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Organisation and implementation of training activities on
the evaluation and authorisation procedures for
Plant Protection Products
under the "Better Training for Safer Food" initiative
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This is the extension of the program on Plant Protection Products implemented in the past two years.

In total, in the next 2 years, we will organise and implement 8 training sessions in the 4 different topics listed hereunder:

- 1) Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water,
- 2) Assessment of efficacy of plant protection products,
- 3) Eco-toxicological risk assessment,
- 4) Toxicological risk assessment

1. Course objectives

General objective

The workshops will allow an analysis and exchange on **risk assessment methodologies** applied at national level for the **assessment of plant protection products** performed in accordance with the EU legislation on pesticides, Regulation (EC) No 1107/2009 and in accordance with the Uniform Principles set out in Regulation (EU) No 546/2011.

The risk mitigation measures assessed during in the risk assessment of plant protection products to allow for an acceptable use are fundamental to define the conditions for use of pesticides in each crop. Indeed, once defined they become part of the authorisation conditions and, if applicable, have to be reported on the labelling of the products in the form of specific conditions of use or as Safety Precaution Phrases (SP-phrase), according to Regulation (EU) No 547/2011.

In this context, a part of the workshop will follow up on the results of **MAgPIE project** which provides the toolbox of **risk mitigation measures** designed for the use on the pesticides for agricultural purposes. This course will generally focus on:

Deepening how Member States and/or zones implement the Uniform principles for **evaluation** and **authorisation** of **plant protection products**,

• examination of national **risk assessment methodologies** and identify which degrees of flexibility in the models used could still be adjusted to not undermine potential mutual recognition,

• examining some specific cases of **risk reduction** goals deriving from the risk assessment and how they are pursued through identification of effective **risk mitigation measures**,

• comparing and discussing possible equivalent risk mitigation measures,

exchanging views on experience gained in implementing the Guidance Document (SANCO/11244/2011 rev.
5) on the preparation and submission of 5

dossiers for plant protection products according to the "risk envelope approach".

Specific objectives

1. Training Course on the <u>risk assessment of efficacy</u> of plant protection products: learning objectives for the training courses

The following modules are proposed

✓ <u>Module 1</u>-general principles of the efficacy evaluation of plant protection products in the framework of the Regulation (EC) No 1107/2009, practical guidance and discussion on the efficacy evaluation of PPPs.

Introduction to the efficacy evaluation of plant protection products (PPPs):

- regulatory framework
- principles of acceptable efficacy
- zonal assessment of PPPs
- minor uses and biological extrapolations

At the end of the module the trainees should be improved in his/her ability to evaluate realistic uses of a representative plant protection product using the available data and the principles of biological extrapolation ✓ <u>Module 2-</u> harmonization among members state Principles of efficacy evaluation for low-risk plant protection products and related regulatory aspects

-harmonized dose expression for the zonal evaluation of plant protection products -Resistance risk analysis

-Biopesticides and low risk Plant Protection Products

At the end of the module the trainees should be improved in his/her knowledge on the latest EPPO standard PP1/296(1) Principles of efficacy harmonization of assessment of the potential risk of resistance development.

2. Training Course on toxicological risk assessment: learning objectives for the training courses

The following modules are proposed

✓ <u>Module 1</u>- General approaches to risks evaluation. Difference between hazard and risk and the risk assessment evaluation approach: effects evaluation, exposure assessment, the significance of the relationship between effects and exposure, the importance of risk characterization

-general approaches to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on human -general approaches to defining the chemical and physical characteristic leading an understanding of the fate and behaviour of a pesticide active ingredient and the movement of a chemicals and to predict a concentration (exposure) in different environmental compartments after its distribution. -the differences between Point Source Contamination and Diffuse Source Contamination At the end the trainee should be improved in his/her cognitive skills, knowledge and comprehension of the difference between hazard and risk and the general rules for the risk evaluation.

