



SECTORAL QUALIFICATIONS FRAMEWORK for Food Processing

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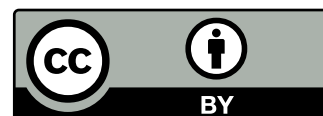
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Introduction

The basic premise and purpose of creating sectoral qualifications frameworks is to develop a tool for entrepreneurs to organise and compare qualifications operating in a given sector of the economy. This assumption is universal for all sectoral frameworks developed so far.

The initiative to develop a sectoral qualifications framework lies with the stakeholders representing a sector and usually stems from a mismatch between the education preparing people to work in the sector and the needs of the labour market, resulting in a shortage of employees with the right competences for a given branch of the economy. Sector skills councils can serve as a link between education and business, as they bring together the industry community and, on behalf of its business representatives, determine the need to develop sectoral qualifications frameworks.

Thus both the dynamic changes taking place in food production technology as well as the mismatch between the formal and non-formal educational offer and the needs of the labour market contributed to the development of the Sectoral Qualifications Framework for Food Processing.

Of particular importance is to have such a tool developed by the industry for the industry. It is the entrepreneurs themselves who know best which competences and qualifications they currently need in their companies. Therefore, they themselves described and systematized the competences and qualifications in terms of level of difficulty and specificity. The sectoral qualifications framework, which was developed with the support of experts from the Integrated Qualifications System, acts as the starting point for further work on developing industry initiatives in vocational education.

The framework for competence development is the Integrated Qualifications System, established on the basis of the Act of 22 December 2015 on the Integrated Qualifications System (Journal of Laws of 2020, item 226 and of 2023, item 2005) (hereinafter, the IQS Act). The system consists of two key elements: the Polish Qualifications Framework (PQF) and the Integrated Qualifications Register (IQR). Tools are being developed in both these areas to support employees and employers in updating and developing competences and skills and presenting them together in one place to respond to labour market demand, and also to follow the business changes occurring in particular industries.

According to the IQS Act, sectoral qualifications frameworks (SQF, also referred to as sectoral frameworks) describe the levels of qualifications functioning in a given sector or industry. Their

levels correspond to the levels of the Polish Qualifications Framework. According to Article 11 of the IQS Act, sectoral qualifications frameworks develop second stage level descriptors typical of vocational qualifications, taking into account the specificity of a sector or industry.

The system of sectoral qualifications frameworks is growing. Currently, 21 frameworks have been developed for the following sectors: banking, sport, tourism, IT, telecommunications, construction, development services, fashion industry, public health, trade, automotive, chemical industry, agriculture, energy, real estate, mining, waste management, water and wastewater management, reclamation and remediation, marketing communications, cybersecurity and food processing.

By relevant decrees of the minister responsible for education and upbringing (the Minister Coordinator of the IQS), the following sectoral frameworks have been incorporated into the IQS system: sport, tourism, construction, development services, trade and energy. The remaining frameworks that have been developed are awaiting inclusion in the IQS.

An important point in the further development of SQFs is their practical use by those operating in and around the industry, and the spread of their use to identify and manage competences in professional and educational settings.



Part I
**Developing the Sectoral Qualifications
Framework for Food Processing**

1. The context of developing the SQF

1.1. Justification for developing the Sectoral Qualifications Framework for Food Processing (SQF FP)

A key argument in favour of developing a sectoral qualifications framework for the food processing sector was the need and interest from the industry community affiliated with the Sector Skills Council for the High Quality Food Sector, which, as part of its activities, undertook a number of activities aimed at structuring the qualifications and competences in that industry. This work culminated in the adoption of a resolution in 2021 on the need to proceed with developing a Sectoral Qualifications Framework for the High Quality Food Sector. The main arguments from the aforementioned document for developing a framework in this food sector are cited below.

The food sector is one of the most important sectors of the Polish economy. It is responsible for roughly 16% of industrial production sales and 13% of Polish exports abroad. It generates almost 3% of gross value added in the economy and employs 383,500 workers (Polish Federation of Food Industry Union of Employers, 2020). It is characterized by dynamic development, and its statistics testify to its high production potential in Europe. In 2022, the value of total exports of agri-food goods from Poland amounted to €47.6 billion (PLN 223 billion), 26.7% higher than in 2021. The main export direction was European markets, but agri-food products worth €12.3 billion (PLN 58 billion) were exported to non-EU countries, resulting in a 20% increase in export value (Ministry of Agriculture and Rural Development, 2023).

Poland is the sixth largest market for food products in the European Union. These products are mainly provided by domestic food producers. Polish companies have been able to create international brands whose recognizable feature is their high quality.

The visible growth in the role of Poland's food production sector was due to the long tradition of this type of production, the development of the agricultural sector (which is linked to the industry and provides it with raw materials), and access to highly qualified personnel educated at first and second stage vocational schools and higher education institutions.

However, the labour market of the quality food production sector suffers from significant problems, stemming from inadequate educational offers, the insufficient number of students

that can be accepted in educational institutions, and the overly slow pace of adapting educational programmes to the industry's needs. This applies mainly to first and second stage vocational schools, which educate for the professions of confectioner, food industry machinery and equipment operator, baker, meat processor, fish processor, dairy processing technician, food technology technician and baker.

For example, there is a glaring disproportion in the number of institutions offering training in the profession of food quality and safety control technician and the profession of confectioner. Education for future control technicians is offered only on an experimental basis at the Gen. Dr. Roman Abraham Complex of Technical and General Education Schools in Września and the Complex of Food Industry Schools in Łódź, while more than 1,000 educational institutions offer programmes in the profession of confectioner.

The adaptation of training programmes to the rapidly changing production conditions in the sector is also problematic. At least several years pass between the introduction of modifications to the core curriculum for vocational education and the entry of the first graduates into the labour market. This means that the learning outcomes acquired in the didactic process and confirmed by vocational examinations may have become inadequate to a changed reality.

The situation is somewhat different for higher education institutions (HEI) offering bachelor's and master's degrees and postgraduate programmes for adepts and employees in the quality food production sector. HEIs can shape their programmes more freely and thus adapt them faster to the expectations of the labour market, but again, due to the specificity of the sector, the cost of possible changes to the educational programme may be very high. In addition, the purpose of universities is to educate mainly high level personnel who manage, plan, direct and supervise the processes of quality food production. Meanwhile, the progressing automation of production or giving it an individual, "artisanal" character, often require key decisions to be made in a number of positions, starting with line workers.

This situation is exacerbated by growing competence gaps, which significantly impede both the development of the sector and the careers of its employees and adepts. Individual employers and workers are implementing various strategies to offset this phenomenon. These range from continuing education in the formal system, training offered in the market, in-house training conducted at workplaces, and self-education. These measures, while often effective, do not cover all the competences and qualifications present in the sector, do not tie them together into any coherent system, nor do they allow for planned career development.

The patchwork nature of the knowledge acquired in this way, the uncertainty about learning outcomes and the various forms of their assessment are problematic in effectively managing the knowledge potential of employees. The consequences are difficulties in comparing the qualifications of employees from different countries, including employees from Poland taking up employment in other EU countries, as well as problems with the transition of employees between companies within the sector.

At the same time, maintaining a high level of competitiveness in the sector requires constant outlays for research and development, which create new technologies and products or implement traditional technologies adapted to the expectations of today's customers regarding the quality and safety of food products. The introduction of new products, equipment, technologies and regulations, their manufacture, use and operation requires workers to be increasingly skilled.

The sector's professional qualifications are characterized by a lack of transversality and a focus on traditional production. They are grouped into several basic categories, common to all branches of food production: food product design, food production, food production management, and food production quality and safety assurance. Within these areas are dozens of competences and qualifications found in the different job scopes and tasks at various levels of complexity, responsibility and impact on the sector. The sectoral qualifications framework will allow all of this to be arranged in level descriptors to serve as a further elaboration of the Polish Qualifications Framework.

Developing an SQF for food processing is also supported by the fact that it is linked to the agriculture sector, which already has its own framework. The link is processual – as agriculture provides the raw materials for the food production sector; cultural – due to the traditional links between food production and agriculture; and administrative.

The Sectoral Qualifications Framework for Food Processing can serve as a tool to support an understanding of the competences and qualifications of employees in food production companies/entities, regardless of their size or the technologies used. It can also contribute to the ability to compare qualifications as well as to undertake self-education and development planning in this most important sector of the economy for society as a whole.

1.2. The interdisciplinarity of the framework and its relationship to other sectoral qualifications frameworks

The connections and dependencies between different industries are an important element in the development of different segments of the economy. The basis of intersectoral relations is most often technology and the interconnectedness of the supply of raw materials, food production and distribution. Additional bonds include various types of strategic documents and legal acts.

In the case of the food processing sector, intersectoral linkages especially relate to agriculture, which supplies raw materials to food production companies, and trade, which provides the distribution channels of food products. The scope of these three sectors of the economy is also covered by the state's activities under its food policy, which goes beyond agricultural or trade policies. Among the objectives of food policy, mainly developed and implemented by the Ministry of Agriculture and Rural Development, is the regulation of and support for the development of agriculture and food processing, as well as measures to strengthen the export position of domestic agricultural and food producers, which is implemented through support for trade.

The linkages between these sectors and the institutional arrangements and state policies that support them result in agriculture, food processing and trade forming a specific agro-processing-trade industry. Currently, these three sectors are undergoing significant and interdependent changes. These are due, among other things, to the introduction of modern work automation technologies, digitalization, and changes in global product supply chains. The latter are caused by international turmoil, as well as changes resulting from policies on sustainability, biodiversity, climate and environmental protection. All of these aspects have changed consumer demands and preferences in their approach to products, their quality, composition, origin, type, carbon footprint and attitude towards the circular economy.

The changes forced by the processes indicated above are not taking place uniformly. Along with the trends responsible for digitalization, automation and the green economy, there is an emerging interest in the traditional products of local markets, culinary habits and organic or traditional agriculture as well as commerce based on personalized customer service. This results in the emergence of a variety of activities and related technologies in the interconnected sectors, which in turn influences changes in the competence requirements for employees and entrepreneurs.

