

### SFI Public Service Fellowship 2023

<b>1. Name of Governmental Department or Agency</b>
Food Safety Authority of Ireland (FSAI).
<b>2. Title of the Project</b>
<b>FSAI3</b> The application of behavioural science to influence food safety compliance
<b>3. Description of the Project</b>
<p>Proposed focus is the application of behavioural science to:</p> <ol style="list-style-type: none"> <li>1. The relationship between publicly accessible Food Hygiene Rating Schemes (FHRS) and the behaviour of consumers and food business operators.</li> <li>2. Food safety culture</li> <li>3. Exploration of the behavioural change of food business operators in response to different forms of food safety enforcement and sanctions.</li> </ol> <p>Behavioural science is increasingly used by policy makers and regulators to improve regulatory effectiveness, business compliance and achieve better outcomes for consumers, through innovations that deliver greater public value and offer significant potential to achieve desired compliance outcomes. This project seeks to develop a platform for the discipline of behavioural science in the work of FSAI, several potential focus areas are offered as examples. FSAI is open to scoping a project involving any one, or all of these proposals.</p> <p>Potential focus:</p> <ol style="list-style-type: none"> <li>1. <b>Food Hygiene rating scheme</b> - FHRSs exist in many guises across an increasing number of countries, both within and without the EU with many positive claims about their ability to contribute to increased industry levels of compliance, supervisory effectiveness and ultimately the delivery of positive outcomes for consumers. To date these options have not been actively progressed or explored from a policy or regulatory viewpoint and how they could be applied in the Irish context. Behavioural Economic (BE) science principles have the potential to offer significant insight in identifying the key elements for success required in the design and application of FHRS.</li> <li>2. <b>Food Safety Culture</b> is a central driver of safe food production. It refers to the behavioural group-norms within a commercial food environment and the manner in which food safety maintenance exists within the competing commercial priorities. There now exists since 2021 in EU law an explicit legal obligation for many operators to develop, maintain and provide evidence of an appropriate food safety culture. There consequently exists a role for food regulators to ensure such standards are met. Behavioural drivers, facilitators and blockers of food safety culture, in management and all employees, are diverse. Behavioural science should provide insight to indices of appropriate culture, and routes towards a cycle of continuous improvement.</li> </ol>

3. **Enforcements and sanctions** - As outlined in the [food law enforcement policy](#), regulators may use tools such as promotion, verification, and if necessary enforcement of compliance. The latter involves use of statutory powers to bring a specific wrongdoer into compliance, and also the retrospectively sanctioning as punishment. Enforcement should have specific dissuasive intent to deter that operator from re-offending and should have a wider deterrent effect for other operators. Food safety regulators have access to variety of regulatory tools, but enforcement rarely exceed steps to ensure the operator moves towards compliance. Behavioural science may help understand the most effective regulatory tools for typical food safety scenarios, along with providing insight to regulatory enforcement decision-making in deployment of such tools.

FSAI is keen to explore and deploy the benefits of behavioural science insights contributing to positive changes in behaviour for businesses and consumers of food and regulators leading to better food safety and regulatory outcomes and delivering key elements of the FSAI's Vision, Mission and Strategy 2019-2023.

#### 4. Project Scope

An FHRS project could consist of the following tasks:

Task 1: A literature Review of International FHRs exploring the impact from such schemes on the behaviour of consumers, regulators and food business compliance, how these findings could be exploited and/or adapted using BE principles, to inform policy in relation to the regulation of the food sector. The results of which will evaluate the potential to deliver tangible impacts such as increased business compliance, supporting supervisory effectiveness, and leading to better outcomes for consumers. Potential beneficial outcomes would include;

- Consumers being able to make more informed decisions about where to eat or purchase food. By providing access to hygiene ratings of food businesses, consumers can choose establishments with higher ratings, with resulting in improved food safety and reduced risks of foodborne illnesses.
- To positively influence both food business and consumer behaviour e.g., to 'Nudge' businesses to be more compliant and 'Nudge' consumers to select more compliant businesses. e.g.:
- Increased awareness among consumers about the importance of food safety and hygiene. The availability of hygiene ratings can highlight the significance of compliance with food safety regulations, encouraging consumers to prioritise establishments that prioritise cleanliness and adherence to hygiene standards.
- Food businesses improving food hygiene practices, and better compliance with food safety requirements because of consumers having the ability to actively consider hygiene ratings.
- Increased accountability and transparency in the food industry. By publicly displaying hygiene ratings, businesses will be more motivated to maintain good standards, and those falling behind may be prompted to improve. Consumers will have access to reliable information, allowing them to hold food businesses accountable for their hygiene practices.

