



Food safety culture diagnostic toolkit for inspectors

©Food Standards Agency, 2012.

All rights reserved. No parts of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the Food Standards Agency.

This is a draft toolkit developed as part of an ongoing research project. The views expressed in this document are those of Greenstreet Berman Ltd and its contractors and not necessarily those of the Food Standards Agency.

Greenstreet Berman Ltd, 10 Fitzroy Square, Fitzrovia, London W1T 5HP, T: 020 3102 2110. W: www.greenstreet.co.uk

Authors: Michael S Wright, Paul Leach and Gill Palmer.

Contents

1I	NTRODUCTION1	
1.1	Application1	
1.2	Purpose of the tool1	
1.3	Understanding food safety culture1	
1.4	Improving food safety culture	
2S	TEP 1: CATEGORISE FOOD SAFETY CULTURE	
2.1	Overview3	
2.2	Level 1 understanding4	
2.3	Level 2 understanding5	
3S	TEP 2: GUIDANCE ON ENABLING FOOD SAFETY CULTURE IMPROVEMENT	6
	PPENDIX A: FOOD SAFETY CULTURE MATRIX: ELEMENT SPECIFIC DESCRIPTORS	
5A	APPENDIX B: SUPPORTING EXPLORATION AND CATEGORISATION 22	
5.1	Overview	
5.2	Areas to explore	
5.3	Observations to undertake	
5.4	Documents to review24	
6A	APPENDIX C: BACKGROUND, PURPOSE AND APPLICATION OF THE TOOL	26
6.1	Background26	
6.2	What is food safety culture?27	
6.3	Purpose of the tool30	
6.4	Application: Understanding food safety culture31	
6.5	Application: Improving food safety culture31	

ii

1 INTRODUCTION

1.1 Application

This toolkit is intended to support the assessment of food businesses in respect of food safety management, including management culture, the application of good practices or 'pre-requisite programmes', standards of hygiene adopted and the approach taken to identifying and controlling food safety hazards. This includes control of process activities (e.g. cooking, cooling, labelling/date code application) and application of pre-requisites (e.g. pest control, cleaning, maintenance of the environment, prevention of cross – contamination). The term 'food safety' is used to embrace all aspects of safe and hygienic processing of food and refers to practices, standards and activities that are required to protect consumers from harm.

1.2 Purpose of the tool

The food safety culture diagnostic tool is for use primarily by local authority personnel undertaking food hygiene inspections to identify aspects of good/poor food safety cultures in food businesses and as a framework/device to influence business culture.

This will help inspectors start to understand the attitudinal drivers to food safety and hygiene behaviour and the type of advice that can be provided to help influence attitudes and, ultimately, the culture within a food business.

The toolkit has been developed with particular consideration for use with micro and small businesses in mind; however the tool is not intended to have exclusive application for such businesses.

The tool can be used as part of inspection and related decision making. The tool will help the inspector to:

- Explore the food safety culture of the food business through discussions, observations and review of documentation;
- Categorise the culture of the business, using the food safety culture matrix; and
- Provide suitable advice to help improve culture.

Some specific uses include:

- Helping to assess the attitudinal aspect of 'confidence in management' ratings
 – as
 part of intervention ratings;
- Helping to consider the attitude of the business when deciding on enforcement actions.

1.3 Understanding food safety culture

The toolkit has two steps, namely:

- Step 1: Categorise the food safety culture of the business (section 2).
- Step 2: Select advice on how to improve food safety culture (section 3).

The inspector should explore the food safety culture of the food business and consider which category best applies to a food business. This categorisation should be based on their observations of the business' attitudes and behaviours gained through discussions, observation of the business and its current compliance behaviour.

Section 4 provides the food safety culture matrix detailing the categories and elements of food safety culture. These categories will help the inspector explore the food safety culture

within the business and consider which category and element descriptors best applies to that food business

Section 5 provides high level guidance to help initiate discussions to help categorise the food safety culture of the food business.

This guidance covers:

- A set of areas to explore each food safety culture element;
- Example documentation to review as part of the inspection, to understand food safety and hygiene practices and;
- Example observations that can be made to help understand food safety and hygiene behaviours within the business.

1.4 Improving food safety culture

Understanding the food safety culture of a business aims to help improve culture in two main ways:

- Supporting enforcement decisions;
- Providing example advice that is mapped to each category and each element (see section 3).

Before applying the toolkit it is advisable to read Appendix C, which provides more detailed information on the background to the tool, its purpose and how to apply the toolkit.

2 STEP 1: CATEGORISE FOOD SAFETY CULTURE

2.1 Overview

The first step is to understand and categorise the food safety culture of the business.

This can be carried out very generally (level 1 understanding) or at a more detailed level (level 2 understanding).

These two options are presented below.

Both the level 1 and 2 require exploration of the food business attitudes and behaviour towards food safety and hygiene and consideration of which food safety culture category best applies to the food business.

The exploration and categorisation of the food safety culture should be based on observations of the business and behaviour and the food safety culture matrix (section 4, Table 5) will support and guide this exploration and categorisation.

To support exploration and categorisation it is helpful to consider:

- Attitudinal reaction and responses to questions relating to food hygiene and safety (see section 5);
- Attitudinal reaction and response to suggestions for improvements to the food hygiene and safety arrangements within the food business, (see section 3);
- Responses to questions that explore the knowledge and appreciation of food safety issues/hazards within the food business (see section 5);
- Food hygiene and safety behaviours exhibited by staff, managers and the food business owner (if applicable) during the inspection (see section 5) or reported in relation to incidents:
- Relevant food safety and hygiene documentation and systems and the FBO's attitudes towards such systems.

In addition if inspector's wish to develop a level 1 understand of the food business culture it is advisable to use section 2.2 to support categorisation and Table 3 to help enable necessary improvements.

To develop level 2 understanding is advisable to use sections 2.2 and 2.3 to support categorisation and exploration of elements and Table 3 and Table 4 to enable improvements at category and element level.

It is the responsibility of the inspector to determine the level of understanding required to effectively support the food business. To help determine the level of understanding required, consideration should be given to:

- Available time to apply the toolkit within the inspection;
- Inspectors current understanding of the food business and their attitude;
- Previous experience of working with the food business;
- Current and previous scores on other food safety performance measures (for example, confidence in management).

2.2 Level 1 understanding

Table 1 provides definitions of each category. Based on observations of the business and behaviour the category applying to the business can be selected. The table includes some quotes that typify the expressed attitudes of businesses in each category.

