

Organisation and implementation of training activities on principles and methods of risk assessment in the food chain – Chafea/2018/BTSF/05 - under the “Better Training for safer Food” Initiative

COURSE 2 – MICROBIOLOGICAL RISK ASSESSMENT

Phase 2

Valid as of 26/07/2023

1. Course objectives.....	2
2. Training dates and locations.....	3
3. Selection criteria for participants	4
4. Country allocations.....	6
5. Face-to-face logistical arrangements	8
Annex 1: Background and main topics covered in training	9
Annex 2: Legislation and guidance	11
Annex 3: Agenda.....	12
Annex 4: Training material, outcomes and dissemination activities.....	19
Annex 5: Contractor contact details.....	20

1. Course objectives

General objective

The main goal of the training programme is to disseminate best practices for the implementation of principles and methods of food chain risk assessment, improving knowledge of this complex area of work and ensuring consistent and high implementation standards across the European Union.

Specific objectives

- Promoting reduction of discrepancies in procedural aspects of risk assessment
- Contribute to the harmonisation of risk assessment approaches
- Contribute to increasing transparency and building trust amongst Member States' authorities in each other's risk assessments.
- Disseminate best practices for risk management and communication
- Promote exchange of experience in order to increase the level of expertise and harmonisation of approaches.

The training will be addressed to officials from the Member States, EEA/EFTA countries and EU candidate countries involved in the risk assessment field.

2. Training dates and locations

Two five-day Face-to-face (F2F) training courses will be delivered in October 2023 and June 2024 with approximately 20 people and it will be designed in the following way: overall five full day sessions (from around 9 AM until around 5 PM Central European Time) with opening introductory session in the morning on the first day and a closing morning session on Friday.

Table 1: Training dates and Location

Year	Training sessions	Course title	Locations*	Proposed dates**	Registration deadline
2023	TS 1	Microbiological Risk Assessment	Warsaw, Poland	09-13 October 2023	08/09/2023
2024	TS 2	Microbiological Risk Assessment	Rome, Italy	17-21 June 2024	17/05/2024

For organisational purposes, names of participants should be communicated at the latest 30 days before the workshop. A reminder will be sent to NCPs before the event.

3. Selection criteria for participants

- Participant must:
1. Fulfil the eligibility criteria
 2. Meet the minimum requirements
 3. Be selected using the evaluation criteria

1. Eligibility criteria for Course 2 Microbiological Risk Assessment

Only **eligible participants** should be further assessed against the minimum requirements below.

Trainees must be originated from national authorities and public institutions (e.g. ex art. 36 of EFSA's founding Reg. CE 178/2002), involved in food chain risk assessment.

Participants must meet the minimum requirements below to ensure they can follow and fully participate in this course. Participants who do not meet the minimum requirements should not be proposed for the training.

2. Minimum requirements for Course 2 Microbiological Risk Assessment

Yes/No

Participant must:

- Have worked in functional areas of food chain risk assessment with a minimum of 3 years of professional experience or
- Have had experience of setting up and implementation of food chain risk assessment in a Competent Authority (covering areas of food/ feed safety, animal health or animal welfare).

Yes/No

The evaluation criteria should be used as a tool to prioritise participation (higher score indicates higher priority), but there is no minimum score necessary.

3. Evaluation criteria for Course 2 Microbiological Risk Assessment

Enter Score

a) Professional experience within a public institution or a competent authority involved in food chain risk assessment

