



# Social science at EFSA

## A roadmap for implementation

### 1. Introduction

The aim of this document is to provide a roadmap for applying social science in the work of the European Food Safety Authority (EFSA). Although EFSA has been using *ad-hoc* evidence and expertise from the field of social science in its work, these have not been formalised and resourced in a way that allows for structured implementation. The recent commitment to build the function within the Authority provides an opportunity to take stock of the existing activities, make recommendations on how to optimize the use of social research and expertise, and synthesize these into an overall framework.

The document provides background information regarding the potential of using social science methods in the field of regulatory science, the overall envisaged framework for EFSA as well as details on implementation over the period to come.

Given EFSA's strategic planning cycle, the framework is to be implemented in a phased manner. The first phase will be the initial two years (2019-2020), where it will be critical to build a function that provides advice to processes across the organization based on evidence from social research and promotes cooperation in the area of social sciences. With an established function, EFSA will commence the second phase of implementation, aligned with the new EFSA Strategy 2021-2027 period. To that end, elements of the roadmap may be adjusted during the Strategy finalization period.

### 2. Background

Global commitments, set out in the [2030 Agenda for Sustainable Development](#), call for science that accelerates human progress by i) providing new evidence; ii) using technology and innovation to improve efficiencies; and iii) contributing to more sustainable consumption and production. These are the essential elements that define the impact of science, to be delivered in partnership between governments, international organizations, civil society and the private sector.

Looking at EFSA's remit, the potential of social sciences to contribute to these commitments include:

- Building knowledge about society through qualitative and quantitative research, using new technologies and engagement mechanisms;
- Interpreting the research findings to provide advice to risk assessors, communicators and managers in order to meet citizen's expectations on food safety;
- Monitoring the impact of science on behaviour patterns;
- Fostering partnerships in the area of social science.

Humanities and social sciences have attracted significant interest over the past decade in terms of the roles they can play in institutions using natural sciences to assess environmental and health risks. Recognized contributions of social research and expertise to the entire risk analysis process include understanding of the social, political and economic context in which science is delivered as well as using qualitative and quantitative methods to explore risk perceptions to inform

communication of risks.<sup>1</sup> Some entities have designed tools to identify risk assessment mandates that require particular attention due to sociological concerns. A commonly used reference is the sociological checklist produced for the French Agency for Food, Environmental and Occupational Health & Safety (ANSES).<sup>2</sup>

While there is recognition of the role social scientists can play in regulatory science, no specific model has been proposed for standardization across institutions.

The way in which social scientists participate in the governance of science varies. In some institutions, each scientific panel includes a social scientist. In others, specific advisory groups composed of sociologists, psychologists, anthropologists or behavioural economists are in place to provide advice on cross-cutting issues. As an example, the Food Standards Agency of England, Wales and Northern Ireland (FSA) has recently set up an Advisory Committee for Social Science with the goal of shaping the behavioural science work of the organization, designing a new framework for risk communication and steering the content and methodology of the national food survey. In EFSA, the recent publication of the “Guidance on communication of uncertainty in scientific assessments”<sup>3</sup> was guided by a working group which included social scientists in an effort to improve risk communication by taking account of evidence on the way people can best understand messages on uncertainties.

There are also different models in terms of in-house social scientists. Within ANSES, social scientists form part of the Science Division. In the Hungarian National Food Chain Safety Office (Nébih), the expertise is part of the overall management and supervision directorate. Social scientists in the German Federal Institute for Risk Assessment (BfR) work within the Risk Communication department. EFSA’s efforts underway to build the social science function are also within the Communication, Engagement and Cooperation Department.

