

Understanding key stakeholders' roles, needs and capacities through Net-Mapping

Gabriela Degen

Abstract

Net-Mapping is a participatory social network method which can be used to conduct a capacity and needs assessment. It invites participants to engage with key issues on a deeper level while considering the experiences of different stakeholder groups within a given network or system. This paper concentrates on the process of implementing the Net-Mapping method in the context of Tunisia's Food Safety System (FSS). From the design, its implementation and the analytical steps that were taken, it is recommended to conduct the Net-Mapping method with various homogeneous group of participants, to provide ample time for discussions, to formulate specific research questions in advance, and to remain flexible and curious in the process. This method invites dialogue in an inquisitive and engaging manner to identifying the needs and capacities in a network or system, while navigating different political agendas of key stakeholders. When knowledge is power, then communication is key.



Introduction

A needs and capacities assessment seeks to understand the stakeholder landscape of a network or a system. It entails several elements, such as identification of the key actors, their roles, their capacities, needs, and their forms of interactions. This first step allows the formulation of specific recommendations for a more robust Tunisia's Food Safety System (FSS). These recommendations were one of the tasks of the SLE joint international research team who conducted a mixed methods research approach to unpack questions regarding the food safety system (FSS) in Tunisia (September – November 2021).

Based on the projects' research inquiry to conduct a stakeholder analysis, the Net-Mapping method, sometimes also referred to as Venn Diagram (Pretty et. al, 1995), was used to conduct a capacity needs assessment (FAO, 2021). This participatory method is useful as it enables various key stakeholders to dive deeper and discuss challenges to address. Put-

SLE method briefs are created from the practical experiences of our alumni in their interdisciplinary research projects. Lessons learned and good practices are compiled. In each brief, we present the method that is explained clearly, step by step, and with the help of practical examples. With its method briefs, the SLE aims to support researchers and practitioners who are active in solution-oriented and transformative international development work by providing insights into hands-on methods in a structured manner, so that the wheel does not always have to be reinvented.

The Centre for Rural Development (SLE) is affiliated with the Albrecht Daniel Thaer-Institute for Agricultural and Horticultural Sciences in the Faculty of Life Sciences at the Humboldt-Universität zu Berlin. Its work concentrates on four branches: international cooperation for sustainable development as a post-master degree course, training courses for international leaders and experts in the field of international cooperation, research on sustainability issues, and advisory services for universities and organisations.

The views and opinions expressed in this brief are those of the authors and do not necessarily reflect the official position of the SLE.

ting things on paper, mapping, and visualising systems and/or processes allows to develop solutions. Thus, the research team and the participants were able to gain a deeper understanding of the different actors responsible for ensuring food safety from farm to fork in Tunisia.

This paper briefly describes the Net-Mapping method, with its implementation steps and its general advantages and challenges experienced by the research team in Tunisia. The design, and administration was done in close coordination with the Ministry of Public Health, the National Authority for Food Safety (INSSPA) and the National Agency of Sanitary and Environmental Control of Products (ANCSEP), respectively referred to as Tunisian partners throughout this paper. It concludes by summarizing good practices and lessons learned.

Method

The Net-Mapping method was developed as a participatory dialogue tool for the public sector to ensure a better understanding of the actors in a given system (Schiffer, 2007). Ideally, this method brings a rather homogenous group of participants physically together to map out their ways of working, to share experiences, their challenges and discuss solutions. This exercise of dialogue is combined with a mapping tool to visualise the discussion. It allowed the participants to better understand who is involved, when, in which part of the food supply chain – upstream, midstream, and downstream. By understanding the stakeholder landscape – their capacities and needs – along with their daily interactions and those during an food safety emergency response, Net-Mapping allowed us to discover present gaps within the food safety system.