Table 1: Level 1 understanding

Category	Tick which category applies
a) Calculative non-compliers: Intentionally breach regulations for the sake of financial gain, disputing or disregarding the potential impact on consumers – without assessing the potential impact on people and making decisions without due deliberation or consideration of regulations or other requirements;	
e.g. 'I never bother wasting time on something that will cost me time but not make me money'.	
b) Doubting compliers: Doubt the significance of the hazard posed by food safety and hygiene and the effectiveness of food hygiene regulations and requirements in managing these hazards. May have the capability to understand requirements but doubt the risk. May express cynical view to staff and do not promote compliance other than for purposes of regulatory compliance.	
e.g. 'We've never had a problem in all the time we have been trading'.	
c) Dependent compliers: Wait upon advice or instruction from regulators and other third parties to make improvements and view food safety and hygiene as something driven by third parties. Tend to view requirements as unfairly complex and that it is unreasonable to expect them to take a lead in understanding and applying. May have low levels of knowledge and training. May not have any clear perception or knowledge of the potential issues posed by food safety and hygiene. e.g. 'Just give me a list of what you want me to do and I will do it'.	
d) Proactive compliers: Understand that hazards posed by poor food hygiene and poor process controls are significant and accept that requirements are effective and necessary. Wish to ensure food safety controls are proportionate and effective, and will positively debate (internally and externally) how best to manage food safety hazards in a cost effective and proportionate way, implementing food safety controls after careful deliberation. Management provides a lead in encouraging compliance for the sake of the business as well as regulatory compliance but may not go beyond "good practice". e.g. 'We encourage all staff to take ownership and responsibility for food safety and we challenge non-compliance'.	
e) Leaders: View food safety and hygiene as critical business issues that they must tightly manage and offers potential business benefits through achievement of a good reputation for food safety and hygiene. Provide visible leadership in continually reviewing food safety and improving food hygiene. e.g. 'We pride ourselves on the safety and hygiene practices of our business'.	

4

2.3 Level 2 understanding

Level 2 understanding includes rating the 8 elements per category and hence requires a more detailed exploration of information and evidence to support understanding and categorisation.

The blank matrix in Table 2 can be used to categorise the food safety culture of the business, by each element.

Table 5 provides examples of the types of attitudes and behaviours for each element per category. Please note the examples given are not exhaustive.

It should be noted that a predominant category across the elements may not appear. For example, a business may be categorised as a Dependent Complier for Competence and Learning, and a Doubting Complier for Food Hygiene Risk Perceptions and Knowledge. This type of finding indicates that the business's attitudes differ across the different facets of food safety culture.

Where this occurs, different advice, mapped to the corresponding categories, may need to be given for each element (see section 3).

Where a predominant category across the elements does appear, advice can be given that is mapped to that specific category for all the elements (see section 3).

Table 2: Blank table for use in recording exploration of elements of food safety culture

	Category				
Element	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:
Business priorities and attitudes towards food hygiene					
Business's perception and knowledge of food safety hazards					
Business's confidence in food hygiene requirements					
Business ownership of food safety and hygiene					
Competence, learning and training in food safety and hygiene systems					
Leadership provided on food safety and hygiene					
Employee engagement in review & development of food hygiene practices					
Communications & trust to engage in food safety and hygiene & report issues					

Having explored the business's attitudes and behaviours, the cells in Table 2 that apply to the business can be selected.

3 STEP 2: GUIDANCE ON ENABLING FOOD SAFETY CULTURE IMPROVEMENT

The following section provides high level advice that can be given to the food business operator to help enable food safety culture improvement.

Example advice is provided, that is:

- Mapped to each category;
- Mapped to each element.

Based on the categorisation of the business, Table 3 and Table 4 can be referred to for advice.

Table 3 presents the theme of advice that may be given to businesses based on their main food safety culture category. The advice is matched to the type of attitude held by each category of business and aims to influence those attitudes. For example, the dismissive attitudes of a "calculative non complier" would be challenged by exemplification of the potential harm they could do, with the aim of changing their beliefs. The dependent mindset of "dependent compliers" would be influenced by highlighting simple methods they can adopt to become self complying and can be encouraged to do so. 'Proactive compliers' would be applauded and encouraged to take next steps to build on their good practices.

Table 4 presents examples of good practice for each element which may be cited to businesses. The advice is again aligned to each category and follows the same logic as Table 3 but is element specific.

The findings from the exploration and categorisation of food safety culture can also be used to help support and target enforcement decisions and strategy. Best practice suggests however that this type of approach should also be complemented with targeted advice to help influence attitudes and behaviour and thus improve the food safety culture.

Table 3: Advice for inspectors on enabling improvements

Category	Advice for inspectors on enabling improvement
a) Calculative non- compliers:	Challenge and convert Highlight cases where harm has occurred and cases where people have been prosecuted and jailed for intentional non compliance, and examples of business failures due to incidents. Challenge their attitudes and indicate the minimum steps to comply. Say that they will be inspected more frequently until there is confidence in their willingness and ability to apply good practice and they are likely to be subject to more severe enforcement if incidents occur because of their attitudes.
b) Doubting compliers:	Convince and dispel doubts. Explain and provide evidence and examples of the hazards (specific to the food business) and where people have been harmed by these. Suggest that they go on relevant training to learn about the hazards or read relevant leaflets etc. Use the examples to explain how the regulatory requirements help to control these hazards and risks and explain the benefit to the business (by maintaining customer confidence). Highlight how the behaviour of the business manager(s) sets an example for the rest of the staff and that they need to set a good example and provide positive leadership to encourage their staff to comply with the law (and thereby avoid damaging the business). Sympathise with their concerns and then explain what 'good looks like'.
c) Dependent compliers:	Encourage and enable self reliance. Provide advice on how they can develop their own ability to comply, such as low cost training, and emphasize that it is their responsibility to understand significant food hazards and identify suitable controls (whilst saying you are willing to help them to a reasonable level). Use examples to illustrate that the requirements are not complex and can be achieved. The examples should illustrate how knowledge and capability can be developed and compliance achieved in a non-complex manner. Sympathise with their concerns and explain what 'good looks like'. Encourage independent thinking and explain where to obtain further guidance. Highlight that they cannot rely on inspectors (who will not always be there) and how it is their duty to take a lead in developing controls for significant hazards within their business.

Category	Advice for inspectors on enabling improvement
d) Proactive compliers:	Applaud and encourage next steps. Applaud their achievements and encourage them to build on this by keeping up with latest developments and thinking of their own novel ways of further improving performance. Engage the business in positive (non critical or adversarial) discussions about the risk posed by each of their food safety hazards and how best to manage them, entertain debate and thank them for their enthusiasm and interest in considering how best to manage food safety. Provide examples of "best practice" to help the business understand how they can enhance their practices. Also highlight the business and personal benefits adopting "best practice" can bring.
	Suggest ideas for further improvement e.g. seeking further involvement of staff, consideration of alternative methods for monitoring e.g. the use of temperature data loggers for chilled storage temperature monitoring.
e) Leaders:	Applaud and reinforce commitment to best practice Applaud the organisation, encourage them to display Food Hygiene Rating Scheme certificate (if applicable). If not already considered by the business, encourage them to become member of associations and seek awards for their achievements e.g. third party certification to an appropriate standard. Warn the business of complacency (using examples of where even the "best" businesses have had problems and why) and reinforce the need for continued learning and development to remain a food safety leader. Ask about future plans and applaud examples of planned actions by the business.

