent contamination of the product;
 - iii. If used in High Risk or High Care zones, be dedicated to the area in question.
- f) A procedure must be established, implemented and maintained allowing personnel to identify equipment malfunction and request maintenance (routine preventive maintenance or repairs).
- g) There must be a procedure for tool control to ensure that tools are not mislaid, thereby becoming a risk to the product.
- h) All tools used in High Risk and High Care areas must be dedicated to those areas (excluding specialist tools of external origin, which must be cleaned prior to entry, clearly identified and accounted for).
- i) Where there is a workshop on-site, this must be incorporated into the cleaning schedule and maintained in a condition that will not compromise equipment brought to the workshop for servicing or repair, or the product.
- j) In the event of equipment failure, prompt corrective action must be taken.

A.3.8.4 Calibration and Control of Monitoring and Measuring

- a) The equipment and methods used for monitoring and measuring activities related to implementing the hazard control plan and the PRPs must be adequate and fit for purpose to provide confidence in the accuracy of the measurement.
- b) All monitoring and measurement devices must:
 - i. Be identified (including a documented reference and location of equipment) to facilitate calibration status determination;
 - ii. Comply with regulatory requirements governing accuracy;
 - iii. Be protected from damage, decline in accuracy and unauthorised use/misuse.
- c) All monitoring and measuring equipment used to monitor or measure parameters critical to food safety or regulatory requirements must be checked/calibrated with traceability to national or international standards at a frequency based on risk assessment, with adjustments made where necessary.
- d) Quantity verification methodologies and frequencies must comply with EU legislation where applicable, with records of checks maintained. Where metrology legislation is not applicable, the product measurements must meet with documented Processor customer requirements, with records of checks maintained.
- e) Records of all calibrations carried out must be maintained. Calibrations must only be carried out by accredited calibration service providers or suitably trained in-house personnel with designated responsibility as per A1.4.a.
- f) Calibration status must be readily identifiable (e.g. by applying a label with the date and result of calibration procedure).
- g) When a device is found not to conform to requirements, an assessment must be made of the validity of previous inspection results, the likely impacts and the appropriate preventive and corrective actions relating to equipment or process environment and any affected product, with records maintained.
- h) The suitability, effectiveness and accuracy of all equipment test methods must be demonstrated (e.g. by reference to industry norms or other standard test methodologies and by laboratory test validation).
- i) The capability of weighing equipment must be checked for accuracy prior to commencement. This applies regardless of whether an average weight system or a net weight system is used.
- j) Where average weights are displayed on packaging, data verifying the statistical backup for the measurements must be available (T1, T2, etc.).

A.4 Product and Process Management

- a) The site must have procedures and processes that ensure the production of consistently safe and legal product that meets the desired quality characteristics and fully complies with the FSMS (Fundamental).

A.4.1 Supplier and Raw Material Approval and Assurance

- a) Documented specifications for all inputs to the process, including services that have an effect on food safety, must be established, implemented and maintained.

A.4.1.1 Supplier Approval

- a) A supplier approval procedure must be established, implemented and maintained that ensures that all potential risks from the raw materials and packaging are identified and controlled.
- b) The supplier approval procedure must identify the emergency substitution controls in place to maintain the safety, quality and legality of the product, and customers must be informed where emergency substitutions result in a deviation from the agreed product specification.
- c) The supplier approval procedure must clearly define the criteria upon which a supplier is approved and be based on a supplier risk assessment which assesses the supplier's ability to meet quality, food safety and traceability expectations.
- d) Supplier approval must include one or a combination of the following:
- i. Verification of an appropriate third party certification (e.g. GFSI benchmarked scheme);
 - ii. Supplier audit by a competent auditor to confirm the process meets the food safety, legal and quality specifications;
 - iii. Supplier Vendor Questionnaire (applicable to 'low risk' suppliers only);
 - iv. Confirmation of an effective traceability system, including mass balance checks.
- e) The Approved Supplier list must be maintained and be available for inspection.
- f) A procedure for the on-going monitoring of suppliers must be in place that:
- i. Is based on the appropriate risk assessment of the supplier (including subcontractors) and the product supplied,
 - ii. Defines how the supplier is monitored (e.g. audit, certificate of analysis/conformance, complaints, product testing),
 - iii. Establishes a schedule of independent product analysis, where verification of conformity is provided through a Certificate of Analysis/Conformance and conducted at a frequency based on risk.
- g) A supplier review must be conducted annually or upon identifying a new risk, an instance of food fraud or substitution, or any other compromise to the supply chain.

A.4.1.2 Raw Material Approval

- a) A documented risk assessment for each raw material or category of raw materials must be undertaken to identify potential risks to product safety. The following must be considered in the risk assessment:
 - i. Microbiological hazards;
 - ii. Chemical hazards;
 - iii. Physical hazards (including risks from the removal of raw material packaging);
 - iv. Allergen cross-contact;
 - v. Species cross-contamination;
 - vi. Fraud or substitutions.
- b) Raw material specifications must be available on-site for all raw materials that could affect product quality and food safety. All raw material specifications must be reviewed at least every three years or in the event of product change.
- c) Raw material specifications must be inspected and approved by purchasing personnel prior to purchase.
- d) Where labelling claims are being used, the raw material specifications must clearly define the evidence provided by the supplier to support the claim.

A.4.1.3 Supplier of Services approval and monitoring

- a) A supplier approval and monitoring procedure must be established, implemented and maintained for suppliers of services based on the level of risk to quality and safety of the products. Suppliers of the following services must be included where applicable:
 - i. Laundry;
 - ii. Contract cleaning;
 - iii. Pest control;
 - iv. Third party storage, transport or packing;
 - v. Waste management;
 - vi. Third party maintenance and calibration of equipment;
 - vii. Laboratory testing;
 - viii. Equipment maintenance,
 - ix. Catering.
- b) Formal agreements with the suppliers of services must be in place to ensure that the service provided meets expectations and that any potential food safety risks associated with the service are managed.
- c) Where any element of the food processing or packing is outsourced, the subcontractor must comply with all parts of A.4.2.1 of this Standard, and a contract must be in place detailing the product specifications and the processing requirements.
- d) The customer must be informed of and, where necessary, agree to the outsourcing of any processing steps.

A.4.2 Reception of materials, storage, dispatch and transport

A.4.2.1 Reception of Materials

- a) Personnel involved in the reception of materials must be provided with the current specification for all raw materials and be made aware of any changes.

- b) All delivery vehicles must be inspected before off-loading to ensure that the structural and hygienic conditions are acceptable and that the quality and safety of the product has been maintained during transit.
- c) Raw materials must be inspected to verify conformance with specified requirements prior to acceptance or use and the following must be considered:
 - i. Packaging integrity;
 - ii. Product temperature, if applicable;
 - iii. Product quality;
 - iv. Absence of pest activity;
 - v. The integrity of seals;
 - vi. Quality assurance status of raw material;
 - vii. Product labelling and traceability details.

A.4.2.2 Storage

- a) A documented procedure must be established, implemented and maintained ensuring that all products (including packaging, raw material in process and finished product) are stored correctly to protect against contamination, allergen cross-contact, or damage.
- b) Suitable storage facilities must be available to ensure that the temperature of chilled or frozen product is maintained at the appropriate level at all stages of the supply chain.
- c) There must be a procedure for the use of raw materials (including food ingredients, additives, spices, etc.) using an effective FIFO or FEFO stock control system.
- d) The processing and holding temperature requirements for all products must be clearly defined and the areas (holding facilities and chills) monitored to demonstrate conformance with the temperature requirements.
- e) Where controlled atmosphere storage is required, the storage conditions must be specified and effectively controlled, with records maintained.
- f) All temperature-controlled areas must be monitored, and a temperature record maintained that demonstrates that the required storage temperatures are being maintained.
- g) There must be a procedure for defining and documenting the corrective action taken to address any temperature non-conformances detected.

A.4.2.3 Dispatch

- a) A dispatch inspection procedure must be established, implemented and maintained to verify that dispatched products meet product specifications (including quantity and weight) as well as customer and legal requirements, and that measures have been taken to ensure that product will be secure during transport. All such inspections must be documented.
- b) All dispatched product must be accompanied with the relevant traceability and product information to ensure that full traceability is maintained and to enable the safe handling, display, storage and preparation of the product within the food supply chain or by the customer.

A.4.2.4 By-Product Management

- a) All by-products resulting from the site's activity must meet all legal, safety and (where applicable) customer requirements.
- b) By-products to be used as animal feed must be managed in line with legislative requirements.

A.4.2.5 Transport

- a) A procedure must be established, implemented and maintained for the inspection of transport vehicles (including contracted vehicles) to ensure that food safety is not compromised, and must include at a minimum:
 - i. An inspection for cleanliness, freedom from odour taints, waterproofing and freedom from damage;
 - ii. An inspection verifying that the temperature of the vehicle is correct for the product being loaded. The refrigeration unit must be capable of meeting the specified product temperatures during transit and, where necessary, remedial action must be taken prior to loading.
- b) A procedure must be established, implemented and maintained to ensure the safe transportation of products (including segregation of products) that includes a contingency plan to deal with refrigerated delivery breakdown or malfunction and ensure continuity of supply.
- c) Container temperatures must be adjusted prior to loading to correspond with the intended transport temperature, with a record of the temperature at loading maintained.
- d) The temperature during transport must be controlled to ensure conformance with product requirements and records must be maintained.

A.4.3 Process Control

- a) The food business operator must have instructions/procedures for the following where applicable (not an exhaustive list):
 - i. Product formulation/recipes;
 - ii. New product development;
 - iii. Preparation instructions;
 - iv. Validated cooking methods, temperatures and times;
 - v. Validated cooling methods, temperatures and times;
 - vi. Thawing instructions;
 - vii. Labelling requirements;
 - viii. Instructions required to meet a CCP;
 - ix. Established and validated shelf life;
 - x. Equipment settings.
- Note:** See FSAI Guidance Note 18 on the Validation of Product Shelf-Life and FSAI Guidance Note 20 on the Industrial Processing of Heat-Chill Foods.
- b) An in-process monitoring system must be in place to verify that the process specifications are consistently followed. Records of the in-process monitoring must be kept.
 - c) Automated in-line monitoring of systems critical to food safety or quality must be linked to a functioning alert system that notifies the appropriate personnel when there is a failure.

- d) Where a failure to meet process specification with implications for food safety or quality has occurred, the safety and quality of the product must be assessed and the action to be taken recorded.
- e) Variations in processing conditions must be validated and verified to ensure that they do not have a detrimental effect on food safety and/or quality.

A.4.4 Product and Process Testing

- a) A scheduled product and process testing programme must be in place that demonstrates the safety, legality and quality of the product, and may include testing to chemical, physical, microbiological, allergens, organoleptic parameters etc. as relevant.
- b) The programme must confirm adherence to the Bord Bia Scheme Rules, including the Bord Bia Logo Use Policy (where relevant), product specifications and customer requirements.
- c) The testing schedule must be based on a documented assessment of the available data relevant to the process.
- d) Where test results are not compliant with the required outcome (as determined by legislation, Bord Bia, customer specifications, supplied data etc.), corrective action must be taken and Bord Bia and the Competent Authority must be notified where required (e.g. for notifiable diseases, microbiological limits/chemical MRL exceedances, etc.), with records maintained.
- e) Data from these and any other relevant tests (such as MRL and microbiological results when available) must be analysed for trends and used to assist in continuous improvement and preventive measure programmes.
- f) A documented shelf-life establishment and verification procedure must be established, implemented and maintained that takes into account the packaging materials, packaging systems (e.g. MAP) and the predictable conditions of processing, storage and use for all products, with the results retained (including those of assessments based on visual, organoleptic, microbiological, pH and A_w criteria).
- g) A regular schedule for the verification of the shelf life must be in place.
- h) Where required by legislation, the shelf life (Use By / Best Before) must be identified on the packaging or product documentation together with the storage and food preparation requirements.

A.4.5 Measures to prevent cross-contamination

A.4.5.1 Chemical hazard control

- a) **All cleaning, sanitising and pest control products, including cleaning chemicals and boiler water treatment chemicals, must be approved for use in a food processing facility, with supporting documentation kept on file (Fundamental).**
- b) All cleaning, sanitising and pest control products, including cleaning chemicals and boiler water treatment chemicals, must be stored in a lockable, secure place (with appropriate bunding) away from production areas. Food and non-food grade lubricants must also be appropriately stored.
- c) Safety information must be available for all chemicals used and accessible to all employees who use such chemicals (e.g. safety data sheets, instructions for use, labels, etc.). In addition, chemical storage containers must be labelled at all times.
- d) All personnel who handle cleaning chemicals must be appropriately trained and be provided with suitable PPE.

- e) Non-food grade chemicals with strong odours or the ability to taint food (which may be used in the processing environment for structural upgrades) must be managed through a procedure to prevent contamination.
- f) An assessment of the environmental hazards posed by the processing facility must be made and reviewed annually. These environmental hazards must be considered and included in the hazard analysis.

A.4.5.2 Physical hazard control and detection

- a) There must be suitable measures and documented instructions in place to prevent and reduce the possibility of physical hazard contamination to the product (including container breakages).
- b) Where physical contamination events have been identified, corrective actions must be carried out with records maintained and reviewed to identify trends and potential improvements.
- c) No loose physical objects should be evident in the processing environment when the product is exposed. Particular attention must be given to metal from equipment, string or tape from insufficient maintenance activity, wood from pallets, paper or cardboard from packaging and personal effects from poor personal hygiene.