From the perspective that knowledge is power, and that various public sector stakeholders are involved in managing a FSS, the main challenge was the low willingness to accept our own gaps and to accept better strategies of other sectors for the sake of food safety. In general, addressing gaps within a governance system might create communication blockades. In this situation, obtaining information from an internal exercise may be easier to accept by the partners involved. In Tunisia, two main agencies need to navigate two institutional agendas with the same goal – ensuring food safety for Tunisia's population. While one primary institution is mandated to ensure the application of the FSS law, another key institution is responsible for ensuring vital scientific farm-to-fork information is communicated as

efficiently and effectively as possible. By using the Net-Mapping method in a participative way that encourages open and honest sharing of information, we allowed key stakeholders to disclose information that would not have been mentioned in a formal interview (The World Bank Group, 2016a).

Additionally, Net-Mapping allows participants to expand their network as well as to strengthen existing connections, as it brings key actors closer together by allowing them to address issues within their own system. Therefore, the Net-Mapping method was a well-suited method to facilitate a homogenous public sector group who is not in direct physical or virtual contact but needs to work closely together to ensure food safety for the population.

Implementation, data collection and data handling

Design: steps and guiding questions

A Net-Mapping guide with different steps was developed (Schiffer, 2007; The World Bank Group, 2016b) with a set of guiding questions tailored to understand the functions, interactions, and levels of coordination between the different actors (see Annex 1). The guide was discussed, adapted, and agreed with inputs from the Tunisian partners. The guide consisted of the following three steps:

1. Participants identify the actors they believe play a role in the FSS sector using circles of different colours.
2. Participants identify the links between actors and how they interact with each other during day-to-day activities by drawing green lines between them.
3. Participants identify the links between actors during an emergency response, by using red lines. For the last two steps, the participants mapped the current situation, but also discuss how communication should be organized in a near future.

The workshop concluded with written feedback from the participants. In addition to suggestions for improvement, participants had the opportunity to give anonymous feedback on specific points that were not covered during the workshop due to time constraints, but also to express any other viewpoints they were not able to openly share. To test the method and the questions, a pilot workshop was organized. This was used strategically to build trust and

confidence with the Tunisian partners.

Implementation: workshop moderation and Net-Map generation

In total, four workshops were held in the capital Tunis with 65 participants from different food supply chain actors. It was a great turnout to have representatives from all over Tunisia participate: from various regions such as Medenine, Jendouba, Kasserine, Gafsa, Sfax, Sousse, Gabes and Tunis. To facilitate the exchange in each group, the participants were subdivided into two groups for the creation of the maps. Thus, a total of 7 maps were generated, including one by the Tunisian partners highlighting the desired approach.

The four Net-Mapping workshops took place over four consecutive days, each of them being a half-day workshop. Each workshop was restricted to a maximum of 20 participants to comply with COVID-19 rules. To enable a rich exchange, participants were then subdivided again into two groups of 10 to map out their networks. This smaller number also ensured that each participant has more opportunities to share their views (Schiffer, 2007). Thus, a total of seven maps were generated, which also included the map the Tunisian partners developed together.

The discussions during the four workshops made it clear that communication between all stakeholders is an essential aspect that needs to be improved. Not only was there a need to have more reliable science-based information, to improve the content of communication, but there is also a need to improve the way in which food safety issues are communicated – in terms of style, easy to understand language even for illiterate food sellers, and timeliness.

Administration: participant selection and sampling

Participants for the Net-Mapping workshops were selected by purposive sampling, a widely used technique in qualitative research for identifying and selecting information-rich cases to make the most efficient use of limited resources (Patton, 2015). It involves identifying and selecting individuals or groups of individuals who are particularly knowledgeable or experienced on a topic of interest (Creswell & Plano Clark, 2011).

The research team obtained a list of relevant FSS stakeholders from the Tunisian partners, which was then used to cluster four homogenous groups, for four separate workshops. The final selection of the participants was also done in agreement with the Tunisian partners.

As the Tunisian partners were going through a transitory phase of restructuring, the workshop was a moment that marked their authority and responsibility as duty bearers to lead the process. Therefore, prior to the workshops, they sent out invitation letters to all institutions, which included a description of the expected participant profile.