Table 4: Advice for inspectors on enabling improvements for each element

	Calculative non compliers	Doubting compliers	Dependent compliers	Proactive compliers	Leaders
Business priorities and attitudes towards food hygiene	Provide examples of business failure caused by non-compliance. Help the business understand how placing targets or performance pressure (i.e. profit, speed of service etc.) can conflict with the prioritisation of food safety and hygiene and compliance with regulation.	Use evidence to highlight how good food safety management can benefit the business, such as by ensuring customer confidence and loyalty.	Acknowledge their wish to comply and to manage food safety. Suggest it is in their self interest to take a lead in managing food safety rather than be dependent on other people, who cannot be there all the time.	Applaud their work and attitude and only then say they could become "best in their class" by building on their good practices. Indicate they could achieve a competitive edge by including their food safety performance in their marketing, such as by displaying Food Hygiene Rating Scheme certificate (if applicable).	Reinforce their attitude by: Citing other examples of industry leaders and how it helps their reputation. Citing examples of high profile cases of non compliance and how they would not want to allow complacency to undermine their good work.
Business's perception and knowledge of food safety hazards	Highlight food safety hazards at this business and explain how these can cause serious harm. Highlight that ignorance of the hazards is no defence in the eyes of the law.	Use examples of issues that might be identified in the HACCP study to ensure the business is aware of specific hazards and the consequences of failing to manage these effectively within the business. Highlight food hygiene issues at this business and explain how these can undermine the business's ability to consistently produce safe, quality products.	Indicate that it is the duty of the business to identify food safety hazards for their operation and decide how best to manage them routinely within the business and that they are best placed to do this as they know their business better than anyone else. Explain that this is a reasonable and legal obligation. Provide examples and guidance on simple food safety hazard analysis and risk assessment tools.	Have positive discussions about hazards and the risk they pose, accept valid debate about these, provide information where the FBO is misinformed or out of date. Encourage them to keep their hazard analysis and risk assessments and their HACCP plans up to date and to subscribe to useful sources of food safety information etc. e.g. FSA Alerts.	Applaud their recognition of significant food safety hazards and the way in which they have decided to manage their Critical Control Points for the business. Reinforce their perceptions and the wisdom of taking a proactive approach to food safety, e.g. by highlighting how others have had incidents because they failed to recognise the significance of these issues and/or have failed to manage them appropriately.

	Calculative non compliers	Doubting compliers	Dependent compliers	Proactive compliers	Leaders
Business's confidence in food hygiene requirements	Use examples of issues that might be identified in the HACCP study to ensure the business is aware of specific hazards and the consequences of failing to manage these effectively within the business. Make clear to the business that a failure to effectively manage food safety and hygiene is likely to result in issues that will have an adverse effect on the business, both in terms of reputation and commercial success.	Use examples of issues that might be identified in the HACCP study to ensure the business is aware of specific hazards and the consequences of failing to manage these effectively within the business. Make clear to the business the value of taking a preventative approach to managing food safety and the use of management systems and impress importance of their use.	Suggest that they should (having assessed their process) ensure they have suitable control measures in place for their identified significant hazards and ensure they monitor these controls throughout processing to provide assurance that the control measures are working successfully. Encourage independent thought and decision making in order to get the business to take ownership for the controls in place within the business.	Acknowledge their commitment to food hygiene management. Discuss how ensuring food hygiene is effectively managed is critical to the success of a food business. Encourage them to keep their food safety controls up to date and to review causes of any incidents to ensure arrangements remain effective. Encourage them to communicate the value of effective food safety controls to staff.	Reinforce their confidence in the food safety controls by agreeing with their view that they are critical. Encourage them to keep the food safety controls up to date and to review causes of any incidents to ensure arrangements remain effective.
Business ownership of food safety and hygiene	Communicate legal duties and how rejection of these duties is regarded as negligence, and likely to lead to more severe enforcement in the event that an incident occurs.	Suggest that regardless of whether they feel that food safety and hygiene requirements are unnecessary, that it remains their duty to understand and apply them. Suggest that by applying good food hygiene practice and applying HACCP principles as required by legislation, they are able to design a food safety management system that	Whilst acknowledging that food safety and hygiene management can be complex and that there are many requirements, emphasise individual and business responsibilities for food safety and hygiene. Provide examples of how the business can encourage staff to take ownership of food hygiene and benefits this brings. Inspectors can help but it is the business's	Acknowledge and applaud their proactive approach. Suggest they do not wait for new requirements to emerge from regulators to make improvement, but use internal reviews and comparisons with other businesses to help identify further improvements.	Acknowledge and applaud their proactive approach to food safety management. Encourage them to continue management involvement in reviewing systems and using the information generated by the food safety management systems e.g. numbers of instances when Critical Control Points have required corrective action to be taken, consumer

	Calculative non compliers	Doubting compliers	Dependent compliers	Proactive compliers	Leaders
		is tailored specifically to their business needs. With a system in place that is specific to their business, they only need to apply the aspects of control required, thus taking ownership of their application.	responsibility to ensure compliance.		complaints etc. to direct their future efforts for improvement.
Competence, learning and training in food safety and hygiene systems	Suggest that customers and other stakeholders will lose confidence in a business which appears to be incompetent. Suggest that being competent should help the business avoid costly incidents and business disruption.	Talk through the competence requirements for the business to effectively manage food safety issues as detailed in the business's HACCP plan and relevant legislation. Suggest that being competent should help the business avoid costly incidents and business disruption.	Provide advice and examples of how they could develop their food safety and hygiene competence and confidence by, for example, attending training, reading or talking to other businesses.	Acknowledge their commitment to training and learning. Suggest they subscribe to newsletters or other channels for being kept up to date with latest issues and requirements.	Applaud and acknowledge their commitment to training. Encourage them to check out new opportunities for training and learning.
Leadership provided on food safety and hygiene	Explain how it is the duty of the business operator to ensure staff are complying with food safety and hygiene requirements and that this includes effective leadership to staff regarding application of relevant standards and procedures etc.	Explain how staff tend to follow the example set to them by their managers and hence the importance of ensuring that they set a good example in words and actions. Use examples to demonstrate the benefit of providing leadership to	Emphasize that staff will follow the lead of management on a day to day basis and cannot rely on inspectors to influence staff. Use the outcome of the HACCP study, observations and documentation to highlight	Applaud their leadership on food safety and hygiene and suggest they build on this by acknowledging instances of good practice amongst staff.	Applaud their leadership on food safety and hygiene and reinforce it by giving examples of where they have succeeded in encouraging good food safety and hygiene behaviour amongst staff. Ask if they have plans for new ways of offering

	Calculative non compliers	Doubting compliers	Dependent compliers	Proactive compliers	Leaders
		staff.	to the food business that they have a framework in place for food safety management and need to take initiative and provide leadership to their staff. Using examples relevant to the business, demonstrate what is expected and encourage the business to actively promote positive food safety practices and challenge poor practices.		leadership.
Employee engagement in review & development of food hygiene practices	Suggest that staff can help prevent costly incidents by being encouraged to help to ensure food safety and hygiene procedures are effective.	Provide examples of problems that staff may be able to help resolve. Discuss the value in encouraging staff involvement and the positive aspects of staff motivation.	Provide examples of how they can engage staff in a simple and effective manner. For example: Asking staff for input when reviewing/developing food safety practices. Encouraging staff to offer feedback and ask questions surrounding changes to food safety practices.	Suggest they ask staff whether there are more effective ways to manage food hygiene than those prescribed by law. Suggest encouraging staff to be innovative in developing new/better procedures and records in relation to food safety management.	Applaud their engagement of staff and ask about plans for future staff engagement.

	Calculative non compliers	Doubting compliers	Dependent compliers	Proactive compliers	Leaders
Communications & trust to engage in food safety and hygiene & report issues	Highlight how in the event of an incident, if staff knew of problems but did not communicate these to management (e.g. as a result of concerns about how management might react), the business would be considered to be at fault for failing to rectify a known problem.	Emphasise the business benefit of communication and trust, such as alerting business operators to problems.	Provide examples of how communication and trust can be enhanced in a simple and effective manner. For example: Encouraging and praising staff who report hygiene issues. Leaders making themselves approachable and available for staff to report issues.	Applaud their approach to communications. Suggest they proactively encourage staff to report any issues and offer suggestions. Suggest they applaud staff who do provide feedback, report problems and suggestions. Highlight to other staff how being alerted to problems is good for the business and something they encourage.	Applaud their open and trusting way of working with staff. Agree on the importance of this. Note that trust is "hard to earn, easy to be lost" and urge them to always be receptive to staff feedback.