Foreign Object Detection and Sorting Equipment

- d) The risk of product contamination must be further eliminated or reduced by using foreign-body detection equipment (e.g. metal detection, sieves, filters, magnets, x-ray equipment, etc.).
- e) As part of the HACCP study, a documented risk assessment must be carried out to determine the most appropriate detection method for the production process.
- f) The frequency and method of monitoring the foreign body detection equipment must be documented and must include information on the use of test pieces if applicable, corrective and preventive action, record completion, verification methods, and records of checks maintained.
- g) Metal detectors must be set at optimum sensitivity for the product following the manufacturer's recommendations and must incorporate an alarm with a stop system (or another fail-safe system) to signify the presence of metals (ferrous, non-ferrous, stainless steel) or other materials where the detector is capable of this.
- h) All equipment used to control metal or foreign bodies must be subject to a cleaning and inspection schedule to verify the continuing suitability of the equipment.
- i) Where a foreign body has been detected in a product, a root cause analysis of the source of the contamination must take place and measures to prevent a recurrence must be implemented, with the incident reported to management and records retained.
- j) Optical or other 'intelligent' sorting machinery must be calibrated and maintained in conformance with the manufacturer's instructions.

Glass, Hard Plastic and other Similar Materials

- k) There must be a documented procedure that defines how glass/hard plastic and other similar materials are managed and how breakage incidents are dealt with, so as to eliminate risk to the product.
- l) A glass/hard plastic register (including a sharp metal implement log) must be available to ensure adequate control of such items. Internal auditing of such items must take place at a frequency determined by a risk assessment, with records maintained.

Wood

- m) Where wood is necessary to the production process, its condition must be monitored to ensure that it does not pose a risk to food safety.

A.4.5.3 Allergen hazard control³

- a) A system must be developed to manage allergenic material to minimise the risk of allergen cross-contact and ensure compliance with legislation.
- b) The allergen risk management programme must address the following considerations:
 - i. Raw material and supply chain;
 - ii. Premises, equipment and processes;
 - iii. Employee competency;
 - iv. Cleaning validation and verification;
 - v. Packaging and labelling;
 - vi. New product development.
- c) A risk assessment of raw material must be carried out to identify known allergen content and also to establish the likelihood of allergen cross-contact. Raw material specifications and vendor questionnaires must be utilised to acquire this information.
- d) A documented risk assessment must be carried out as part of the HACCP study to identify the possible areas within the process where allergen cross-contact might occur. In addition, control measures must be determined to prevent cross-contact, including some of the following:
 - i. Production scheduling;
 - ii. Physical separation during storage and processing;
 - iii. Dedicated equipment;
 - iv. Additional protective clothing;
 - v. Allergen policy for food brought on-site.
- e) All relevant personnel involved in handling ingredients, equipment, utensils, packaging and product must be trained regarding the food allergens in the process, and must understand the established control measures and the consequence of their ingestion by sensitive individuals.
- f) Cleaning procedures for removing allergenic material from equipment must be validated to ensure that they are effective. The validated cleaning procedures must also be routinely verified.
- g) Product labelling with allergen information must comply with allergen labelling regulations (as per Regulation (EC) No. 1169/2011 on the provision of food information to consumers).
- h) Procedures must be established for the use and control of allergens during new product development.

A.4.6 Sanitation (Microbiological hazard control)

- a) A documented sanitation programme must be established, implemented, maintained and adequately resourced to ensure that the standard of hygiene within the food business operation facilitates the production of safe and legal food products.

³ Please see Commission Regulation (EU) 2021/382 and Codex Alimentarius Code of Practice on Food Allergen Management for FBOs.

- b) The building, plant, equipment and food contact surfaces must be kept clean and hygienic.
- c) An environmental monitoring programme must be established, implemented and reviewed on an annual basis to ensure the effectiveness of controls preventing contamination of the site environment and must include at a minimum:
 - i. Hygiene inspections to assess cleaning and housekeeping performance (including sampling protocol, frequency of testing, test methods, control limits, etc.);
 - ii. Fabrication inspections to identify risks to the product from the building or equipment;
 - iii. The documentation of all inspections, with frequency of inspection based on risk assessment relating to the zone in question.
- d) Sanitation procedures must address the following:
 - i. Cleaning method, including the dismantling of equipment;
 - ii. Frequency of cleaning;
 - iii. Cleaning chemicals to be used and their concentrations (e.g. detergents, disinfectants, sanitisers);
 - iv. Responsibility and accountability for cleaning;
 - v. Method of monitoring and verification;
 - vi. Corrective action procedures;
 - vii. Documentation of monitoring and verification.
- e) The sanitation procedure must be validated to ensure all reasonable hazards (microbiological, physical, chemical and allergen) are removed or reduced to an acceptable level. Acceptable levels of cleaning must be defined and apply to the relevant risk area (High Risk/High Care). Data supporting the acceptable levels of cleaning for removal of biological, chemical and allergen hazards must be available.
- f) The standard of pre-operational hygiene must be monitored and documented before releasing equipment back into production and can include visual, chemical analysis or microbiological checks. If the level of sanitation is not satisfactory, corrective action must be undertaken before equipment is released to operations.
- g) Cleaning equipment must be identified, suitable for intended use, suitably stored and kept clean.
- h) Cleaning equipment for High Risk and High Care areas must be visually different and dedicated to those areas.

A.4.7 Personnel

A.4.7.1 Personnel Health and Medical Screening

- a) All personnel handling food products must have been approved to do so based on a pre-employment health assessment.
- b) A procedure must be established, implemented and maintained to ensure that no person is permitted to handle food or enter any food-handling area where they:
 - i. Are likely to be a carrier or suffering from a disease transmitted through food; or
 - ii. Have infected wounds, skin infections, sores or diarrhoea.
- c) All personnel (including staff members, contractors and visitors) likely to come into contact with food must be made aware of their responsibility to notify management of any infectious disease or condition they

may be suffering from, or have come into contact with, that could adversely affect the safety of the product.

- d) A return to work procedure must be established, implemented and maintained for employees and contractors if they have been absent from work due to illness.

Note: Processors will need to consider all health risks from manual handling, use of hazardous equipment, etc.

A.4.7.2 Personal Hygiene and PPE

- a) Hands must be washed before entry to the production area, throughout the production process to minimise risk, and after any activity that could be the source of contamination.
- b) No visible jewellery (except plain rings or medical alert devices) or other adornments that pose a contamination risk (e.g. false fingernails) may be worn by personnel working in the production area.
- c) Smoking (including electronic smoking devices), eating and drinking are prohibited outside designated areas, and there must be clear signs to this effect.
- d) Cuts, sores and grazes must be covered entirely after treatment with a distinctively coloured (e.g. blue) waterproof dressing incorporating a validated metal detectable strip, with this dressing supplied by the Processor.

Note: Disposable gloves may be required to protect a finger or hand dressing.

- e) Dressings must be controlled through a formal issue procedure, including disposable gloves where used to secure dressings.
- f) The use of strongly perfumed personal care products is prohibited, and personnel must be advised of this.
- g) Medications that are notified to and permitted by management must be stored securely, with instructions provided to prevent product contamination.

A.4.7.3 Protective Clothing

- a) Details of protective clothing and footwear necessary to prevent contamination of the product and appropriate for working within the different risk areas must be specified.
- b) All personnel (including staff members, visitors and contractors) working in or entering production areas must be provided with sufficient quantities of suitable protective clothing that covers all outdoor clothing, head hair, facial hair and ears (caps, nets, snoods), and be provided with the appropriate footwear.
- c) Clean protective clothing must be issued daily (or more frequently if required), and any clothing that is damaged must be removed from the system at the earliest opportunity.
- d) Clear staff instructions describing the correct dress code/PPE procedure applicable for entry to each zone must be made available in the changing areas and supplemented by illustrations where appropriate (e.g. segregation of clothing, the correct order of applying and removing PPE clothing, head hair coverings, footwear etc.).

- e) Protective clothing and footwear worn in the food production area must not become a source of contamination and must at a minimum:
 - i. Be clean at the start of the shift;
 - ii. Be changed during the shift if contamination occurs (or as directed by the area supervisor);
 - iii. Not be worn outside the process area (e.g. in toilets, canteens, offices and smoking areas);
 - iv. Be sanitised prior to entry (in the case of protective footwear);
 - v. Be replaced regularly, controlled and tracked (in the case of gloves).
- f) Where waterproof aprons or other PPE unsuitable for laundering are provided, these must be obtained from clean supply and cleaned and sanitised as required at a frequency based on risk.
- g) A procedure must be established, implemented and maintained that specifies the hygienic handling of used or contaminated clothing and footwear so as to prevent cross-contamination.
- h) A scheduled laundering of all protective clothing must be in place, with High Risk and High Care area clothing laundered separately.
- i) Protective clothing must be laundered effectively to eliminate the risk of product contamination. The laundry, whether internal or contracted, must be able to demonstrate that:
 - i. The wash cycle (wash procedure and detergent used) is effective in cleaning to the level required, including being commercially sterile for clothing to be used in High Risk or High Care areas;
 - ii. Clean and dirty clothing are adequately separated;
 - iii. Cleaned clothing is protected from contamination until use.

A.4.7.4 Training and Competency

- a) All employees whose performance can affect product safety and quality must be suitably trained and demonstrate competency in their work activity.
- b) All staff, including contractors⁴, must be suitably trained prior to commencing work. The induction training programme must make all personnel aware of the food safety hazards in the work environment and outline their expected behaviour.
- c) Where personnel are engaged in activities that are critical to food safety or CCP/oPRP management, competency assessments must take place.
- d) A documented training programme must be in place and include, at a minimum, the following four steps:
 - i. Identification of training needs;
 - ii. Development/identification of appropriate training programme;
 - iii. Delivery of training by competent trainer;
 - iv. Evaluation of performance and competency.
- e) Training records must be available for all training delivered. A record must be kept of the names of trainer and trainees, the course title, the course date and duration of training.
- f) A documented review must be carried out at least annually to identify the competence and training needs of all staff, and to verify the effectiveness of the training given.

⁴ Contractor certification to a relevant GFSI-recognised or equivalent scheme can be used.

A.5 Preparedness and Continuous Improvement

A.5.1 Product Identification, Traceability and Reconciliation

- a) A documented product identification and traceability procedure must be established, implemented and maintained (Fundamental).**
- b) The traceability procedure must demonstrate how all raw materials, including packaging, can be traced back to the supplier through all processing steps and dispatch to customers and vice versa (Fundamental)⁵.**
- c) Identification of product at all stages (including rework and work in progress) must clearly define how traceability integrity is maintained.**
- d) The Processor must challenge the traceability system at least annually across a range of products to ensure traceability can be determined from raw material supply to finished product, including reconciling the quantities (mass balance).**
- e) The acceptable outcomes and the tolerance for variances must be identified for each stage of the reconciliation process with justification for acceptance of variation.**
- f) Reconciliations/mass balance must be recorded and made available as required by Bord Bia.**

A.5.2 Non-conforming and Returned Product

- a) When raw materials do not conform to the relevant specification, a documented procedure must be established, implemented and maintained to ensure that these products are prevented from unintended use and must include at a minimum the following points:**
 - i. Defining non-conforming product (including contaminated, out of specification etc.);**
 - ii. Making staff responsible for reporting non-conforming product;**
 - iii. Clear identification of the non-conforming product;**
 - iv. Quarantining or isolation of the product to avoid unintended use;**
 - v. Identifying the personnel responsible for decision making on rework or disposal etc.;**
 - vi. Documenting all actions, including keeping records on destruction.**
- b) A procedure must be established, implemented and maintained to ensure that returned products are fully traceable at all stages, are evaluated on receipt, are stored at the appropriate temperature pending decision to rework or dispose etc., and that all decisions by nominated personnel are documented.**

A.5.3 Labelling and Packaging

- a) Certificates of conformance for product packaging (or other suitable evidence of conformance) must be available and must verify that the packaging is suitable for the food type and characteristics, so as to meet food safety, legal and quality requirements.**
- b) All external/outer packaging material must be removed prior to bringing the primary packaging into the processing area.**

⁵ Further requirements for the traceability of Bord Bia Quality Assured Product are given in Module B.

- c) A procedure must be established, implemented and maintained to ensure that products are correctly packaged and labelled with the required legal and customer specified information and that only correctly labelled packaging is made available for use at the packing line.
- d) Packaging must be handled in a manner that reduces the risk of product contamination.
- e) All product labelling must comply with legal requirements in the designated country of intended sale.
- f) Labelling information must be reviewed whenever there is a significant change to the product, including changes to the recipe, the supplier, the raw material, the legislation or the country of origin.
- g) Where packaged product is purchased for resale, a procedure must be established, implemented and maintained to verify that the correct labelling requirements are being met and that the contents are as described on the label.
- h) When pre-printed packaging or labels are received, a procedure must be established, implemented and maintained to verify that the print information and colours are correct.

A.5.4 Claims

- a) All product claims made on the label must be substantiated with documentary evidence based on production records (see also Section E) and must be in line with legal requirements and, where appropriate, with the Bord Bia Logo Use Policy.

A.5.5 Final Product Release

- a) A documented pre-release inspection of product must be carried out by designated personnel with authority to grant approval, and where this inspection incorporates any specific tests required by customers, these must be included.
- b) The pre-release inspection must include (at a minimum):
 - i. A visual inspection of the product and its packaging to ensure that it is free from hazards and contamination;
 - ii. An inspection of the labelling to ensure legal compliance, customer and Bord Bia conformance;
 - iii. An inspection to verify that the product meets Bord Bia's documentation requirements (including those for dispatch).
- c) Products must not be released until all inspections have been completed and release has been authorised by the nominated personnel.
- d) All inspections must be recorded.

A.5.6 Emergency Preparedness and Response

- a) The Processor must have an effective Crisis Management Plan to manage all emergencies that could affect product safety, legality and quality, including details on product withdrawal and recall, with the overall responsibility assigned to a senior member of staff trained in this area.