Scoring

less than 3 years = 1 points; 3 - 5 years = 5 points; 5 - 10 years = 10 points; > 10 years = 12.5 points

b) Experience in microbiological risk assessment

Scoring

less than 2 years = 0 points; 2 - 5 years = 5 points; 5 - 10 years = 10 points; > 10 years = 12.5 points

c) Experience in crisis investigation and management

Scoring

no experience = 0 points; less than 3 years = 5 points; 3 - 5 years = 10 points; > 5

	years = 12.5 points	
d)	<p>During the course, participants will be provided with a training package to be used as support dissemination material. Commitment to disseminate the knowledge received is a prerequisite for course participation.</p> <p><u>Scoring</u></p> <ol style="list-style-type: none"> 1. Commitment to distribute the training material among their colleagues = 5 points; 2. Point 1 plus preparing and giving presentations based on the training material for the staff of national competent authorities/uploading training material to national competent authorities' intranets/websites = 10 points 3. Points 1, 2 plus preparing informative articles in the professional national journals = 12,5 points 4. no commitment = 0 points 	
Maximum total score		50

4. Country allocations

A total of 20 seats for each session will be allocated according to the tables below. The course will be offered to officials of the Member States, EEA/EFTA countries and EU candidate countries. It's highlighted that each invited country will be requested to select trainees coming from the risk assessment field. Please note that the number of allocated seats for each country may vary.

Table 2: Suggested allocation for EU Member States and Candidate Countries

Country group	Country	TS01 - Warsaw	TS02 - Rome
		09-13 October 2023	17-21 June 2024
Member States	Austria	0	1
	Belgium	0	1
	Bulgaria	1	0
	Croatia	1	0
	Cyprus	0	1
	Czech Republic	1	0
	Denmark	1	0
	Estonia	1	0
	Finland	1	0
	France	0	1
	Germany	1	1
	Greece	0	1
	Hungary	1	0
	Ireland	0	1
	Italy	1	1
	Latvia	1	0
	Lithuania	1	0
	Luxembourg	0	1
	Malta	0	1
	Netherlands	0	1
	Poland	1	1
	Portugal	0	1
	Romania	0	1
	Slovakia	1	0
	Slovenia	0	1
	Spain	1	1
Sweden	1	0	
Candidate Countries	Albania	0	1
	Bosnia and Herzegovina	1	0
	Montenegro	0	1
	North Macedonia	1	0
	Serbia	1	0
	Türkiye	0	1
	Ukraine	1	0

Table 3: Suggested allocation for other non-EU Countries

Non-EU Countries	Iceland	0	0
	Norway	1	0
	Northern Ireland	0	1

You are welcome to nominate more participants for the reserve list than indicated in the table above. If seats will become available you will be informed in due time.

In addition to the numbers indicated above, each country will be requested to indicate additional participants for a reserve list to be used should one or more countries not meet the proposed quota.

For logistic organisational reasons, it is kindly requested that names of participants shall be communicated at the latest within 15 days from the workshop. A reminder will be sent to NCPs before event.

Should you consider that the number of allocated seats is insufficient to meet your country's training needs, please contact the Project Manager at 20189605riskassessment@btsftraining.com as soon as possible, providing an explanation.

The contractor will evaluate your request and pass it to the Contracting Authority for consideration.

5. Face-to-face logistical arrangements

In the case of face-to face training sessions, the European Commission will fund in full the visa, travel, accommodation, meals for all training participants. No daily allowance will be paid on top of this. Any other costs are to be paid by the participants themselves.

Participants will arrive at the training venues on morning of day 1 (Monday) and training will commence around lunch time (depending on travel connections, participants may be requested to arrive at the training venues on the evening of Sunday). Return travel will be on the afternoon of day 5, upon closure of the session, or on the following morning of Saturday according to flight connections.

OPERA Team will liaise further with the nominated participants for all logistics and practical aspect.

Annex 1: Background and main topics covered in training

Background

The EFSA Advisory Forum has on several occasions expressed a need to develop a long-term training programme on risk assessment for experts working in different fields of the food chain, wishing also more recently to extend these training programmes to additional areas of risk assessment.”.

The harmonisation of risk assessment methodologies has been identified as a priority area of the Strategy for Cooperation and Networking between the EU Member States and EFSA, since harmonisation would help in the development of high-quality scientific opinions that are recognised as truly authoritative. This harmonisation does not aim at standardising risk assessment methodology, but merely at identifying possible discrepancies between the approaches used by different Member States in order to increase transparency and trust amongst Member States’ authorities in each other’s risk assessments.