Sectoral qualifications frameworks, which are ultimately part of the Integrated Qualifications System, provide a tool to support the development of competences in these three sectors. They are tools that will be used by all entities operating in agriculture, food processing and trade, regardless of business, type or size of production. The Sectoral Qualifications Framework for Food Processing (SQF FP) is the third tool of its kind for the fields within the state's food policy focus area, alongside the Sectoral Qualifications Framework for Trade (SQFT) and the Sectoral Qualifications Framework for Agriculture (SQF AG). SQF FP with its level descriptors complements the other two frameworks. SQFT, SQF AG and SQF FP level descriptors, while maintaining sector specificity, can be used as a tool to support employees and employers in all three sectors. They can improve the processes of self-education and knowledge acquisition by employees, as well as those who conduct home food processing and sell the food products they produce. The indicated SQFs will also support the staffing activities of enterprises and facilitate the sectors' employees in determining career paths and planning their professional development within these three branches of the economy: agriculture, food processing and trade.

1.3. The people and entities involved in developing the proposed SQF FP

A characteristic feature of the Sectoral Qualifications Framework for Food Processing is its functionality, achieved by including the competences currently used in food production and processing companies. The usefulness of this tool stems from the basic assumptions of the methodology for developing sectoral qualifications frameworks, primarily the key assumption that the sectoral framework is developed by stakeholders representing the industry community. Work on developing the proposed SQF FP involved expert practitioners working in the food industry on a daily basis, having specialized knowledge and many years of experience with the competences and qualifications required for working in food production, taking into account national and international food safety legal standards.

A consortium of the Polish Federation of Food Industry Union of Employers (PFFI UE) and Warsaw University of Life Sciences (SGGW) developed the draft Sectoral Qualifications Framework for Food Processing under a public procurement contract.

The Polish Federation of Food Industry Union of Employers was established to ensure the effective participation of business entities in working on the legal, organisational and economic conditions for the development of the food sector. Members of PFFI UE are leading companies and organisations in the broadly understood food market in Poland. In addition, the Federation represents the Polish food industry in the forum of the entire food industry of

the European Union. Since 1999, it has been the only Polish organisation that is an associate member of the largest EU organisation of food producers, FoodDrinkEurope, Specialised Nutrition Europe and UNESDA. It is a member of the leading employers' organisation, the Union of Entrepreneurs and Employers. It participates in the work of the Triologue Team for the Food Industry of the Social Dialogue Council. PFFI UE serves as a leader in the Sector Skills Council for the High Quality Food Sector.

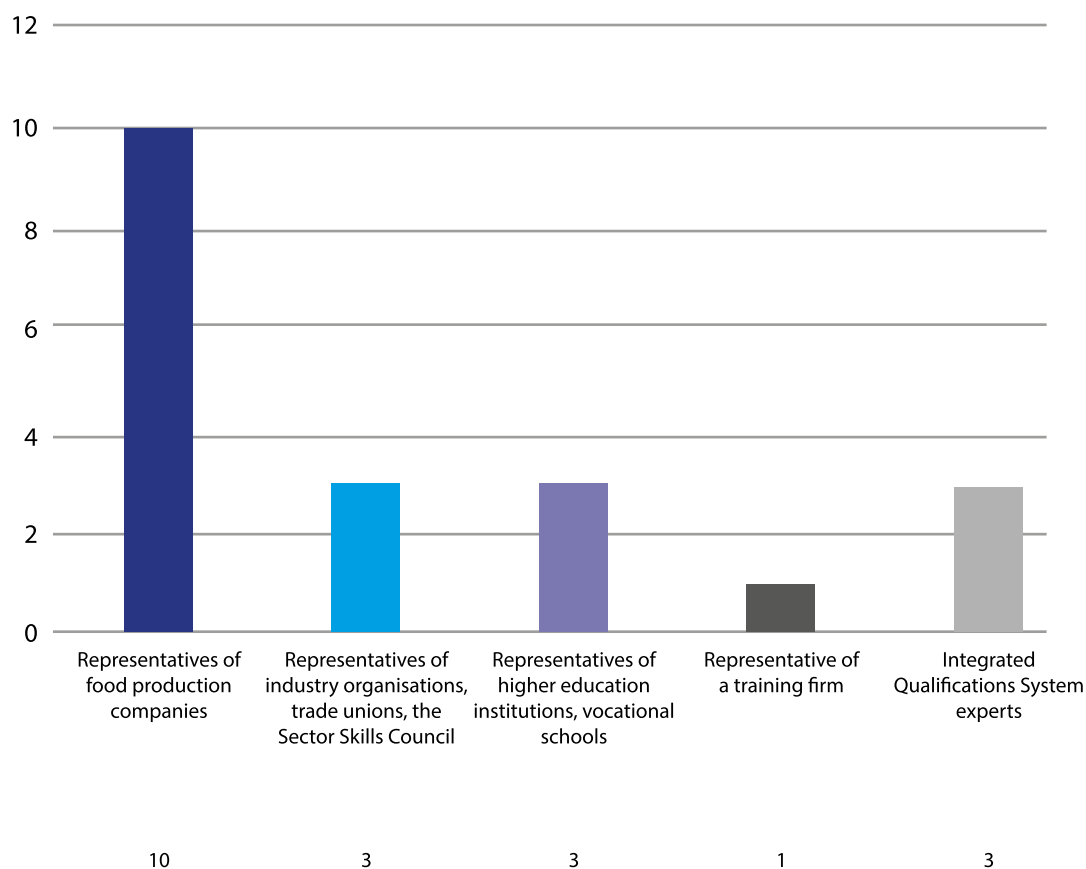
Warsaw University of Life Sciences (SGGW) is the oldest agricultural and natural sciences university in the country. It offers 40 fields of study: from natural sciences and technology, to veterinary medicine, social sciences or economics. It educates nearly 16,000 students in full-time, part-time, doctoral and postgraduate studies, as well as through international student exchanges.

It has state-of-the-art research centres, studios and laboratories, and ensures the presence of outstanding experts, which allows it to educate and conduct world-class research and transfer the results to the economy. SGGW serves as a partner in the Sector Skills Council for the High Quality Food Sector.

To develop the draft Sectoral Qualifications Framework for Food Processing, a team of experts was appointed, consisting of representatives from production and food processing, and reflecting the structure of the sector in terms of size (micro, small, medium and large companies), as well as level of sophistication of the production processes (industrial food production, artisanal production).

The team of experts included individuals representing production areas selected on the basis of the main Polish Classification of Activities (PKD) codes, including: processing and preserving meat and production of meat products, processing and preserving fish, crustaceans and molluscs, processing and preserving fruits and vegetables; production of oils and fats of vegetable and animal origin; production of dairy products; production of grain mill products, starches and starch products, production of bakery and flour products; production of other food products, production of beverages.

Representatives of industry organisations, employers' and employees' organisations, representatives of supervisory institutions and institutions involved in formal and non-formal education were also invited to participate in the work. Methods experts with experience in work relating to the Integrated Qualifications System also participated in developing the framework.

Figure 1. Composition of the SQF FP team of experts

The project manager overseeing the work on the Sectoral Qualifications Framework for Food Processing was Prof. Dominika Guzek, PhD, DSc, while Andrzej Wojciechowicz, an expert in the FMCG (Fast-Moving Consumer Goods) market, was the project coordinator.

The following table presents the members of the expert team.

Table 1. Expert team members developing the SQF for Food Processing

	Name	Representing:
1.	Dr. Anna Mikołajewska-Olewnik	Olewnik Grupa Olewnik S.A.
2.	Marcin Paluszek	Thai Union Poland
3.	Grażyna Rychter	Hortex Holding S.A.
4.	Sebastian Tołwiński	Upfield
5.	Dorota Gańko	District Dairy Cooperative in Sierpc <i>Okręgowa Spółdzielnia Mleczarska w Sierpcu</i>

	Name	Representing:
6.	Piotr Romańczuk	Lubella Ltd. <i>PZZ Lubella GMW Sp. z o.o.</i>
7.	Mariola Chiczevska	Lubaszka Bakery Ltd. <i>Piekarnie Lubaszka Sp. z o.o.</i>
8.	Dr. Jacek Czarnecki	Nestle Polska S.A.
9.	Renata Józefowicz	Hortex Holding S.A.
10.	Dr. Andrzej Gantner	Polish Federation of Food Industry Union of Employers (PFFI UE) Sector Skills Council for High Quality Food
11.	Dr. Barbara Groele	"National Union of Juice Producers" Association <i>Stowarzyszenie „Krajowa Unia Producentów Soków” (KUPS)</i>
12.	Teresa Kowalska-SucHECKA	National Secretariat for the Food Industry of the "Solidarity" Trade Union <i>Krajowy Sekretariat Przemysłu Spożywczego NSZZ „Solidarność”</i>
13.	Prof. Tadeusz Trziszka	Wrocław University of Environmental and Life Sciences
14.	Prof. Krystyna Gutkowska	Warsaw University of Life Sciences Sector Skills Council for High Quality Food
15.	Dr. Urszula Augustyniak	Complex of Catering and Hotel Schools in Warsaw <i>Zespół Szkół Gastronomiczno-Hotelarskich w Warszawie</i>
16.	Izabela Tańska	IGE FOOD
17.	Paweł Badowski	Unilever Polska Sp. z o.o.
18.	Dr. Andrzej Faliński	Integrated Qualifications System expert
19.	Iwona Ciechan	Integrated Qualifications System expert
20.	Magdalena Słocińska	Integrated Qualifications System expert

Source: Own elaboration based on the *Final Report on developing a proposed Sectoral Qualifications Framework for Food Processing*

2. The course of the work to develop SQF FP

2.1. The scope of the Sectoral Qualifications Framework for Food Processing

Following the principles of developing sectoral qualifications frameworks, SQF FP includes only those competences that are specific to the food processing sector.

SQF FP identifies the main areas of competence for the food processing sector, essential in designing a food product, implementing its production and ensuring food safety and quality at each stage. The scope of the framework includes in particular:

- analysis of the food market, socio-economic conditions, current dietary trends among consumers,
- characteristics of raw materials and food products,
- legal regulations governing food processing activities,
- food safety and safety in the processes of food processing,
- food product design and its production,
- process technology, machinery and production line equipment used in food processing.

In addition, SQF FP includes descriptions of competences associated with conducting food processing in accordance with the concept of sustainable development and a circular economy, promoting the use of raw materials from sustainable crops and the use of environmentally friendly packaging in the industry community. The framework also defines the social competences of promoting healthy eating habits among consumers and shaping attitudes geared towards choosing quality products, including local and regional ones.