- b) The Withdrawal or Recall procedure must:
 - i. Specify the sequence of actions to be taken and the responsibilities for those actions;
 - ii. Include the contact details of all personnel, customers and agencies that need to be informed;
 - iii. Include a provision to initially contact the regulatory authorities (FSAI, DAFM, etc.) and Bord Bia prior to initiating a food safety-related product Withdrawal or Recall;
 - iv. Include a review of similar products that could also have been affected;
 - v. Be reviewed after each incident and tested at least once annually to verify its continuing effectiveness, with records retained.
- c) The crisis management plan (most specifically the Withdrawal or Recall procedure) must be challenged to demonstrate its ongoing effectiveness, with records maintained.
- d) A procedure must be established, implemented and maintained to ensure that product subject to a withdrawal or recall is managed to ensure consumer protection.
- e) If a major food safety or another significant incident relevant to this Standard has occurred (including a product withdrawal or recall), Bord Bia must be informed.

A.5.7 Internal Audits

- a) The company must be in a position to demonstrate conformance through a documented internal audit programme ensuring conformance with this Standard. The Plan, Do, Check, Act approach of ISO 19011:2018 should be considered in designing the programme.
- b) The frequency of internal audits must be determined by the risk associated with the activity and previous audit findings. All requirements of this Standard must be included in the internal audit schedule and audited at least annually.
- c) The scope of internal audits must include all facilities owned, rented or outsourced/contracted by the Processor.
- d) Internal auditors must be able to demonstrate competency through qualifications, experience and training in auditing. They must have an in-depth knowledge of the requirements of this Standard and be independent of the activity being audited.
- e) The internal audits must identify the areas where the business is in conformance and where it is in non-conformance, with the findings supported by objective evidence.
- f) All internal audit findings must be reported to the person responsible for the activity. Corrective action, preventive action and timelines for close-out of non-conformances must be agreed with the responsible person.
- g) All closed out non-conformances must be verified by the internal auditor.

A.5.8 Complaints Handling

- a) A documented and effective procedure must be established, implemented and maintained to record, classify, evaluate and resolve complaints relating to this Standard, including those of a regulatory nature, and must make provisions for the confidential reporting of issues.
- b) All complaints must be addressed in a timely and effective manner by appropriately trained staff.
- c) The preventive and corrective action taken must be recorded.

- d) The complaint records must be analysed regularly (at least annually) to identify significant trends or issues, and the results of the analysis used to avoid reoccurrence and to implement on-going improvement in product/service quality, food safety and legality.

A.5.9 Corrective Action and Preventive Action

- a) A documented procedure must be established, implemented and maintained that specifies the appropriate actions needed to identify and address the root cause and prevent recurrence of a non-conformance which has been detected against a critical limit or action criterion for oPRPs, the QMS, internal and external audits, customer or consumer complaints, or any food safety or legal issues (see A.2.12).
- b) For each corrective or preventive action, competent personnel must be assigned with responsibility for completing the action, including identifying the root cause, appropriately prioritising the action (e.g. by means of defined time scales for completion), documenting the action and verifying that the action was effective.

A.5.10 Documentation, Data and Records Control

- a) All documented information and data relating to the requirements of this Standard (including relevant external documentation, such as this Standard and all Customer and Regulatory documentation) must be effectively collated, managed and controlled (e.g. through a Quality Manual) as part of the Quality Management System, with the Processor ensuring that at a minimum:
 - i. A master list is maintained of all relevant documents, including work instructions and procedures;
 - ii. The current issues of all documents are made available for use by the relevant personnel in a clear, understandable and legible format;
 - iii. Documents are protected from interference by unauthorised personnel;
 - iv. Documents and records are securely stored for the time period required to meet customer and legal requirements, or for 12 months beyond the shelf-life of the food where customer or legal requirements are not available.

A.5.10.1 Control of Documented Information

- a) A procedure must be established, implemented and maintained for the control of documents that includes information on how the following tasks are managed:
 - i. Document identification (e.g. title, date, author, or reference number, 'authorised by');
 - ii. New document development;
 - iii. Control of changes;
 - iv. Review and approval of new or updated documents;
 - v. Communicating new document changes and revisions;
 - vi. Document retrieval,
 - vii. Removal of obsolete documents
- b) Applicable documents of external origin must be identified, effectively controlled and accessible.

A.5.10.2 Data Management

- c) Data to be used in the FSMS or QMS must be reviewed and authorised.

- d) Data must be accessible only to authorised personnel, available as required and backed up to prevent accidental loss.

A.5.10.3 Records

- a) An effective recording system must be in place that can demonstrate the effective control of food safety, legality and quality throughout production and through to dispatch.

A.5.11 Management Review

- a) Senior management must review the company's Food Safety Management System (FSMS) and Quality Management System (QMS) at appropriate intervals to ensure it is being implemented and verified as planned, and that it continues to be effective in controlling all reasonable hazards.
- b) The annual management review must consider the following at a minimum:
 - i. The minutes from the previous FSMS/QMS review and the close-out of the actions noted;
 - ii. External and internal issues that could affect the food safety and quality management system (legal changes, standard changes, process or personnel changes);
 - iii. Data on the performance and the effectiveness of the food safety and quality management system, including:
 - a. **Human resources**
 - i. Food safety management team training
 - ii. Supervisors training
 - iii. Staff training.
 - b. **Business resources relating to the management of the Pre-requisite Programme and FSMS/QMS**
 - c. **Pre-requisite programme performance**
 - i. Premises, equipment, utilities, zoning
 - ii. Supplier performance
 - iii. Sanitation
 - iv. Personal hygiene
 - v. Pest control
 - vi. Product Recall
 - vii. Transport and distribution
 - d. **Effectiveness of the 12 Codex Steps in managing hazards (see A.2)**
 - e. **Other areas for improvement including:**
 - i. Customer complaints
 - ii. CAPA log
 - iii. Internal audit schedule
 - f. **The food safety and quality management system objectives for the following 12 months**
- c) The outcome of the annual FSMS/QMS review and the agreed objectives for the following 12 months must be communicated to staff members to ensure key performance indicators are understood and implemented.

- d) Minutes of all meetings must be retained.
- e) The outcome of the FSMS/QMS review must be the basis of the development of a best practice food safety culture within the business, ensuring continuous improvement.

B Product Quality and QA Logo⁶ Use Module

Introduction

This Food Processor Standard (FPS) module contains the criteria applicable to Participants intending to market any products with the Bord Bia Logo.

Participants must demonstrate conformance to the criteria below along with any other applicable modules. The figure below illustrates the modules of this Standard.

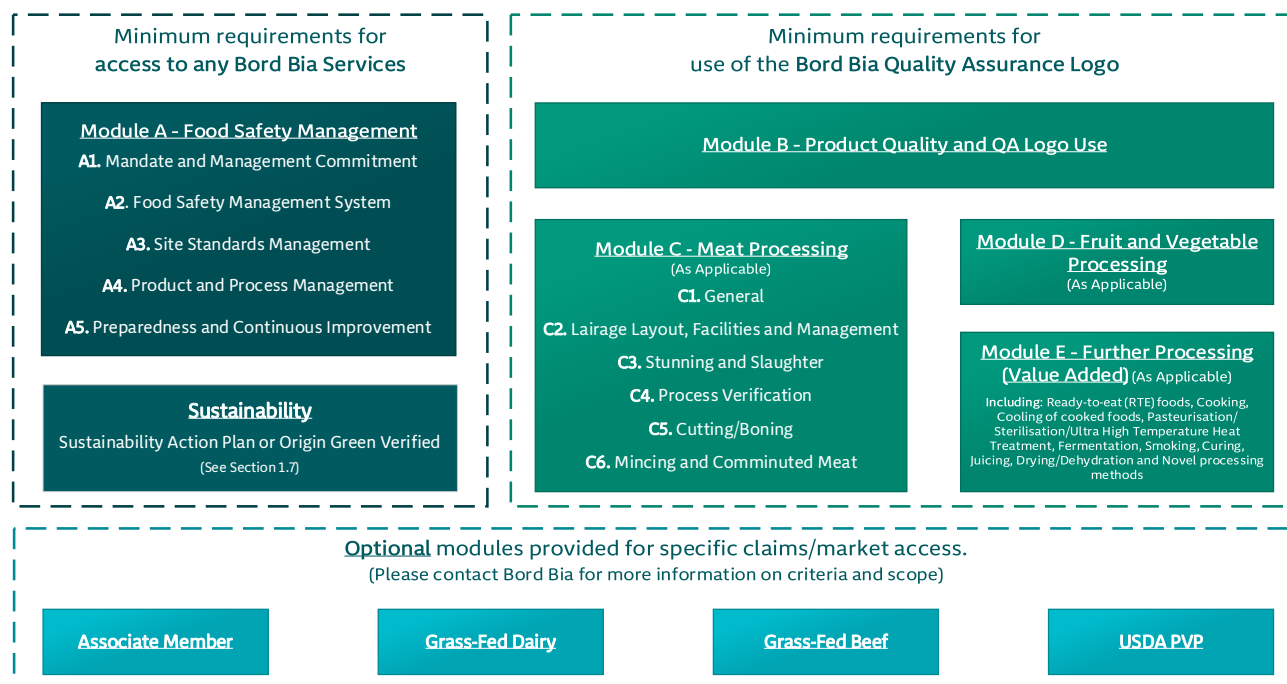


Figure 6: Standard Structure (Product Quality and QA Logo Use module highlighted)

⁶ Please refer to the QA Logo definition within Section 1.11.

B.1 Product Quality Criteria

B.1.1 Bord Bia Product Quality Control Plan

- a) The Processor must have in place a Product Quality Control Plan (PQCP) that identifies at a minimum:
 - i. The process steps from intake to final product dispatch necessary to produce the food to the specified quality;
 - ii. The sequence and interaction of these processes;
 - iii. The criteria and methods needed to ensure that the operation and control of these processes are effective.
- b) The Product Quality Control Plan (PQCP) must be reviewed annually or before any significant change in the materials, products or processes occurs, so as to ensure that the impact of the change on quality is fully considered.
- c) The PQCP must be integrated with and be supported by the Food Safety Management System.

Note: Please see Appendix 3 for PQCP guidance.

B.1.2 Bord Bia Product Identification, Traceability and Reconciliation

- a) All personnel responsible for traceability, segregation and product identification of Bord Bia Quality Assured Product must be trained in this Standard's requirements.
- b) Quality Assured Product must be segregated from non-Quality Assured Product.
- c) **The traceability system must be capable of identifying the quality assured status of the product at all stages of the process and the system must be documented (Fundamental).**
- d) Information regarding traceability must be readily accessible in the work area.
- e) The Processor must document all identification codes used (including those corresponding to intermediate and final product) and provide a full explanation of their significance (e.g. breed/variety, age, customer, etc.).
- f) **The traceability system must permit a reconciliation demonstrating that non-Quality Assured Product was prevented from being incorporated into products sold as Quality Assured Product (Fundamental).**
- g) A full reconciliation exercise must be carried out and made available on request from Bord Bia.
- h) Where the reconciliation process identifies an unacceptable variance, corrective actions must be taken and documented via the corrective action system.

B.1.3 Final Product Release Management

- a) Where Quality Assured Product is required as part of customer specifications, the product that is released by the Processor (whether bearing the Bord Bia Logo or not) must be accompanied with:
 - i. A dispatch document that identifies the product's Bord Bia quality assurance status; or
 - ii. A certificate of Quality Assured status (the Bord Bia online dispatch register may be used to generate a certificate for Meat).

- b) Processors must maintain an up to date list of customers to whom Bord Bia Quality Assured Product is supplied, as well as an up to date list of products for which Bord Bia Quality Assured Product is specified within the relevant product specification.

B.1.4 Quality Assured Product and Logo Use

- a) **The use of the Bord Bia Quality Assured Logo must be in accordance with the specific conditions for Logo use as communicated by the current Bord Bia Logo Use Policy, published on www.bordbia.ie (Fundamental).**
- b) The information provided in the logo use application to Bord Bia must accurately reflect the actual use of the Logo on product.
- c) Products to be marketed under this Scheme must bear the processor identification and traceability codes and the Bord Bia quality assured status on the label, or in the case of pre-packed retail products, the Bord Bia Quality Assurance Logo.

Note: See Section A5.3 for labelling criteria applicable to all Participants.

- d) Meat produced from animals that have been slaughtered without prior stunning can be identified as quality assured for the purposes of business to business transactions but cannot carry the Bord Bia Logo on retail packaging.

Note: The retail packing Processor is responsible for ensuring that no product originating from animals that have been slaughtered without prior stunning carries the Bord Bia Logo.

B.1.5 Management Review and Internal Audit

- a) The annual management review must assess areas for improvement relating to customer complaints regarding Quality Assured Product.

Note: Please see Module A5.11 for a complete list of the management review criteria.

- b) All requirements of this Standard must be included in the internal audit schedule and audited at least annually.

Note: Please see Module A5.7 for a complete list of the internal audit criteria.

C Meat Processing Module

Introduction

This module of the Food Processor Standard (FPS) contains the criteria applicable to Participants processing meat products intended to be marketed with the Bord Bia Quality Assured Logo.

Participants must demonstrate conformance to the criteria below along with any other applicable modules. The figure below illustrates the modules of this Standard.