2008 EFSA Working Group Report on “Fostering harmonised risk assessment approaches in Member States” pointed out how countries organised risk assessment differently at the time. Many of the procedures in the countries appeared to be in line, or at least not in conflict, with procedural aspects within EFSA, however highlighting discrepancies in procedural aspects of risk assessment, mostly regarding declarations of interest, public register of risk assessment requests, procedures concerning the selection of experts, the interaction with stakeholders and between risk assessors and risk managers during the risk assessment process. Harmonisation of risk assessments is thus considered fundamental to avoid divergences by different national agencies and strengthen collaboration within Europe and beyond.

The present training programme will address issues listed above through the adoption of a practical approach, aimed to increase knowledge of Competent Authorities and scientists from public institutions and national authorities involved in food chain risk assessment in order to increase the level of expertise and harmonisation.

* * *

Risk analysis comprises Risk assessment, Risk management and Risk communication. Since the 1990’s, different regulatory areas have acknowledged the need to assess and manage microbiological risks on the basis of scientific approaches. Internationally, the Risk assessment framework in the area of genetically modified microorganisms was primarily initiated through OECD work in the mid-eighties. These principles were later elaborated and formalised in EC Directives 90/219/EEC and 90/220/EEC. Likewise, the regulation of microbial pesticides in the EC is governed by a Directive 91/414/EEC, where microbial Risk assessment plays a major role.

Over the last decades, the diseases and the disease prevalence’s related to food-borne pathogens have changed considerably. In the post-war era, general hygienic principles in food production were developed and for a long period the level of hygiene was thought to match and control the food-borne pathogens. However, over the last decades emerging pathogens have caused new and increasing problems all over the world. Examples of these pathogens are Salmonella, Campylobacter, Yersinia, Enterohemorrhagic E. coli (EHEC) and Listeria monocytogenes. The causes behind the new problems have not been elucidated fully but new production systems in the primary production as well as in the manufacturing sector are likely to have had an influence. Other changes in the food production chain from farm to table, including changes in kitchen habits at the consumer level, have also been mentioned.

The international trade agreements: World Trade Organisation WTO SPS agreement (Article 2) establishes that sanitary measures should be based on scientific principles. Risk analysis should be used to enhance protection of human health and minimize the incidence of food-borne disease through establishing realistic and achievable levels of control of food-borne hazards and basing food safety policies on the practical application of the results of Risk assessment and Risk management.

While risk assessment of chemical food safety hazards has been performed internationally for more than 50 years, microbiological risk assessment is a relatively new scientific discipline. While the specific practical performance of risk assessment is not necessary for everyone involved in food safety regulatory work, it is nevertheless important for every official in this area to understand the general principles behind these assessments as well as the potential benefits as well as uncertainties related to the models used and the estimates arrived at using microbiological risk assessment.

Main topics covered in the training

- Introduction to microbiological risk assessment (EU and international regulatory framework, basic steps in microbiological risk assessment);
- Introduction to microbiological risk assessment (different steps, microbiological risk assessment at national and at international level, approaches in different areas of food and feed safety, problem formulation, routes of exposure) and its legal framework;
- Hazard Identification
 - Statement of problem and scope of risk assessment;
 - What makes microbiological risk assessment different (i.e. differences with other risk assessments);
 - Food intoxication versus food infection;
 - Pathogen-product pathway;
 - Data and information on microbial agent, food and process, consumer practice;
 - Concept of Qualified Presumption of Safety (QPS);
 - Bacteria, molds, algae, mycotoxins.
- Hazard Characterization
 - The disease triangle (pathogen virulence-host susceptibility-food matrix);
 - Sources of dose-response data (human volunteer feeding studies, epidemiological data, animal studies, in vitro studies);
 - Modelling dose-response relationship (types of models, selection of dose-response model);
 - Statistical inference in dose-response modelling and applicability of results to new (even unknown) conditions, different from the reference data set.
- Exposure Assessment
 - Describing and modelling the production-to-consumption chain;
 - Describe the basic processes, such as microbial processes (such as growth and inactivation of microorganisms) and food handling processes (such as cross-contamination), statistical inference and applicability of results to new (even unknown) conditions, different from the reference data set;
 - Qualitative and quantitative (deterministic vs. stochastic) models, simple vs. structured models, limitations due to data;