2.2. Definition

The food processing sector is diverse, and its players vary greatly in terms of the competences needed for the product being processed, the technology used, the size of the entity or the way production is organised. In order to study the competences used in the food sector, it was necessary to precisely delineate its boundaries and adopt a definition that did not exclude its various segments.

The first decision was to move away from the narrowing name of “high quality food”, which suggested only a fragment of the entire sector. In formulating a name for the sectoral framework,

experts focused on a key process: processing, and therefore the name “food processing sector” was adopted.

To define the scope of the sectoral qualifications framework for the sector and its boundaries, the following definition was adopted:

**PROCESSING RAW MATERIALS INTO PRODUCTS
INTENDED FOR DIRECT OR INDIRECT HUMAN CONSUMPTION**

According to the definition adopted for SQF FP, the food processing sector includes (based on PKD codes) food components intended for human consumption regardless of their form and degree of processing. The definition excludes components relating to agricultural production (plant and animal), feed production and food distribution.

2.3. Identifying the sectoral determinants for SQF FP

Following the example of the sectoral qualifications frameworks prepared to date, in defining the sectoral determinants, the developers of the framework used a methodology based on the German Car Easy Vet project. This methodology consists of describing the key competences identified in the sector and distinguishing job-related categories that contextually relate to the identified competences. The Car Easy Vet project defines four work-related categories:

1. Key work processes – the most important work processes taking place in the field of producing products or services,
2. Work objects – the interrelationships of technological processes, workers, products, phenomena and costs occurring within the scope of a given process of manufacturing products or services,
3. Tools, methods and organisation of work – the methods, tools and forms of managing the organisation of work in the course of producing products or services,
4. Labour and technology requirements – the requirements and conditions necessary to perform work in a given production technology or provide certain services, including those fulfilling legal regulations and cultural norms as well as with knowledge about the expectations of the end users and consumers of products and services.

A preliminary analysis of the sector was made in terms of the categories indicated above. In formulating the contextual determinants, the above definition and the stages of food processing adopted in the substantive concept for developing the draft SQF were used. As a result, contextual ranges were formulated (Table 2), which were the starting point for the formulation of the sectoral determinants.

Table 2. Contextual scopes of SQF FP

Work-related categories	Contextual scope
key work processes	<ul style="list-style-type: none"> ■ choice of raw materials ■ acquisition of raw materials ■ acceptance of raw materials ■ selection of raw materials ■ processing raw materials into a product ■ packaging of the product ■ storage of the product ■ delivery of the product to the customer ■ processing by-products and waste products
work objects	<ul style="list-style-type: none"> ■ animal raw materials and animals ■ plant raw materials and plants ■ mineral raw materials ■ synthetic raw materials ■ products and semi-finished products ■ packaging ■ waste and residues ■ suppliers of the product ■ recipients of the product ■ customers of the product ■ the natural environment ■ agro-culture ■ the tradition and culinary culture of the recipients
tools, methods and organisation of work	<ul style="list-style-type: none"> ■ processing tools and machinery ■ processing methods and technologies ■ organisation and management methods
work and technology requirements	<ul style="list-style-type: none"> ■ quality and production safety requirements ■ customer safety requirements ■ environmental safety requirements ■ ethical and moral requirements ■ religious and cultural requirements ■ legal requirements relating to the organisation of work ■ legal requirements relating to socio-economic issues of the organisation of food production ■ requirements for the humane treatment of animals constituting the raw materials

Source: *Final Report on developing a proposed Sectoral Qualifications Framework for Food Processing*

The identified contextual scopes were discussed among the project's experts and confronted with current publications and studies on competences in the food processing sector. After the experts analysed the material, agreement was reached on the properties of the presented contextual scopes. On this basis, a first version of the sectoral determinants was produced, to which key competences were assigned, categorised by knowledge, skills and social competence. As a result, many competences were repeated in the SQF FP in different determinants. This resulted in an overdeveloped SQF. Guided by the conclusions of the expert team and the suggestions of IBE's methods experts, an arrangement analogous to that used in the Polish Qualifications Framework was adopted, i.e., separate determinant formulations were prepared for knowledge, skills and social competence.

2.4. Analysing competences

Before work began on the proposed Sectoral Qualifications Framework for Food Processing, the Educational Research Institute prepared a report entitled *Analysis of Competences and Qualifications in the Food Processing Sector*. The report's main part was the result of a field survey of competences and qualifications operating in the food processing sector.

The survey was conducted throughout the country and included 50 in-depth interviews (IDI) with employees of different types of food processing companies, as well as three focus group interviews (FGI and mini FGI). Entities were selected for the study following adopted criteria and the sector's definition developed for producing SQF FP. The main objective of the study was to identify the occupations, positions and qualifications operating in it as well as to identify the processes, professional tasks, activities and competences/skills important for working in the sector.

The result of this work was a report consisting of desk research analysis and the findings of the field research. The key element of the report is a competence table containing characteristic and specific competences required for particular positions and professional tasks performed in the food processing sector. The developed report, along with the identified competences, was provided to the experts as supportive material in the subsequent work on the food processing sectoral framework.

2.5. Stages of work on SQF FP

2.5.1. Stage I – developing the initial SQF FP draft by the team of experts

After signing an agreement with the selected contractor who was to develop the proposed SQF FP (i.e., the PFFI UE and SGGW consortium), the Educational Research Institute provided it with all supporting materials, including those on the Integrated Qualifications System and the development of sectoral qualifications frameworks, as well as the *Analysis of Competences and Qualifications in the Food Processing Sector* report. Equipped with the necessary knowledge, the contractor proceeded to the first stage of work on the sectoral framework. This began with an introductory seminar for expert team members organised together with IBE experts, who provided necessary knowledge about the IQS and SQFs.

During the seminar, expert team members were introduced to the issues of the Integrated Qualifications System, the process of developing sectoral qualifications frameworks, as well as the schedule and organisation of work on SQF FP. The experts were presented with examples from pilot projects on the practical use of SQFs in companies. An interesting point of the seminar, which aroused interest and lively discussion among the experts, was the presentation of the results of the field survey of qualifications and competences conducted among employees working in the food processing sector. Work on the framework was performed in close cooperation between the contractor and the methods experts from IBE, who ensured that the competence descriptions were compatible with the Polish Qualifications Framework. The result of the work was a preliminary draft of SQF FP.

2.5.2. Stage II – consulting the initial SQF FP draft within the sector and its verification

The developed preliminary SQF FP draft was submitted to the industry community for consultation. Consultations were conducted with representatives of key players in the sector and its stakeholders. During the consultations, the appropriateness of the adopted sectoral determinants and level descriptors was verified, as well as their compliance with stakeholder expectations. In addition, the industry terminology used in the draft was verified.

The draft was also verified through consultation seminars and qualitative research performed with the focus group interview technique. A total of 117 people participated in the consultations.

Consultations of the preliminary SQF FP draft were also held with the Sector Skills Council for the Quality Food Sector.

During the consultations, meeting participants submitted their comments and suggestions for modifications to the preliminary SQF FP draft. All comments were analysed by the expert team, who made additions and changes to the draft based on them.

The most important observations and comments are presented below:

- Consider adding competences to SQF FP relating to the willingness to learn, autonomy, decision-making, delegating tasks.
- Add competences relating to export (knowledge of the legal framework, specific requirements in different countries arising from, e.g., kosher rules, ritual slaughter).
- Analyse and possibly clarify provisions for labelling packaging and food products to clearly indicate two areas (labelling of packaging and labelling of packaged food products).
- Supplement the framework with issues relating to nutrition claims.
- Supplement the framework with knowledge of how to hedge against commodity price fluctuations with financial instruments.
- Supplement the framework with issues relating to the logistics of the finished product (storage, movement within the plant, shipping to the recipient), including knowledge of conditions, logistics and transport regulations.
- Supplement the framework with knowledge of the chemical properties of food ingredients (raw materials).
- Add competences relating to the elaboration and statistical analysis of test results (knowledge of basic methods, knowledge of advanced methods).
- Consider adding competences relating to sensory (organoleptic) testing.
- Supplement the framework with knowledge of the principles of nutrition, the impact of nutrition on human beings/human health, nutritional needs in scientific terms.
- Include an assessment of aptitude for conducting sensory evaluations.
- Consider whether the skills of ensuring the efficiency of food processing procedures are sufficiently covered in the SQF (analysing bottlenecks, optimizing processes).
- Is the ability to anticipate risks and implement preventive measures included in quality assurance?
- Competences relating to sustainability are lacking (knowledge of the product life cycle, comprehensive product approach, environmental footprint).
- Clarify the name of the “research” competence series in the QUALITY AND SAFETY determinant so that it is not confused with the “consumer research” series.
- Is the SQF linked to the improvement of language skills and knowledge of at least one foreign language (e.g., English) in the area of professional terminology?

- Is the issue of the proper selection and adequate preparation of food packaging included in the framework?
- Does the SQF contain references to standardized quality and safety management systems for food and packaging?
- The possible lack of competences in process or system auditing should be verified.
- Analyse and eventually rewrite the packaging series.
- Add competences: definitions, functions, classifications and basic concepts of packaging used in the food industry, types and properties of packaging materials used for direct and indirect food packaging, structural forms of unit and transport packaging, quality control of packaging and ancillary components (based on documentation, visual assessment, test results), rules on the safety of using materials for direct contact with food, including test methods and evaluation, supporting documentation, standardized test methods for packaging and materials, principles of the selection and design of packaging in the environmental, social and economic areas, trends in the area of new packaging materials and innovations in the area of food packaging, principles of storage and transportation of packaging materials and packaging elements, including labels and closures, methods of identifying materials, accessory elements and packaging.
- Consider grouping competences by the typical processes performed in a food processing plant.
- Consider sequencing competences for specific areas of the sector's activities.

2.5.3. Stage III – preparing the final version of SQF FP and guidelines on its implementation and use by stakeholders

In the final stage of work on the Sectoral Qualifications Framework for Food Processing, a concluding seminar was held for representatives of the sector, during which the final draft of the FP sectoral framework was presented.