As a result, almost one third (68%) of the participants had long-standing experiences in the food safety sector of more than eleven years. Thanks to their specialist knowledge the four groups obtained very diverse results. Therefore, each map was unique in its connections and linkages. Even the maps of the subgroups in the homogeneous group of the same workshops differed considerably from each other. This observation reflects the diversity of perspectives on the FSS in Tunisia. This is revealing of the tight-knit interactions participants have based on their role, responsibility, and capacities, while at the same time exposing the challenges and needs. It could be said that the Tunisian FSS is presently more based on personal interactions than systems

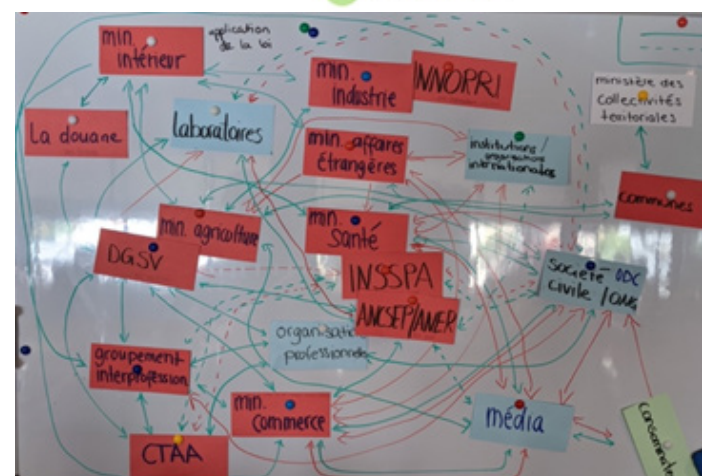
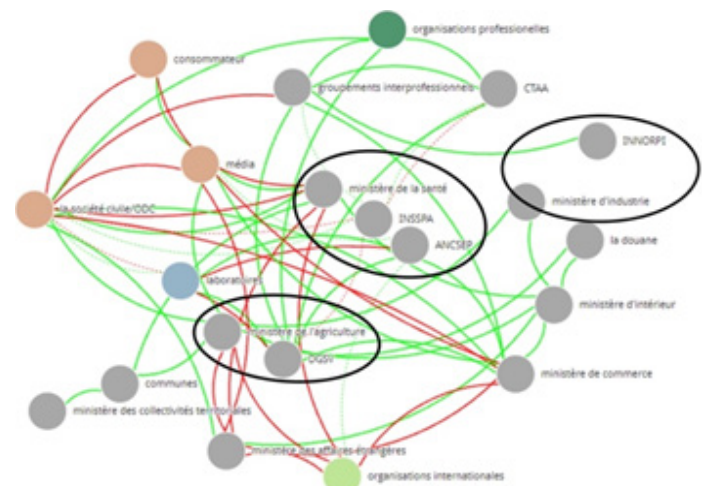


Figure 1: Net-Map created during the third workshop by trade and industrial enterprises (left) and the digital representation (right) (Source: photo by Lena Gomer, network created with Datamuse network mapping software, developed by Datamuse LLC)

with officially endorsed guidelines and structures.

Generally, the FSS network system is quite complex. Figure 1 illustrates one of the netmaps, in this case that of Group 3. The complexity is clearly visible through the multiple links between the different actors. Streamlining and standardizing the surveillance and monitoring processes to ensure food safety was the main aim of Tunisians law that came into force in 2019. Due to the complexity and differences of the maps, the software Datamuse was used to juxtapose, compare, and analyze the different maps after the findings from the maps were validated.

Data analysis

To analyze and visualize the results of the Net-Mapping workshops, we used the Datamuse network mapping software, developed by Datamuse LLC. Photos were taken of each map after the workshop – participants used metaplan cards of different colors to visualize the network – after which the research team transferred this metaplan card map in an excel sheet, before uploading it onto Datamuse for visualization (as per software guide and instructions). This qualitative analysis also included some quantitative elements, such as the comparison of the number of links between the different actors. For example, for participants in Group 3 as illustrated in figure 1 above, the most connected actors were civil society and the media. This is represented by the number of green lines, illustrating the general day to day scenario. While for the other actors, the media and consumers only played a role in emergencies - as represented by the red lines - here these actors were central and had the most connections.