The fitness check of the EU General Food Law<sup>4</sup> and public debates over the approach and management of sensitive substances indicate that the risk analysis process requires social science expertise. The proposal of the European Commission (EC) on the transparency and sustainability of the EU risk assessment in the food chain (recently agreed amendment of the regulation 178/2002 on the General Food Law) seeks to address citizens’ demands that the risk assessment process be more transparent and the need to make risk communication more effective and coherent across different actors in Europe. To implement the proposed measures, there is a clear need for monitoring, understanding and considering risk perceptions as well as exploring adequate ways of engagement to strengthen the trust Europeans have in the food safety system. Similarly, the report on “[Delivering on EU Food Safety and Nutrition in 2050](#)” calls for exploring the potential of behavioural insights to improve policy-making at EU level, with the aim of ultimately contributing to improved consumer habits.

Considering the above, the social science framework for EFSA, proposed in this document, aligns with the global commitments and proposals for a stronger food safety system in the EU, builds on best practices from other risk assessment and communication institutions, and provides a roadmap for implementation that allows regulatory science to understand the pulse of society and be a trustworthy provider of scientific advice.

<sup>1</sup> [Incorporating social sciences in public risk assessment and risk management organizations](#) (Wendling, 2014)

<sup>2</sup> [A sociological checklist for assessing environmental health risks](#) (Benamouzig et al., 2014)

<sup>3</sup> [Guidance on communication of uncertainty in scientific assessments](#) (EFSA, 2019)

<sup>4</sup> [http://europa.eu/rapid/press-release\\_MEMO-19-1031\\_en.htm](http://europa.eu/rapid/press-release_MEMO-19-1031_en.htm)



### 3. Social Science framework

Building a social science function at EFSA requires a solid foundation of expertise. An evolving in-house team will be complemented with external experts and networks of social scientists from Member State authorities, sister EU agencies and international organizations.

Together, the knowledge in different disciplines of social sciences will allow for EFSA to implement actions across two pillars:

- The research pillar, which will focus on building knowledge about society through qualitative and quantitative research; and
- The advice pillar, which will aim to interpret the research findings and provide insight to risk assessors and communicators to meet demands from stakeholders and institutional partners.

If EFSA ensures an adequate expert base and advances as per the objectives defined for each of the pillars, the function is set to meet the overarching mission of helping the organization achieve its Strategic Objectives.



It is envisaged that the proposed framework will guide EFSA's work up to the end of the current and into the next EFSA Strategy cycles. The implementation will be phased, allowing the function to mature. The objectives presented in the following section are expected to remain valid for the entire framework period.

The activities are more detailed for the first phase of implementation (2019-2020), with longer-term goals indicated for the second phase. Elements of the roadmap will be adjusted as the work evolves, in parallel with the Strategy finalization.



### 3.1 Social research pillar

The objectives of EFSA's work in terms of social research will be to:

- Set up a functioning system for monitoring risk perceptions in the area of food safety;<sup>5</sup> and
- Strengthen EFSA's reputation management process through understanding of institutional partners and stakeholders.

EFSA has been conducting **studies on risk perceptions among Europeans** sporadically since 2005, when it commissioned a Eurobarometer survey on food-related risks jointly with the Directorate-General for Health and Food Safety (DG SANTE). A similar study was repeated in 2010. However, the practice was discontinued as the investment was not coupled with resources to analyse the findings in a way that could direct EFSA's work. Instead, targeted studies, smaller in scale, were commissioned covering, amongst others, [antimicrobial resistance](#) (2016), [emerging risks](#) (2017) and chemical mixtures (research finalized in 2018; to be published during Q1 2019). The use of the latter studies shows that they can provide evidence on a specific topic; however they are far from covering the full array of potential risks within the remit of EFSA. As such they can inform only a portion of communication outputs. A solid research design is needed to strike the balance between coverage and details to generate knowledge that can be used more strategically for the risk analysis process.