4 APPENDIX A: FOOD SAFETY CULTURE MATRIX: ELEMENT SPECIFIC DESCRIPTORS

Table 5 provides descriptions of each element per category.

Table 5: Matrix of food safety culture category and elements

	Category					
Element	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Business priorities and attitudes towards food hygiene	Consider food hygiene to be a nuisance. Food safety requirements are rejected for reasons of self interest. Productivity and profit always take priority. e.g. 'I never bother wasting time on something that will cost me time but not make me money'.	Food safety given low priority as business fails to see the benefit or importance of food safety. (Focus on getting the job done). FBO resistant to engage in discussions about food safety with others. Evidence of misplaced complacency. e.g. 'We've never poisoned anyone'.	Consider food safety to be of low priority in relation to other business priorities. Display no interest in food safety/hygiene unless caught out by inspection. Productivity and profit frequently take priority. e.g. 'I have a business to run, VAT return to complete etc '.	Set food hygiene as one of several business priorities. Accept that food hygiene is important. Receptive to suggestions from Local Authority Inspector. Evident acknowledgement of compliance within the business. e.g. 'We try to keep on top of the requirements for managing food safety'.	Considers food hygiene to be a top priority, a critical business success factor & something at which they wish to be excellent Food safety is a shared value across the business prioritised by management and staff. Frequent reference to food safety/hygiene, and enthusiasm for prevention rather than cure e.g. actively adopting planned preventative maintenance for equipment rather than repair after breakdown. Actively using sampling and testing to verify achievement of food safety rather than using it as a means of control. e.g. 'We pride ourselves on the safety and hygiene practices of our business'.	

Flamout	Category					
Element	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Business's perception and knowledge of food safety hazards	Disregard potential for harm to people or presume it is acceptable regardless of the level of non-compliance. No action taken to evident pest infestation. No effort made to identify or understand food safety/hygiene requirements. e.g. Encouraging personnel to re-use food that should be categorized as waste (food dropped on the floor, passed the use-by date or returned uneaten by consumers).	Do not believe that the issues associated with their food products justifies applicable food safety practices. Fail to understand the potential severity of noncompliance with food safety/hygiene requirements. Perceive it unlikely that their food safety practices may adversely affect the health and wellbeing of customers. e.g. 'We've never had a problem in all the time we have been trading'. e.g. 'People are not seriously harmed by food poisoning". e.g. 'Food safety risks are exagerated'.	Largely unaware of food safety issues and legislative requirements. May have a neutral or undeveloped view of the potential issues posed by food safety. Perceive their management of food safety & hygiene as adequate once they have complied with the most recent inspector's requirements. e.g. "I am not sure what the hygiene issues are". e.g. 'It's up to the inspector to tell us what the problems are'.	Understand the food safety and hygiene issues associated with the activities of the business. Place importance on mitigating risk in line with food hygiene legislation. Make a dedicated effort to remain up to date with changes in food safety legislation. e.g. 'We review our practices when there is a change in the regulations to make sure that our business is compliant and practicing safely'.	Believe that food poisoning or other similar incidents could result in a major adverse impact on the business as well as harm to many people. Management and staff fully understand the food safety and hygiene issues associated with the activities of the business and know how to mitigate against these. Continual and on-going review of food safety and related information that may have some relevance to their operations and consideration of how this may be incorporated in the business's food safety management system. e.g. 'We are never complacent when it comes to food safety and make sure that all significant food safety issues for our business are actively managed to exceed regulatory requirements'.	

	Category						
Element	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders :		
Business's confidence in food hygiene requirements	Do not care whether food hygiene systems are effective. Make no effort to update any systems in place over time. Take no responsive action when food safety issues are reported & evident, (i.e. fridge breakdown, faulty thermometers etc.) e.g. 'I'm not wasting time and money in fixing something which I don't use anyway'.	Doubt whether food hygiene requirements would effectively prevent food poisoning and doubt their proportionality or necessity. Fail to understand how food hygiene systems help reduce the likelihood of food poisoning. See HACCP as a bureaucratic burden. May lack documentation, have HACCP Plan 'on the shelf'/un-customised copy of Safer Food, Better Business. e.g. 'Paperwork doesn't make food safe'. 'We've been doing this job for 20 years'. e.g.'These food hygiene requirements will not prevent people from food poisoning'.	May not have an opinion on whether the food hygiene requirements are effective or not, but will still comply. Compliance with food hygiene requirements is the result of instruction from the regulator and other third parties. No verification or review is undertaken to ensure the effectiveness of food hygiene systems. e.g. 'I have always done what the local authority have asked me to do'. e.g. 'It is not for me to say whether these food hygiene systems are necessary'.	Understand the benefit and importance of complying with food hygiene legislation. Confident that the use of HACCP identifies the controls required for food safety management within the business. Express agreement that food safety and hygiene requirements are effective. e.g. 'We are confident that the control requirements cited in our HACCP will prevent food safety problems'.	Believe that systems such as HACCP when properly applied are essential for the sake of the business (and that they do effectively control the significant food safety issues). Staff and managers understand the different food safety and hygiene systems and value their importance in mitigating food safety concerns. e.g. 'HACCP and related hygiene procedures are a critical part of how we prevent incidents'.		

Element	Category					
	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Business ownership of food safety and hygiene	Consciously do not comply unless enforcement obliges them to. Lack of presence within the business with no delegation of responsibility for food safety. e.g. 'I won't change anything (with regards to food safety unless they [the regulator] can show me evidence that I have to'.	Food hygiene requirements seen as burdensome. Business rejects ownership of food safety practices as these are believed unnecessary. e.g. 'We don't need to worry - the staff know what they are doing – it's common sense'.	Place ownership and responsibility for food hygiene compliance on the regulator and other third parties. Reliant on sources external to the business to update them to legislative changes and highlight what, if anything, needs to change. e.g. Just tell me what you want me to do(with regard to food safety)'. e.g. 'Just give me a list of what you want me to do and I will do it'.	Understand the importance of food hygiene compliance and take ownership of meeting the requirements. Clearly understood organisational structure and defined responsibilities for food safety. e.g. 'We encourage all staff to take ownership and responsibility for food safety and challenge noncompliance'.	Self-evaluation of the food safety and hygiene systems to identify opportunities for improvement e.g. active use of scheduled internal audits. See food hygiene as a fundamental business risk and one that must be actively managed. Evidence of active management of food safety and completion of records, timely reaction to issues. e.g. 'The food safety lead will regularly communicate a review of food safety practice standards across the business to highlight best practice and areas for further monitoring/improvement'.	