The following materials, among others, were prepared during the work:

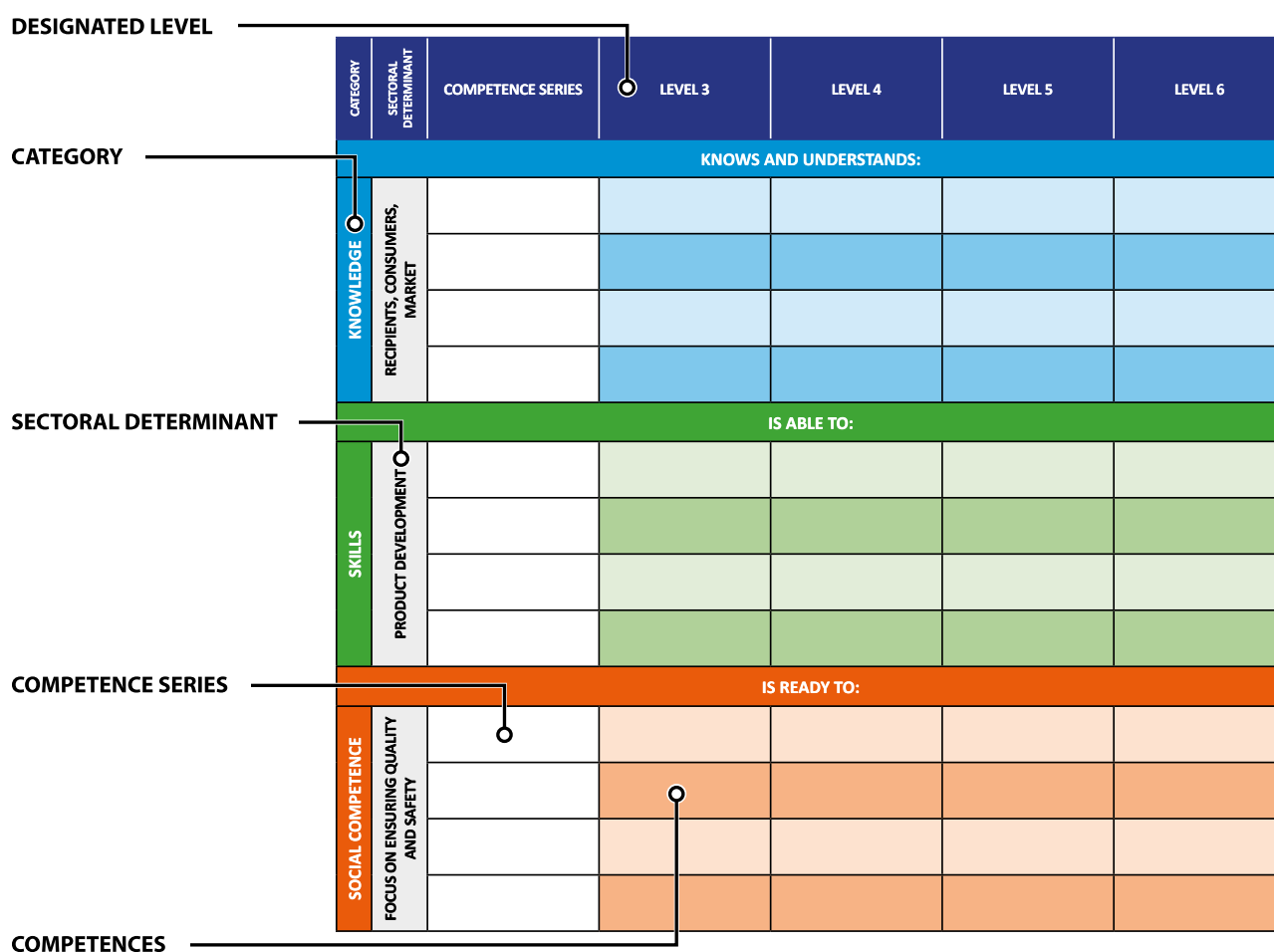
- a proposed Sectoral Qualifications Framework for Food Processing, reviewed by the industry community,
- a table of correspondence between the SQF FP entries and the second stage PQF level descriptors typical for vocational qualifications,
- a glossary of terms used in SQF FP.

3. Construction of the Sectoral Qualifications Framework for Food Processing

3.1. Structure of SQF FP

The Sectoral Qualifications Framework for Food Processing is a set of competences categorized by knowledge, skills and social competence, organised by their level of complexity. Individual competence areas are clustered in sectoral determinants, made up of rows of competence series describing the simplest to the most complex and complicated competences across the horizontal row, in accordance with their assigned framework level. The elements of the SQF FP construction are shown in Figure 2:

Figure 2. Structure of the Sectoral Qualifications Framework for Food Processing



Source: own elaboration.

3.2. Level descriptors

The Sectoral Qualifications Framework for Food Processing is a structured set of key and specific competences used in the processes of food processing. The identified competences correspond to levels 2 through 8 of the Polish Qualifications Framework. The entries are assigned to their corresponding sectoral determinants and form competence series.

According to the premises of the Integrated Qualifications System, level descriptors:

- are relevant to the specificity of the food processing sector, taking into account the key groups of competences and the most important qualifications used in the sector,
- are an elaboration of PQF descriptors and are able to be referenced in qualifications,
- are formulated in the language of learning outcomes in the areas of knowledge, skills and social competence.

3.3. Sectoral determinants

The final wording of the sectoral determinants in the categories of knowledge, skills and social competence was formulated as follows:

KNOWLEDGE:

- recipients, consumers, market
- raw materials, food products, packaging, waste
- tools, methods, processes
- quality and safety

Recipients, consumers, market – The determinant includes a description of competences relating to knowledge of: consumer needs, dietary patterns, consumer research, the food market, suppliers and customers, rules of food marketing, activities in the food sector.

Raw materials, food products, packaging, waste – The determinant describes competences concerning the properties of food, food products, properties and principles of using raw materials in food products, availability and cost of obtaining raw materials, handling raw materials, packaging used for food, methods of handling waste generated in food processing.

Tools, methods, processes – The determinant describes competences relating to the knowledge of: methods and technologies used in food processing, processes and unit operations in food processing, physical transformations, biological processes and chemical

reactions occurring in food processing, principles of operating machinery, equipment and production lines used in food processing, methods of estimating and optimizing the efficiency of food processing.

Quality and safety – The determinant describes competences relating to: the quality of raw materials and food products, methods of quality testing in food processing, methods of ensuring food safety in processing and process safety, methods of risk analysis, knowledge of supervisory procedures and the tasks and powers of food processing supervisory institutions.

SKILLS:

- product development
- process planning
- process implementation
- quality and safety assurance

Product development – The determinant describes skills relating to: analysing food market trends, creating food product concepts, selecting raw materials, selecting food production technology, analysing nutritional values, designing the ways of packaging food products.

Process planning – The determinant describes the skills of: determining the volume of food production, ensuring the supply of raw materials for food production, planning the disposal of food products, resource planning and cost analysis in food processing at the home and industrial scale, selecting tools, machinery and equipment for food production, risk analysis and ensuring the continuity of the food production process, planning the management of food production waste and by-products, developing documentation.

Process implementation – The determinant includes a description of the skills for: manual food processing operations, operating tools, machinery and equipment, maintaining cleanliness and disinfection, monitoring food processing, using documentation.

Quality and safety assurance – The determinant describes skills relating to: testing the quality of raw materials and food products, ensuring the safety of food packaging, certification of food products, analysis of food safety risks, counteracting food safety risks.

SOCIAL COMPETENCE:

- focus on ensuring quality and safety
- focus on consumers' needs
- focus on the environment

Focus on ensuring quality and safety – The determinant describes the social competence of being ready to: take care to ensure the quality of food products, maintain and improve the level of food safety and hygiene, maintain and improve the level of the safety of people, property and the environment, ensure the reliability of the food processing process.

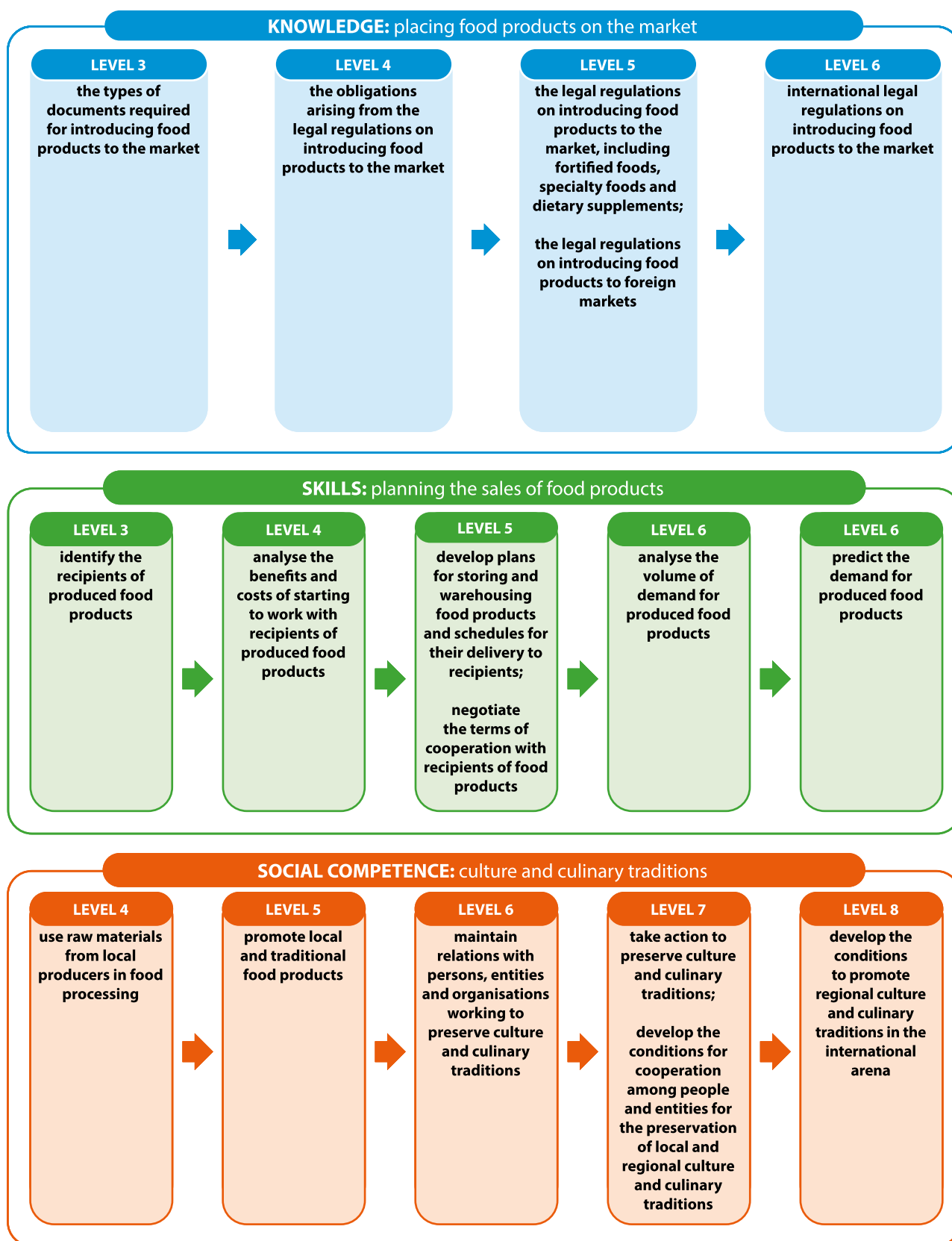
Focus on consumer needs – The determinant describes the social competence of being ready to: take into account the needs and expectations of consumers, promote the idea of healthy eating, the concept of sustainable development, including the conscious purchase of food products.

