NEW VERSION OF FSSC 22000 VERSION 4.1
VECTORS OF DEVELOPMENT IN FOOD SAFETY MANAGEMENT SYSTEMS
SGS OVERVIEW OF NEW REQUIREMENTS OF FSSC 22000 VERSION 4.1

In popular certification schemes that are approved by GFSI (Global Initiative for Food Safety), there are ongoing major changes in the control aspects of the food production and supply chain. Therefore, SGS suggest with all specialists who work in the food chain, will discuss and understand what key, vital changes have occurred in the FSSC 22000 version 4.1 scheme? What steps need to be taken by specialists for implementation of innovations?

In July 2017, the holders of the FSSC 22000 (Food Safety System Certification) scheme published the new version 4.1, which reflected the most important vectors in the development of food safety management systems and risk management in the modern food business. According to the news published on the FSSC 22000 website in July 2017, the new version 4.1 of the FSSC 22000 standard was approved only 7 months after the approval of version 4.

The main difference in the additional requirements of FSSC 22000 version 4.0 and 4.1

The main difference between two version is that two requirements have been removed, namely "Supervision of personnel" and "Management of supplied materials".

Exclusion of the requirement of Supervision of personnel in the application of food safety principles as an additional requirement is understandable. All food chain operators fulfill this requirement in accordance with ISO 22000:2005, cause 6.2.2.

In addition, in technical specifications, for example, in ISO / TS 22002-1, "Prerequisite programs for food safety - Part 1: Food manufacturing", detailed requirements are described in section 13 to ensure the correct application of food safety principles are implemented by the personnel.

In addition, the implementation of the principles of food hygiene by the staff in view of its high importance should be documented, for example, in the Policy of personal behavior and personnel hygiene, cause 13.

The next requirement, which is eliminated due to duplication, concerns the management of purchased materials. The
requirements for the management of the supplied materials are included in all the documented technical specifications of ISO / TS series 22002 as one of the important pre-condition for the implementation of prerequisite programs.

For example, in ISO / TS 22002-1, "Prerequisite programs for food safety - Part 1: Food manufacturing", the requirements of the procurement and input control of materials are described in cause 9.

**Time for implementation of the requirements of FSSC 22000 version 4.1**

First of all, we need take into consideration the fact that these requirements must be met by all food chain operators who are certified or planning to carry out certification according to FSSC 22000 scheme since January 01, 2018.

Enterprises that have certificates under previous versions FSSC 22000 scheme (3.2 or 4.0) should transfer to new requirements during the next surveillance audit after the announced date of January 01, 2018.

Certification or re-certification process after January 01, 2018 are carried out by certification bodies only under FSSC 22000 version 4.1.

**Additional requirements of FSSC 22000 version 4.1**

The approved FSSC 22000 scheme includes:

- the requirements for a food safety management system in the production and supply chain, set out in the ISO 22000 standard
- requirements for prerequisite programs for a particular food sector, as set out in the standards series ISO / TS 22002, and
- additional requirements.

The scheme FSSC 22000 version 4.1 includes **nine additional requirements** for food chain operators, which can be divided into two groups:

- **common** - for all participants without exception and
- **special** - implementation of which applies only for specific food industries.

**The common additional requirements** for food chain operators now include the following:

- Management of Services;
- Product Labeling;
- Food Defence;
- Prevention of Food Fraud;
- Use of the FSSC 22000 logo;
- Management of Allergens.

**Special additional requirements** for specific operators of the food chain now include the following:

- Environmental monitoring (for categories C, I and K only),
- Formulation of products (for category DII only, for domestic animals - feed for dogs and cats);
- Management of natural resources (for category A only, for animal farm).

We suggest in this publication to consider some practical aspects of fulfilling additional requirements, which are fully described in FSSC 22000 Part II: Requirements for Certification (Section 2 - Requirements for certification).