During expert interviews, the team members took notes on all the answers with a focus on key words. These key words were added into a previously prepared form that included already the findings from the Net-Mapping workshop.

The objective of this preparatory step was to filter out the appropriate key words from the workshop's conversation to validate. Interviewees' answers were then pre-sorted according to the four categories of the index before being transferred to the MaxQDA software (Release 20.14.1, VERBI GmbH Berlin) for qualitative content analysis.

Based on the findings from expert interviews, new key themes were identified and validated. The results of this thematic analysis were then used as primary codes for further analysis.

Validating findings with semi-structured interviews

To validate the findings from the Net-Mapping workshop, key informants were identified from the same group from the respective workshop for a semi-structured interview or focus group discussions. This choice sampling was applied for a richer qualitative analysis and to make the best use of available resources (Etikan, 2016).

The Net-Mapping workshops were followed by semi-structured expert interviews. For this purpose, an interview guide was developed in advance based on a FSS index which was developed in this study. This guide contained all the questions for public sector actors and allowed for the exploration of opinions and views of a national FSS. The guide was structured by the four index items (see Annex 2) and contained a total of 39 questions designed to enable open discussions and to dive deeper into certain topics.

The interview guide was further developed and adapted with the Tunisian partners. The research team also conducted a pre-test interview (or pre-test interviews) to try out the order and wording of the questions. By doing so, the team became more familiar with the context and culture (Green & Thoroughgood, 2018).

The research team confirmed the availability of the selected participants at the end of each Net-Mapping workshop, which helped to organize and schedule interviews. In total, 51 interviews were conducted with key experts and representatives from regulatory institutions, each lasting approximately 90 minutes. The interviews took place, where possible, at the interviewee's workplace and were conducted by two members of the research team. The range of interviewees included people from decision-making level, such as directors, managers, and statutory officers, to the operational level, such as inspectors. Depending on the participants, the interview guide was adapted and shortened where needed. The index categories used in the interview guide facilitated this process.

Limitations

It is important to take into consideration that representing the complexity of networks in a single map is a time-consuming activity. Many participants also pointed out in their feedback forms that they would have liked to have more time for these activities. The maps therefore do not have the tendency to be exhaustive, but rather representative of the various

participant's views. They are always and only limited to the views of those who participated in the workshops. The maps collected at the end of the sessions did reveal that there are many different perspectives on the current system in Tunisia, and thus serve as snapshots of a system. Given the diversity of the stakeholders, it was not possible to come up with one single map. The overarching links did not represent stark similarities to merge into one single map.

On another level, it is also worth mentioning that while participants were able to reveal the actual links they and their colleagues engage with daily, those links did not entirely match the presupposed links and communication flows mentioned in Tunisia's legal texts governing the food safety system. Regulatory or administrative references were neither represented in the maps nor suggested, as the new Law had not been widely circulated. Therefore, a more strategic engagement with stakeholders would be a great added value for the future application of legal texts.

In general, the Net-Mapping workshops have supported the research to identifying the challenges in communication in the current interactions. The results were a good a valid base for the follow-up interviews with the experts to better understand the needs and capacities of key actors.

Conclusion: Good practices and lessons learned

When actors with different expertise and interests, yet with a common professional duty and responsibility come together, in this case – ensuring safety for consumers' food and animals' feed – the participatory Net-Mapping method exposes challenges and opportunities in stakeholder interactions. From experiences collected during the four Net-Mapping workshops, good practices were the following: a well-prepared workshop programme with guiding questions, flexibility, and curiosity to facilitate the process, which allow stakeholders to interact to better understand their organisational cultures and contexts. Facilitating a participatory Net-Mapping exercise with 10 participants required a lot of energy for the research team, even when facilitating in pairs. Conducting this participatory research approach required to flexibility in terms of adapting to participants requests and suggestions as well as remaining curious to the discussions.