- Uncertainty and variability in exposure assessment;
- Sources of data and models, their generality vs. context dependency.
- Risk Characterization
 - Qualitative, semi-quantitative, quantitative outputs;
 - Distinguishing variability and uncertainty;
 - Sensitivity analysis and “what if” scenarios;
 - Model criticism: model fit, model comparison and model assumptions;
 - Applicability and generality of results, limitations.
- Risk management aspects specifically related to microbiological risk assessment and other related issues (e.g. antimicrobial resistance, BSE and other TSE prions);
- Short introduction to Risk Communication.

Annex 2: Legislation and guidance

- Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety;
- Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs.
- EFSA, 2011, Technical report on technical specifications on training regarding principles and methods of food safety risk assessment.
- EFSA, 2017, Scientific opinion on the requirements for the development of microbiological criteria
- EFSA, 2017, Guidance on Uncertainty Analysis in Scientific Assessments

Annex 3: Agenda

DAY 1 Monday

<i>Time</i>	<i>Topic</i>	<i>Tutor</i>
13.00– 13.50	Lunch Registration of participants starting at 13.50	
14.00– 14.40	Welcome addresses, course background, objectives & expected results, presentation of tutors and participants. Preliminary discussion with participants, aimed at enquiring about their expectations on the training initiative.	Training Coordinator
14.40– 15.00	Initial test of Knowledge	
TOPIC 1: INTRODUCTION TO RISK ASSESSMENT		
15.00– 15.30	1.1 Introduction to microbiological risk assessment in feed and food <ul style="list-style-type: none"> • Risk analysis principles for food safety according to the FAO/WHO Codex Alimentarius principles and their implementation in the EU legal framework; • Division of competences between risk assessment and risk management; risk analysis in Regulation 178–2002; risk assessment in Regulation 178–2002; • Risk assessors mandated with own initiative (e.g. in EFSA regulation) • How to utilize the outcome of risk assessments <i>Presentation</i>	Training Coordinator
15.30– 16.00	1.2 Microbiological risk assessment in short: overview over the four basic steps: <ul style="list-style-type: none"> • Overall objective of risk assessment using a well-structured approach based on four steps: 1. Hazard identification 2. Hazard characterization 3. exposure assessment 4. risk characterization; in order to set the scene for the rest of the program in this training. • EFSA/WHO principles and guidelines for the conduct of microbiological risk assessment, including the definition of risk assessment question and policy (performed by risk managers) • the importance of genome sequencing in the different steps of MRA <i>Presentation</i>	Tutor
16.00– 16.30	Coffee break	
16.30– 18.15	Interactive session on Topic 1 (Practical definition of a MRA problem) <i>in this exercise, the participants will be divided into four groups and provided with four different pathogen/food combinations (e.g. Salm./eggs, Campy/poultry, Listeria/RTE, Vibrio parah/shellfish) and they will be challenged to define a MRA problem. In the plenary meeting, the participants will summarize their key findings and present them to the whole group.</i> <i>Working group exercise, followed by plenary discussion</i>	All tutors
18.15– 18.30	Overview and Conclusions of Day 1	Training Coordinator
18.30	End of Day 1	
19.30	Welcome cocktail and welcome Dinner	