In order to tackle this, EFSA will work with the Member States to instate a more stable system for monitoring risk perceptions. A survey conducted among EFSA's Communication Experts Network in late 2018 showed that some 20 percent of Member States conduct periodic national risk perception surveys, while others rely on evidence from EU and international organizations. In 2019, a pan-European study on food-related risks will be commissioned by EFSA. Its questions will be designed considering the existing national surveys to ensure comparability of data. The goal is to produce a core set of questions related to food safety and implement the research in year 1. In year 2, the same evidence would be available in the Member States that conduct periodic surveys; in addition it is expected that any new social research efforts in other countries be aligned to the core questionnaire. Such a system would allow trend analyses in the EU over time. Comprehensive citizen surveys will be complemented by smaller-scale research projects, triggered to gather detailed evidence on specific topics, such as risk assessments of high public interest.

However, the studies commissioned by EFSA or Member States are only a small portion of social research that can be undertaken in the remit of EU's food safety system. To ensure adequate resources are available at EU level, EFSA will **promote social and behavioural studies within the EU research agenda**. In the 2019-2020 period, the creation of the new European research infrastructure, aligning all relevant players in the food safety area under the auspices of the Directorate-General for Research and Innovation (DG RTD), provides an opportunity to advocate for research needs related to understanding the societal context and delivering and communicating impactful science. Should this result in a substantial funding commitment for the period up to 2030, EFSA will consider enlarging its coordination role of connecting researchers in the EU with the resource opportunities to the area of humanist and social sciences.

In recognition of the importance of safeguarding EFSA's reputation and stemming from discussions held in the context of the development of the EFSA Strategy 2020, the Authority launched an internal initiative in reputation management to build understanding of the value of reputation and expertise in reputation management across the organisation. To underpin this initiative, EFSA deemed it important to have a clear understanding of the extent to which various stakeholders and institutional partners 'trust' the organization and to track perceptions of its work and reputation over time.

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<sup>5</sup> Pursuant to the amendment of the regulation 178/2002 (General Food Law), which calls for taking risk perceptions of all interested parties into account as part of general principles of risk communication.



The first [Reputation barometer study](#), finalized in 2017, was set to measure the reputation of EFSA amongst key actors across the European Union. This pilot survey-based study has proven to be a useful tool for assessing performance across the range of EFSA's activities and identifying areas of concerns where EFSA needs to strengthen its efforts. As part of the social science roadmap, such **targeted research among institutional partners and stakeholders** is planned to continue. The reputation barometer will be conducted on a biennial basis. Future studies will build on the design of the pilot but the survey tool will be complemented by innovative research methods to minimize respondent fatigue. An example includes discourse analysis which can be used to assess the positions of the European Parliament or the European Commission regarding EFSA instead of face-to face interviews or online surveys. For other target audiences, available records regarding interest in EFSA's work will be used, such as media inquiries or data available from the "Ask EFSA" service.

A more structured and harmonised approach to social research within EFSA will also allow EFSA to **optimize the use of feedback mechanisms**. A number of surveys are currently undertaken, soliciting feedback from various actors outside EFSA. In the immediate period, a set of large-scale surveys targeting the same audience will be compared with the aim to reduce duplication. For example, the EFSA customer satisfaction survey and Reputation Barometer present an opportunity for using only one of the tools to gather feedback among stakeholders, the European Commission and the European Parliament. Other opportunities exist and will be explored through a creation of a standardized process for soliciting internal and external feedback regarding EFSA's activities.

The longer-term goal for the second phase of implementation (2021 and onwards) will be to set-up a functioning "society watch", with harmonized social research methodologies, in the area of food safety in the EU. The activities planned for the 2019-2020 biennium are therefore a basis for creating an "open database" of evidence from social research conducted by Member States, the European Commission, sister EU agencies and independent studies funded under the EU research programmes. This shared evidence source can then be used to inform the work of different actors within the EU food safety system. Use of decentralized mechanisms for data collection, such as community-based monitoring, will be explored as part of the design of the common platform.



## 3.2 Social science advice pillar

In line with its core value of scientific excellence, bringing social science skills to the interdisciplinary mix of expertise available at EFSA is intended to further improve organizational processes. Under this pillar, social science advice will pursue the following objectives:

- Contribute to better understanding and enhanced engagement with society along the risk assessment process;
- Contextualize communication about risk assessment;<sup>6</sup>
- Provide social science perspectives in corporate processes.