✓ <u>Module 2-</u> the EU legislative framework on pesticide risk evaluation and sustainability including the pesticide package, information on IPM and the different methodologies available and the link with other regulations as the WFD (the Directive 2000/60/EC)

An analysis and exchange on risk assessment methodologies applied at national level for the assessment of plant protection products and authorisations process will be performed Participants will be asked, after the confirmation of the course participation, to respond to a questionnaire prepared by the trainers' staff, on this subject to share the data that will emerge and discuss the differences between the various approaches, and the limit of harmonization

✓ Module 3 - Human exposure evaluation and mitigation measure for different target

-general approaches for Consumer risk exposure assessment, current state of knowledge and tools. -general approaches for occupational exposure assessment to pesticides, current state of knowledge and outlook for prevention and protection including Pesticide Protection Equipment. Evaluation of different sources of exposure and procedures for the *legal and safe*:

storage and handling of plant protection products, the preparation of the mixture, washing of containers and equipment after treatment, disposal of wastewater and packaging, following the "on farm life circle management" and the MagPie toolbox of measure where available.

-general approach on non-occupational exposure. As a consequence of the Sustainable Use Directive, Member States are required to develop specific measures to minimize also non-occupational exposure to pesticides others than consumer. The EFSA model and the recent Scientific Opinion of the PPR Panel on the follow-up of the findings of the External Scientific Report "Literature review of epidemiological studies linking exposure to pesticides and health effects" will be presented and discussed. -pesticide label reading and label mitigation measure evaluation, safe and risk phrases At the end the trainee knows aspects related either to the assessment evaluation process of chemicals then the management requirements

3. Training Course on <u>eco-toxicological risk assessment</u> for the <u>terrestrial and aquatic environment</u>

The following modules are proposed:

✓ Module 1 - General approaches to risks evaluation: difference between hazard and risk and the pesticide risk assessment evaluation approach, effects evaluation on non-target organism, exposure assessment, the significance of the relationship between effects and exposure, the importance of risk characterization.

-general approaches and current state of knowledge on models to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on non-target organism,

-general approaches on chemical, physical characteristic that influence the fate of a chemical in the environment and current state of knowledge on multimedia fate models to define and to understand the fate and behaviour of a pesticide active ingredient and in order to understand the movement of a chemicals in the environment and to predict a concentration in different environmental compartments (exposure)

-general approach in defining the non-target organism, the food chain, the bioaccumulation and biomagnification, the ecosystems and examples of risk characterisation

-the exposure sources: Point Source Contamination and Diffuse Source Contamination

At the end the trainee should be improved in his/her cognitive skills, knowledge and comprehension of the difference between hazard and risk and the general rules for the ecotoxicological risk evaluation.

✓ Module 2 - the EU legislative framework on pesticide risk evaluation and sustainability including the pesticide package, information on IPM and the different methodologies available and the link with other regulations as the WFD (the Directive 2000/60/EC).

An analysis and exchange on **risk assessment methodologies** applied at national level for the assessment of plant protection products and authorisations process will be performed Participants will be asked, after the confirmation of the course participation, to respond to a questionnaire prepared by the trainers' staff, on this subject to share the data that will emerge and discuss the differences between the various approaches, and the limit of harmonization

✓ Module 3 - evaluation of the exposure and the mitigation measure applicable

-the decision supporting systems available to prevent environmental contamination after a pesticide treatment and the comparative management assessment

- diagnostic tools of run off in different contexts

-drift diagnosis tools: machine calibration and SDRT related reduction percentages from MAgPie and

Mitigation Measure for drift limitation in different contexts

-level of risk reduction degree of the **principal mitigation measure** applied in risk assessment to obtain safe use and the link with **MAgPie evaluation**

-pesticide label reading and mitigation measure label evaluation, safe and risk phrases

-Inventory of the **mitigation measure in MAgPie**, the evaluation of their efficacy taking into account the additional effect of more than one mitigation, the diversity of the tools developed and implemented throughout European countries, as well as the number of regulatory frameworks to which they relate or with which they may overlap

An analysis and exchange on the mitigation measure applicability in different context will be developed. A case study will be presented and working group will be organised in order to analyse different situation in different context and culture.

4. Training Course on environmental fate and behavior in soil, air and water

The following modules are proposed

✓ Module 1 - General approaches to risks evaluation: difference between hazard and risk and the pesticide risk assessment evaluation approach, effects evaluation on non-target organism, exposure assessment, the significance of the relationship between effects and exposure, the importance of risk characterization.