DAY 2 Tuesday

<i>Time</i>	<i>Topic</i>	<i>Tutor</i>
TOPIC 2: HAZARD IDENTIFICATION		
09.00– 09.30	<p>2.1 Selecting the pathways in the exposure assessment</p> <ul style="list-style-type: none"> • Identify relevant hazards to be considered in the formulation problem • Define microbial hazards and the relevant food products, including potential information from source attribution • Description of the food pathway: introduction of the different processing steps starting at primary production (initial, intermediary and final) <p><i>Presentation</i></p>	Tutor
TOPIC 3: DATA FOR EXPOSURE ASSESSMENT		
09.30– 10.00	<p>3.1 Necessary data for an exposure assessment and related collection</p> <ul style="list-style-type: none"> • Types of data used for exposure assessment (food product, food chain, microbiological hazard, consumer) and their requirements (format, presentation, homogeneity) • Food consumption data source, exploring national and international data base for appropriate data (e.g. National Surveillance data; EU baseline surveys; EFSA/ECDC annual summary reports, industrial sources, governmental reports) • Data collection, selection and utilization <p><i>Presentation</i></p>	Tutor
TOPIC 4: METHODOLOGIES AND APPROACHES FOR EXPOSURE ASSESSMENT		
10.00– 10.30	<p>4.1. How to evaluate transmission of the hazard in the food pathway (e.g. from farm to table)</p> <ul style="list-style-type: none"> • Methods to obtain the input–output relation in each processing step: i) <i>observation</i>; ii) <i>laboratory experimentation</i>; iii) <i>predictive microbiology</i> • Introduction of different approaches to develop overall model: Event Tree, Fault Tree, Dynamic Flow Tree model, Process risk Model • Description of methodology to investigate and describe microbiological data from food: prevalence, concentration and probability of detection • Utility of risk assessment methods to identify pathogen sources <p><i>Presentation</i></p>	Tutor
10.30– 10.45	<i>Questions and Answers</i>	
10.45– 11.15	Coffee break	
11.15– 11.45	<p>4.2 Basic processes describing the transmission of the hazard in the selected food pathway</p> <ul style="list-style-type: none"> • Potential effects of each step on microbial survival, inactivation and growth along the food chain • Describing microbial basic processes and food handling processes and understanding how (and if) they can be allocated to the different processing steps • Choosing a modelling strategy for the food chain: selecting the model to use for each processing step, on the basis of the statement of purpose, process knowledge, data availability and the alternative scenario considered. <p><i>Presentation</i></p>	Tutor
TOPIC 5: SEMI-QUANTITATIVE MODELS FOR RISK ASSESSMENT		
11.45– 12.15	<p>5.1. Screening risks using semi-quantitative models</p> <ul style="list-style-type: none"> • Overview of semi – quantitative models • Example of semi – quantitative risk matrix: concept of low, medium and high risk 	Tutor

	<ul style="list-style-type: none"> • Limitations (both in theory and in practice) of semi - quantitative methods <i>Presentation</i>	
TOPIC 6: RAPID RISK ASSESSMENT (RRA) and FOODBORNE OUTBREAKS AS A CAUSE FOR RRA		
12.15– 12.45	<ul style="list-style-type: none"> • Framework for Rapid Risk Assessment • Difference between RRA and full quantitative Microbiological Risk Assessment • Examples of RRA • Interaction between risk assessor and risk manager during and after RRA <i>Presentation</i>	Tutor
12.45– 13.00	<i>Questions and Answers</i>	
13.00– 14.00	Lunch break	
14.00– 15.15	Interactive session on Topic 4 (Methodologies and approaches for exposure assessment . part I) <i>In this exercise, the participants divided into groups will be challenged with the following:</i> <ul style="list-style-type: none"> • EU and other Data sources to be provided for discussion • Predictive model (e.g. Listeria growth and Salmonella reduction along processing line) • The impact of basic processes on the hazard transmission according to given scenarios and available data (e.g. environmental conditions, handling practices, kind population for which assessment is done) <i>Working group exercise</i>	All tutors
15.15– 15.45	Coffee break	
15.45– 16.45	Interactive session on Topic 4 (Methodologies and approaches for exposure assessment . part II) <i>In the plenary meeting, the participants will summarize their key findings and present them to the whole group.</i> <i>Plenary discussion</i>	Plenary session
16.45– 17.00	Overview and Conclusions of Day 2	Training Coordinator
17.00	End of Day 2	
18.00	City Guided tour, followed by the Social Dinner	