A closer look at **incoming requests for scientific advice** is needed to understand the nature of the request, the knowledge and perceptions that exist around it as well as institutional and stakeholder interests. Such assessment, which takes into consideration socio-economic factors and perceptions of interested parties, should identify what is at stake when assessing a specific risk. EFSA will introduce a checklist-based process to structure this process and facilitate discussions around the mandates at an early stage. Mandates that are subject to society concerns will benefit from engagement with institutional partners, stakeholders, and the wider public throughout the risk assessment process. They will be accompanied by dedicated risk communication activities.

A number of past social science activities in EFSA have focused on helping improve the effectiveness of its communication. This is a natural entry point for social science as findings from social research, if properly designed, can **inform the direction and content of risk communication activities**. Available evidence from social research will guide: i) prioritization of topics for communication campaigns based on representative surveys at EU-level; ii) development of products and selection of communication messages that meet information needs of the targeted audience; and iii) identification of communication topics and channels that require particular focus.

EFSA's recent work on the **"Guidance on Communication of Uncertainty in Scientific Assessments"** is an example of how using social research, combined with expertise of social scientists, can improve risk communication efforts. With the endorsement of the Guidance and its publication in early 2019, it will be implemented as part of the social science roadmap starting mid-2019. The implementation will include training of assessors and communicators, update of the risk communication handbook as well as maintenance of a repository of example communication material developed in line with the recommendations of the guidance.

Best practices from EFSA's partner organizations, coupled with positive experience from developing the uncertainty communication guidance indicate that **involvement of external social science expertise in the work of scientific groups** can improve the quality of EFSA's outputs. To build on this momentum, scientific advice for risk communication will be piloted in 2019 through the establishment of an EFSA working group. Composed of psychologists, behavioural economists and communication scientists, under the coordination of the COMCO department, the group will initially look at how to best account for societal factors in EFSA's process of delivering science to society, be it at the planning stage of assessing the upcoming mandates, design stage of social research or in the final stage of communicating results of risk assessments. The progress of the groups' work will be regularly presented to the Scientific Committee, in order to jointly decide on best modalities of social scientists' involvement in the work of the next iteration of scientific panels (currently due in 2021) and the supporting working groups.

Internally, **social science advice will be provided to a number of corporate processes**. A member of the team will take part in EFSA's strategic planning process. In 2019, the focus will be to contribute to the environmental scanning process; in 2020 to inform the drafting of the new strategy, ensuring it adequately addresses societal factors. Other anticipated activities include: i)

<sup>6</sup> Addresses Management Board recommendation stemming from the 3<sup>rd</sup> external evaluation of EFSA (2018)



Assisting the design and holding of events that promote engagement and scientific cooperation; ii) ensure learning on social sciences among EFSA staff through design of a short training programme due to start in mid-2019; and iii) "Every day social science" support, for instance design of surveys directed to staff and organization of focus group discussions to strengthen internal processes.

The continuation and scale-up of activities under the Advice pillar well into the new EFSA strategic cycle will inform processes at all stages– the framing of the mandate, the risk assessment in engagement with stakeholders and institutional partners and the development of risk communication. Adding the "social" aspect of scientific excellence is expected to strengthen EFSA's role in the EU food safety system as a trustworthy source of advice on food safety. To understand the impact of these activities, the social science team will lead the monitoring and reporting on consumer confidence in the food safety system throughout the 2021-2027 period.

### 3.3 Social science expertise

The objective of EFSA's work in terms of ensuring adequate expertise will be to maintain relations with social scientists specialising in areas related to the Authority's work and develop collaboration opportunities.