Focus on the environment – The determinant describes the social competence of being ready to: collaborate with other actors in the food sector, promote the idea of the social responsibility of food processors, preserve diversity and culinary culture, participate in shaping food policy.

3.4. Competence series

SQF FP groups the competences of the sectoral determinants into series, which are sets of thematically-related competences forming a logical sequence of entries of increasing complexity. Competences belonging to a single series are presented in the same row in the framework, making it possible to trace the increase in the requirements. Examples of competence series are shown below (Figure 3).

Figure 3. Examples of SQF FP competence series



Source: own elaboration.

Arranging the competence descriptions that make up the SQF FP level descriptors into series and determinants makes the framework easier to use and ensures its utility and functionality.

3.5. Glossary of terms used in the Sectoral Qualifications Framework for Food Processing

In order to make the food processing qualifications framework a functional and useful tool for potential users, the competence descriptors have been formulated in a synthesized manner with the use of industry-specific language. A glossary of the most commonly used terms in SQF FP, including definitions of the various terms formulated for the framework, is a helpful addition to facilitate its understanding and use.

Term	Definition
RECIPIENT	an entity (natural or legal person) purchasing food products as finished or semi-finished products
CONSUMER	the final user of a food product who does not use that product in a food-related operation or business
FOOD PRODUCTS	substances or products, whether processed, partially processed or unprocessed, intended or expected to be consumed by humans, including fortified foods, foods for special medical purposes and dietary supplements
RAW MATERIALS	substances or products, including flavourings, food additives, food enzymes used in the manufacture or preparation of a given food product and still present in it, even if their form has changed
NUTRIENTS	substances supplied to the body by food, e.g., water, protein, carbohydrates, fats, minerals, vitamins, fibre
FOOD PROCESSING	a sequence of operations and unit processes occurring in a specific time sequence, starting from the selection and receipt of raw materials to obtaining the finished food product; food processing includes the selection and receipt of raw materials, its preparation for production (e.g., grinding, mixing, etc.), production in accordance with a specific technology, including preservation, packaging and storage
DIETARY PATTERNS	a concept covering all diets, cuisines, traditions, trends, food cultures

4. Recommendations for implementing and using the SQF in the food processing industry

The Sectoral Qualifications Framework for Food Processing is a functional tool that has a number of applications within the Integrated Qualifications System, as well as in areas of interest to employers and employees. Among the many benefits for the industry resulting from the development and implementation of the framework are easier identification of key competence areas as well as a better alignment of qualifications, education and training programmes with the labour market. In turn, at the level of a single entity operating in a given industry, an SQF can serve as a tool to support competence development in an organisation. Whether the Sectoral Qualifications Framework for Food Processing will be used in practice depends on the involvement of stakeholders in the industry and the implementation of activities for its promotion among employers, industry organisations, educational institutions and representatives of central and local government.

During the work of the expert team as well as during the consultations, a number of recommendations were made on the implementation, development and use of the Sectoral Qualifications Framework for Food Processing. Representatives of the sector highlighted that the involvement of the central administration, especially the ministry responsible for the food processing sector, in promoting the SQF FP will strengthen opportunities for its use.

Possible uses of SQF FP by education stakeholders

SQF FP can be used by education stakeholders to:

- design training courses and curricula in formal and non-formal education institutions tailored to the specific and current needs of entrepreneurs, reflected in the SQF FP level descriptors (in formulating learning outcomes in line with current trends and requirements),
- design forms of short training based on SQF FP, complementing specific skills in particular areas (seminars, webinars, podcasts, mini-courses),
- design new qualifications in the food processing sector (create sets of competences that can be the basis for developing learning outcomes for qualifications),
- design training programmes specifically for the attainment, for example, of market, sectoral or craft qualifications in the food processing sector.

Possible uses of SQF FP by employers (entrepreneurs)

SQF FP can be used by employers (entrepreneurs) to:

- identify key competences for individual jobs,
- develop sets of competences that are requirements for a particular job or necessary to perform specific tasks (job descriptions, job instructions),
- develop a path for employee development and employee evaluation (training plan, evaluation, audit and verification of employee competences),
- formulate job recruitment offers by using the competence descriptions in SQF FP (formulation of requirements for job offers and recruitment tests),
- develop internship and apprenticeship plans,
- create job descriptions defining the knowledge, skills and social competences needed to perform specific tasks.

Possible uses of SQF FP by employees and job seekers

SQF FP can be used by employees and job seekers to:

- identify gaps in knowledge, skills and social competence (self-diagnosis of one's competences),
- plan an individual career path (identify areas for professional development, identify qualifications at higher levels leading to promotion),
- precisely understand the requirements formulated in job recruitment advertisements,
- become informed about professional opportunities in the sector.

The expert team stated the Sector Skills Council for the Quality Food Sector has a key role in the implementation and promotion of the SQF FP, as the natural initiator and "owner" of the developed framework.

An important task for the Sector Skills Council, which brings together the industry community, educational institutions and representatives of public administration, is to disseminate the tool in the context of the possibilities for its use to companies, schools, training providers and labour market entities. The goal of these activities should be to promote the use of SQF FP as a tool that can significantly support personnel and training processes in enterprises.

5. Instructions for using SQF FP

The proposed SQF FP is a structured set of competence descriptions specific and key to the food processing sector, described in the categories of knowledge, skills and social competences. These competence descriptions are systematized thematically and arranged by the complexity and difficulty of the requirements.

Searching for competences in SQF FP

Step 1. Check the scope of SQF FP

The scope of SQF FP indicates the main competence areas in the food processing sector that emerged from the analysis of key processes and tasks in the industry. By analysing the very definition of the sector: *the processing of raw materials into products for direct or indirect human consumption*, we are able to determine whether the competence we are looking for is included in this sectoral qualifications framework. The principles for the development of sectoral qualifications frameworks indicate that only sector-specific competences should be included in a given sector's framework (in this case, SQF FP). If a given competence is not found among those described in SQF FP, it should be assumed that it has already been described in one of the other sectoral qualifications frameworks developed so far, for example in the SQF for Agriculture, for the Chemical Industry, for Trade, or for Waste Management.

Step 2. Determine the category of the competence

As envisaged by the IQS, the competences included in sectoral qualifications frameworks are divided into three categories: **KNOWLEDGE (knows and understands)**, **SKILLS (is able to)** and **SOCIAL COMPETENCE (is ready to)**. When looking for a specific competence, it is necessary to determine its assigned category.

In the Sectoral Qualifications Framework for Food Processing, as in the other sectoral frameworks developed so far, the same colour coding has been used as in the Polish Qualifications Framework. The following colours correspond to the above categories: knowledge – blue, skills – green, social competence – orange.

Step 3. Choose the sectoral determinant

The sectoral determinants organise competences into thematic areas identified in the sector. The description of the determinants makes it easier to quickly find the competences being sought, grouped into categories describing knowledge, skills and social competence. The sectoral determinants identified for the SQF FP and their descriptions are presented in Chapter 3.

Step 4. Select the competence series

Competences within the sectoral determinants are grouped into competence series. A competence series is a set of descriptions of competences that are thematically related and form a logical sequence of entries that increase in terms of the complexity and difficulty of their requirements. Competences belonging to one series are always in the same row, making it possible to trace the progression of requirements. Each series in SQF FP is named, indicating the thematic scope of the competences. Their names are included in the framework's structure to facilitate the search for competences.

Step 5. Look for the competence

Competence series consist of competence descriptions organised by individual PQF levels. The SQF FP competences are described in accordance with levels 2–8 of the Polish Qualifications Framework. However, individual series may not contain descriptions of competences at all these levels. When a particular level in a series does not contain a competence description, it means that key competences for the sector, which could be assigned to that level, have not been identified or transversal competences¹ may apply.

Step 6. Further define the competence

The specific nature of the food processing sector, characterised by the variety of produced food products, has contributed to the formulation of level descriptors at a general level to reflect the competence requirements for the sector as a whole. Therefore, they need to be made more specific in order to use them, for example, to write a job description, prepare a training programme or develop a qualification description. The following is an example of how a competence description can be written more precisely.

Table 3. Example of how to further define an SQF FP descriptor in the category of skills

SQF FP descriptor	Example of defining it more precisely
(is able to) perform manual activities requiring the use of high manual dexterity, precision or artistry in food processing (e.g., gutting, filleting, decorating)	decorate confectionery products

Source: Own elaboration.

To prepare an entire set of competences, repeat the above steps until a complete set is obtained. Importantly, a single set of competences can contain descriptions of competences from different determinants and series, as well as those not included in the framework and even

¹ For more information on transversal competences, see <https://www.transvalproject.eu/>

those corresponding to different SQF and PQF levels. The glossary of terms used in the Sectoral Qualifications Framework for Food Processing can also be helpful in developing such a set.