DAY 3 – Wednesday

<i>Time</i>	<i>Topic</i>	<i>Tutor</i>
TOPIC 7: ANALYSIS OF DATA FOR EXPOSURE ASSESSMENT		
09.00– 09.30	<p>7.1 Analysis of necessary data for an exposure assessment on the basis of assessment models shown previously</p> <ul style="list-style-type: none"> • The issue of data gaps along the food chain: communicating them to risk managers and outlining strategies how to deal with them • Overcoming data limitations and improving data collection: model simplification; predictive microbiology; surrogating data; experts’ opinions. <p><i>Presentation</i></p>	Tutor
09.30– 10.15	<p>7.2 Definition of variability and uncertainty</p> <ul style="list-style-type: none"> • Introduction of probability distribution • Sources of uncertainties (scenario, model and parameter uncertainties) • Separating variability and uncertainty (second-order modelling): opportunities and limitations <p><i>Presentation</i></p>	Tutor
10.15– 10.30	Questions and Answers	
10.30– 11.00	Coffee break	
11.00– 11.45	<p>7.3. Probability distributions and stochastic processes/ Development of exposure estimates</p> <ul style="list-style-type: none"> • How to describe distributions of microbiological concentrations, including the use of Binomial, Poisson and Hypergeometric processes • Methods for modelling the changes of concentrations of pathogen in food taking variables into account (e.g. using predictive microbiology tools to predict growth/inactivation of pathogens in food over time) • Methods for modelling the probability of contamination of a food item, in view of the lack of perfect knowledge of a parameter value <p><i>Presentation</i></p>	Tutor
TOPIC 8: QUANTITATIVE MODELS FOR RISK ASSESSMENT		
11.45– 12.15	<p>8.1 Screening risks using quantitative models</p> <ul style="list-style-type: none"> • Examples of quantitative models and comparison of the performance of the semi-quantitative against quantitative models • Deterministic vs. stochastic models • Introduction to risk assessment softwares <p><i>Presentation</i></p>	Tutor
12.15– 12.30	Questions and Answers	
12.30– 13.30	Lunch break	
TOPIC 9 – PERFORMING EXPOSURE ASSESSMENT		
13.30– 14.45	<p>Interactive session – Case study on exposure assessment</p> <p>Case study (part 1)</p> <p><i>In groups, participants will perform an exposure assessment of Listeria monocytogenes in one of the following food – smoked seafood, pasteurized milk, frankfurters (reheated) or deli meats by collecting and analyzing relevant information in the case provided.</i></p> <p><i>Working group exercise</i></p>	All tutors

14.45– 15.15	Coffee break	
15.15– 16.15	Interactive session – Case study on exposure assessment Case study (part 2) <i>In the plenary meeting, the main scientific findings of the different groups are presented and compared.</i> <i>Plenary discussion</i>	Plenary session
16.15– 16.30	Overview and Conclusions of Day 3	Training Coordinator
16.30	End of Day 3	
20.00	Dinner	