**Additional requirements of FSSC 22000 version 4.1**

**“Management of Services”**

No one doubts that today food chain operators use the services of companies that, for example, are involved in pest control, washing clothes for employees, preparing food for staff and so on. Therefore, the risk-based approach of the FSSC 22000 scheme provides for organizations to be sensitive to the possible impact of such kind of services directly on food safety. In other words, in an organization that fulfills the requirements of the FSSC 22000 scheme, effective approaches to the management of services that affect food security must be implemented.

For implementation of these requirements food chain operators should **identify and document the specified norms and parameters** for services and regularly review them to ensure relevance.

This step is quite logical and very similar to how all food chain operators set requirements for raw materials, ingredients, packaging materials in the specifications.

These could be specific safety and quality indicators that help food chain operators to agree on certain parameters and acceptable levels.

We also provide the same approach in describing the requirements for services that we need in the food safety management system.

The most difficult and the most correct in this description is to find clear and specific requirements that could later be able for **monitoring and verifying process** (and preferably measuring).

In this case, the food safety team (or the HACCP group, as it is often called) could describe each of the services with the involvement of the specialists of these companies in order to establish objectively and accurately the characteristics in line with **level of impact on food safety** and to ensure the permanent status of the service provider approval.

All used services are managed in accordance with the requirements described in the technical specifications of prerequisite schemes.
programs. These minimum hygiene requirements are developed for various industries and links in the food chain.

For example, if we are considering a service for the transportation and storage of raw materials or finished products, food chain operators could and should use the requirements NTA 8059:2016 ‘Prerequisite programmes on food safety for transport and storage’.

When providing catering services to employees, the organization should implement ISO/TS 22002-2:2013 Prerequisite programmes on food safety – Part 2: Catering.

When implementing this additional requirement, FSSC 22000 operators should consider and describe at least utilities (e.g/ water supply), transportation and storage, maintenance, sanitation and any other outsourcing services.

Quite often, food chain operators could not easily decide this task and as a result, the description of services or specifications is very general, not reflecting specific requirements that could be measured and / or verified in future.

The author of this article personally suggest to specialists use the “Japanese Method 5M” during description of requirements for services. In other words, when describing the service please try to take into account the following aspects, which are reflected in Figure 3.

The HACCP group is invited, when describing services and establishing criteria, to consider the following minimum list: Material, Machine, Method, Man, Management.

Let's review and discuss each of the above proposed components for reflection in the description of the requirements for services. Firstly, we consider the requirement for the used materials and give some examples for establishing criteria.

MATERIAL
We will describe the requirements for materials that could be used during the provision of services, operators could specify the requirement of regulatory documents and norms.

We could clearly regulate prohibited preparations, materials that could not be used.

Documents (Sanitary and Hygienic Conclusions, MSDS, Certificates of Conformity, Test Reports, Permission to use in a specific food industry, etc.).

The second not less important item is the definition of requirements in the specification for equipment, ancillary equipment and other similar items that belong to the group machine-equipment and will give practical examples.

EQUIPMENT
We will describe the requirements for brands or types of equipment that could be used during the provision of the service.

We could specify the requirement for spare parts, the accuracy of the measuring instruments used and so on.

We could clearly regulate the necessary marking and zones, where possible restrictions for use.

Periodicity of performance of maintenance or repair work.

The next aspect in describing of the requirements in the specification could be the methods of performing the work in the provision of services, the possible technologies used that belong to the group methods (the technologies used), and give examples.

METHOD
We should describe the technologies used, for example, the method of cleaning or sanitizing equipment or premises.

If you need a detailed description in the form of regulations, you could make a reference to the document, which will be a binding application to the contract or specification.

We should clearly regulate the availability of licenses for services, if this is required by law.

It is necessary to stipulate the methods of carrying out work to provide services, taking into account the current legislation.

For example, a service for the removal and processing of waste or potentially hazardous products should include either a reference to existing laws and regulations.

The next very important and rather difficult for description is the definition of requirements in the specification for personnel (man), which should implement and implement the service to the food chain operator. Establishing criteria for the personnel of the company providing services could be very variable.