As previously mentioned **experts from academia and other scientific organizations** will be involved in the work of scientific groups – initially to support the risk communication efforts and gradually looking at the wider risk analysis process, deepening the understanding of the economic and social background relating to scientific risk assessment. EFSA will maintain a list of experts that have experience in the areas of food-safety, perception research and behavioural science. The pool of experts will complement the expertise in-house by sharing insights on specific subjects and developing harmonised approaches. A network of students and researchers in social science disciplines will be established to draw upon quick requests such as literature reviews and summaries of existing research.

In late 2018, EFSA joined the **International Social Science Liaison Group**, chaired by the Food Standards Australia New Zealand (FSANZ) authority. The group provides a forum for government organisations involved in the social sciences of food regulation, food safety and public health nutrition to discuss and collaborate on issues of mutual interest. EFSA's involvement will include: i) sharing of planned and completed social research, including draft questionnaires, methodological approaches, summaries of findings, reports and, where appropriate, data; ii) exchange of information on types of issues and topics where social research has been of use; and iii) seeking peer reviews of initiatives implemented under the Roadmap.

A number of EU Member States have **social science functions embedded within the national food authorities**, as noted in the *Background* section of the document. Currently, EFSA is establishing a basis for scientific cooperation with colleagues from Member States. Examples include participation as speakers at conferences, peer reviews of documentation as well as sharing of contacts and expertise. After the initial setup period of 1-2 years, EFSA will look at taking a coordinating role in terms of sharing of research methodologies and data among Member States, trying to ensure a multiplier effect rather than duplication of efforts.

Another goal will be to encourage **collaboration within EU Institutions**, including the European Commission (EC), European Centre for Disease Control (ECDC), European Chemicals Agency (ECHA), European Environmental Agency (EEA) and the European Medicines Agency (EMA)<sup>7</sup>, possibly through EFSA's membership of ANSA. The entire EU risk analysis process can benefit from the findings of social research in the area of food safety; therefore EFSA will collaborate with the Directorate-General for Health and Food Safety (DG SANTE) in defining the scope of studies which

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<sup>7</sup> Addresses Management Board recommendation stemming from the 3<sup>rd</sup> external evaluation of EFSA (2018)



can direct coordinated risk communication activities. Work with Joint Research Centre (JRC) in the area of understanding the economic and social background relating to scientific risk assessment will focus on behavioural sciences as these have advanced in support of policy making. In early 2019, EFSA is organizing a first info-session with all staff to discuss the role these disciplines can play in an EU institution, jointly with colleagues from the JRC behavioural unit. It is expected that the partnership evolves to common research projects and joint publications. EFSA's team will also liaise with social scientists working in the four sister EU agencies with the goal of establishing a network of social scientists by the end of 2020.

In 2021, EFSA hopes to host an event aimed at assessing progress to date and determining the joint priorities for social science work at Member State food authorities and EU partner institutions. This could result in a work plan for social research and advice activities under the "One Health/One Environment" approach in the 2021-2027 period.

#### **4. Way forward**

EFSA's commitment to start building a well-defined social science function has been translated into this roadmap to guide the initial implementation, at the same time providing a longer-term strategic direction. Current staffing arrangements allow for setup of the foundations – most critically in the next two years. A full-time in-house social scientist, under the guidance of Communication Unit managerial community, will be supported by trainees and guest scientists to guide these efforts.

A special EFSA Journal issue on achievements of social science in EFSA is planned for end 2020/early 2021 to capture progress made across the three main elements of the roadmap – the research pillar, the advice pillar and the expertise foundation. As the function evolves and its potential to help EFSA achieve its Strategic Objectives is assessed, a more sustainable model might be required.

With the implementation of the new EFSA Strategy starting in 2021, and considering the resource implications of the revision of the General Food Law (178/2002), future arrangements may include a dedicated coordinator for each of the three roadmap elements, working as part of an independent social science team.

Regardless of the staffing scenario, staff working within the function will seek to build knowledge about European society and use this growing expertise in a way that strengthens the risk analysis process. Ultimately, social science at EFSA should and can have a fundamental and positive impact on the quality of science and public information that EFSA delivers. That remains its key contribution.