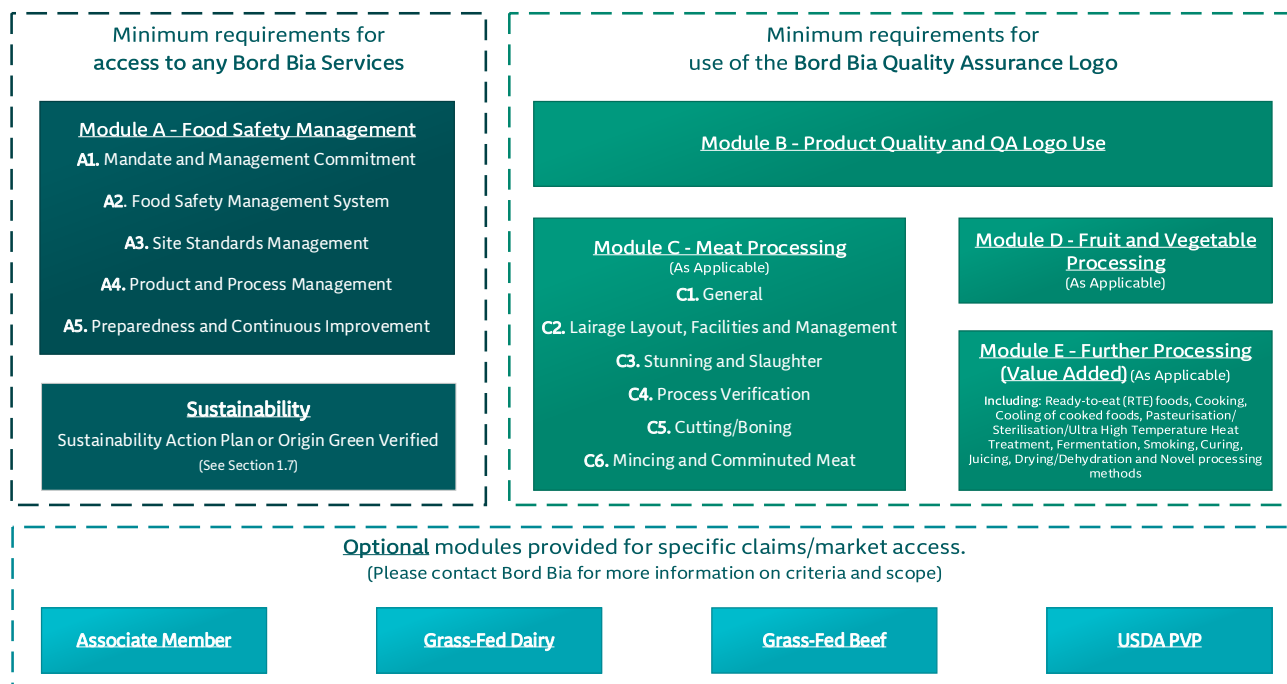


Figure 7: Standard Structure (Meat Processing module highlighted)

C.1 General Criteria

C.1.1 Animal Welfare

- a) The Food Business Operator must ensure that the site is managed to prevent any breaches of animal welfare in line with this Standard, company policy and Regulation (EC) No. 1099/ 2009 (Fundamental).**
- b) The Processor must have a documented Animal Welfare Policy that, at a minimum, includes a management commitment to:**
 - i. Maintaining and promoting an animal welfare culture within the plant and with service providers;
 - ii. Safeguarding the welfare of animals at each stage of the process;
 - iii. Meeting market and stakeholder expectations with regards to animal welfare;
 - iv. Providing adequate resources to permit the implementation of the animal welfare policy;
 - v. Providing the infrastructure and environment, including equipment, plant and structures necessary to maintain and improve animal welfare;
 - vi. Being in full compliance with the relevant clauses, annexes and amendments of the animal welfare regulation (EC) No. 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.
- c) A documented animal welfare procedure must be established, implemented and maintained that includes the individual steps from animal receipt to slaughter, the animal welfare issues at each step, the controls in place, a plan for the monitoring and verification of those controls, and the records to be kept.**
- d) Animals must always be handled in a manner that minimises stress and discomfort (e.g. protection from sudden or loud noises) and prevents injury and/or tissue damage.**
- e) Animals must not be lifted or dragged by the head, horns, ears, legs, tail or fleece, handled with excessive physical force, or handled in a manner that will cause distress and injury.**
- f) Animals must be moved using contactless stimuli (visual and auditory) and gentle contact stimuli such as drive boards and/or paddles. Sticks are not permitted for striking the animals.**
- g) Animals must be handled without the routine use of electrical goads.**
- h) Where is it deemed necessary to use goads, management must ensure that handlers are trained on their use based on a documented work instruction that ensures that, at a minimum:**
 - i. Goads are used only as a last resort when the animal is free to move forward but refuses to do so following a number of other interventions;
 - ii. Goads are used only on adults (bovines and porcines);
 - iii. Shocks are applied only to the muscles of the hindquarters;
 - iv. Shocks last no longer than one second and are adequately spaced;
 - v. Shocks are not used repeatedly if the animal fails to respond.
- i) The facilities for handling animals must be designed, constructed and maintained to ensure the safety of both the animals and the stock person.**



- j) Poultry Processors must maintain documentation that demonstrates that the poultry catching teams are identified and supervised by a trained animal welfare officer, and that the catching team personnel have been trained in the following:
- i. Correct catching techniques;
 - ii. Acceptable densities for birds in transit (relative to weather conditions and bird size);
 - iii. Protection of birds from inclement weather, excessive heat or excessive cold while in transit or while awaiting veterinary inspection on arrival at the abattoir.



- k) Poultry Processors must have a catching procedure in place which ensures that the birds are not injured or unduly stressed.

C.1.1.1 Animal Welfare Officer

- a) **A qualified animal welfare officer must be appointed by management and be given the authority to make and implement animal welfare decisions in line with this Standard (Fundamental).**
- b) Responsibilities of the Animal Welfare Officer must be clearly defined and must include at a minimum:
- i. Ensuring that the animal welfare policy is communicated to all those involved in lairage or slaughter processes;
 - ii. Ensuring that a competent person checks all consignments of animals, that this check is documented and that animals that require special care are treated promptly;
 - iii. Ensuring that the animal welfare monitoring and verification plan is implemented by a competent person in line with the animal welfare procedure, with records kept;
 - iv. Ensuring that all lairage personnel are suitably trained to demonstrate competence and compassion in handling birds and animals;
 - v. Implementing measures that avoid animals being subjected to unnecessary stress, including physical and auditory stress;
 - vi. Monitoring of the stun-stick procedure to ensure compliance with the prescribed procedure;
 - vii. Ensuring that equipment required for stunning and slaughtering is fit for purpose and functioning correctly;
 - viii. The inspection of a percentage of the daily slaughtering capacity before and after sticking/cutting to determine the effectiveness of the stun-stick process;
 - ix. Ensuring that an animal welfare incident log is completed for all failures in animal welfare, with the cause investigated, corrective actions (including training where appropriate) implemented, and the incident communicated to senior management.

C.1.1.2 Animal Welfare Training and Competency

- a) The Processor must ensure that the following slaughter operations are only carried out by persons holding a Certificate of Competence for such operations, as provided for in Article 21 (Regulation EC No 1099/2009), demonstrating their ability to carry out any of the following:
- i. The handling and care of animals before they are restrained;
 - ii. The restraint of animals for stunning or killing;
 - iii. The stunning of animals;
 - iv. The assessment of effective stunning;
 - v. The shackling or hoisting of live animals;
 - vi. The bleeding of live animals;
 - vii. The slaughter of animals using particular methods prescribed by religious rites.
- b) Internal audits, including a review of staff competency, must be conducted regularly to verify that the health and welfare requirements of the animals are being maintained, with all corrective actions identified, implemented within a reasonable period and recorded in the corrective and preventive action system.

C.1.2 Supplier Health and Welfare Programmes

- a) Processors must consider actions that would support supplier health and welfare programmes on-farm, for example:
- i. Providing feedback to suppliers on welfare indicator data, where available (e.g. tail biting incidence, foot pad dermatitis, etc.);
 - ii. Engaging with suppliers in a proactive way so as to facilitate the management and reduction of Salmonella prevalence on farm;
 - iii. Engaging with farmers to minimise antimicrobial use on farm so as to facilitate the reduction of antimicrobial resistance in line with best practices on the use of critically important antibiotics;
 - iv. Engaging with farmers to improve farm biosecurity.

Campylobacter Control Programme (Poultry)



- b) Poultry Processors must engage with suppliers to ensure that procedures are in place to reduce the level of Campylobacter infection in the flocks.
- c) Poultry Processors must have established a clearly defined Campylobacter Improvement Programme.

Note: Please see FSAI document on the Recommendations for a Practical Control Programme for Campylobacter in the Poultry Production and Slaughter Chain.

- d) A schedule must be agreed upon with each supplier for implementing the Campylobacter Improvement Programme.

C.1.3 Animal Transport

- a) Animals destined for slaughter must be transported in a manner that minimises contamination, minimises stress, maintains traceability and ensures that the animal's welfare is maintained.

- b)** A register of approved hauliers must be maintained, including:
- i. Name;
 - ii. Approval Number;
 - iii. Evidence of Certificate of Competence, where transporting live animals over distances greater than 65kms;
 - iv. Evidence that haulier has access to the guidelines on Best Practice for the Welfare of Animals during Transport published by FAWAC (<http://www.fawac.ie/>).
- c)** An animal transport procedure must be established, implemented and maintained to ensure that transport vehicles (including Producer vehicles) meet the required standards and that they are operated in a manner to ensure the safe haulage of animals.
- d)** A documented procedure must be established, implemented and maintained to report welfare issues relating to haulage to the animal owner and to the haulier, and records of this communication must be maintained.
- e)** Corrective actions must be implemented where persistent haulage-related welfare issues are identified.
- f)** Scheduled checks on all approved haulier vehicles (collecting and delivering) must be completed on an annual basis with records of checks maintained, so as to ensure that vehicles comply both with company procedure and with the following requirements (at a minimum):
- i. Vehicles are designed and operated in a manner that maximises the ease and safety of the loading and unloading process, and prevents animals slipping or falling from the ramp or acquiring injuries from sharp projections;
 - ii. Vehicles are designed for ease of cleaning and disinfecting and are in good repair;
 - iii. A cleaning routine is in place for maintaining the vehicle in a clean and hygienic state between uses;
 - iv. Vehicles have adequate physical space with a separation between animals that are likely to cause injury to one another or between species;
 - v. Where the vehicle is decked, it is designed with an impervious floor between decks to minimise seepage onto lower deck animals;
 - vi. Lighting (including portable lighting) is available for loading or unloading in the dark;
 - vii. Vehicles are adequately ventilated at all times while in transit;
 - viii. Vehicles allow for a visual assessment of the animals at any time during a journey.
- g)** Designated animal transport cleaning and disinfection facilities must be provided on-site, including a supply of approved disinfectant and an appropriate means of applying the disinfectant.
- h)** The animal transport cleaning and disinfection facilities must:
- i. Be appropriately located and designed to avoid cross-contamination of clean vehicles;
 - ii. Be clearly identified;
 - iii. Have an adequate supply of water;
 - iv. Have a supply of approved disinfectant and an appropriate means of applying the disinfectant;
 - v. Have a means of capturing/storing transport bedding.

- i) The animal transport vehicle cleaning and disinfection procedure must be established, implemented and maintained with checks in place to ensure that operators of haulage vehicles:
 - i. Follow the cleaning procedure, or
 - ii. Provide a declaration that vehicles will be cleaned off-site (e.g. Section 2 of the Food Chain Information Form for cattle).
- j) All cleaning and disinfection materials and fluid must be collected pending safe disposal.

C.1.4 Clean Livestock Policy

Food Business Operators should be aware of their obligations to ensure that animals have a clean hide, skin or fleece so as to avoid any unacceptable risk of contamination of the fresh meat during slaughter. For further information please review Regulation (EC) No. 853/2004 laying down specific hygiene rules for food of animal origin, and Implementing Regulation (EU) 2019/627 laying down uniform practical arrangements for the performance of official controls on products of animal origin intended for human consumption.

- a) A Clean Livestock Policy must be implemented and maintained which, at a minimum:
 - i. Includes illustrative/descriptive examples (e.g. A, B and C for cattle) at the entrance to the lairage of the slaughter plant (note: where the Competent Authority has officially issued a poster for this purpose, then this must be used);
 - ii. Includes relevant work instructions for operators (including corrective actions where required), made available in the lairage;
 - iii. Ensures that the number of animals accepted into the slaughter plant (and classified according to the categories where appropriate) is recorded, and any associated actions are undertaken;
 - iv. Provides feedback to herd owners/keepers on the condition of their animals presented for slaughter (e.g. by giving the number of animals by CLP category, or by providing photographic evidence, where necessary, of the condition of the animals).

C.1.5 Animal Receipts, Antemortem Inspection and Documentation

- a) All relevant parties (e.g. farmer, haulier, FBO) must fully complete food supply chain information documents (e.g. FCI or other approved electronic system), which must be checked for accuracy and provided to the Official Veterinarian in respect of all animals presented for slaughter.
- b) Animals must be off-loaded from vehicles:
 - i. In the sequence in which the vehicles arrive (where possible, animals should move through the lairage in the same order);
 - ii. With care, in a calm, unhurried manner (so as to minimise stress);
 - iii. In a manner that ensures that they are not exposed to sudden or loud noises or distractions, and handled so as to minimise disturbance.
- c) The unloading and subsequent passage of animals through the lairage to the point of stunning and slaughter must be supervised by competent staff members(s) with defined responsibility for lairage management.

- d) Animal condition (including poor hygiene, any injuries or mortality and heightened stress levels) must be checked on arrival, records kept and, where required, appropriate corrective action taken in accordance with the Animal Welfare Policy and Clean Livestock Policy.
- e) Any ill or injured animals must be immediately brought to the attention of the Official Veterinarian.
- f) Where lactating cows are being off-loaded, the lairage intake personnel must record when they were last milked as they must be slaughtered within 12 hours of the last milking or milked at intervals of not more than 12 hours.
- g) Birds must be visually checked to confirm that the animal welfare requirements at catching were observed and, where damage to the birds as a result of catching is noted, this must be reported to the management, the catching teams manager and the Competent Authority as relevant.
- h) There must be a documented system in place to notify the Competent Authority and/or the Producer where issues are identified with regard to animals arriving at the lairage in poor condition.
- i) Where animals arrive injured and require immediate euthanasia for welfare reasons, trained competent staff member(s) or a nominated veterinarian must be available to undertake the process in accordance with a documented procedure.