-general approaches and current state of knowledge to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on humans and non-target organism,

-general approaches on chemical, physical characteristic that influence the fate of a chemical and current state of knowledge on multimedia fate models to define and to understand the fate and behaviour of a pesticide active ingredient and to predict a concentration in soil air and water (exposure)

✓ Moule 2 - the EU legislative framework on pesticide risk evaluation and sustainability including the pesticide package, information on IPM and the different methodologies available and the link with other regulations as the WFD (the Directive 2000/60/EC)

An analysis and exchange on risk assessment methodologies applied at national level for the assessment of plant protection products and authorisations process will be performed

Participants will be asked, after the confirmation of the course participation, to respond to a questionnaire prepared by the trainers' staff, on this subject in order to share the data that will emerge and discuss the differences between the various approaches, and the limit of harmonization

✓ Module 3 - exposure refinement and mitigation measure applicable

-option to refine the modelling assumptions from conservative default parameters to more realistic conditions.

- The integration of models and geographical information systems (GIS) for a better calibration of the procedure and the validation of exposure prediction and risk assessment

- level of risk reduction degree of the principal mitigation measure applied in risk assessment to obtain safe use and the link **with MAgPie evaluation**

- Inventory of the **mitigation measure in MAgPie**, the evaluation of their efficacy taking into account the additional effect of more than one mitigation, the diversity of the tools developed and

implemented throughout European countries, as well as the number of regulatory frameworks to which they relate or with which they may overlap

An analysis and exchange on the mitigation measure applicability in different context will be developed. A case study will be presented and working group will be organised to analyse different situation in different context and culture.

2. Selection criteria for participants

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

1. Eligibility criteria for Course Food Hygiene and Controls of Meat, including Derived Products

Participants who have previously completed the BTSF courses on **Plant Protection Products** should be assessed for their eligibility for this training based on the criteria below. Only **eligible participants** should be further assessed against the minimum requirements below.

Participants shall represent **staff of competent authorities** involved in **official control activities** and more specifically **risk assessors.**

It should be clear from their background and professional position that the participation in the training activity is a key element for the improvement of their skills and competence for their job.

The trainees should have the required **technical skills related to the fields listed above.**

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 Food Hygiene and Controls of Meat, including Derived Products	Yes/No			
Participant must:					
•	 have completed previous courses in Plant Protection Products – NOT MANDATORY!!! 				
<u>OR</u>					
•	Have worked in functional areas of Plant Protection Products with a minimum of 3 years of professional experience or				
•	Had experience of setting up and implementation (planning control activities at central or regional level) of Plant Protection Products in a Competent Authority.				

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	Enter Score		
a)	Experience in Plant Protection Products within a competent authority in areas of food/feed safety, in particular in areas such toxicological risk assessment , efficacy, eco-toxicological risk assessment and environmental fate and behavior in soil, air and water	Max 12.5		
	Scoring	points		
	less than 3 years = 0 points; \geq 3 years = 5 points; 5 - 10 years = 10 points; > 10 years = 12.5 points			
b)	Experience in implementing of planning control activities at central or regional level) of PPP within a competent authority in areas of food/feed safety, in particular in areas such as toxicological risk assessment, efficacy, eco- toxicological risk assessment and environmental fate and behavior in soil, air and water			
	Scoring			
	no experience = 0 points; < 2 years = 5 points; 2-5 years = 7.5 points; > 5 years = 10 points			
c)	Contribution towards very specific topics on PPP related advanced outcomes.			
	Scoring			
	no experience = 0 points; < 2 years = 5 points; 2-4 years = 10 points; > 4 years = 12.5 points			
d)	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.			
	Scoring			
	 Commitment to distribute the training material among their colleagues = 5 points; 	Max 15		
	 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 	points		
	 Points 1, 2 plus preparing informative articles in the professional national journals = 15 points 			
	4. no commitment = 0 points			
	Maximum total score	50		

3. Country allocations

A total of **approx. 30** seats will be allocated per training session according to the tables below. Please note that the number of allocated seats for each country may be subject to variation.

Should you consider that the number of allocated seats is insufficient to meet your country's training needs, please contact the Project Manager at GIZ International Services Brussels Office, <u>www.trainsaferfood.eu/base/contact</u> or by email at <u>info@trainsaferfood.eu</u> as soon as possible, providing an explanation.