Element	Category					
	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Competence, learning and training in food safety and hygiene systems	Any knowledge is not applied. Staff/management have no wish to improve competence with regards to food safety. Demonstrate lack of interest in guidance, negative attitude to suggestions that training is undertaken (self or staff). e.g. 'I don't care about getting a certificate, as long as the customer keeps coming back'.	Doubt the benefit of attending training and developing competence in food safety. Do not perceive training to be relevant or important to their business. e.g. 'Don't need to train staff – it's common sense'.	Basic competence displayed with regards to food hygiene. Knowledge is derived from interactions with the regulator and other third parties. e.g. 'They [the regulator] told me to use different chopping boards for raw and cooked meats so I do'. e.g. 'Just tell me what you want me to do'.	Competent and knowledgeable about food hygiene legislation and how to manage relevant hazards. Undertakes standard food safety training for food businesses. Staff have received instruction in food hygiene and safety requirements and are evidently knowledgeable. Those monitoring Critical Control Points display good understanding. e.g. 'We make sure that all staff receive training on basic/Level 2 food safety'. e.g. 'It is very important that everyone knows what they need to do to prevent incidents'.	Very well informed about hazards and latest methods of control. Highly trained and knowledgeable management, with regards to food safety. Awareness of current food safety issues and legislative changes with regard to food safety is evident. Knowledge of food safety goes over and above legislative requirements (i.e. strive for 'best practice'). e.g. 'All our staff receive formal food hygiene training annually and internal reviews to ensure they know what they are doing'. e.g. 'It is essential that staff are competent to avoid incidents'.	

Element	Category					
	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Leadership provided on food safety and hygiene	Management advocates non-compliance except where there is a risk of enforcement. No attempt to provide suitable equipment /facilities to enable staff to work correctly e.g. hand wash facilities. e.g. 'It's not my problem - they can't fine the boss if the kitchen staff don't wash their hands'.	Leaders fail to act as a role model of good food safety behaviours and express cynicism to staff. (e.g. FBO/Managers not adhering to protective clothing rules). Poor food hygiene practice remains unchallenged and feedback is not provided with regards to hygiene behaviours. e.g. 'I'm not going to wash my hands every time I go in and out of the kitchen what a waste of time'.	Leadership surrounding food hygiene is inconsistent and follows instruction from the regulator. Lack of initiative and drive demonstrated by the FBO. Little presence of/direction from the FBO in workplace with regard to food safety, except following LA inspection. e.g. 'The inspector told them [staff] to tie their hair up so I tell them to do that now'.	Leaders aim to provide a good example and encourage the food hygiene behaviours desired from their staff as per the regulations. Leaders challenge poor food hygiene practices which fail to comply with legislation. e.g. 'I wash my hands when entering the kitchen and I expect my employees to do the same'.	Frequently encourage staff to apply food hygiene procedures, explain why this is necessary and applaud good practice. Evident active interest in food safety; leadership through good examples. Recognition of achievement i.e. 'scores' for compliance with standards. e.g. 'I think it's important to give recognition for when staff are implementing best practice with (regards to food safety) as well as challenging when they are not'.	

Element	Category					
	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Employee engagement in review & development of food hygiene practices	Minimal staff engagement. Dictatorial approach to 'managing' staff or simply do not seek staff opinion. e.g. 'I expect my staff to do what I say'.	Low employee engagement as doubt the significance of the hazards posed by poor food hygiene and the effectiveness of food hygiene regulations/ requirements. Employee suggestions/input offered is not considered by management or actively encouraged. e.g. 'We've always done it this way' e.g.' Staff lack the expertise to help improve food hygiene procedures'.	Low employee engagement as development and application of practices and procedures is driven by the regulator and other third parties. Staff are left to get on with what they are paid to do and behave in a way that they think is appropriate. e.g. 'Our food hygiene practices would only be changed in response to recommendations following inspection'. e.g. 'It is not realistic for us to engage staff in reviewing how we do things here'.	Employee engagement is accepted to help comply with regulation. Develops food hygiene practices with some staff involvement and offers the opportunity for employees to comment once complete. (e.g. following review of HACCP Plan or Safer Food, Better Business). e.g. 'It is important to get representation from staff when reviewing the practices they are expected to implement and it needs to be practical'.	Actively seek employee views on how to improve food hygiene. Evident active interest in continual improvement in food safety — incentives/rewards for compliance and consistent achievement of internal standards; encouragement of suggestions for improvement. e.g. 'Employee involvement is key to the development of practical and effective food hygiene practices'. e.g. 'Employees can help solve problems'. e.g. 'We always work together with staff to review problems and come up with solutions'.	

Element	Category					
	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:	
Communications & trust to engage in food safety and hygiene & report issues	Either no trust or actively discouraged from reporting concerns. e.g.' I would not report issues, its more than my job's worth'. e.g. 'It is not the job of staff to say something is wrong'. e.g. 'If someone makes a mistake they deserve to be blamed for it'.	Management make derogatory comments about food safety/hygiene requirements. No action taken when issues are reported or actions taken are not timely. Staff have to raise issues several times to get a response. e.g. 'People worry too much. If I followed up every staff concern raised I would never get any work done'. e.g. 'We are a small business, so I do not need people to tell me what is going on'.	Employees not encouraged to report poor food hygiene. Very little communication about food hygiene. Staff left to get on with the job and work around any issues. e.g. 'Any communication about food safety will come from the inspector when they visit'. e.g. 'I would not know how to solve a problem if staff reported one to me'.	Communications focus on promoting food hygiene in line with regulation. Staff are encouraged to report examples of poor food hygiene practice to ensure compliance. Staff indicate they can influence food safety practice within the business. e.g. 'We have an open door policy so staff can flag any points of concern in confidence that they will be investigated'. e.g. 'When we implement new procedures or working practices, we ask staff to tell us if they work well or not'.	Employees feel completely free to report issues and trust management to respond positively. Evident communication of food safety matters (i.e. staff 'notice board', display of any complaints and actions taken). Management receptive to suggestions for improvement. Involvement of staff in resolving issues and providing support in taking agreed actions. e.g. 'Suggestions for improvement and highlighted issues are logged with details of follow up. This log is freely accessible to all staff to track the progress and contribute to the final outcome'. e.g. 'We applaud and thank people when they report problems'.	

5 APPENDIX B: SUPPORTING EXPLORATION AND CATEGORISATION

5.1 Overview

The toolkit aims to help inspectors understand and categorise the food safety culture of a business.

This can be carried out very generally (level 1 understanding) or at a more detailed level (level 2 understanding).

Both the level 1 and 2 require exploration of the food business attitudes and behaviour towards food safety and hygiene and consideration of which food safety culture category best applies to the food business.

The exploration and categorisation of the food safety culture should be based on observations of the business and behaviour and the descriptors detailed in the food safety culture matrix (section 4, Table 5) should be used as a benchmark to support and guide this exploration and categorisation.

The exploration and categorisation of the food safety culture should be based on observations of the business and behaviour.

This section provides guidance on:

- The areas to explore during discussion with the food business and staff;
- Observations of staff and owner behaviour;
- Documents that can be reviewed as part of the inspection.

All of which can help support exploration and categorisation, on the part of the inspectors, of the food business attitudes and behaviour towards food safety and hygiene.

5.2 Areas to explore

Each element, detailed below, has a selection of issues the inspector can explore to help profile the attitudes and behaviours of the business.

This information can be used to support categorisation, on the part of the inspector, of the food business attitudes and behaviour towards food safety and hygiene.

Not all issues need to be explored. Rather these are example areas to explore during discussions, within the inspection, to help understand the food business attitudes and behaviour towards food safety and hygiene.