C.1.5.1 Identification and Traceability

- a) Intake of animals must be managed in a manner (through batching, lot identification, etc.) that guarantees that traceability of animals (or batch of animals) to source farms is maintained throughout the lairage, slaughter, dressing and carcase grading process.
- b) Identification and traceability information that accompanies all animals presented for slaughter must be presented to the lairage manager and must be checked for the following:
 - i. Compliance with legislation;
 - ii. Accurate information on the source farm and the animal identification (correct herd/flock number, tags, slap marks etc.);
 - iii. Accuracy of other relevant information required to support labelling claims or other customer requirements (including category, breed, age, etc.).
- c) A valid passport must accompany bovines presented for slaughter⁷ and the passport data must be corroborated and entered into the approved verification system for each animal (in ROI AIM database or equivalent in other Member States).
- d) The Dispatch/Movement dockets accompanying ovines presented for slaughter must be accurate and must either document the total number of animals in the load or list the individual tag numbers, where the Processor is not approved as a central point of recording (CPR) under the National Sheep Identification System (NSIS).
- e) Animals must not be accepted without proper identification (tags, marks or documentation) and, where an issue has been raised relating to the identification of the animal(s) (e.g. through the AIM system), the animal(s) must not be accepted as suitable for slaughter.

⁷ Where this is not available (e.g. in the case of Animal Health issues), then another form of DAFM approved documentation must be made available.

- f) Residency checks must be carried out on all animal deliveries to establish compliance with the Bord Bia residency criteria (as set out in Section B1.4.3) and to establish the Quality Assurance Status of the animal, flock or herd (Fundamental).**

C.1.5.2 Antemortem Inspection and Slaughter Scheduling

- a) Only animals that have passed the antemortem inspection conducted by the Official Veterinarian can be processed for slaughter, and evidence must be maintained.**
- b) Where an animal has failed the antemortem inspection, then a condemnation cert must be obtained from the Official Veterinarian (excluding poultry).**
- c) Records must be available to demonstrate that the results of relevant on-farm monitoring specified either in the Bord Bia Standards (e.g. for Salmonella and Campylobacter) or by the Competent Authority was taken into account in the scheduling of slaughter.**
- d) Processors must have procedures in place to prevent the receipt of known cloned animals or their progeny presented for slaughter.**



C.2 Lairage Layout, Facilities and Management

The lairage must be designed, constructed, maintained and operated in a manner that minimises microbial cross-contamination and reduces animal stress as much as possible.

C.2.1 Lairage Layout and facilities

- a) The lairage facilities must be designed, constructed and maintained so that:
 - i. There are no sharp projections that could injure the animals or handlers;
 - ii. Floors are non-slip, free from build-up of dung and have good drainage for liquid waste;
 - iii. Animals can be restrained while minimising the risk of injury and stress;
 - iv. Animals of different types are segregated either on a space or time basis;
 - v. There is a designated facility for conducting the antemortem inspection;
 - vi. There is appropriate lighting (e.g. the lighting system prevents harsh lights and shadows, and permits dimming where animals are kept overnight);
 - vii. Health and safety requirements are met;
 - viii. Visitor access is restricted.
- b) There must be clearly identified pens for sick or suspect animals, which must have separate draining and be sited in such a way as to avoid contamination of other animals, unless the Competent Authority considers that such facilities are unnecessary.
- c) There must be a clearly identified holding facility/quarantine area available for animals with traceability/ownership queries or any other queries that need to be addressed prior to slaughter (e.g. animals not compliant with the Clean Livestock Policy).
- d) The maximum daytime capacity and maximum overnight capacity of the holding pens must be displayed on each pen and these capacities must not be exceeded.
- e) Where animals are intended to be kept for more than four hours, space must permit all animals to lie down simultaneously.
- f) The lairage must be covered to protect the animals from inclement weather conditions.
- g) Clean water must be available at all times and supplied in all pens through operational drinking points.
- h) There must be a reserve water supply available for animals that remain on the premises overnight (e.g. covered tanks).
- i) The lairage area must be ventilated to prevent the build-up of gases (e.g. ammonia) and maintain the animals' thermal comfort.
- j) Where mechanical ventilation is installed, the ventilation equipment must be alarmed and the alarms tested at least monthly.
- k) All lairage drains must be securely gridded to prevent injury to animals or staff members.
- l) Lairage facilities must be designed and constructed to facilitate the inspection of the animals, and adequate fixed or portable lighting must be provided to enable the inspection of animals at any time.


C.2.2 Lairage Management

-  **a)** Lairage pens must be maintained hygienically to ensure that animals are kept in a hygienic state during holding times.
- b)** A documented poultry tray and crate washing programme with defined outcomes must be carried out in a dedicated facility, with records retained demonstrating the effectiveness of the sanitising process (e.g. weekly swab testing of the surfaces of the trays and crates as part of the *Campylobacter* minimisation process), and damaged crates must be discarded.
- c)** Watering devices, including drinkers and storage facilities, must be:
- Adequately provisioned and positioned for the animals retained;
 - Kept clean and regularly inspected to ensure they are in good working order;
 - Located with a view to the minimisation of risk of fouling and freezing in cold weather.
-  **d)** Birds must be maintained in low-intensity or blue lighting prior to hang-on.
- e)** Animals which have not been slaughtered within 12 hours of their arrival must be:
- Fed, and subsequently given moderate amounts of food at appropriate intervals;
 - Provided with an appropriate amount of bedding or equivalent material which guarantees a level of comfort appropriate to the species and ensures efficient drainage or adequate absorption of urine and faeces.
- f)** Any concentrate feed provided to the animals must be sourced from a supplier certified under the Bord Bia Feed Quality Assurance Scheme and records of delivery must be maintained.
- g)** All animals must be under the supervision of a competent staff member.
- h)** A documented procedure must be established, implemented and maintained for managing animals that are injured or sick and a record maintained of all such animals.
- i)** There must be access to veterinary services immediately to treat sick or injured animals and for the humane slaughter of animals.
- j)** Where the euthanasia of an animal is necessary on humane grounds, then:
- This must be carried out by qualified operatives under veterinary supervision (see C.1.1.2.a);
 - The owner must be informed;
 - The euthanised animal must be stored in a manner that will prevent contamination pending safe removal or disposal;
 - A condemnation cert must be obtained from the Competent Authority (excluding poultry).
- k)** A procedure for managing the following situations must be in place (based on risk assessment and with staff trained in its implementation):
- Bulls in the lairage;
 - Fractious or excitable animals (e.g. by penning separately);
 - Animal escape.
- l)** A plan, including an evacuation plan, for effectively dealing with emergencies which may arise in a lairage must be put in place (which covers animals and personnel), with relevant staff trained in its implementation.
- m)** Dogs and other pets must not be allowed in the lairage.

- n) Staff or visitors in the lairage, or any staff handling animals, must be provided with suitable clothing (e.g. dark coloured clothing) and designated footwear.
- o) Clothing and footwear worn by personnel working in the lairage or handling live animals must be clearly distinguishable from and maintained separately from those worn by food operatives.

C.3 Slaughter Operations

C.3.1 Stunning

- a) All animals must be stunned using only those methods listed in legislation⁸, and the loss of consciousness and sensibility must be maintained until death (Fundamental).**
- b) Restraining equipment and facilities must be designed, built and maintained to:**
 - i. Optimise the application of the stunning or killing method;
 - ii. Prevent injury or contusions to the animals;
 - iii. Minimise struggle and vocalisation when animals are restrained;
 - iv. Minimise the time of restraint.
- c) Bovine restraining boxes used in conjunction with a pneumatic captive bolt must be fitted with a device that restricts both the lateral and vertical movement of the head of the animal.**
-  **d) For poultry, a documented 'live hang-on' procedure must be established, implemented and maintained which includes at a minimum:**
 - i. The hang-on times for each species (bird, duck, turkey) as dictated by legislation⁹;
 - ii. The actions that must be taken in the event that the interval between hang-on and stunning for poultry is exceeded (e.g. in the event of line breakdown);
 - iii. Controls ensuring that, in the case of a line breakdown before electrical stunning, live-hung poultry are removed off the line with immediate effect;
 - iv. Controls ensuring that the line speed to ensure hang-on is conducted to minimise stress for the birds;
 - v. Controls ensuring that undersized birds are not placed on the line with larger birds where electrical water bath systems are used;
 - vi. Controls ensuring that birds are maintained in low intensity or blue lighting environment during hang-on and prior to stunning.
- e) The stunning area must:**
 - i. Be designed to avoid excessive noise and distress or injury to the animal;
 - ii. Have sufficient lighting for the inspection of stunning;
 - iii. Be maintained and checked in accordance with the manufacturers' instructions by persons specifically trained for that purpose;
 - iv. Be designed so the approach race permits animals to move in a calm and unimpeded manner along the approach towards the stunning area without being distracted, thereby minimising physical stress;
 - v. Have slopes in the approach, which are 10° or less for pigs and 7° or less for cattle.
- f) The stunning process must be documented in a procedure and demonstrated to be effective through observations and records.**

⁸ See Council Regulation (EC) No. 1099/2009 Annex I.

⁹ Council Regulation (EC) 1099 / 2009 Annex (11, Art 5) sets out the regulatory parameters relating to water bath stunning that must be complied with, including hang-on times as follows: ducks, geese and turkeys < 2 minutes; all other birds < 1 minute.

- g) Regular recorded checks for signs of revival must be carried out on animals post-stunning and prior to sticking, with corrective action implemented as required.
- h) Stunning equipment must be calibrated where applicable (see also A.3.8.4 for criteria relating to calibration).
- i) The daily maintenance of stunning instruments and systems (e.g. electrical or gas, other) must be documented.
- j) An alternative stunning system¹⁰ must be available immediately in the event of failure of the primary stunning system or a repeated need to use the stunning backup equipment.
- k) Where a captive bolt gun is used, a correctly functioning spare gun must be immediately available at all times.
- l) When the stunning system is found to be defective, the process must be immediately halted, with corrective action taken and a thorough investigation of the root cause of the failure undertaken.
- m) Where it is necessary to halt the line, it must be possible to return waiting animals to the lairage in a manner that minimises stress and the procedure must be documented.
- n) Where the line has been delayed for more than four hours, the delay must be notified to the Animal Welfare Officer and all intake personnel, and subsequent scheduled animal deliveries must be postponed.
- o) In the case of animals subject to religious slaughter where a derogation from stunning is invoked under Council Regulation (EC) No. 1099/2009, the practice must:
 - i. Conform with DAFM Trader Notice MH 03/2020 or the equivalent competent authority notice in the other Member States;
 - ii. Be documented as part of the traceability procedure for the product (e.g. by means of identification codes);
- p) Processors carrying out slaughter without stunning must have the documented Competent Authority approval for such practice available for inspection.

¹⁰ In accordance with Council Regulation (EC) No. 1099/2009 Annex I.

C.3.2 Sticking

- a) A 'sticking' procedure¹¹ must be established, implemented and maintained, and must ensure the following at a minimum:
- i. Sticking is carried out hygienically with hot water supplied at not less than 82 °C, or using a validated alternative system having an equivalent effect, as approved by the Competent Authority;
 - ii. Animals are bled as soon as possible after stunning;
 - iii. Sticking is carried out in line with the parameters of 'Stun to Stick' times for each species;
 - iv. Sticking is completed in a manner that ensures the animal does not regain consciousness;
 - v. Effectiveness of the stunning is monitored at stunning and bleeding (e.g. through visual inspection that includes checks for signs of life and missed cuts (poultry) on the bleeding line);
 - vi. Documented verification checks are conducted at a frequency based on risk;
 - vii. Where a non-conformance is identified, corrective action is taken immediately, the action taken is recorded, and preventive measures are implemented where necessary.
- b) Where blood is being collected or stored, then it must be managed in a manner that would not cause contamination to other products (e.g., harvesting using a closed system, chilling to <3°C as rapidly as possible, maintaining separately from each batch of animals until all carcasses in the batch have passed post-mortem inspection).

Note: Blood is not an eligible product under the Scheme. Please see Appendix 2 for a full list of eligible products.



- c) Where automatic neck cutters are in use, a manual backup system must be in place in the event of a breakdown so that birds may be slaughtered immediately.

C.3.3 Carcase Dressing

- a) A documented procedure for dressing the carcasses during the various process steps must be in place and must include the following:
- i. A list of all dressing operations, along with controls ensuring that dressing operations are supervised;
 - ii. Controls ensuring that dressing is carried out immediately after slaughter and hygienically;
 - iii. Controls ensuring that slaughter line speeds/personnel are managed to ensure hygienic carcase dressing;
 - iv. Specification of the work practices to control cross-contamination (e.g. from hide or fleece, unsanitised equipment or surfaces, digestive tract contents spillage, contaminated personal equipment or clothing, other uninspected carcasses, SRMs);
 - v. A description of how edible and inedible products are segregated during production (e.g. clearly marked bins for each status of product must be provided);
 - vi. A recording system to address accidental spillage of gut contents;
 - vii. Corrective action procedures in the event that contamination occurs.
- b) Work instructions must be documented for each dressing operation, and operatives trained against the relevant work instruction to ensure competence to carry out their tasks hygienically and consistently.

¹¹ In accordance with Regulation (EC) No 1099/2009.