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

4. Training dates

In total we will organise and implement <u>8 training sessions in the 4 different topics listed</u> hereunder:

Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water,
 Assessment of efficacy of plant protection products, 3) Eco-toxicological risk assessment, 4)
 Toxicological risk assessment

Here below is presented the daily schedule of each training session:

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		Trainining session 1 Toxicological risk assessment ATHENS (GR)	Training session 2 Assessment of efficacy of plant protection products ALBA/ALBENGA (IT)	Training session 3 Eco-toxicological risk assessment for the terrestrial and aquatic environment AVEIRO (PT)	Training session 4 Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water PIACENZA (IT) 03-07 October 2022	Training session 5 Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water TBC PIACENZA (IT) 06-10 Mar 2023	Training session 6 Eco-toxicological risk assessment for the terrestrial and aquatic environment AVEIRO (PT)	Training session 7 Risk assessment of efficacy of plant protection products ALBA/ALBENGA (IT)	Trainining session 8 Toxicological risk assessment ATHENS (GR)	
		09-11 Feb 2022	16-18 Mar 2022	18-22 Apr 2022			15-19 May 2023	21-23 June 2023	06-08 Sep 2023	
A	oplication									τοται
Me	mber states	INVITED	INVITED	INVITED	INVITED	INVITED	INVITED	INVITED	INVITED	
ΔΤ	Austria		1	1	1		1		1	5
BF	Belgium	1	1	1	1	1	1		1	7
BG	Bulgaria	-	-	- 1	- 1	-	- 1		1	4
CY	Cvprus		1	- 1	1	1	1	1	1	7
	Czech									
CZ	Republic	1	1	1	1	2	1	1	1	9
DK	Denmark	1	1	1	1	2	1		1	8
EE	Estonia			1	1		1		1	4
FI	Finland	2	1	1	1	2	1	1	1	10
FR	France	1	1	1	1	2	1	2	1	10
DE	Germany	1	1	1	1	1	1	2	1	9
GR	Greece	2	1	1	1	1	1	2	2	11
HR	Croatia	1	2	1	1	1	1	1	2	10
HU	Hungary	1	1	1	1	1	1	2	1	9
IE	Ireland	1	1	0	0		0	1	0	3
IT	Italy	2	2	1	1	1	1	2	1	11
LT	Lithuania	1	1	1	1	2	1		1	8
LU	Luxemburg	1						1		2
LV	Latvia	1	1	1	1	1	1		1	7
MT	Malta		1	1	1		1		1	5
NL	Netherlands	1	1	1	1	1	1	1	1	8
PL	Poland	1	1	1	1	1	1	1	1	8
PT	Portugal	1	2	2	2	1	2	2	1	13
RO	Romania	1		1	1	1	1		1	6
ES	Spain	1	2	2	2	1	2	2		12

SE	Sweden	1				1		1		3
SI	Slovenia	1	2					2	1	6
SK	Slovakia	1		1	1	0	1	1	1	6
	Northern		1	1	1	1	4	2		-
UK	Ireland		1	T	1	1	1	Z		
	S/TOTAL	25	27	26	26	25	26	28	25	208
С	andidate									
C	ountries									
AL	Albania	1		1	1		1			4
MK	Fyrom	1				2			1	4
ME	Montenegro	1	1							2
TR	Turkey			1	1	1	1	1	1	6
RS	Serbia		1	1	1		1		1	5
	S/TOTAL	3	2	3	3	3	3	1	3	21
E	FTA/EEA									
IS	Island					1				1
NO	Norway	1	1	1	1	1	1	1	1	8
СН	Switzerland	1							1	2
	S/TOTAL	2	1	1	1	2	1	1	2	11
	TOTAL	30	30	30	30	30	30	30	30	240

Toxicological risk assessment

DAY 1

TIME	Session Title
12:00-13:15	Lunch at the hotel restaurant
13:15-13:45	Registrations
13.45-14.30	Welcome and presentation of: -Logistic arrangements - BTSF video -Tutors -BTSF programs and course -Presentation of each participants, and discussion of participants' role and professional background -Knowledge test
14.30-15.30	Lecture on the EU legislative framework - The EU legislative framework on pesticide risk assessment and sustainability. The concept of hazard, effect and risk. The importance of metabolites, , and the need for risk mitigation in thee context of human health risk assessment
15.30-16.00	Coffee Break
16:00-16:45	Lecture on the General approaches to risk evaluation- Risk assessment - Effect Evaluation: general approaches to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on humans. Classification of products
16:45-17:15	Group discussion - Analysis and exchange on human risk management at national level for plant protection products during the authorisations process
17:15-18:45	Dissemination activities and group discussion - To highlight the importance of dissemination networks and platforms available awareness raising campaign on sustainable use directive
18:00-23:30	Social activity and dinner