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Part II
The Sectoral Qualifications Framework
for Food Processing

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	RECIPIENTS, CONSUMERS, MARKET	consumers' needs		the groups of food product consumers, including groups with special nutritional needs	consumer expectations in terms of food quality, its availability, form, compliance with trends	the social, cultural, regional, geographic and climatic conditions affecting nutritional needs, expectations and tastes; the impact of aesthetic, visual, aromatic, and other values on consumers' perception of food products	the socio-economic phenomena shaping trends in consumer food consumption behaviours		
		nutritional needs			the nutritional needs of individual consumer groups, including the caloric values of food products, nutrient content, etc.	the physiological processes occurring in the human body that relate to nutrition; the influence of diet on the functioning of the human body			
		dietary patterns		the types of dietary patterns, including types of diets (e.g., gluten-free, vegetarian, vegan), types of cuisine (e.g., molecular, fusion, national, regional cuisines, those specific to various social and religious groups)	the specificity of dietary patterns, such as the principles of food composition, methods of selecting and combining ingredients, specific dishes and characteristic spices	the regulations and cultural norms defining dietary patterns	the socio-economic phenomena shaping trends in dietary patterns	the trends in dietary patterns	
		suppliers and recipients	the types of recipients of food products (e.g., wholesalers, shops, restaurants, processors, individual recipients); the types of raw material suppliers	the principles of cooperation with suppliers of raw materials and recipients of food products	the expectations of recipients of food products, e.g., in terms of the properties of these products, the way they are packaged				

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWLEDGE	RECIPIENTS, CONSUMERS, MARKET	consumer research		the sources of data on the needs, expectations and behaviours of consumers as well as the trends relating to food consumption behaviours	the principles of conducting consumer tests and consumer preference research				
		food market	the basic concepts relating to the food market (e.g., recipients, consumers, food, supply of food, demand for food, market segments)	the types of data and parameters describing the condition of the food market; the sources of data on the food market and the entities operating in it	the factors affecting food market dynamics, including food costs, prices, supply and demand; the specificity of the functioning of local food markets	the methods of researching the phenomena occurring in the food market; the phenomena occurring in the domestic food market	the mechanisms shaping the course of phenomena in the food market and its dynamics; the phenomena, relations and connections occurring in international food markets		
		placing food products on the market		the types of documents required for introducing food products to the market	the obligations arising from the legal regulations on introducing food products to the market	the legal regulations on introducing food products to the market, including fortified foods, specialty foods and dietary supplements; the legal regulations on introducing food products to foreign markets	international legal regulations on introducing food products to the market		

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	RECIPIENTS, CONSUMERS, MARKET	activities in the sector	the types of entities operating in the field of food processing, including those processing food, associating food processors, regulating and supervising activities in the food processing sector	the tasks of entities operating in the field of food processing, including those processing food, associating food processors, regulating and supervising activities in the food processing sector; the requirements for people performing food processing tasks, e.g., current tests, certificates, training	the principles of establishing producer groups, cooperatives, etc. and their functioning; the requirements for operating a food processing business in a home environment; the possibilities of raising funds to operate and develop food processing activities	the legal regulations on operating a food processing business; the requirements for conducting food processing activities on an industrial scale; the financial instruments for hedging against the price fluctuations of raw materials	the opportunities to participate in shaping national food policies; the market and non-market food policy instruments supporting food producers	the opportunities to participate in shaping international food policies	
		sustainable development		the life cycle of food products (LCA – life cycle assessment)	the principles of conducting the processes of food processing in accordance with the concept of sustainable development	the impact of food processing on the natural environment; the benefits of conducting the processes of food processing in accordance with the concept of sustainable development	the conditions for conducting the processes of food processing in accordance with the concept of sustainable development		
	RAW MATERIALS, FOOD PRODUCTS, PACKAGING, WASTE	properties of food	the concepts concerning the parameters characterising raw materials and food products (e.g., energy value, glycaemic index); the types of food products (for direct consumption, long-life, special purpose, etc.)	the types of nutrients, including micronutrients and macronutrients; the methods for measuring and calculating the nutritional value of food products	the properties of nutrients and their importance in nutrition; the nutritional values of raw materials and food products	the impact of nutrients contained in food on the human body			

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	RAW MATERIALS, FOOD PRODUCTS, PACKAGING, WASTE	properties of raw materials		the types of raw materials used in food processing, including the types of raw materials containing allergens	the physicochemical properties of the raw materials used in food processing; the principles of using raw materials in food products	the chemical composition of the raw materials used in food processing; the properties of the chemical substances found in the raw materials; the impact of specific raw materials on the properties of food products, including taste, appearance, texture, shelf life	the course of the chemical reactions as well as the physical and biological processes occurring between the ingredients of food products		
		availability of raw materials		the sources of raw materials; the availability of raw materials resulting, for example, from the geographical diversity of their occurrence, seasonality	the factors affecting the availability of raw materials	the possibility of using raw material substitutes in the processes of food processing; the methods of forecasting the availability of raw materials; national legal regulations on the acquisition and use of raw materials in food processing	international legal regulations on the acquisition, cross-border movement and use of raw materials in food processing		
		handling raw materials	the procedures and instructions for handling raw materials	the principles of handling raw materials; the conditions for storing, warehousing and transporting raw materials; the principles of preparing raw materials for the production process; the principles of ensuring the traceability of raw materials	the good practices of handling raw materials				

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	RAW MATERIALS, FOOD PRODUCTS, PACKAGING, WASTE	costs of obtaining raw materials		the components of raw material acquisition costs	the methods of calculating the costs of obtaining raw materials; the factors affecting the prices of raw materials and the costs of their acquisition, e.g., seasonality, weather, competitive environment, economic situation	the methods of the short-term and long-term forecasting of changes in the prices of raw materials and the costs of their acquisition	the theories explaining the impact of external factors on the current and future prices of raw materials and the costs of their acquisition	the global trends shaping the prices of raw materials and the costs of their acquisition in the country and in the world	
		information on food products		the types of information required on food labels; the types of nutrition and health claims; the data sources containing information on nutrition and health claims	the requirements for ensuring the traceability and labelling of food products; the principles of using nutrition and health claims and other messages and information addressed to the consumers of food products; the procedures for obtaining the authorization to provide new nutrition and health claims	the legal regulations on nutrition and health claims and food product labelling			
		handling food products			the requirements for storing, moving within the facility, transporting and warehousing food products	national legal regulations on transporting food products	international legal regulations on the cross-border movement of food products		

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	RAW MATERIALS, FOOD PRODUCTS, PACKAGING, WASTE	packaging	the concepts relating to the packaging used for food products; the types of markings indicating that the packaging may be used in contact with food	the types and structural forms of unit and transport packaging for food products; the principles of preparing and ensuring the traceability of food packaging	the properties of the materials used for direct and indirect food packaging; the good practices in assessing the condition of food packaging; the requirements for the condition of food packaging; the principles of selecting packaging in accordance with the type of food product, warehousing method and transport; the requirements for storing, moving within the facility, transporting and warehousing food packaging	the legal regulations on using food product packaging	the impact of the type of packaging on the properties of a food product; the principles of designing packaging for food products, taking into account environmental, social and economic aspects as well as the principles of sustainable development	the trends in the packaging materials used to package food products	
		waste		the types of waste generated in food processing	the principles of handling the waste generated in the processes of food processing	the legal regulations specifying the method of managing the waste generated in food processing	the principles of designing the processes of food processing, taking into account the assumptions of the circular economy	the trends in reusing the waste generated in food processing; the trends in waste-free food production and the circular economy	

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	TOOLS, METHODS, PROCESSES	methods and technologies used in food processing		the stages of food processing; the types of methods and technologies used in food processing	standard and other frequently used methods and technologies for preparing the raw materials for production as well as for processing, preserving and packaging food products	non-standard methods and technologies used to prepare raw materials for production as well as for processing, preserving and packaging food products; the selection criteria for food processing methods and technologies	the principles of designing food processing technologies; the determinants for using food processing methods and technologies	the directions of development in the methods and technologies used to prepare raw materials for the production, processing, preservation and packaging of food products	the latest methods and technologies used to prepare raw materials for the production, processing, preservation and packaging of food products
		processes and unit operations used in food processing		the types of processes and unit operations used in food processing; the parameters describing the processes and unit operations used in food processing	the course and methods of implementing the processes and unit operations used in food processing	the factors affecting the course of the processes and unit operations used in food processing; the conditions for implementing the processes and unit operations used in food processing	the impact of the processes and unit operations used in food processing on the properties of raw materials and food		
		physical transformations occurring in food processing		the types of physical transformations occurring in food processing	the course of the physical transformations occurring in food processing	the factors influencing the course of the physical changes occurring in food processing			

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWLEDGE	TOOLS, METHODS, PROCESSES	chemical reactions, biological processes occurring in food processing			the types of chemical reactions and biological processes occurring in food processing	the factors affecting the course of the chemical reactions and biological processes occurring in food processing; the methods of preventing adverse chemical reactions and biological processes from occurring in food processing	the course of the chemical reactions and biological processes occurring in food processing		
		machines, devices and production lines		the purpose of the machines and equipment used in food processing	the operating parameters of machines and devices; the principles of operating and using the tools, machines and devices used in food processing in a home environment	the principles of selecting the machines, devices and production lines for the technological processes used in food processing; the principles of operating and using the tools, machines, devices and production lines used in food processing on an industrial scale	the solutions available in the market of machines, devices and production lines used in food processing	the directions of development of the machines, devices and production lines used in food processing, in particular relating to process automation, the use of artificial intelligence (AI), the Internet of Things (IoT)	the latest solutions in the field of the machines, devices and production lines used in the processes of food processing based on technologies using artificial intelligence (AI), the Internet of Things (IoT)
		efficiency of the food processing process		the types of production factors required for the processes of food processing; the costs and availability of the production factors required for the processes of food processing	the demand for the production factors in the processes of food processing; the conditions affecting the costs and availability of production factors	the conditions affecting the efficiency of the processes of food processing; the possibility of using alternative production factors in food processing	the methods of optimising the consumption of production factors in the processes of food processing, taking into account the principles of the circular economy; the methods of optimising the efficiency of the processes of food processing		