Element 1: Priorities and attitudes

- 1. To what extent is food safety and hygiene seen as a critical success factor for the business?
- 2. What are the things that are seen as most important for the business to succeed?

Element 2: Food hygiene risk perceptions & knowledge

- 3. To what extent does the business think that not complying with food hygiene and food safety regulations would create a significant possibility of customers getting food poisoning?
- 4. To what extent does the business think that the risk to their customers of food poisoning or other forms of harm justify current food hygiene and safety regulations?
- 5. What does the business believe are the key things that can make their products unsafe for consumers to eat? How do they think this could affect their business? What effect do they think this could have on consumers?

Element 3: Confidence in food hygiene and safety requirements

6. How necessary does the business think (practice x) is for preventing food poisoning or other food safety problems?

- 7. How valid and appropriate does the business think food hygiene legislation is, with respect to the relevant food safety concerns within the business?
- 8. To what extent does the business consider food hygiene legislation to be a nuisance, impractical, unnecessary, ineffective, over the top or necessary, appropriate and effective?

Element 4: Business ownership of food hygiene

- 9. Can the business provide examples of changes in their food hygiene and safety practices over the last year? Who decided on these changes and what prompted these changes?
- 10. Is it clear who in the business is responsible for determining how to prevent food from being unsafe?
- 11. Is it clear who in the business is responsible for deciding how to improve food safety and hygiene practices?
- 12. How often does the business review and update their food hygiene and safety practices?
- 13. When was the last time the business reviewed or changed food hygiene and safety practices? What prompted this?
- 14. To what extent does the business believe that they are responsible for understanding and complying with food safety and hygiene regulations?

Element 5: Competence, learning, training, knowledge etc

- 15. How does the business develop their staff's food safety and hygiene competence and knowledge?
- 16. What does the business do to help their staff know about food safety issues in relation to their products?
- 17. What does the business do to help their staff understand what they need to do to ensure food is safe for consumers/customers?
- 18. To what extent does the business believe that the safety of their products depends on their staff complying with the hygiene requirements and practices in place within the business?
- 19. To what extent does the business believe that food hygiene and safety is common sense (as opposed to requiring training and instruction)?
- 20. To what extent does the business assume that their staff understand the food hazards in the business and understand good hygiene practice?

Element 6: Leadership on food hygiene

- 21. What does the business do to encourage good food hygiene and safety practices amongst staff?
- 22. How does the business encourage staff to behave correctly/follow the rules for food safety when they are handling food?
- 23. To what extent does the business look to set a good example to their staff in following food hygiene and safety rules?

Element 7: Employee engagement in review & development of food hygiene practices

24. Who is involved in reviewing food safety and hygiene practices and identifying how to improve these practices? For example, if cooked food in a restaurant is being left out for too long before being taken to customers, who decides what to do about it?

- 25. Can the business provide examples of how staff are involved in reviewing food hygiene practices and deciding on improvements?
- 26. Do the staff have enough experience and expertise to help identify how to improve food hygiene and safety practices?
- 27. How often does the owner/manager obtain staff opinion on how to improve food hygiene and safety practices?

Element 8: Communications & trust to engage in food hygiene & report issues

- 28. How does the business communicate food safety and hygiene good practices with its staff?
- 29. How do staff report issues with food safety?
- 30. What do staff do when they find a problem that might affect the safety of the food. How do they report it?
- 31. What does the manager/owner say to staff when they report a food hygiene problem?
- 32. What would the business do if one member of staff reported that another member of staff had failed to follow the rules for food safety/hygiene?
- 33. What information do staff get to help them understand how well the business is performing with respect to food hygiene and safety?

5.3 Observations to undertake

The following are examples of observations that can be made during your inspection:

- 1. Environmental prompts encouraging food safety behaviour (i.e. signage, colour coded utensils and cookware, soap and towels/dryer availability);
- 2. Provision and use of equipment (suitable hand wash and sinks in appropriate positions, thermometers, protective clothing/aprons/tabards, hairnet/catering hats, designated storage areas for specific items e.g. cleaning chemical storage, cleaning equipment storage);
- 3. Personal staff behaviours relative to food safety (nail varnish/jewellery worn, use of catering plasters, hand wash behaviour);
- 4. Organisation within the food handling area/workspace (i.e. logical flow for products/process, designated workspaces e.g. vegetable preparation, service, waste handling and flow, personnel 'flow');
- 5. Management/leader food safety behaviour (i.e. presence of manager/leader, role modelling positive food safety behaviours, challenges poor food safety).

5.4 Documents to review

The following are examples of documentation that could be reviewed as part of the food safety culture discussion:

- 1. Documented food safety management system (based upon HACCP as required by law); e.g. HACCP Plan or Safer Food Better Business pack;
- 2. Records/logs of food safety practices undertaken (i.e. temperature monitoring,

thermometer calibration, goods received, pest monitoring, cleaning schedule/cleaning instructions, process control/CCP monitoring, maintenance);

- 3. Log of food safety issues reported (including details of follow up and resolution if possible); customer complaints;
- 4. Records of food hygiene training (including date, level, duration, content and accreditation if applicable); internal hygiene and food safety training.

6 APPENDIX C: BACKGROUND, PURPOSE AND APPLICATION OF THE TOOL

6.1 Background

An outbreak of *E. coli* O157 in South Wales in 2005 and the publication of the Public Inquiry Report in March 2009¹ highlighted the issue of cultures and behaviours in businesses and their role in influencing compliance with food hygiene legislation. The outbreak – the largest ever incidence of E. coli O157 in Wales and the second largest in the UK – affected more than 150 people, most of whom were children in 44 schools; 31 people were admitted to hospital and a five-year-old boy died.

The report notes that there were serious, and repeated, breaches of food safety regulations. The Food Business Operator (FBO):

- Failed to ensure that critical procedures, such as cleaning and the separation of raw and cooked meats, were carried out effectively;
- Falsified certain records regarding food safety practice;
- Lied to Environmental Health Officers:
- Had a significant disregard for food safety and thus, for the health of people who consumed meats produced and distributed by his business.

Similar lessons have been learnt from incidents overseas. For example, in the USA the Peanut Corporation was responsible for a salmonella outbreak which affected 3000 companies and resulted in 9 deaths and 4000 recalls. They had been audited and given a high rating. The failure was attributed in part to its food safety culture. ²

These incidents indicate that many food safety outbreaks are due to food handler error or non-compliance with food hygiene procedures, often despite being trained. Recognising that many food businesses are small, compliance is thought to be highly influenced by the person in charge, just as senior management influence norms in larger businesses.

As expressed by Chris Griffith³ with reference to food safety:

"Thousands of businesses are over-managed but underled with a negative culture where safety is a low priority. Many more have a neutral culture of complacency. Big companies are especially prone to this. How many of you have a positive culture of passion and commitment?"

Occupational health and safety went through a similar evolution, first focusing on equipment, workplace and procedures, then focusing on management and more recently safety culture. This reflects a progressive process, with each stage of work building on the previous one.

Food safety culture is now coming to the fore, with, for example, the Underwriters Laboratories (UL) in the USA having launched⁴ an initial training platform on "Food Safety Culture," which is designed to "guide food industry executives through the process of creating an organizational culture to ensure that food products are safe and meet consumer and regulatory requirements".