TIME	Session Title
08:45-09:00	Registrations
09:00-10:00	Lecture on risk assessment - General approaches for dietary risk assessment
	including exposure to metabolites
10:00-10:30	Workshop: Presentation of EFSA Tools for consumer exposure - Current state
	of knowledge and tools to calculate the exposure and risk for consumers
	through diet. How risk mitigation work in practice
10:30-10:45	Coffee break

10:45-11:45	Group exercise on dietary risk assessment and group discussion - Example of practical application Divide the trainees into working groups to discuss: How dietary risk assessment is carried out in each country; Guidance given by the competent authorities and what control measures are taken; Using also information available on the web and national websites; Implications of the risk mitigation strategies to be adopted
11:45-12:45	 Reporting back - Presentation of the information discussed within the different working groups; The leader of each group will present key issues on a board for better understanding; Summary of the different points of view. To be addressed environmental aspects of drift that affect exposure of humans
12:45-13:45	Lunch break
13:45-14:45	Lecture on non-dietary risk assessement / Demonstration of EFSA tool - General approaches for non-dietary risk exposure assessment (current state of knowledge, prevention and protection including Pesticide Protection
	Equipment); Combined exposure; How mitigation works in practice
14:45-15:30	Equipment); Combined exposure; How mitigation works in practice Lecture - Different sources of human exposure and procedures for the legal and safe management for storing, transporting, handling and mixing of PPPs; Safe disposal of empty packaging and of surplus PPPs Use of OpenTEA – video
14:45-15:30 15:30-16:00	Equipment); Combined exposure; How mitigation works in practice Lecture - Different sources of human exposure and procedures for the legal and safe management for storing, transporting, handling and mixing of PPPs; Safe disposal of empty packaging and of surplus PPPs Use of OpenTEA – video Coffee break
14:45-15:30 <i>15:30-16:00</i> 16:00-17:15	Equipment); Combined exposure; How mitigation works in practice Lecture - Different sources of human exposure and procedures for the legal and safe management for storing, transporting, handling and mixing of PPPs; Safe disposal of empty packaging and of surplus PPPs Use of OpenTEA – video Coffee break Workshop with practical exercise - Pesticide label reading and evaluation of label mitigation measures, including hazard and precautionary statements; Use of OpenTEA – quizzes

TIME	Session Title		
08:00	Registrations and travel		
8:45-09:30	Field visit - Demonstration of different exposure scenarios and level of		
	protection		
09:30-10:00	Coffee break on the filed		
10.00-11.30	Field visit - Demonstration of safe storage, handling and mixing of PPPs, safe		
	disposal		
11:30–12:15	Return to the hotel		
12:15-13:00	Closing of the training - Conclusion		
	Recommendation; Importance of dissemination and networking; on-line		
	evaluation; Knowledge test; Distribution of certificates		
13:00	Lunch and departure of participants		

Assessment of efficacy of plant protection products

Time	Activity
09:00 - 10:00	Opening registration
	Welcoming of the participant
10:00 - 10:45	Welcome and presentation of Better Training for Safer Food Initiative and
	Introduction to this BTSF session: what to expect and is expected, general
	principles, technical content, description of break-out sessions
	BTSF video
10:45 - 10:50	Break
10:50 - 11:30	Initial knowledge
	Presentation of each participants, and discussion of participants' role and
	professional background
	- Initial knowledge test to evaluate the general background of the attendants
	as a group
11:30 - 11:45	
11:45 – 12:30	Introduction to the efficacy evaluation of plant protection products
	guidance on general principles of the efficacy evaluation of plant protection
	products and pesticides active substances in the framework of the Regulation
	(EC) No 1107/2009.
12.20 - 12.25	Brook
12.30 - 12.33	Continuo:
12.35 - 13.35	Introduction to the efficacy evaluation of plant protection products
	guidance on general principles of the efficacy evaluation of plant protection
	products and pesticides active substances in the framework of the Regulation
	(EC) No 1107/2009.
13:35 - 14:35	Lunch Break
14:35 – 15:35	Introduction to the efficacy evaluation of plant protection products.
	"Hands on": Practical verification including the harmonized dose expression for
	the zonal evaluation of plant protection products.
15:35 – 16:05	General discussion
	Participants will discuss in general assembly about aspects addressed in
	lectures 1 and in the practical exercise. Main problems encountered by
	participants will be discussed.
16:05 - 16:20	Coffee Break
16:20 - 18:30	Social Event
18:30	Closing of the first day