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	QUALITY AND SAFETY	quality of raw materials and food products	the procedures and instructions for the quality control of raw materials and food products	the certificates confirming the quality and origin of raw materials and food products, including those indicating their specific characteristics or origin (e.g., eco, bio, organic, regional, traditional, fair trade)	the parameters describing the quality of raw materials and food products; the criteria for assessing the quality of raw materials and food products	the quality requirements for raw materials and food products, including those resulting from certificates confirming their quality and origin; the legal regulations and standards specifying the requirements for raw materials and food products, including fortified foods, specialty foods and dietary supplements	the determinants affecting the quality and properties of plant raw materials intended for food production (e.g., climatic conditions, type of cultivation); the conditions affecting the quality and properties of animal raw materials intended for food production (e.g., type of breeding and husbandry management); the conditions affecting the quality of food products		
		testing the properties of raw materials, food products and packaging	the principles of collecting, securing, labelling, storing and transporting samples of raw materials, food products and packaging for testing	the methods of the organoleptic assessment of the properties of raw materials, food products and packaging; the principles of preparing samples of raw materials and food products for testing; the types of instruments, control and measuring tools used in the process of food processing and the principles of their operation	the laboratory methods for testing the properties of raw materials, food products and packaging; the types of laboratory instruments and apparatus used in food processing and the principles of their operation; the requirements for laboratories performing tests on raw materials and food products	the legal regulations specifying the requirements for laboratories performing tests on raw materials and food products			

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
			KNOWS AND UNDERSTANDS:						
KNOWLEDGE	QUALITY AND SAFETY	food safety during processing	work station instructions on the safety and hygiene of food processing	food processing safety and hygiene procedures; the principles of developing a book of good hygiene practices and a book of good manufacturing practices; the principles of documenting activities and tasks performed to ensure food safety and hygiene in the process of food processing	the principles of implementing mandatory and voluntary food safety and quality assurance systems, e.g., HACCP, GHP, GMP, ISO 9000, QACP systems; the principles of conducting the process of food processing in accordance with mandatory and voluntary food safety and quality assurance systems, e.g., HACCP, GHP, GMP, ISO 9000, QACP	the legal regulations and standards specifying the requirements for the safety and hygiene of food processing			
		process safety	the personal protective equipment ensuring safety in the processes of food processing; the types of control activities conducted in the workplace and the principles of their performance and documentation	the collective protection measures ensuring safety in the processes of food processing; the principles and procedures for applying basic measures to ensure safety in the performance of professional tasks and in emergency situations occurring in the processes of food processing; the principles of performing and documenting control activities in the processes of food processing	the principles of selecting measures to limit the risk of emergency situations occurring; the protection of machines and devices in the event of a failure or disturbance in work	the principles of designing measures limiting the risk of emergency situations occurring; complex safety systems for machines and devices	the principles of designing process safety systems in food processing	the directions of development of systems for ensuring process safety in food processing	the latest solutions and technologies for ensuring process safety in food processing

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
KNOWS AND UNDERSTANDS:									
KNOWLEDGE	QUALITY AND SAFETY	risk analysis		<p>the types of threats to people, property and the environment occurring in the processes of food processing;</p> <p>the types of threats to food safety and hygiene in food processing</p>	<p>the factors and situations influencing the possibility of threats occurring to people, property and the environment in the processes of food processing;</p> <p>the factors and situations influencing the possibility of threats occurring to food safety and hygiene</p>	<p>risk analysis methods for food processing</p>			
		audits		<p>the types of audits performed on conducting the processes of food processing (e.g., external audits performed by recipients, audits of suppliers, internal audits)</p>	<p>the principles of performing various types of audits on conducting the processes of food processing</p>	<p>the legal regulations for performing audits on conducting the processes of food processing</p>			
		supervisory institutions	<p>the types of institutions and entities supervising and monitoring the processes of food processing</p>	<p>the tasks, scope of responsibility, powers of institutions and entities supervising and monitoring the processes of food processing</p>	<p>the principles and procedures of cooperating with institutions supervising food processing activities;</p> <p>the principles and procedures of supervising the processes of food processing by entities and institutions designated for this purpose</p>	<p>the legal regulations on supervising the processes of food processing by entities and institutions designated for this purpose</p>			

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
SKILLS	PRODUCT DEVELOPMENT	analysing trends in the food market		search for information (e.g., in reports, industry publications, websites, etc.) on dietary preferences as well as consumer needs and expectations in relation to food products	track changes in dietary preferences as well as consumer needs and expectations in relation to food products	analyse dietary preferences as well as consumer needs and expectations in relation to food products; plan the scope of consumer research and testing	identify trends influencing dietary preferences as well as consumer needs and expectations in relation to food products; predict dietary preferences as well as consumer needs and expectations in relation to food products	forecast trends influencing dietary preferences as well as consumer needs and expectations in relation to food products	
		developing concepts of food products			adapt existing recipes to changes resulting from, among others, technological changes, availability of raw materials; specify the methods of using, storing and transporting a food product; determine the dates relating to the suitability of a food product for consumption, based on, among others, the results of laboratory tests; develop the characteristics of a food product	develop concepts for modifying existing food products in connection with, among others, technological changes, availability of raw materials, changes in dietary preferences as well as consumer needs and expectations; develop recipes for typical food products	develop recipes for innovative food products	develop concepts of innovative food products in accordance with the preferences, needs and expectations of consumers and the assumptions relating to, for example, available technology, budget	

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
			IS ABLE TO:						
SKILLS	PRODUCT DEVELOPMENT	selecting raw materials		calculate the amount of raw materials necessary to produce a food product	indicate substitutes for raw materials used in the processes of producing food products	select raw materials to produce a food product; determine the parameters of the raw materials necessary to produce a food product			
		selecting production technology			specify the parameters of storing, warehousing and transporting food products as well as the raw materials and semi-finished products being processed	select the processes and unit operations in the production processes of typical food products; determine the sequence and parameters of processes and unit operations for typical food products	select the processes and unit operations for producing non-routine or innovative food products; specify the sequence, parameters of processes and unit operations for non-routine or innovative food products	modify technologies for the production of food products; forecast the directions of development of food production technology	develop new technologies for the production of food products
		analysing nutritional values	read and understand information about the nutritional value of raw materials and food products	calculate the nutritional value of raw materials and food products	perform laboratory tests to determine the nutritional value of raw materials and food products				
		developing information about food products		search registers for relevant nutrition and health claims for a given food product	develop symbols and information to be placed on the label of a food product; develop instructions for the consumer on how to use and store the food product	analyse food products in terms of the possibility of using nutrition and health claims			

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
SKILLS	PRODUCT DEVELOPMENT	designing methods of packaging food products			select the packaging for food products	analyse solutions for packaging food products in terms of, e.g., their functionality, the possibility of using them for packaging specific food products, ensuring the safety and durability of a food product, economic effectiveness, environmental footprint	formulate guidelines for modifying and designing the packaging of food products		
	PROCESS PLANNING	determining production volume			make calculations resulting from changes in production volume	determine production volume on the basis of data	analyse technological, organisational and economic limitations affecting the possibility of changing production volume		
		ensuring the supply of raw materials		identify suppliers of raw materials	choose suppliers of raw materials	develop schedules for the supply of raw materials for the processes of food processing; negotiate the terms of cooperation with suppliers of raw materials	analyse market and socio-economic conditions in terms of the availability of the raw materials used in food processing	predict the availability of raw materials used in food processing	
		planning the sales of food products		identify the recipients of produced food products	analyse the benefits and costs of starting to work with recipients of produced food products	develop plans for storing and warehousing food products and schedules for their delivery to recipients; negotiate the terms of cooperation with recipients of food products	analyse the volume of demand for produced food products	predict the demand for produced food products	

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
IS ABLE TO:									
SKILLS	PROCESS PLANNING	planning the resources and analysing the costs of food processing in a home environment		indicate the resources necessary to produce food products in a home environment	determine the resources, including their type and quantity, necessary to produce food products in a home environment; estimate the costs of obtaining the raw materials and other resources necessary to produce food products in a home environment; calculate the costs of producing food products that are processed in a home environment	analyse the profitability of producing food products in a home environment; optimise the use of the raw materials and other resources necessary to produce food products in a home environment			
		planning the resources and analysing the costs of food processing on an industrial scale		indicate the resources necessary to produce food products on an industrial scale; convert the proportions of raw materials from a sample of a food product to a production scale	calculate the costs of producing food products that are processed on an industrial scale, including quality costs	determine the resources, including their type and quantity, necessary to produce food products on an industrial scale; analyse the current and future costs of obtaining raw materials and other resources necessary to produce food products on an industrial scale	analyse the profitability of producing food products on an industrial scale; optimise the use of raw materials and other resources necessary to produce food products on an industrial scale, taking into account the principles of the circular economy		

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
SKILLS	PROCESS PLANNING	diagnosing the needs for competences and assessing the predispositions of people performing tasks in food processing			judge whether people have the predispositions to perform an organoleptic assessment	update and develop one's own competences necessary to perform professional tasks in the processes of food processing; analyse the competence requirements for people and teams performing professional tasks in the processes of food processing	analyse the opportunities of employees to develop the competences necessary to perform professional tasks in the processes of food processing		
		selecting tools, machines and devices		select the tools for performing food processing tasks	select the machinery and devices for performing processes of food processing at home	select the machines and devices for performing processes of food processing on an industrial scale; follow the technological developments pertaining to the tools, machines and devices used in food processing	design technological lines and production lines in a food processing facility	modify process lines and production lines using production automation systems and solutions based on new technologies, e.g., artificial intelligence (AI), Internet of Things (IoT)	
		ensuring process continuity and analysing risk				develop production schedules; analyse the technological process in terms of its smooth operation, e.g., identify bottlenecks, indicate factors that threaten process continuity; select measures to reduce the risk of disrupting the continuity of the process of food processing	analyse the conditions that may affect the continuity of the process of food processing		

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
IS ABLE TO:									
SKILLS:	PROCESS PLANNING	planning the management of waste and by-products		read and understand the procedures and workplace instructions on how to handle waste and by-products of food processing	select the methods of handling the waste and by-products of the processes of food processing; develop instructions for handling the waste and by-products of food processing	plan the reuse of the waste and by-products of food processing, taking into account the principles of the circular economy			
		preparing documentation			develop the work station instructions and procedures used in the processes of food processing; develop guidelines on quality standards and criteria for assessing the quality of raw materials and food products	develop and verify the technical and technological documentation of the processes of food processing			
	PROCESS IMPLEMENTATION	performing manual activities	perform simple manual activities in food processing (e.g., sorting, thawing, washing)	perform moderately complex manual activities in food processing (e.g., cutting, measuring raw materials, packaging)	perform manual activities requiring the use of high manual dexterity, precision or artistry in food processing (e.g., gutting, filleting, decorating)				