- c) Trimming of any visible contamination must be conducted at each process step prior to final carcass inspection and using a sterile knife.
- d) The two-knife technique must be used for all tasks that involve the opening of the hide or skin (excluding poultry).
- e) Knives used must be colour coded according to a defined colour coding system where necessary to minimise the risk of cross-contamination.
- f) Where appropriate during evisceration, the actions indicated in the table below must be taken as relevant to minimise carcass contamination:

- i. The gullet (oesophagus) must be rodded and tied;
- ii. The rectum must be bunged and sealed;
- iii. The rectum must be bagged.

	Bovines	Ovines	Porcines
	Yes	Yes	n/a
	Yes	n/a	n/a
	n/a	n/a	Yes

- g) Where it is intended that eligible offals are to be marketed under the Scheme, traceability of the parts to certified farms must be established through records.

Porcine Carcasses



- h) All carcasses must be scalded and de-haired.

Poultry Carcasses



- i) Scalding, plucking and evisceration equipment must be monitored, maintained and operated to minimise contamination of carcasses.

C.3.4 Post-mortem carcass inspection

- a) All carcasses and offals must be presented to the Competent Authority for post-mortem inspection in a clean and hygienic manner, providing correlation between the carcass and other body parts, with sufficient facilities for the inspection to be conducted.
- b) A documented procedure with records maintained must be in place for the following activities:
 - i. Segregation of unfit carcasses identified by the Competent Authority, which must incorporate an investigation to determine the cause of the issue;
 - ii. Control of the release of any carcasses put on hold by the Competent Authority;
 - iii. Control of carcasses that are condemned.
- c) There must be a documented, maintained and implemented supplier communication procedure detailing actions to be taken where there is evidence of significant health or animal husbandry issues affecting product quality in animals from the same herd.

C.3.5 Condemned Materials

- a) Adequate facilities for the identification, segregation and safe handling of condemned materials must be provided.
- b) For Processors handling specified risk materials (SRMs: meat, meat parts, carcass parts), a specific SRM protocol as required by the Competent Authority must be in place and implemented, with records maintained (Fundamental).

- c) The disposal of unfit carcasses must be carried out in line with legislation¹², with records maintained.
- d) The safe handling, control and disposal of all condemned materials must be included within the FSMS.
- e) Where condemned material or other wastes are removed through conveyors or chutes, these must be constructed and installed in such a way as to avoid any risk of contamination of fresh meat.
- f) Hauliers of SRMs must be registered with the appropriate Competent Authority.

C.3.6 Carcase Grading and Identification

- a) Carcasses must be graded by an approved grading process (e.g. ROI: DAFM approved for bovine and porcine) and if a carcase is re-graded, the amended documentation must be signed by the inspector, where relevant.
- b) All key grading measurements must be communicated back to the Producer and records of this communication must be maintained.
- c) Carcasses must be identified (e.g. labelling, slap mark, stamp, etc.) with information relating to traceability, grading, compliance to this Standard, and all other relevant specification requirements.

C.3.7 Carcase Chilling (Refrigeration)

- a) Carcase chilling must be carried out according to a documented procedure and in a manner that minimises risk to food safety and quality.
- b) Refrigeration of carcasses must begin directly after the slaughter and dressing process and carcasses must be spaced to facilitate air flow until they have reached the required temperature as defined in the HACCP plan.
- c) The effective control and operation of carcase chilling must be considered as part of the Product Quality Control Plan (PQCP) to minimise cold or hot shortening (see Section B.1.1).
- d) Eligible offals must be chilled to 3°C or less within 24 hours of slaughter and if offals are frozen, they must be frozen to a -18°C core temperature within 36 hours from the commencement of freezing and this process must be validated on a bi-annual basis.
- e) **Bovine and ovine only:** Records must be maintained of pH and cooling criteria demonstrating conformance with customer specifications to ensure maximum eating quality.
- f) During carcase chilling, contamination of the carcase must not occur from condensation or refrigeration defrost water.
- g) Validation studies must be undertaken and made available for review to ensure carcase hygiene is not compromised where 'misting' or other carcase chilling techniques are employed.

¹² E.g. Regulations (EC) No 1774/2002, (EC) No 1069/2009 and (EC) No 142/2011.

C.4 Process Verification

C.4.1 Testing - Microbiological and Chemical Residue

- a) Sampling of meat carcasses for microbiological and chemical residue analysis must comply with the current regulatory testing requirements (e.g. EC 2073 / 2005)(Fundamental).**

Note: Please see Teagasc SOP for information on the Microbiological Examination of Carcasses, as referenced in Appendix 1.

- b)** A Residue Testing Procedure which has been devised in conjunction with the Official Veterinarian must be in place and implemented to test carcasses from eligible herds for residues, where this procedure:
- i. Complies with the National Residue Control Plan (NRCP)¹³ (including detection of chemotherapeutics);
 - ii. Incorporates any special monitoring required under the Bord Bia Food Processor Standard or farm supplier Standards;
 - iii. Ensures that records are retained of test results from laboratories accredited to ISO17025.
- c)** Processors must implement a self-monitoring programme to satisfy themselves that the farm animals or products brought into the establishment:
- i. Do not contain residue levels which exceed maximum permitted limits;
 - ii. Do not contain any trace of prohibited substances or products.
- d)** Evidence must be maintained to demonstrate that the Residue Testing Procedure is operated according to a defined schedule.
- e)** Corrective action must be undertaken for all issues identified, including any actions required by the Official Veterinarian to ensure that non-conforming product is removed from the supply chain where necessary, with records kept.

C.4.2 Testing - Poultry



- a)** The sampling and testing of poultry carcasses must comply with the requirements for Campylobacter testing as set out by (EU) 2017 / 1495 (see Teagasc guidelines).



C.4.3 Testing - Pigmear



- a)** Pigmear Processors must have a Salmonella sampling programme that complies with the current regulatory testing requirements.
- b)** Pigmear Processors must have a Trichinella testing programme that complies with the current regulatory testing requirements.
- c)** Where a risk of boar taint has been established (e.g. in animals over 8 months of age), a procedure must be established, implemented and maintained to conduct testing for boar taint in meat according to a defined schedule, and the results used to minimise its occurrence.

¹³ The NRCP is complemented by a legislatively based regime under which Processors are obliged to implement their own residue monitoring measures.

C.5 Cutting/Boning

- a) All consignments of meats or other process inputs (Bord Bia assured or otherwise) must be examined on delivery as set out in Section A.4.2, with records maintained.
- b) Outer packaging materials must be removed prior to inputs being brought into processing areas.
- c) A documented procedure must be established, implemented and maintained for carrying out inspections of product entering the boning hall to verify the absence of contamination and the presence of correct labelling, with records maintained.
- d) Carcasses entering the boning hall must have a deep muscle temperature of less than 7°C (beef, lamb, pigmeat) or less than 4°C (poultry), unless there is an alternative documented procedure agreed with the Competent Authority.
- e) The pH of bovine carcasses must be checked to ensure that dark meat is excluded from quality assured batches.
-  f) Pig meat must be checked to ensure that Pale, Soft, Exudative (PSE) meat is excluded from Quality Assured batches or only used in Quality Assured comminuted products.
-  g) Pig meat must be processed within 7 days of the kill date unless vacuum-packed and stored at 3°C or less.
- h) A batch coding process must be in place to ensure that each quality assured batch contains only Quality Assured Product.
- i) Boning activity must be performed hygienically, be based on documented procedures, and comply with documented in-house or customer product specifications.
- j) The Processor must ensure that there is adequate segregation between the processing of different species, ideally via separate facilities. However, where the same facility is used for multiple species, procedures must be established, implemented and maintained to verify the control of species cross-contamination.
- k) Records must demonstrate that the following checks have been made:
 - i. Inspection for leakers prior to boxing with appropriate corrective action;
 - ii. Assessment of the accuracy of traceability to carton/tray;
 - iii. Evaluation of the accuracy of tare weights, including the amendments required when changing packaging supplier;
 - iv. Compliance with carton/retail pack label requirements.

C.6 Minced Meat/Comminuted Meat/Meat Preparations

- a) Mincing/comminuting activity must be performed hygienically, be based on documented procedures and meet product specifications.
- b) Minced/comminuted product must only be produced from edible carcass parts as identified in the legislation (as per EC 853:2004, Annex III; Section V; Chapter II).
- c) When minced/comminuted product is produced from chilled meat, it must be processed in accordance with the regulations (as amended) as follows:
 - i. Poultry: no more than 3 days from slaughter;
 - ii. Other animals: no more than 6 days from slaughter;
 - iii. Vacuum-packed bovine meat: no more than 15 days from slaughter.
- d) The internal temperature of meat undergoing comminuting/mincing must be monitored to ensure compliance with Regulation No 853/2004.
- e) Minced/comminuted product must be chilled to less than 2°C using a validated process, and this must be demonstrated through records.
- f) Where meat is frozen, the date of freezing must be documented.
- g) Minced/comminuted product must not be refrozen after thawing.
- h) Mechanically separated meat, or any products made thereof, are prohibited from being sold as Bord Bia Quality Assured.
- i) Where MAP packaging is used, gas analysis must confirm the correct gas combinations and percentages to ensure the target shelf life of the product is attained.
- j) Where minced product is sold under a declaration of visual lean (VL) content, monitoring procedures must be in place to verify the levels declared.
- k) The Processor must ensure that when manufacturing bacon, sausages, burgers and other comminuted products/preparations, the specifications contained in the Bord Bia Logo Use Policy are met.

D Fruit and Vegetable Processing Module

Introduction

This Food Processor Standard (FPS) module contains the criteria applicable to Participants processing fruit and vegetable products intended to be marketed with the Bord Bia Logo.

Participants must demonstrate conformance to the criteria below along with any other applicable modules. The figure below illustrates the modules of this Standard.

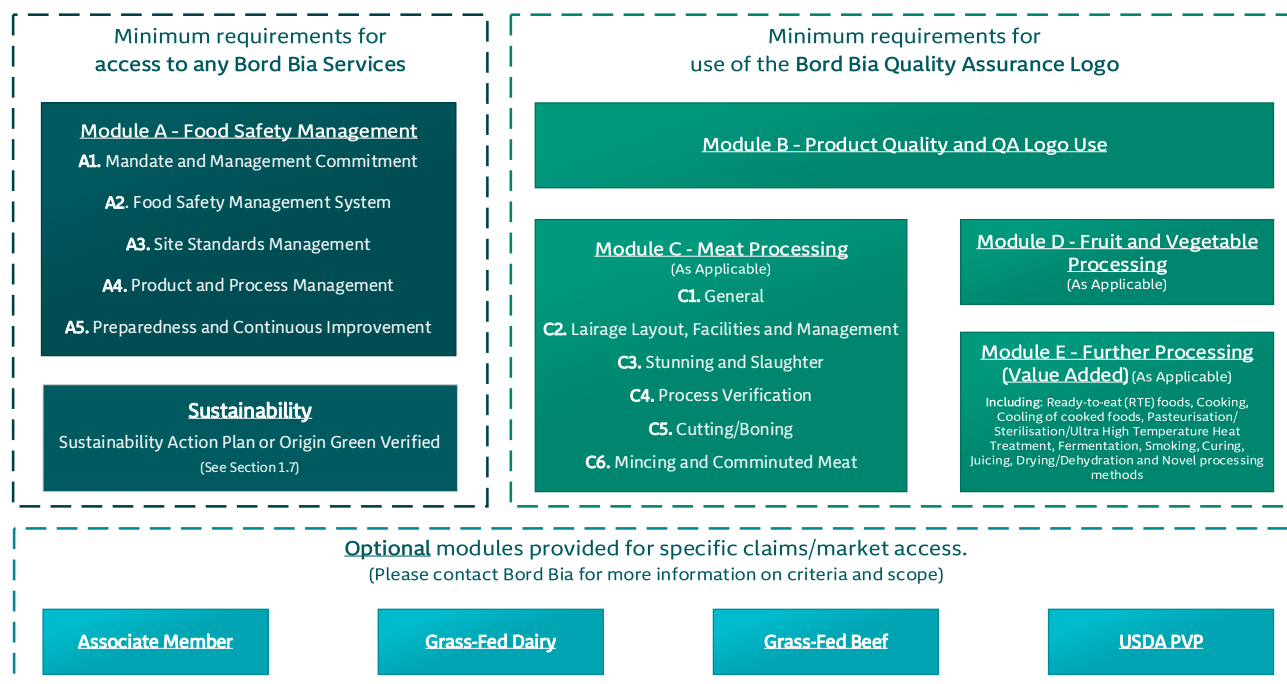


Figure 8: Standard Structure (Fruit and Vegetable Processing module highlighted)

D.1 Fruit and Vegetable Processing Criteria

Please note that all criteria within Module A apply in addition to the criteria below, and that particular attention must be paid to the Fundamental criteria within Module A.

D.1.1 Intake and Storage

- a) A procedure must be established, implemented and maintained to assess the condition of fruit and vegetables at intake (e.g. presence of insects, dust, soil or spoilage) and to define the corrective actions required to deal with these issues.
- b) The Processor must risk-assess the need for produce loads to be covered and/or refrigerated during transport and ensure that determined controls are in place.
- c) Fruit and vegetables must be stored in dedicated areas with temperature controls appropriate to the product and to the process undertaken, if relevant (e.g. ripening).
- d) Pallets must be stacked to prevent fresh produce damage, either from crushing from heavier products placed on top or through the collapse of pallets in the transport stage to the customer.

D.1.2 Water

Water can be a source of contamination for fresh produce. The quality of the water used directly (as an ingredient) or indirectly (in the cleaning of contact materials or in the processing of foods) is the responsibility of the food business operator. The parameters for potable water are set out in Council Directive 98/83/EC and implemented under the EU Drinking Water Regulation 2014 and set into Irish Law through S.I.122 of 2014.