Also, Fatimah et al⁵ report that they are developing organizational climate measures based

http://wales.gov.uk/ecolidocs/3008707/summaryen.pdf?skip=1&lang=en

² Sara Mortimore, Vice President, Quality Assurance and Regulatory Affairs, Land o'Lakes, USA Global Food Safety Conference 2011

³ Chris Griffith, Editor British Food Journal and Head of Food Research and Consultancy Unit, University of Wales, UK and Technical Director of Von Holy Consulting, South Africa Global Food Safety Conference 2011

⁴ http://www.prnewswire.com/news-releases/ul-launches-new-food-safety-initiative-128001093.html

⁵ Ungku Fatimah Ungku Zainal Abidin, Susan W. Arendt, & Catherine H. Strohbehn. Department of Apparel,

"upon an analysis of existing safety climate surveys, expert reviews, and pilot testing". They report that the "measures developed from this study may be used in future research to better understand the impact of climate for safe food handling on organization food safety outcomes".

Frank Yiannas⁶, author of 'Food Safety Culture. Creating a Behavior-Based Food Safety Management System', argues that:

"Achieving food safety success in this changing environment requires going beyond traditional training, testing, and inspectional approaches to managing risks. It requires a better understanding of organizational culture and the human dimensions of food safety. To improve the food safety performance of a retail or foodservice establishment, an organization with thousands of employees, or a local community, you must change the way people do things. You must change their behavior...."

6.2 What is food safety culture?

Coreil, Bryant, and Henderson, (2001⁷) state "Culture is patterned ways of thought and behaviour that characterize a social group, which can be learned through socialization processes and persist through time." (p11)

Professor Chris Griffith⁸, defines food safety culture as "the collective food safety practices used within an organization ... taking into account both food safety culture and food safety management....the aggregation of the prevailing relatively constant, learned, shared attitudes, values and beliefs contributing to the hygiene behaviours used in a particular food handling environment" and one must "provide staff with a common sense of food safety purpose."

Food safety culture is viewed as:

- How and what the employees in a company or organization think about food safety;
- The food safety behaviours that they routinely practice and demonstrate.

From a cultural perspective, employees will learn these thoughts and behaviours from other people in the organization. These thoughts and behaviours are said to cascade throughout the organization and thereby have a sustained influence on peoples' performance – whether this is for good or bad.

Recent studies (Frank Yiannas 2009⁹; Powell et al 2011¹⁰; Griffith et al 2010¹¹ and Institute of Employment Studies 2010¹²) indicate there are two key ways to understand food safety

Educational Studies, and Hospitality Management Iowa State University. *Organizational climate for promotion of safe food handling practices: Development and validation of measures in foodservice organizations.*

⁶ Yiannas, Frank. *Food Safety Culture: Creating a Behavior-Based Food Safety Management System*. 2009. Series: Food Microbiology and Food Safety.

⁷ Cited within F. Yiannas, (2009). Food Safety Culture: Creating a Behavior-Based Food Safety Management System (Food Microbiology and Food Safety). Springer science.

⁸ http://www.foodsafetymagazine.com/article.asp?id=4099&sub=sub2

⁹ Yiannas, F. (2009). Food Safety Culture: Creating a Behaviour-based Food Safety Management System. Springer. New York:USA.

¹⁰ Powell, D., Jacob, C. & Chapman B. (2011). Enhancing food safety culture to reduce rates of foodborne illness. *Food Control.* 22 (6), 817-822.

¹¹ Griffith, J., Livesey, K.M., Clayton, D. (2010) The assessment of food safety culture, *British Food Journal*, *Vol. 112 Iss: 4, pp.439 – 456.*

¹² Evidence review on regulation cultures and behaviours, Institute of Employment Studies Cardiff Work

culture, namely:

• By defining types of organisational culture, such as reactive versus proactive, and;

By defining the elements that comprise or influence a culture, such as leadership.

The recent studies outlined above suggest that food safety culture can be said to have the following elements:

- 1. **Priorities and attitudes –** Food business's attitudes towards food safety and the degree to which food safety is prioritised within the organisation.
- 2. **Business's perceptions and knowledge of food hazards-** Food business's (management and staff) perceptions and knowledge of the hazards associated with food hygiene (and whether they are significant enough to justify the requirements).
- 3. **Business's confidence in food safety requirements** the extent to which the business perceives the food hygiene regulations and requirements to be valid and effective.
- 4. **Business's 'ownership' of their food safety responsibilities -** The extent to which they see food hygiene to be the responsibility of the regulator and adopt a reactive approach, as opposed to accepting that the business is responsible for taking a lead in food safety.
- 5. **Business's competence** Knowledge and understanding of the hazards and subsequent hazard management throughout the organisation.
- 6. **Business's internal leadership** The extent to which there is clear and visible commitment and leadership of food safety from management.
- 7. **Employee involvement** The extent to which there is involvement, ownership and accountability for food safety across staff at all levels of the business.
- 8. **Communications within businesses** The extent to which there is open communication and freedom to challenge and discuss practices.

Moreover, the recent studies outlined above suggest that businesses' food safety culture (across the elements) can be categorised, as follows:

- a) Calculative non-compliers: Intentionally breach regulations for the sake of financial gain, disputing or disregarding the potential impact on consumers – without assessing the potential impact on people and making decisions without due deliberation or consideration of regulations or other requirements;
- b) **Doubting compliers:** Doubt the significance of the hazard posed by food safety and hygiene and the effectiveness of food hygiene regulations and requirements in managing these hazards. May have the capability to understand requirements but doubt the risk. May express cynical view to staff and do not promote compliance other than for purposes of regulatory compliance.
- c) Dependent compliers: Wait upon advice or instruction from regulators and other third parties to make improvements and view food safety and hygiene as something driven by third parties. Tend to view requirements as unfairly complex and that it is unreasonable to expect them to take a lead in understanding and applying. May have low levels of knowledge and training. May not have any clear perception or knowledge of the potential issues posed by food safety and hygiene.
- d) **Proactive compliers:** Understand that hazards posed by poor food hygiene and poor process controls are significant and accept that requirements are effective and necessary. Wish to ensure food safety controls are proportionate and effective, and will positively debate (internally and externally) how best to manage food safety hazards in

Environment Research Centre. http://www.food.gov.uk/science/socsci/ssres/crosscutss/ssculturereview

a cost effective and proportionate way, implementing food safety controls after careful deliberation. Management provides a lead in encouraging compliance for the sake of the business as well as regulatory compliance but may not go beyond "good practice".

e) Leaders: View food safety and hygiene as critical business issues that they must tightly manage and offers potential business benefits through achievement of a good reputation for food safety and hygiene. Provide visible leadership in continually reviewing food safety and improving food hygiene.

The elements and categories of food safety culture can be presented as a matrix.

The matrix, which forms the basis for the exploration and categorisation of food safety culture assessment (section 2 and 3), consists of 5 categories and 8 elements.

Table 6 Food Safety Culture Matrix Categories and Elements

	,						
	Category						
Element	a) Calculative non- compliers:	b) Doubting compliers:	c) Dependent compliers:	d) Proactive compliers:	e) Leaders:		
Business priorities and attitudes towards food hygiene							
Business's perception and knowledge of food safety hazards							
Business's confidence in food hygiene requirements							
Business ownership of food safety and hygiene							
Competence, learning and training in food safety and hygiene systems							
Leadership provided on food safety and hygiene							
Employee engagement in review & development of food hygiene practices							
Communications & trust to engage in food safety and hygiene & report issues							

The food safety culture matrix is presented in Section 4, Table 5 and provides descriptions of each element per category.