Time	Activity
08:45-09:00	Open
09:00 – 10:30	Addressing data requirements: minor uses and biological extrapolations. To stimulate discussion regarding the need of national guidance
	and harmonization of approaches at the zonal and EU level
10:30 - 10:45	
10:45 – 11:45	Continue: Addressing data requirements: minor uses and biological extrapolations.
11:45 – 12:30	"Hands on": efficacy evaluation of plant "protection product x" (reasoned case study)
12:30 - 13:00	"Hands on": efficacy evaluation of plant "protection product x" (reasoned case study)General discussion
13:00 – 14:00	
14:00 – 15:30	FIELD Visit & demonstration activities
15:30 - 15:45	Coffee Break and networking
15:45 – 18:30	FIELD Visit & demonstration activities
18:30	

Time	Session Title	Activity				
08:45-	Registration					
09:00- 10:00	Lecture on General approaches to risks evaluation- Risk assessment	Chemical and physical characteristics that influence the fate of a chemical in the environment				
10:00- 11:00	Lecture on General approaches to risks evaluation - Risk assessment	General approaches and current state of knowledge on models to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on non-target organisms, POPs, tiered approach and cut-off criteria				
11:00-	Coffee Break					
11:15- 12:15	Lecture on General approaches to risks evaluation - Risk	Current state of knowledge on models to define and to understand the fate and behaviour of a pesticide active ingredient and to predict a concentration in soil air and water;				

	assessment	
12:15- 12:45	Group discussion and exchange of experience	Examples of applications and results of models used to define and to understand the fate and behaviour of a pesticide active ingredient and to predict a concentration in different environmental compartments
12:45- 13:00	Question and answer session	Learning how to collect information, assess the quality of data for applying the models.
13:00-	Lunch	
14:00- 16:00	Lecture: modelling approaches for e- fate	Option to refine the modelling assumptions from conservative default parameters to more realistic conditions. Higher tier in the groundwater assessment Exposure assessment option and monitoring
	<i>Coffee Break</i>	
16:15- 17:30	Case study:	Examples provided by tutors and practical exercises with participants divided in groups
17:30- 23:00		

Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water

Time	Session Title	Activity
12:00-13:30		
13:30-13:45	Registration	
13:45-15:30	Welcome	Welcome and presentation of: -logistic arrangements -tutors -BTSF programs and course -presentation of each participants, and discussion of participants' role and professional background - BTSF video - Knowledge test
15:30-16:30	Lecture on the EU legislative framework	The EU legislative framework on pesticide risk evaluation and sustainability including information on IPM and the different methodologies available and the link with other regulations such as the WFD (Directive 2000/60/EC), recent strategies (as Farm to Fork and Biodiversity) and CAP
16:30-16:45		
16:45-17:30	Group discussion	Analysis and exchange on evaluation and risk assessment procedures applied at national level for the assessment of plant protection products in the authorizations process and in National Action Plans
19:00-21:00		

Time	Session Title	Activity
08:45-09:00	Registration	
09:00-10:00	Lecture on General approaches to risks evaluation- Risk assessment	Chemical and physical characteristics that influence the fate of a chemical in the environment
10:00-11:00	Lecture on General approaches to risks evaluation - Risk assessment	General approaches and current state of knowledge on models to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on non-target organisms, POPs, tiered approach and cut-off criteria
11:00-11:15	Coffee Break	
11:15-12:15	Lecture on General approaches to risks evaluation - Risk assessment	Current state of knowledge on models to define and to understand the fate and behaviour of a pesticide active ingredient and to predict a concentration in soil air and water;
12:15-12:45	Group discussion and exchange of experience	Examples of applications and results of models used to define and to understand the fate and behaviour of a pesticide active ingredient and to predict a concentration in different environmental compartments
12:45-13:00	Question and answer session	Learning how to collect information, assess the quality of data for applying the models.
13:00-14:00	Lunch	
14:00-16:00	Lecture: modelling approaches for e-fate	Option to refine the modelling assumptions from conservative default parameters to more realistic conditions. Higher tier in the groundwater assessment Exposure assessment option and monitoring
	Coffee Break	
16:15-17:30	Case study:	Examples provided by tutors and practical exercises with participants divided in groups
17:30-23:00		