PERSONNEL
We could describe the criteria for working experience, education or the availability of diplomas, or certificates of special training. It is possible to pass the training or courses according to the regulations and requirements of the enterprise-customer of this service.

If necessary, describe in detail the requirements for hygiene of personnel, the availability of medical commission evidence, work clothes, the permission of access to different zones, etc.

We clearly regulate the legal requirements for the personnel rendering services, if this is established. For example, a certificate of a person's mental health (if he deals with dangerous substances or poisons). Sometimes companies establish for the employees of companies on pest control the availability of a documentary evidence of the absence of a criminal background.

Let's consider one more requirements – management of
the services, i.e. the order of management and control of the service. These requirements determine the order of monitoring, verification (in other words - periodic verification of results), validation of control measures.

**MANAGEMENT**

We could describe the Monitoring Plan with the established frequency and control parameters.

If there is a need for validation procedures, we could set the order of validation.

For example, for sanitation and treatment procedures, a company could present a validation method and its frequency.

Perhaps, we are developing a check-list with the requirements for verifying the prerequisite programs used.

We could set the indicator, which will be the rating level (sufficient or not satisfactory) for this service in our Food Safety Management System.

An important element of effective management is well-established communication between the two parties, therefore it is quite logical to review and document in the specification the mandatory frequency of assessing satisfaction, developing corrective actions or the possibility of improvement.

In some cases, it is possible to establish the requirement for mandatory audit or other forms of conformity assessment by the customer's specialists or the existence of a quality management system or food safety.

The requirement for service management is not completely new in the FSSC 22000 scheme. Food industry operators already have clear ideas of how it can be performed. Additional examples of practical approaches will only improve the management system.

It is important that the established criteria for each service assist by the food safety team with a comprehensive assessment of the significance of risks or threats in terms of the likelihood and severity of the consequences. As a rule, all these evaluation data need to be documented (for example, in the assessment report) and, if necessary, timely revised requirements.

In version 4.1 of the FSSC 22000 scheme, the requirements for laboratories which food chain operators conduct food safety testing are classified as services. Few manufacturers independently monitor food safety indicators, such as for example the level of heavy elements, pesticides, microbiological indicators as Listeria monocytogenes, Staphylococcus aureus and so on.

When food chain operators implement management of testing services, an important aspect is ensuring the reliability of test results for those indicators that are critical for food safety testing.

It's no secret that repeated tests, if necessary, carried out by food manufacturers, always require additional resources, i.e. time, money and sometimes people.

Therefore, food chain operators should use the services of competent laboratories that are able to produce accurate and reproducible test results using proven test methods and best practices.

The best practice in the world is that laboratories or testing centers undergo accreditation procedures in accordance with international standards, such as ISO 17025. An alternative possibility to confirm the competence of laboratories is, for example, successful participation in training testing programs. The only condition for such an alternative is the ability to demonstrate that this training program is designed and conducted by truly competent organizations.

**Additional requirements of FSSC 22000 version «Environmental monitoring»**

This requirement of FSSC 22000 version 4.1 does not apply to all participants in the food chain. The following operators should develop and implement measures for environmental monitoring:

1. Category C (processing of perishable animal products, processing of perishable plant products, processing of perishable animal and plant products (mixed products) and processing of ambient stable products);

2. Category I (production of food packaging and packaging material);

3. Category K (production of (bio)chemicals)

The new version of FSSC 22000 includes the requirement to provide the food market operator with an environmental monitoring program aimed at verifying the effectiveness of sanitation and sanitation programs and ensuring that it meets the verification requirements described in ISO 22000.

The good news for all categories of food operators is that if you have a well-implemented preliminary program that verifies the effectiveness of cleaning and sanitizing, and effectively validates, verifies and improves the food safety system (see section 8 of ISO 22000: 2005), you do not need to worry about additional actions to fulfill this requirement.

In the next publication, we will consider absolutely new requirements concerning food fraud and discuss about the best practice of management of allergens.