When working with government officials, it is not

always clear sailing when navigating different agendas in uncharted waters. Therefore, obtaining insiders' perspective from key informants and experts is vital. While the research team did not understand the full discourses of the situation, they were fully aware that they were playing a small part in the process of bringing institutions closer. In this sense, the Net-Mapping was a great method tool in bringing different stakeholders with similar roles and responsibilities to dive deeper to discuss known and unknown challenges, in a non-critical manner.

When visualizing network systems and/or processes, the method allowed for the discovery interactions and gaps in communication to be revealed. Through the Net-Mapping method, the research team was able to gain a deeper understanding of the roles and linkages of different actors responsible for ensuring food safety from farm to fork in Tunisia. As dialogues evolve, so too do solutions from the group themselves start to emerge.

Literature

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Los Angeles: SAGE Publications.

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1. <https://doi.org/10.11648/j.ajtas.20160501.11>

FAO. (2021). *Global capacity needs assessment methodology*. In *Global capacity needs assessment methodology*. <https://doi.org/10.4060/cb2069en>
Green, J. & Thorogood, N. (2018). *Qualitative methods for health research*. SAGE

Patton, M. Q. (2015). *Qualitative research & evaluation methods*. In SAGE Publications, Inc. (4th ed.). Los Angeles: SAGE.

Pretty, N. J., Guijt, I., Thompson, J., & Scoones, I. (1995). *Participatory Learning & Action – A Trainers Guide*. The International Institute for Environment and Development (IIED).

Schiffer, E. (2007). *Net-Map toolbox. Influence Mapping of Social Networks*.

The World Bank Group. (2016a). *Public-Private Dialogue (PPD) Stakeholder Mapping Toolkit. A practical guide for stakeholder analysis in Public-Private Dialogue using the Net-Map method*. Retrieved from www.wbginvestmentclimate.org

The World Bank Group. (2016b). *Public-Private Dialogue (PPD) Stakeholder Mapping Toolkit. A practical guide for stakeholder analysis in Public-Private Dialogue using the Net-Map method*.

Centre for Rural Development (SLE)

Hessische St. 1-2 & Robert-Koch-Platz 4
10115 Berlin
Telephone: +49 (0)30 2093-46890
Fax: +49 (0)30 2093-46891
Email: sle.agrar@hu-berlin.de

Annexe 1 Net-Mapping Guide

First part of the workshop: Identification of stakeholders	
Approach	<ul style="list-style-type: none"> ● Participants propose actors and the team writes the names on cards ● The cards are pinned to the flip whiteboard.
Key questions	<ul style="list-style-type: none"> ● Who are the actors who play a role in the management of food safety at the institutional level? What for? <i>If the roles are not very clear (reference to the 2019 FAO report): How do you understand the responsibilities and their distribution?</i> ● Select! ● Which actors do you miss? Add actors!
Specific questions	<ul style="list-style-type: none"> ● Is there cooperation with the actors mentioned? Do you work together and if so in what aspects? ● Who do you think is the main actor/landmark/contact? ● Who is responsible for <ol style="list-style-type: none"> (0) registration and authorization (1) control, (2) inspection and surveillance, and (3) food sampling throughout the supply chain, from fork to fork? Who monitors imports? ● Who are the institutions responsible for the four dimensions (surveillance, inspection, public institutions, international bodies, etc.) ● Who is responsible for risk assessment, risk communication, risk management?
Part II of the workshop: Creating links	
Approach	<ul style="list-style-type: none"> ● Participants discuss the relationships between stakeholders in a daily situation and an alert case ● The team visualizes the links with different colored arrows ● Communication in a daily situation is visualized in green ● Communication in the event of an alert is displayed in red ● If there is communication in one direction, the arrow has a head. ● If there is a mutual exchange, the two-headed arrow.
Key questions	<p>a) Daily activities</p> <ul style="list-style-type: none"> ● Who communicates or exchanges information with whom in a normal situation (daily activities)? ● Based on your experience of the current state, what do you think could be improved in the future with regard to communication in an everyday situation? <p>b) In the event of an emergency</p> <ul style="list-style-type: none"> ● Who communicates or exchanges information with whom in an alert case? ● Based on your experience of the current state, what do you think could be improved in the future with regard to communication in an alert case?
Specific questions	<p>a) Daily activities</p> <ul style="list-style-type: none"> ● Perhaps you can specify: Who is to contact in a normal situation? Is there regular exchange of information? Where is this information and how is it executed in the field? ● Is there no communication between Part A and Part B? Should there be a regular exchange? ● Is information/data (e.g. from an import violation, an outbreak) recorded in a system? Which system? Is it a single system or are there multiple systems? ● How are the cooperations with the actors mentioned? Do you work together and if so in what aspects? ● Is information/data (e.g. from an import violation, an outbreak) recorded in a system? Which system? Is it a single system or are there multiple systems? <p>b) In the event of an emergency</p> <ul style="list-style-type: none"> ● Are there standardized procedures for emergencies? ● How are corrective measures decided and who participates in them? ● Who communicates with civil society, other stakeholders? ● Who communicates with whom in the event of a food recall/positive test on samples? ● Who communicates with whom in the event of an epidemic and food poisoning? ● What does your institution do in the event of an alert?