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
			IS ABLE TO:						
SKILLS	PROCESS IMPLEMENTATION	operating tools, machines and devices	use the hand tools and power tools utilised in food processing	perform simple activities relating to the operation of machines and devices used in the processes of food processing (e.g., preparation for work, start-up, adjustment, setting parameters in accordance with instructions, refilling feeders, switching off, securing the machine/ device after finishing work); recognise irregularities in the operation of machines, devices and production lines	perform tasks relating to the operation of machines, technological lines and production lines used in the processes of food processing under routine conditions (preparation for work, start-up, adjustment, setting parameters in accordance with instructions, monitoring parameters, switching off, maintenance and securing after work)	perform tasks relating to the operation of machines, technological lines and production lines under variable and not fully predictable conditions (monitoring the operation of the machine, correcting parameters depending on the course of the process)	program computer-controlled machines and production lines	modify and optimise the software controlling the operation of machines and production lines	
		maintaining cleanliness and disinfecting	perform activities relating to washing and disinfecting the tools used in the processes of food processing	perform activities relating to washing and disinfecting the machines, devices and surroundings in which the processes of food processing are performed	develop a schedule for washing and disinfecting the machines, devices and surroundings in which the processes of food processing are performed	select the methods and chemicals for cleaning and disinfecting the tools, machines, devices and surroundings in which the processes of food processing are performed			
		monitoring processes of food processing		conduct control activities relating to the tasks being performed at the work station and solve emerging problems	monitor the way activities are performed at the work station; identify irregularities in the way activities are performed at the work station and introduce remedial actions; monitor production losses and estimate the costs	monitor the course of the process of food processing; identify irregularities in the processes of food processing; modify the parameters of the process of food processing (e.g., time, temperature, amount and type of raw materials) during the process and depending on its course	analyse the impact of external factors and irregularities occurring in the processes of food processing on their course and outcomes	optimise the course of the process of food processing, taking into account, among other things, resource availability, raw material parameters, technological limitations	

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
SKILLS	PROCESS IMPLEMENTATION	using documentation	read and understand information from the operating instructions of tools, machines and devices as well as the work station instructions necessary to perform tasks in the processes of food processing	read and understand information from the specifications of raw materials regarding, e.g., properties, origin, quality, production system, nutritional values; use the technical and technological documentation of the processes of food processing	document activities performed in the processes of food processing				
	QUALITY ASSURANCE AND SAFETY	assessing the quality of raw materials and food products	identify defects in raw materials and food products based on an organoleptic assessment	analyse compliance of the taste, aroma and visual qualities as well as the physical properties of raw materials and food products with a specific model based on an organoleptic assessment collect, label, secure and prepare samples of raw materials and food products for storage, transport and testing	perform laboratory tests of the properties of raw materials and food products	analyse the results of tests on the properties of raw materials and food products in terms of their compliance with specific standards; develop plans for testing the quality of raw materials and food products in the processes of food processing	interpret the results of research and analyses on the properties of raw materials and food products		
		ensuring the safety of food product packaging	identify defects and damage to packaging used for packing food products based on an organoleptic assessment	prepare samples of packaging for purity tests	test the microbiological purity of the packaging used for packing food products; monitor the warehousing conditions of packaging that affects its quality				

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
IS ABLE TO:									
SKILLS	QUALITY ASSURANCE AND SAFETY	certification of food products			<p>assess the compliance of a food product and its production process with the requirements of a given certification</p>	<p>analyse the properties and production process of a food product in terms of the possibility of obtaining a certificate confirming, for example, its quality, origin or production standards; formulate recommendations for modifying the recipe or technological process in order to meet the requirements necessary for certification confirming, for example, the quality, origin or production standards of a food product</p>	<p>develop the requirements necessary for the certification confirming, e.g., the quality, origin, production standards of food products</p>		
		analysing threats to food safety		<p>assess the conditions of the transport and storage of food products that impact their quality</p>	<p>identify exceedances of critical parameter values indicating the occurrence of threats to food safety</p>	<p>identify potential food safety threats: microbiological, biological, chemical and physical; estimate the probability of threats occurring to food safety; develop documentation relating to the analysis of threats to food safety</p>	<p>assess the significance of the impact of a given threat to consumer health</p>	<p>develop a comprehensive risk analysis for the processes of food processing</p>	

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
			IS ABLE TO:						
SKILLS	QUALITY ASSURANCE AND SAFETY	counteracting threats to food safety			<p>determine the critical control points in food processing and the tolerance limits for the process parameters;</p> <p>conduct instruction and training on the professional tasks performed in the processes of food processing;</p> <p>document control activities in the processes of food processing</p>	<p>select the methods of counteracting the occurrence of threats to food safety;</p> <p>select the procedures and means of control in the processes of food processing;</p> <p>develop procedures and instructions to ensure food safety during its processing</p>	develop plans for food safety inspections in a food processing facility	develop and optimise food safety systems in a food processing facility	
		IS READY TO:							
SOCIAL COMPETENCE	FOCUS ON ENSURING QUALITY AND SAFETY	quality of food products	follow instructions on the quality assessment of raw materials and food products; comply with the recommendations resulting from the recipes of food products	act in accordance with the regulations relating to the professional tasks performed in the processes of food processing	take responsibility for the impact of how professional tasks are performed on the quality of food products	search for new ideas for recipes for food products, taking into account good practices in ensuring the high quality of produced food products	disseminate good practices on ensuring the high quality of produced food products	require persons and entities operating in and on behalf of the food processing sector to apply the principles ensuring the high quality of food products	develop models of action ensuring the delivery of high quality food to consumers
		food safety and hygiene	act in accordance with work station instructions, regulations and procedures that ensure hygiene and food safety in the processes of food processing	act in accordance with the requirements for maintaining food safety and hygiene resulting from standards and legal regulations	control the quality of performed tasks to ensure food safety and hygiene	take responsibility for the safety and hygiene of food products supplied to consumers	disseminate good practices on ensuring food safety and hygiene	require associates and subordinates to comply with the principles ensuring food safety and hygiene in the processes of food processing; initiate actions to improve food safety and hygiene in the processes of food processing	develop models of action ensuring food safety and hygiene

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
			IS READY TO:						
SOCIAL COMPETENCE	FOCUS ON ENSURING QUALITY AND SAFETY	safety of people, property and the environment	act in accordance with work station instructions, regulations and procedures that define the safety principles in the processes of food processing	comply with the regulations on safety in food processing	take responsibility for the safe performance of the tasks being performed and the operation of the work on machines and devices	take responsibility for the safety of people, property and the environment in the processes of food processing	make decisions in the event of irregularities and disturbances in the course of processes of food processing that may pose a threat to the safety of people, property and the environment	make decisions in emergency situations posing a threat to the safety of people, property and the environment	
		reliability	control the quality of one's own work; take care of entrusted tools, machines and devices and take into account the impact of the way equipment is handled on its durability and correct functioning	take into account the impact of the way one conducts activities on the quality, timeliness and safety of the professional tasks being performed by oneself and the team in which one works	take into account the impact of the way professional tasks are performed on the quality, effectiveness and safety of the processes of food processing; observe professional secrecy, especially in maintaining the secrecy of food product recipes				
		technological progress			perform work in an automated environment and adapt to changes resulting from technological progress	search for new technological and organisational solutions in food processing			
	FOCUS ON CONSUMER NEEDS	consumer needs and expectations		take into account the expectations and needs of consumers when designing and producing food products	take into account the economic effects of not adapting food products to the expectations and needs of consumers	take into account the economic and social consequences of providing consumers with food products of insufficient quality and not adapted to their expectations and needs	promote an attitude of openness in the industry community to the expectations and needs of consumers	require others to take into account the needs and expectations of consumers when designing and producing food products	

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
SOCIAL COMPETENCE	FOCUS ON CONSUMER NEEDS	healthy eating				take into account the impact of food products on consumer health; promote the principles of healthy eating among consumers	support the activities of institutions and organisations promoting healthy eating habits	take steps to improve consumers' healthy eating habits	
		conscious purchase of food products		provide consumers with reliable information about the properties of food products, e.g., nutritional values, composition, origin of raw materials	inform consumers about the importance of labels confirming the high quality of food products	promote the principles of the conscious purchase of food products among consumers (e.g., not wasting food, analysing the information on labels)	shape attitudes among consumers on choosing high quality food products that are in line with recognised values (e.g., organic products, fair trade products)		
	FOCUS ON THE ENVIRONMENT	cooperation in the sector			communicate with suppliers of raw materials and recipients of food products	maintain relations with suppliers of raw materials and recipients of food products	maintain relations with organisations associating persons and entities operating in and on behalf of the food processing sector	develop and shape the conditions for cooperation among the people and entities operating in and on behalf of the food processing sector, including establishing and developing cooperation as part of industrial symbiosis	develop and shape the conditions for establishing international cooperation with organisations and entities operating on behalf of the food processing sector
		social responsibility			use raw materials from sustainable crops, produced in accordance with the idea of fair trade, no cruelty, etc.; design and conduct processes of food processing in accordance with the principles of sustainable development, fair trade, no cruelty, etc.	promote the use of raw materials from sustainable crops, produced in accordance with the idea of fair trade, no cruelty, etc. in the industry community; promote the use of environmentally friendly packaging in the industry, including recycled and recyclable packaging	promote the principles of sustainable development, the circular economy, fair trade, no cruelty, etc. in the industry community	take action to increase the awareness of food processors, producers of raw materials and packaging about sustainable development, the circular economy, fair trade, no cruelty, etc.	develop models of conduct in the field of sustainable food production, including the application of fair trade principles, the circular economy, etc.

CATEGORY	SECTORAL DETERMINANT	COMPETENCE SERIES	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
IS READY TO:									
SOCIAL COMPETENCE	FOCUS ON THE ENVIRONMENT	culture and culinary traditions			use raw materials from local producers in food processing	promote local and traditional food products	maintain relations with persons, entities and organisations working to preserve culture and culinary traditions	take action to preserve culture and culinary traditions; develop the conditions for cooperation among people and entities for the preservation of local and regional culture and culinary traditions	develop the conditions to promote regional culture and culinary traditions in the international arena
		shaping food policy					engage in activities to shape legislative solutions and strategies for the food processing sector	develop the conditions for cooperation among people and entities to shape national legislative solutions and build national strategies for the development of the food processing sector	develop the conditions for cooperation among people and entities to shape international strategies and legislative solutions in the field of food processing