- a) **Processors must ensure that only potable water is used to wash fruit and vegetables (Fundamental).**

D.1.3 Produce Decontamination (Produce Washing)

- a) A documented procedure must be established, implemented and maintained for the washing and rinsing of fruit and vegetables that specifies how washing and rinsing are conducted so as to ensure that the product is safe for consumption (e.g. specification of the equipment settings, residence time, concentration and activity of solutions, etc.).
- b) Where a sanitiser is utilised in the washing process (e.g. chlorine), the product must be suitable for the intended use and used according to label instructions, with the concentrations/activity of solutions managed to ensure the product's efficacy throughout the washing cycle.

D.1.4 Processing

- a) All fresh produce preparation steps must be included in the food safety management system flow chart and comply with all applicable elements of Section A.2 and B.1.1 of this Standard.
- b) A documented procedure must be established, implemented and maintained specifying how excess water is removed from fruit and vegetables after washing and before packing.

- c) The environmental temperature at which fruit and vegetables are maintained at all stages of preparation, processing and packing must be documented, and a record of product temperature at packing must be maintained.

E Further Processing (Value Added) Module

Introduction

The further processing of primary products such as cooking, cooling, smoking, and fermentation introduces specific and additional food safety hazards. These foods may be ready-to-eat, like salami or ham, or may require further preparation prior to consumption, such as re-heating. To ensure the safety of the product, the risks associated with further processing must be managed through the Food Safety Management System (FSMS). Although Section A2 in this Standard covers the FSMS in detail, it was deemed necessary to highlight areas of additional concern that relate explicitly to further processing. It is also important to acknowledge that there is specific relevant legislation relating to the impact of certain processing techniques, processing aids or additives: see for example Regulations (EU) 2017/2158, (EC) No 1881/2006 and (EC) No. 1333/2008. Processors should be familiar with the relevant legislation and ensure compliance to these legal requirements.

This Food Processor Standard (FPS) module contains the criteria applicable to Participants performing further processing on products marketed with the Bord Bia Logo.

Participants must demonstrate conformance to the criteria below along with any other applicable modules. The figure below illustrates the modules of this Standard.

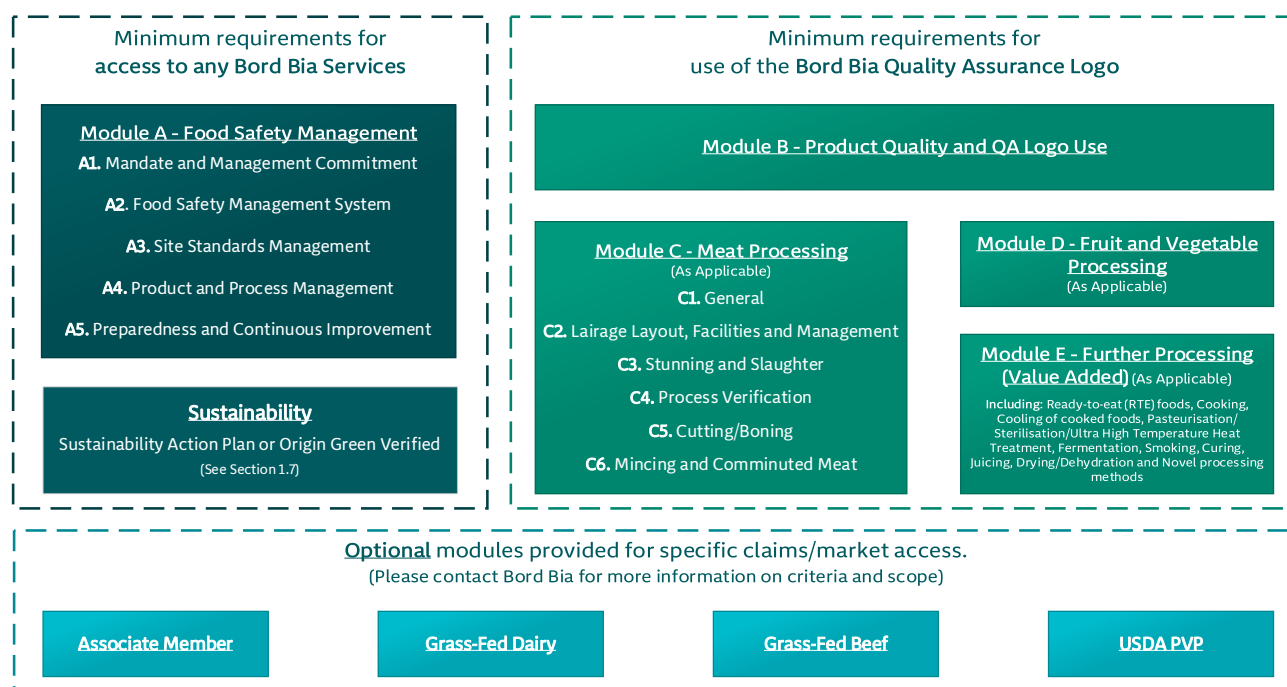


Figure 9: Standard Structure (cooking module highlighted)

E.1 Ready-to-Eat (RTE) foods

- a) For Ready-to-Eat (RTE) foods, environmental monitoring for *Listeria Monocytogenes* in line with Regulation (EC) No 2073/2005 must be in place and appropriate corrective action taken as required.

E.2 Cooking: General

- a) The cooking step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.
- b) Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the cooking process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
 - i. Time/temperature cooking combination to ensure adequate heat penetration at the core or thickest part of the food for optimum product safety;
 - ii. Uniformity of product;
 - iii. Hazards and their associated risks in the cooking and post-cooking process, and controls to reduce or eliminate the potential for cross-contamination;
 - iv. Validated methods for the appropriate cooking of food;
 - v. The capacity of the cooking equipment to ensure it is adequate to manage peak demand;
 - vi. The monitoring, the corrective action as required and the recording of the temperature of the food during the cooking process to verify that the time/temperature combination is achieved;
 - vii. Re-validation of the controls in the event of any adjustment to the procedure (e.g. recipes, ingredients, equipment) in line with the FSMS (A.2.10).

Note: See FSAI Guidance Note 20 on the Industrial Processing of Heat-Chill Foods.

- c) Where food is cooked, it must either be brought to a core temperature of 75°C or held at 72°C for 2 minutes, and records must be available to demonstrate that this was achieved. Where other temperature targets are used, validation data must be available to demonstrate that this process achieves the same food safety objective.
- d) Equipment and utensils used for production and process monitoring of cooked foods (e.g. trays, thermometers, vacuum packaging machines) must be dedicated to that zone (see A.3.3.1).
- e) A procedure must be established, implemented and maintained to verify that products cooked in packaging (e.g. sous vide products) are checked for leaking packages after the cooking process is complete.

E.3 Cooling of Cooked Foods

- a) The cooling step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.

- b)** Processors must have an effective procedure in place, implemented and maintained which clearly defines all steps in the cooling process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
 - i. Time/temperature cooling combination;
 - ii. Uniformity of product;
 - iii. Hazards and their associated risks in the cooling process, and controls to reduce or eliminate the potential for cross-contamination;
 - iv. Validated methods for the appropriate cooling of cooked food, including the cooling curve;
 - v. The capacity of the cooling equipment to ensure it is adequate to manage peak demand;
 - vi. The monitoring, the corrective action as required and the recording of the temperature of the food during the cooling process to verify that the time/temperature combination is achieved.
- c)** The equipment used for cooling must be dedicated to the cooling of cooked product.
- d)** Chilling units used to maintain other foods must not concurrently be used for the cooling process.

E.4 Pasteurisation/Sterilisation/Ultra High Temperature (UHT) Heat Treatment

- a)** The pasteurisation/sterilisation/UHT heat treatment step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.
- b)** Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the pasteurisation/sterilisation/UHT heat treatment process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
 - i. Time-temperature cooling combination;
 - ii. Uniformity of product;
 - iii. Hazards and their associated risks in the pasteurisation/sterilisation/UHT heat treatment process, and controls to reduce or eliminate the potential for cross-contamination;
 - iv. Validated methods for the appropriate pasteurisation/sterilisation/UHT heat treatment process used;
 - v. The capacity of the pasteurisation/sterilisation/UHT heat treatment equipment to ensure it is adequate to manage peak demand;
 - vi. The monitoring, corrective action when required and recording of the pasteurisation/sterilisation/UHT heat treatment process to verify that the parameters are achieved.

E.5 Fermentation

- a)** The fermentation step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.

- b)** Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the fermentation process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
- i. Optimisation of the processing conditions (e.g. correct time/pH combination where relevant, a_w , temperature, salt concentration) to ensure food safety;
 - ii. Optimum quality, composition and microbial load of the raw materials;
 - iii. A suitable environment for the process to ensure food safety;
 - iv. Hazards and their associated risks in the fermentation process, the risk of cross-contamination during or after the fermentation process, and controls to reduce or eliminate these risks (Section A.2 of this Standard));
 - v. Validated methods to achieve the desired intrinsic conditions for optimum quality and safety;
 - vi. The monitoring, the corrective action as required and recording of the parameters specific to the product (e.g. pH/time combination, a_w , etc.) to verify that set targets are achieved.

E.6 Smoking

- a)** The smoking step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.
- b)** Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the smoking process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
- i. Optimisation of the processing conditions (e.g. a_w , pH, salt concentration, environment humidity, smoking agent and method) to ensure food safety;
 - ii. Optimum quality, composition and safety of the raw materials, including the smoking agent used for this process;
 - iii. A suitable environment for the process to ensure food safety;
 - iv. Hazards and their associated risks in the smoking process, the risk of cross-contamination during or after the smoking process, and controls to reduce or eliminate these risks (see Section A.2 of this Standard);
 - v. Validated methods to achieve the desired intrinsic conditions (pH, a_w) for optimum quality and safety;
 - vi. The monitoring, the corrective action as required and the recording of the intrinsic conditions (pH, a_w) to verify that the set targets are achieved;
 - vii. The smoking unit's capacity to maintain consistent temperatures throughout the process (i.e., the maximum volume of product for processing per unit);
 - viii. Cooling steps for hot-smoked product (as per section E.3 above).

E.7 Curing

- a)** The curing step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.

- b)** Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the curing process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
- i.** Optimisation of the processing conditions (e.g. brine concentration, brine to product ratio, curing time) to ensure food safety;
 - ii.** Optimum quality, composition and safety of the raw materials, including the curing agent used for this process;
 - iii.** A suitable environment for the process to ensure food safety;
 - iv.** Hazards and their associated risks in the curing process, the risk of cross-contamination during or after the curing process, and controls to reduce or eliminate these risks (see Section A.2 of this Standard-FSMS);
 - v.** Validated methods to achieve the desired intrinsic conditions (e.g. salt level) for optimum quality and safety;
 - vi.** The monitoring, corrective action as required and recording of the extrinsic conditions (brine concentration, brine to product ratio, curing time) to verify that the set targets are achieved;
 - vii.** The curing unit's capacity to perform the process effectively during peak demand (i.e. the maximum volume of product for processing per unit).
- c)** The use of sodium and potassium nitrates and nitrites in cured meat products must comply with the provisions set out in Regulation 1333/2008/EC as amended on food additives.

E.8 Dry Aging

- a)** The dry aging step must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.
- b)** All meat must be dry aged for a minimum of 14 days.
- c)** Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the dry aging process to ensure food safety and quality. At a minimum, this procedure must consider the following list (not exhaustive):
- i.** Optimisation of the processing conditions to ensure food safety;
 - ii.** Optimum quality, composition and safety of the raw materials;
 - iii.** A suitable environment for the process to ensure food safety and quality;
 - iv.** Hazards and their associated risks in the dry aging process, the risk of cross-contamination during or after the dry aging process, and controls to reduce or eliminate these risks (see Section A.2 of this Standard);
 - v.** Validated methods to achieve the desired intrinsic conditions for optimum quality and safety;
 - vi.** The monitoring, corrective action as required and recording of the extrinsic conditions (e.g. relative humidity, temperature, storage time) to verify that the set targets are achieved;
 - vii.** The dry aging facility's capacity to perform the process effectively during peak demand (i.e., the maximum volume of product for processing per unit).

E.9 Juicing

- a) The juicing process must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.
- b) Processors must have an effective procedure in place, implemented and maintained that clearly defines all steps in the juicing process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
 - i. Optimisation of the juicing process and the post-juicing (e.g. pasteurisation) conditions to ensure food safety (e.g. handling of frozen and fresh ingredients, e.g. fruit, yoghurts, vegetables, the storage of juiced product/ smoothies);
 - ii. Optimum quality, composition and safety of the raw materials;
 - iii. A suitable environment for the juicing process to ensure food safety;
 - iv. Hazards and their associated risks in the juicing process (e.g. pathogens, mycotoxin (patulin)), the risk of cross-contamination during or after the juicing process, and controls to reduce or eliminate these risks (see Section A.2 of this Standard);
 - v. Validated methods to achieve optimum quality and safety;
 - vi. The monitoring, corrective action where required and recording of the juicing process and post-process (where applicable) to verify the set targets are achieved.

E.10 Drying/Dehydration

- a) **Fruit and Vegetable Processing Only:** A microbiological reduction step (e.g. convective air, in-pack pasteurisation of dried fruits, osmotic dehydration, fluidised bed, microwave, etc.) must be applied prior to the dehydration step to eliminate the risks from pathogens.
- b) The drying/dehydration process must be included in the food safety management system and comply with all applicable elements of Section A.2 of this Standard.
- c) Processors must have an effective procedure in place, implemented and maintained, which clearly defines all steps in the drying/ dehydration process to ensure food safety. At a minimum, this procedure must consider the following list (not exhaustive):
 - i. Optimisation of the drying/dehydration process conditions to ensure food safety (e.g. time/temperature combination, a_w , relative humidity);
 - ii. Optimum quality, composition and safety levels of the raw materials;
 - iii. A suitable environment for the drying/dehydration process to ensure food safety;
 - iv. Hazards and their associated risks in the drying/dehydration process, the risk of cross-contamination during or after the drying/dehydration process, and controls to reduce or eliminate these risks (see Section A2 of this Standard);
 - v. Validated methods to achieve optimum quality and safety;
 - vi. The monitoring, corrective action where required and recording of the drying/dehydration process to verify the set targets are achieved;
 - vii. The capacity of the drying/dehydration unit(s) to maintain a consistent process (i.e. the maximum volume of product for processing per unit) during peak demand.