Annexe 2 Foot Safety System Index

1. Institutional Framework (CI)

1.1 Competent authority

CI 1: Presence of a food safety body / administrative structure responsible for carrying out the activities of control, management and communication of risks, crisis situations, and foodborne diseases.
CI 2: Presence of a national agency responsible for food risk assessment.
CI 3: Definition of roles and responsibilities for risk management, communication, and assessment (clear mandates and coordination as well as communication).
CI 4: Deployment of a strategy based on considering the material and human resources needs necessary to carry out inspections and analyses.
CI 5: Presence and establishment of an operational exchange mechanism between all organizations involved in food safety and quality.

1.2 Policy, legal and regulatory framework

CI 6: Basis of the national policy and the legal and regulatory framework on an integrated approach to the existing food chain on the ground and scientific data.
CI 7: Basis and implementation of an integrated national food control strategy and the operation of a national food control programme on the principles of risk analysis.
CI 8: Coverage of the scope of current regulatory texts, from the entire food chain from primary production to consumption
CI 9: Presence and implementation of a regulation that provides for a system of qualification of companies based on the evaluation of food safety management systems (Example: Sanitary approval, approval for storage, registration of warehouses, import licenses, ...)
CI 10: Presence and implementation of regulations that provide for the approval, registration or granting of authorisation for food establishments based on hygiene aspects/knowledge and infrastructure

2. Food Control and Inspection (CIA)

2.1 Planning and documentation of inspections

CIA 1: Presence of documented risk-based (including sampling) inspection methodology and procedures for locally produced and marketed food.
CIA 2: Presence of documented risk-based (including sampling) testing methodology and procedures for imported and exported food.
CIA 3: Presence of an up-to-date national database, food companies.
CIA 4: Presence of an up-to-date national database, which classifies establishments according to risk and includes inspection records and results of official food controls
CIA 5: Implementation of official inspection and control mechanisms by the government on self-control systems throughout the food chain and its annexes (cleaning products, food contact skills, etc.).
CIA 6: Presence of guides to assist companies in the development of work procedures and instructions relating to Good Agricultural Practices (GAP), Good Manufacturing Practices (GMP), Good Hygiene Practices (GMP) and the Hazard Analysis System, Critical Control Points (HACCP).
CIA 7: Presence and use of inspection checklists, regularly updated, and based on effective procedures.
CIA 8: Implementation of documented procedures for; the taking and submission of food samples to the official food control laboratories, the request for analysis and the communication of the results.
CIA 9: Exchange of information and formal communication between the risk assessor and the risk manager for the preparation of official control and monitoring plans and their regular updates.
CIA 10: Demonstrated necessary skills for authorities and internal experts (e.g. training, qualifications, procedures, checklists) and contact with regular external experts to update databases.
CIA 11: Adequate provision of physical resources and reliable transport and communication systems to conduct inspections, transmission of samples to laboratories, analyses and effective communications.