Day 4 –Thursday

<i>Time</i>	<i>Topic</i>	<i>Tutor</i>
TOPIC 10: HAZARD CHARACTERIZATION		
09.00– 09.45	10.1 Introduction of the Disease Triangle (pathogen infectivity and virulence – host susceptibility – food–water matrix). Addressing the problem <ul style="list-style-type: none"> • What adverse health effects may be associated with exposure to the pathogen? • What are the short– and long–term consequences – acute and chronic effects? • Potential interaction with host resistance and other hazards (including chemical) • How does the matrix (food or water) affect the ability of the organism to cause infection and illness? <i>Presentation</i>	Tutor
09.45– 10.15	10.2. Data collection and modelling dose–response <ul style="list-style-type: none"> • Hazard characterizations are developed by compiling information from a variety of data sources (e.g. outbreak investigations, human studies, surveillance statistics, volunteer feeding studies, animal studies, in vitro studies): • Overview of the strengths and limitations of different data sources • Specific description of mathematical models used for dose–response modelling • Modelling concepts and selection of models • Exponential and beta–poison dose–response models <i>Presentation</i>	Tutor
10.15– 10.30	<i>Questions and Answers</i>	
10.30– 11.00	Coffee break	
TOPIC 11: RISK CHARACTERIZATION		
11.00– 11.30	11.1 Producing the risk estimate <ul style="list-style-type: none"> • Outputs from a qualitative, semi–quantitative and quantitative assessment: analysis of uses and limitation of the results • Combining exposure and dose–response assessments, integrating variability and uncertainty • Assessing the reliability of the results, including describing the uncertainty of the risk assessment: ensuring transparency in reaching the conclusions <i>Presentation</i>	Training Coordinator
TOPIC 12: REPORTING		
11.30– 12.00	12.1 Reporting the outcome of the assessment to risk managers <ul style="list-style-type: none"> • Presentation of the results to the risk managers 	Tutor

	<ul style="list-style-type: none"> Follow up activities (support of official control activities and mitigation strategies, consumer advice, etc.) Impact of the outcome of the risk assessment on different follow up activities <i>Presentation</i>	
TOPIC 13: AMR MICROBIOLOGICAL RISK ASSESSMENT		
12.00–12.30	13.1 Specific complications of AMR MRA <ul style="list-style-type: none"> Additional sources of AMR genes (in pathogens, in commensals) AMR gene transfer Additional routes of exposure (animals, food, humans, environment) AMR Hazard characterization – including long-term effects <i>Presentation</i>	Tutor
12.30–12.45	Questions and Answers	
12.45–13.45	Lunch break	
13.45–15.00	Interactive session on TOPIC 11 and 12 (Risk characterization and reporting – part I) <i>In this exercise participants will be asked to apply a dose-response model as shown in previous lectures and combine with exposure assessment outcome into the main sections of a risk characterization (itemized). Thereafter they will combine this into a skeleton report – presented on 1–3 pages of the flip-over</i> <i>Working group exercise</i>	All tutors
15.00–15.30	Coffee break	
15.30–16.30	Interactive session on TOPIC 11 and 12 (Risk characterization and reporting – part I) <i>In the plenary meeting, the reports of the different groups are presented and discussed</i> <i>Plenary discussion</i>	Plenary session
16.30–16.45	Overview and conclusions on the day	Training Coordinator
16.45	End of Day 4	
20.00	Dinner	

DAY 5 – Friday

<i>Time</i>	<i>Topic</i>	<i>Tutor</i>
TOPIC 14: RISK COMMUNICATION		
08.30–09.00	14.1 Development of risk communication strategies In a short introduction, different communication strategies are presented, according to stakeholders involved in specific situations and according to their risk perception, with a special focus on communication strategies to be adopted in case of crisis situations. This will include consideration of involvement of interested parties (e.g. industry, consumers etc.) both in risk management processes before risk assessment and risk management and communication processes after risk assessment; it is underlined that different types of communication “styles” need to be used according to the target audience (e.g. scientists vs general public). <i>Presentation</i>	Training Coordinator