Appendices

Appendix 1 Reference Information

This section lists key pieces of legislation applicable to business implementing this Standard.

Note: Legislation may be corrected or amended from time to time. Such amendments will need to be considered and adhered to as appropriate.

A consolidated version of EU legislation can be found on the following link:

<https://eur-lex.europa.eu/collection/eu-law/consleg.html>

General Labelling

- Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004.
- Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods.
- Commission Implementing Regulation (EU) No 1337/2013 of 13 December 2013 laying down rules for the application of Regulation (EU) No 1169/2011 of the European Parliament and of the Council as regards the indication of the country of origin or place of provenance for fresh, chilled and frozen meat of swine, sheep, goats and poultry.
- Commission Implementing Regulation (EU) 2018/775 of 28 May 2018 laying down rules for the application of Article 26(3) of Regulation (EU) No 1169/2011 of the European Parliament and of the Council on the provision of food information to consumers, as regards the rules for indicating the country of origin or place of provenance of the primary ingredient of a food.

Bovine Identification and Registration System

- Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97.

General Food Law and Hygiene Package

- Regulation (EC) No 178/2002 of The European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.
- Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.
- Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for on the hygiene of foodstuffs.
- Commission Regulation (EC) No 2073/2005 of 15 November 2005 on microbiological criteria for foodstuffs.

- Commission Regulation (EU) 2021/382 amending the Annexes to Regulation (EC) No 852/2004 of the European Parliament and of the Council on the hygiene of foodstuffs as regards food allergen management, redistribution of food and food safety culture.

Materials and articles intended to come into contact with food

- Regulation (EC) No 1935/2004 of the European Parliament and of the Council on materials and articles intended to come into contact with food, repealing Directives 80/590/EEC and 89/109/EEC.

Food Contaminants and Residues

- Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.
- Regulation (EC) No. 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.
- Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC.
- Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stockfarming of certain substances having a hormonal or thyrostatic action and of beta-agonists, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC.

Potable Water

- Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption.

Food Additives, Food Flavourings and Food Enzymes

- Regulation (EC) No 1333/2008 on the use of food additives.
- Regulation (EC) No 1332/2008 of the European Parliament and of the Council of 16 December 2008 on food enzymes and amending Council Directive 83/417/EEC, Council Regulation (EC) No 1493/1999, Directive 2000/13/EC, Council Directive 2001/112/EC and Regulation (EC) No 258/97.
- Regulation (EC) No 1334/2008 of the European Parliament and of the Council of 16 December 2008 on flavourings and certain food ingredients with flavouring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC.

Poultry and Poultry Meat Products

- Regulation (EU) No 1308/2013 of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007.
- Commission Regulation (EC) No 543/2008 of 16 June 2008 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 as regards the marketing standards for poultry meat.

Eggs and Egg Products

- Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007.

Fish and Fish Products

- Regulation (EU) No 1379/2013 of the European Parliament and of the Council of 11 December 2013 on the common organisation of the markets in fishery and aquaculture products, amending Council Regulations (EC) No 1184/2006 and (EC) No 1224/2009 and repealing Council Regulation (EC) No 104/2000.

Meat and Meat Products

- Council Regulation (EC) No. 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97.
- Commission Regulation (EC) No 1825/2000 of 25 August 2000 laying down detailed rules for the application of Regulation (EC) No 1760/2000 as regards the labelling of beef and beef products.
- Council Regulation (EC) No. 1234/2007 of 22 October 2007 establishing a common organisation of agriculture markets and on specific provisions for certain agriculture products.

Milk and Milk Products

- Regulation (EU) No 1308/2013 of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (CMO Regulation).
- Council Directive 2001/114/EC of 20 December 2001 relating to partly or wholly dehydrated preserved milk for human consumption.

Quick Frozen Foods

- Council Directive 89/108/EEC of 21 December 1988 on the approximation of the laws of the Member States relating to quick-frozen foodstuffs for human consumption.

Animal Welfare

- Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97.
- Council Regulation (EC) 1099 / 2009 of 24 September 2009 on the protection of animals at the time of killing.
- Council Directive 99/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens.
- S.I. 509 / 2009 Waste Management (Food Waste) Regulations 2009.
- Safety, Health and Welfare at Work (Reporting of Accidents and Dangerous Occurrences) Regulations 2016 (S.I. No. 370 of 2016).

Standards

- GFSI Benchmarking Requirements v2020.1 Part 4: Glossary
- I.S. 342 Guidance to hygiene requirements for food processors in accordance with EU Regulations 852/2004 and 853/2004
- ISO 9001:2015 Quality Management Systems - Requirements
- I.S. EN ISO 22000:2018 Food safety management systems - Requirements for any organisation in the food chain
- I.S. EN 15842:2019 Foodstuffs - Detection of food allergens - General considerations and validation of methods
- ISO 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories
- Codex Alimentarius: Code Of Hygienic Practice For Meat 1 CAC/RCP 58-2005
- I.S. EN ISO 19011:2018 Guidelines for auditing management systems
- ISO 20976- 1:2019 Microbiology of the food chain - Requirements and guidelines for conducting challenge tests of food and feed products - Part 1: Challenge tests to study growth potential, lag time and maximum growth rate
- I.S. EN 15180:2014 Food Processing Machinery - Food Depositors - Safety And Hygiene Requirements
- I.S. EN 1672-1:2014 Food Processing Machinery - Basic Concepts - Part 1: Safety Requirements
- I.S. EN 1672-2:2020 Food processing machinery - Basic Concepts - Part 2: Hygiene and Cleanability Requirements
- I.S. EN ISO 18593:2018 Microbiology of the food chain - Horizontal methods for surface sampling
- I.S. EN 1673:2020 Food processing machinery - Rotary rack ovens - Safety and hygiene requirements
- I.S. EN 1974:2020 Food processing machinery - Slicing machines - Safety and hygiene requirements
- PAS 96:2017 Guide to protecting and defending food and drink from deliberate attack
- Teagasc, Standard for the management of animal welfare at time of slaughter, 2020

FSAI Guidance Notes

- FSAI Guidance Note 18, Validation of Product Shelf-life.
- FSAI Guidance Note 20, Industrial Processing of Heat-Chill Foods.
- FSAI Guidance Note 27, On the enforcement of Commission Regulation (EC) No 2073/2005 on Microbiological Criteria for foodstuffs.

For further guidance notes please see the FSAI website.

Appendix 2 Eligible Products

Cautionary Notice

Refer to the Bord Bia Use Policy for details relating to the Logo use and further specifications regarding specific permissible value-added products.

Only products that have been sourced from Bord Bia certified farms that are processed in Bord Bia Processors are eligible to carry the Logo. However, non-assured products can be processed subject to the conditions described for product identification and traceability in Section A.5.1 and B1.2.

Category	Eligible Product
Combined Products Products made using meat, fruit and vegetables (and other eligible ingredients) in accordance with the Logo Use Policy	Fresh products intended to be cooked prior to consumption
	Fresh products intended to be cooked in packaging prior to consumption
	Fresh products intended to be consumed without cooking
	Cooked products intended to be consumed without cooking
	Cooked products intended to be consumed after heating
Beef and Lamb Products	Beef and lamb carcasses
	Bone-in sides
	Bone-in or vacuum-packed cuts
	Pre-packed cuts (e.g. wrapped or MAP)
	Comminuted meat/mince
Pigmeat Products	Pork carcasses and cuts and vacuum-packed primal cuts
	Wiltshire bacon and bone-in primals
	Bone-in and boneless bacon products
	Pre-packed cuts (e.g. wrapped, vacuum packed or MAP)
	Pork mince
	Basted pork
	Pork trimmings
Specified added value products as per Logo Use Policy	
Poultry Products	Whole poultry (fresh/chilled/frozen)
	Primary cuts or poultry portions (fresh/chilled/frozen)
	Pre-packed cuts (e.g. wrapped, vacuum packed or MAP)
	Specified added value products as per Logo Use Policy
Fruit and Vegetable Products	All fruits and vegetables

Table 1: Eligible Products

Eligible Offals	Bovine	Ovine	Porcine	Poultry	Comment
Heart	Y	Y	Y	Y	
Kidney	Y	Y	Y	N	
Tail	Y	N	N	NA	
Tongue	Y	Y	Y	NA	
Liver	Y	Y	Y	Y	
Diaphragm (Thick Skirt)	Y	Y	Y	NA	
Thin Skirt (Costal muscle)	Y	Y	Y	NA	
Cheek	Y	N	Y	NA	
Sweetbread/Thymus	Y	Y	NA	NA	
Casings/Intestines	N	Y	Y	N	
Tripe	Y	N	NA	NA	
Gizzard	NA	NA	NA	Y	
Blood	N	N	Y	N	Specific DAFM approval required
In the table above, Y, N and NA mean the following:					
Y	This item qualifies under the FPS for sale as Quality Assured Product.				
N	This item does not qualify under the FPS for sale as Quality Assured Product (e.g. ovine tail)				
NA	This item does not appear in the species in question (e.g. gizzard in porcine)				
Note	Collection and disposal of ineligible products must ensure segregation at source in accordance with S.I. 508: 2009.				

Table 2: Eligible Offals

Qualifying Animals and Residency

Slaughtering facilities must have the capability to confirm, either manually or through the online web-service, the quality assurance status of the animal over the entire period of the required residency, as outlined below:

Cattle	Steers, young bulls (i.e. up to 24 months of age), heifers and cows which have been resident on a certified farm or farms for minimum 70 days continuously prior to slaughter
Sheep	All animals which have been resident on a certified farm or farms for minimum 42 days
Pigs	Whole of life during the complete fattening period (pigs) continuously prior to slaughter
Poultry	All meat producing chickens, ducks and turkeys from farms certified continuously from day-old
Casualty slaughtered Animals	Casualty slaughtered animals and spent hens are not eligible under the Scheme.

Note: Meat produced from animals that have been slaughtered without prior stunning can be identified as quality assured for the purposes of business to business transactions but cannot carry the Bord Bia Logo on retail packaging.

Appendix 3 Product Quality Control Plan (PQCP) Guidelines

A PQCP details the controls required so that the required product quality is achieved.

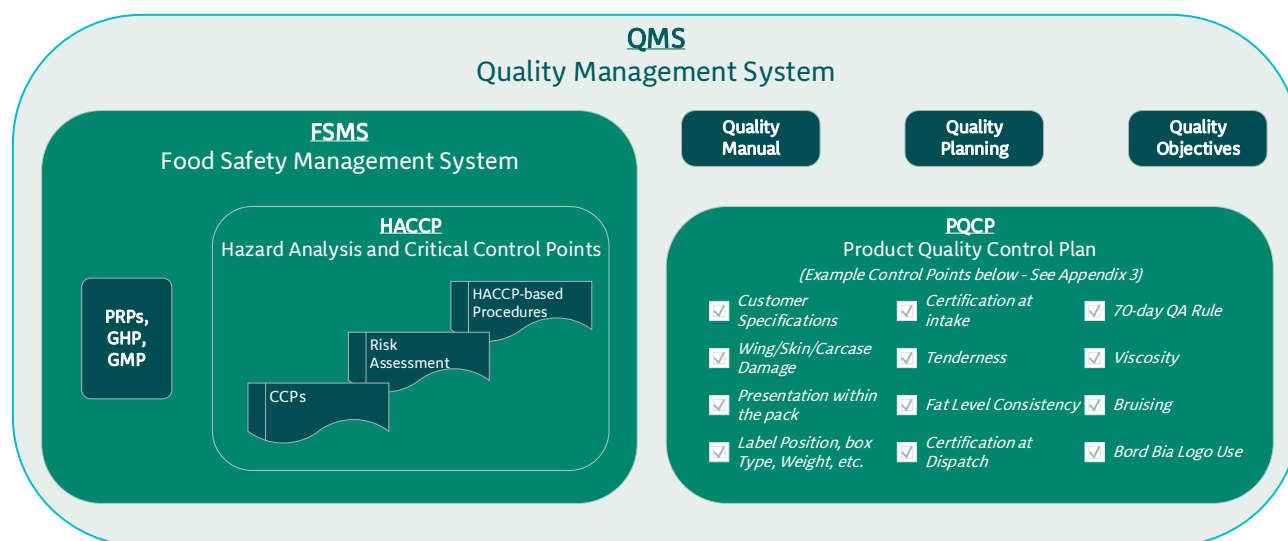


Figure 10: Management System Terminology

At each step, the Processor should identify the following:

- **Process** Name;
- **Step** name;
- **Control measure** being applied at this step to ensure product quality based on product specifications including limits/targets where applicable;
- **Responsibility** and **frequency** for monitoring the control measure;
- The **tests/checks** to be conducted at this step to verify product quality prior to forwarding to the next step;
- The **corrective action** to be taken in the event of a non-conformance.
- The **type** of control measure applicable at this step;
- The person with **overall responsibility** for Corrective/preventive Action;
- The **procedure** for this step;
- The **records** to be maintained to verify conformance at this step.

Once the analysis is completed, this PQCP can be used as follows:

- For verification of quality objectives and quality planning through review of the actions required in the various steps;
- For training (so that the trainee understands the upstream suppliers' checks and the downstream receivers' requirements);
- As a document to be used for annual revision of the processes (validation) and for internal training on an ongoing basis;
- To inform the FSMS team when constructing flow diagrams for the steps in the processes (see A.2.1 to A.2.16).