2.2 Carrying out inspections

CIA 12: Application of a system for planning, implementing and monitoring food inspection and official control activities based on the risk approach.
CIA 13: Mechanism for sanctions in the event of non-compliance with regulatory requirements relating to food safety for companies, this mechanism is applied equally between different establishments.
CIA 14: Provision of an adequate number of agents to carry out the tasks defined in the regulatory texts.
CIA 15: Sufficient identification and adequate allocation of inspection missions for establishments along the food chain (from fork to fork).
CIA 16: Evaluation of the competence of official laboratories through audits, tests, or other methods.
CIA 17: Accreditation of inspection bodies according to international standards.

3. Surveillance system and preparedness for food safety crises (SS)

3.1 Foodborne Illness Preparedness and Prevention

SS 1: Implementation of an emergency plan or protocol with definition; a crisis unit; various responsibilities and authorities as well as trigger situations, to respond to food safety crises.
SS 2: Implementation of a system of early warning, notification, and urgent launch of withdrawals/recalls at the national and international levels. Sharing of the system between the various institutions concerned.
SS 3: Establishment of mechanisms to detect foodborne diseases and contaminations and study the link with the products concerned (analyses, evaluation, etc.).
SS 4: Establishment of effective links between hospital institutions, public health laboratories and official controls laboratories with inspection and evaluation institutions to control foodborne diseases.
SS 5: Presence of documentary system describing the actions to be implemented at national and international level.
SS 6: Provision and homogeneous geographical distribution of an adequate number of food control laboratories, including those that are specialized (Serotyping, ...), to support the official food control system.
SS 7: Accreditation of official food control laboratories according to international standards.
SS 8: Presence of a manual of procedures for laboratories and hospitals.
SS 9: Provision of laboratories, competent employees (knowledge of international standards, training programs, ...).

3.2 Monitoring of food and risk assessment data

SS 10: Awareness and control of hazards that may compromise product safety by operators and inspectors.
SS 11: Definition of food product analysis frequencies based on epidemiological data.
SS 12: Implementation of a program to evaluate the degree of compliance with food analysis protocols with reference to international standards in laboratories (Example: internal audits, external audit, ...).

3.3 Human health surveillance and epidemiological data

SS 13: Establishment of a statistical management system and control of a reliable database
SS 14: Presence and use of specific questionnaires and targeted matrices to guide foodborne illness investigations
SS 15: Presence and confirmed competence of specialized laboratories for patient analysis and diagnosis of the foods involved.

3.4 Technical capacity

SS 16: Provision of adequate infrastructure, facilities, equipment, supplies and reference materials, as well as access to calibration and maintenance.
SS 17: Cooperation between research institutions and specialized private laboratories for product analysis, case monitoring and updating of scientific/epidemiological data

4. Risk communication, education, awareness (R)

4.1 Institutional level

R 1: Deployment by the food control body of an information, education and communication strategy on food safety and quality targeting external audiences (consumers, consumer organizations, food industry, professional associations, etc.)

R 2: Establishment by the risk assessment agency of a clear and effective strategy (or procedure) to communicate the results of its risk assessment studies and scientific work and advice to; risk managers, to the private sector, and to the consumer (published reports) on the basis of the principle of transparency required by the food law.

R 3: Implementation of an integrated dynamic information system (procedure, technical information, alert, websites, magazines, etc.) facilitating access to information for food safety operators and consumers (the general public)

R 4: Presence of a data management system and mechanism to understand levels of public confidence in food safety

4.2 Interaction with stakeholders

R 5: Integration of several organizations in the communication of information relating to food safety and the prevention of foodborne diseases such as professional organizations, associations, communities, educational institutions, public health collaborators, etc. ...

R 6: Establishment of a system to provide mandatory education and training based on food safety risks for food business operators

R 7: Establishment of a food safety information system to reach all stakeholders, from fork to fork, including consumers, to remain aware of potential hygiene and food safety issues and risks.

R 8: Updating the database with contact details of relevant stakeholders

R 9: Interaction with international stakeholders

R 10: Collaboration of competent authorities with international counterpart organizations