It should also be noted that there is insufficient research in the area of food safety to indicate whether businesses progress through these categories in a sequence over time, or whether it is necessary to move businesses through the categories from "calculative non compliers" to "leaders".

Therefore, they are presented in the food safety culture matrix as categories by which a business may be categorised.

6.3 Purpose of the tool

The food safety culture diagnostic tool is for use primarily by local authority personnel undertaking food hygiene inspections to identify aspects of good/poor food safety cultures in food businesses and as a framework/device to influence business culture.

This will help inspectors start to understand the attitudinal drivers to food safety and hygiene behaviour and the type of advice that can be provided to help influence attitudes and, ultimately, the culture within a food business.

The toolkit has been developed with particular consideration for use with micro and small businesses in mind; however the tool is not intended to have exclusive application for such businesses.

The tool can be used as part of inspection and related decision making. The tool will help the inspector to:

- Explore the food safety culture of the food business through discussions, observations and review of documentation;
- Categorise the culture of the business, using the food safety culture matrix; and
- Provide suitable advice to help improve culture.

Some specific uses include:

- Helping to assess the attitudinal aspect of 'confidence in management' ratings
 – as
 part of intervention ratings;
- Helping to consider the attitude of the business when deciding on enforcement actions.

Annex 5 of the Food Law Code of Practice¹³ (Food establishment intervention rating schemes) includes assessment of 'Confidence in Management', namely "the likelihood of satisfactory compliance being maintained in the future". The code suggests that factors "that will influence the inspector's judgement include....the attitude of the present management towards hygiene and food safety." The five categories of food safety culture cited in Table 1 may be used to inform the rating of 'Confidence in Management' by profiling the business attitude as follows (for food hygiene):

- A 'leader' is more likely to display a "Good record of compliance"; (score of zero)
- A 'proactive complier' might be more likely to display a "Reasonable" (possibly good) record of compliance; (score of 5)
- A 'dependent complier' might be more likely to display a "Satisfactory record of compliance"; (Score of 10)
- A 'doubting complier' might display "Varying record of compliance"; (score of 20)
- A 'calculative non complier' might display a "Poor track record of compliance". (Score of 30).

The advice on how to influence food safety culture may be applied in parallel to and as part of informal and formal enforcement, such as verbal advice and letters. As noted in the Food Law Code of Practice "Authorised officers should take account of the full range of enforcement options. This includes educating food business operators, giving advice, informal action,..." (p47). The code advocates a hierarchical approach, starting with advice and education and only moving to formal enforcement where advice and education fails to secure compliance. The advice on how to influence food safety culture is intended to help

¹³ www.food.gov.uk/multimedia/pdfs/codeofpracticeeng.pdf

motivate businesses to move towards self motivated self compliance. The advice includes 'messages' and voluntary actions that might influence or help to change the attitude of businesses.

In addition, when deciding on the issue of hygiene improvement notices, the officer should consider whether they have "reason to believe that an informal approach will not be successful" (p53). The food safety culture category of a business may inform this judgement.

6.4 Application: Understanding food safety culture

The inspector should explore the food safety culture of the food business and consider which category best applies to a food business. This categorisation should be based on their observations of the business' attitudes and behaviours gained through discussions, observation of the business and its current compliance behaviour.

Section 4 provides the food safety culture matrix detailing the categories and elements of food safety culture. These categories will help the inspector explore the food safety culture within the business and consider which category and element descriptors best applies to a food business

Section 5 provides high level guidance to help initiate discussions to help categorise the food safety culture of the food business.

This guidance covers:

- A set of areas to explore each food safety culture element;
- Example documentation to review as part of the inspection, to understand food safety and hygiene practices and;
- Example observations that can be made to help understand food safety and hygiene behaviours within the business.

6.5 Application: Improving food safety culture

Understanding the food safety culture of a business aims to help improve culture in two main ways:

- Supporting enforcement decisions;
- Providing example advice that is mapped to each category and each element (see section 3).

Research suggests that developing an understanding of business attitudes can help to support and target enforcement decisions and strategy. For example Jensen and Jensen (2003)¹⁴ developed a simple guide to matching enforcement tactics to the exhibited attitude of the organisation. They classify businesses according to whether they are willing and able to comply, with three categories, I = willing and able, II = able but not willing, III = neither willing nor able.

Moreover, similar work has been completed in other regulatory areas such as environmental law (Greenstreet Berman Ltd for DEFRA, 2011) 15. The findings from this work suggested a

¹⁴ Jensen P and Jensen J. *Carrots and sticks – inspection strategies in Denmark*, July 2003. National research centre for OHS regulation. Online publication http://ohs.anu.edu.au/publications/pdf/wp%2012%20-%20Jensen%20and%20Jensen.pdf

¹⁵ Business perspectives on approaches to securing compliance - BR0103, Greenstreet Berman Ltd 2011. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=17702

model of responsive regulation whereby the prior attitudes of businesses are taken into account in enforcement decisions.

This research also suggests that a range of approaches to securing compliance need to be matched to the attitudes and capacity of businesses. Therefore along with supporting potential enforcement strategies, the assessment of attitude and culture should be used to decide on other interventions that can be applied to help influence attitudes and behaviour.

For example, Powell et al (2011) ¹⁶, indicate that interventions, such as advice, guidance and recommended training etc... that encourage the development of the following will help to create a good food safety culture:

- Know the significant hazards associated with the foods they handle and how these should be managed;
- Dedicate resources to evaluate supplier practices;
- Stay up-to-date on emerging food safety issues;
- Foster a value system within the organization that focuses on avoiding illnesses;
- Communicate compelling and relevant messages about hazard and risk reduction activities, and empower others to put them into practice;
- Promote effective food safety systems before an incident occurs; and
- Do not blame customers, including commercial buyers and consumers, when illnesses are linked to their products.

Some of the research (Frank Yiannas 2009¹⁷; Powell et al 2011¹⁸; Griffith et al 2010¹⁹ and Institute of Employment Studies 2010²⁰) also suggests that introducing a positive safety culture incorporating the elements outlined in the food safety culture matrix, should ensure that businesses have an understanding of food safety requirements as well as the knowledge, motivation and skill to effectively manage significant food safety hazards.

This is particularly important for micro and small enterprises where compliance is often driven by the regulator and motivations to change are commercially, as opposed to safety, driven.

32 July 2012

©Food Standards Agency, 2012

¹⁶ Powell, D., Jacob, C. & Chapman B. (2011). Enhancing food safety culture to reduce rates of foodborne illness. *Food Control.* 22 (6), 817-822.

¹⁷ Yiannas, F. (2009). Food Safety Culture: Creating a Behaviour-based Food Safety Management System. Springer. New York:USA.

¹⁸ Powell, D., Jacob, C. & Chapman B. (2011). Enhancing food safety culture to reduce rates of foodborne illness. *Food Control. 22 (6)*, 817-822.

¹⁹ Griffith, J., Livesey, K.M., Clayton, D. (2010) The assessment of food safety culture, *British Food Journal*, *Vol. 112 Iss: 4*, pp.439 – 456.

²⁰ Evidence review on regulation cultures and behaviours, Institute of Employment Studies Cardiff Work Environment Research Centre. http://www.food.gov.uk/science/socsci/ssres/crosscutss/ssculturereview