Task 2: Where the review provides evidence of promising potential in the Irish Context, recommendations would include identification of the key elements from a behavioural science perspective necessary for consideration in the production of an Ireland roadmap for the design and implementation of a FHRS.

A Food Safety Culture project could include:

Task 1. A literature review of the science around behavioural indices of an appropriate food safety culture, and enablers/blockers of appropriate food safety culture development and maintenance in commercial food business operation.

Task 2 could pilot the incorporation of any indices or enablers/blocker identified in literature review, into official control inspection protocols, and appraise utility to differentiate appropriate from inappropriate food safety culture.

Better outcomes for consumers could include

- Improved tools for food businesses to understand the status of food safety culture in their operation, identify concerns before a problematic culture results in unsafe food on the market to consumers
- Improved tools for food business to drive continuous improvement in food culture, and thence the safety of food being marketed to consumers
- Improved tools/ability for food regulators to meaningfully differentiate between acceptable and problematic food safety culture, to focus official controls towards arresting problems before they arise, and conversely to facilitate endorsement of positive culture. Objective indices available to regulator should tend towards harmonised and effective official controls, with predictability for operators, and maximal deterrence of suboptimal practice, hence safer food for consumers.

A Food Regulation enforcement project could include:

Task 1. Literature review of the relative efficacy of different regulatory tools as regards benefits to deter inappropriate food safety approaches and drivers of regulator behaviour in their selection of particular tools.

Task 2 This would develop categorisation of food-safety non-compliances indicating the spectrum of regulatory tools that might best bring about immediate compliance, and dissuade future noncompliance. Triggers for higher-order retrospective sanctions such as criminal prosecution might be considered. These protocols could be piloted in a way that makes further consideration of behavioural science insight to influence regulator behaviour in their choice of enforcement tools.

Potential beneficial outcomes for consumers could include

- Optimal selection and application of regulatory tools, should maximise the deterrence effect of enforcement, and hence overall impact of official controls, to keep industry orientated towards safer food for consumers. With discontinuous e.g., several times per year inspections, the benefits of deterrence for overall food safety every day of the year has potential to be much broader than individual inspections., for safety of the totality of food reaching consumers mostly without official control.
- Correct application of regulatory tools has the reciprocal benefit of endorsing the positive activity when they can see the suboptimal producer being called-out for appropriate enforcement. Consumers should benefit from the overall rising tide of compliance with food safety requirements.

- Consumers can derive confidence of a regulatory enforcement approach with teeth where necessary, and willingness to appropriately deploy those on behalf of the consumer.

#### 5. Skills/Expertise Required

A recognised qualification in Behavioural Science.

- The ability to review and collate the peer reviewed and grey literature.
- Application of this research to a food safety enforcement environment.
- Science communication (written and oral).

#### 6. Expected Outputs of Project

These individual 3 proposed focus areas could have different outputs:

1. A comprehensive literature review (research briefing paper) for each area.
2. A paper identifying recommendations of key considerations for the design and implementation of a FHRS, food safety culture promotion & assessment, food safety enforcement tool for Ireland including proposals for pilot schemes.
3. Possible delivery of the study findings and recommendations to key stakeholders.
4. Possibilities to publish a peer reviewed paper can be explored.

#### 7. Working Arrangements

FSAI is based in Dublin 1. The candidate can be based in the FSAI offices but they need not be based permanently in Dublin and could work from any location but must be prepared to attend the FSAI offices in Dublin's IFSC as required. Arrangements would have to be made for access to the FSAI IT systems and this would depend on the location of the candidate. The candidate would be required to sign confidentiality agreements and any other relevant documents as determined by the HR department.

#### 8. Expected Timeline

The project is expected to take 12 months. The Fellow could opt for a placement lasting either 12 months full-time or 24 months part-time.

Further involvement in projects with FSAI could arise based on the knowledge gained and outputs delivered from this research.

#### 9. Contact Details

Rob Phillips, Micheál O'Mahony