09.00– 10.00	Interactive session on Topic 14 (Role Play on a public hearing – part I) <i>The different groups are assigned the role of a stakeholder group: a public hearing, to which they will take part to, will be simulated, introducing participants to the specific scenario and their specific role.</i> <i>Preparation for the role play. Consideration of two role play situations</i> <i>TC + Patrick BUTAYE</i>	
10.00– 10.15	Coffee break	
10.15– 11.15	Interactive session on Topic 14 (Role Play on a public hearing – part II) <i>The public hearing is performed; the groups play their role as assigned.</i> <i>Role play</i>	Role play Plenary session
11.15– 11.25	Dissemination of the contents of the training <i>Presentation</i>	Event manager
11.25– 11.35	<i>Conclusions and Lessons learned on the topics covered. Questions & Answers</i>	Training Coordinator
11.35– 11.45	Final Test of knowledge	
11.45– 12.00	<ul style="list-style-type: none"> • On-line evaluation of training • Training certificates 	
12.00	End of the training session	
12.30	Lunch, followed by departure to the airport	

Annex 4: Training material, outcomes and dissemination activities

Training material

All participants will receive the training material well in advance of the training. The material will include additional pre-recorded material for offline studies. Preparatory videos will introduce the specific topic and provide background information to participants.

All participants will receive a Dissemination Kit electronically to enable them to actively disseminate course knowledge upon their return from BTSF training. Participants attending face-to-face courses will receive the information on the USB key.

Dissemination Kit

This contains the following training materials:

- All course presentations
- Study notes on field trips and group activities/discussions and conclusions thereof
- The course syllabus
- The training information sheet
- Glossary of terms and abbreviations used in the course
- Additional references for further study
- Written guidance on how to actively disseminate course knowledge to colleagues upon participants' return to their home countries, different methodologies/examples/best practice
- Other information and material delivered at the course such as quizzes, FAQs etc.

Dissemination questionnaire

Participants will be requested to commit themselves to disseminate the knowledge received via different dissemination methods, i.e. informing colleagues about the information received at the training, distributing (photocopying or sending via electronic way) the training materials among their colleagues. Two to three months after the respective training session, participants will receive a standard questionnaire requesting information on the dissemination activities of the participant after the training, and details on differences in the approach adopted in day-to-day work following the training.

Test of knowledge

Furthermore, the programme will include an anonymous knowledge test to be carried out at the beginning and at the end of each training session in order to measure the impact of the training on the understanding of the participants of the subjects taught.

Participants are expected to agree to carry out the above tests and to reply to the surveys and questionnaires.

Participants agree to be registered in the BTSF Academy and to participate in a group photo of the participants and tutors at the end of the training.

Please find more information regarding data protection here:

<https://better-training-for-safer-food.ec.europa.eu/training/mod/page/view.php?id=417>

Annex 5: Contractor contact details

The project is managed by OPERA Srl, in consortium with NSF Euro Consultants SA.



Project manager:

Claudio BOMPARD

Training coordinator for Course 2:

Jørgen SCHLUNDT

Separate notifications will be sent to National Contact Points for each course and will contain the names and contact details of the Event Manager and Assistant Event Manager as well as logistical details on the event.

All official communication between National Contact Points and the project will be maintained through the functional e-mail address 20189605riskassessment@btsftraining.com or by phone to +39 06 80773315 telephone number.

All information on BTSF training can be found at the BTSF Academy website and at www.btsftraining.com/btsf-risk-assessment. The website will be regularly updated with details of forthcoming courses.

Data Protection Notice for the BTSF online Trainings

This processing operation concerns the participation in BTSF online training activities which are held within the context of the Better Training for Safer Food Initiative (BTSF) and hosted in the BTSF ACADEMY to provide wider accessibility to training in the areas of food law, feed law, animal health and animal welfare rules, as well as plant health rules by using a state-of-the-art and interactive e-learning system. The BTSF is a Commission DG Health and Food safety (DG SANTE) Initiative managed by the European Health and Digital Executive Agency (HaDEA) and aimed at organising a EU training strategy in the areas mentioned above.

This data protection notice explains the reason for the processing of all personal data provided and how HaDEA collects and handles them and ensures their protection. It also details how that information is used and what rights the data subject may exercise in relation to the data. Your personal data is processed in accordance with Regulation (EU) No 2018/1725. Please find more details on the following link <https://better-training-for-safer-food.ec.europa.eu/training/mod/page/view.php?id=417>.