Time	Activity
08:00-09:30	Meeting at the hotel and travel to the demonstration site
09:30-12:30	Field Visit & demonstration activity: in field demonstration activities Exchange and videos
12:30-14:00	Lunch
14:00-16:00	Field Visit & demonstration activity: in field demonstration activities Exchange and videos
16:00-17:00	Wrap-up, questions and answers
17:00	Return to hotel
19:00-21:00	Dinner at the hotel

Day 4

Time	Session Title	Activity
08:45-09:00	Registration	
09:00-10:30	Point Source	Inventory of mitigation measures
	Contamination	Best practices
	Coffee break	
10:30-11:15	Diffuse	Inventory of mitigation measures
	contamination	Best practice
	Coffee break	
11:30-12:15	Case study	Tutor will present the MAgPie toolbox of measure and guideline available for management of pesticide risk taking into account the additional effect of multiple mitigation measures.
	Lunch	
14:00-16:00	Practical exercises	With participants divided in groups on mitigation measure: trainees act out a real-life situation.
16:00-16:15	Coffee break	
16:10-18:30	Case study continue:	practical exercises with participants divided in groups
19:00-21:00	Dinner at the hotel	

DAY 5		
Time	Session Title	Activity
08:45-09:00	Registration	
09:00-10:00	Report back from the participants	Presentation of the lecture prepared within the different working groups per crop/pesticide in the case studies developed the previous day.
10:00-10:20	Coffee Break	
10:20-13:00	Lecture: Metabolite and cut off-of criteria assessment	Practical example on how assess and apply the EFSA guideline
13:00-13:30	Conclusion	Conclusions and recommendations Importance of dissemination and networking Distribution Certificates On-line evaluation Knowledge test
	Lunch and departure to the airport/train station	

Eco-toxicological risk assessment

DAY 1

TIME	Session Title
12:00-13:15	Lunch at the hotel restaurant
13:15–13:45	Registrations
13.45-14.15	Welcome and presentation of: -Logistic arrangements - BTSF video -Tutors -BTSF programs and course -Presentation of each participants, and discussion of participants' role and professional background
	-Knowledge test
14.15-15.00	Presentation 1a : general protection goals in ERA- Unwrapping the EU legislative framework in the evaluation of PPPs: in the context of the EU legislative framework on pesticide risk evaluation and sustainability including the pesticide package, information on IPM and the different methodologies available and the link with other regulations as the WFD (the Directive 2000/60/EC) The importance of risk mitigation and mitigation strategy.
15:00-15:45	Presentation 1b : Ecotoxicological Risk Assessment (basic principles, steps); problem formulation and hypothesis testing; specific protection goals
15.45-16.15	Coffee Break
16:15-17:30	Practical 1: Specific protection goals & Drafting parts of problem formulation
19:30-21:30	Dinner at the hotel restaurant

TIME	Session Title
08:45-09:00	Registrations
09:00-10:00	Presentation 2 : Exposure characterisation in ERA. Exposure evaluation general approaches on chemical, physical characteristics that influence the fate of a chemical in the environment and current state of knowledge on multimedia fate models.
10:00-11:00	Practical 2 : exposure pathways (e.g. PPP NTAs GD) & procedures/ models; Example of model application to define and to understand the fate and behaviour of a pesticide active ingredient, to understand the movement of a chemicals in the environment and to predict a concentration in different environmental compartments
11:00-11:15	Coffee break
11:15-12:15	Presentation 3: Hazard/ Effect characterisation (Effect assessment). From

	screening to first tiers (also information and discussion on approaches and current state of knowledge on models to defining end points and other criteria related to intrinsic characteristic of the active ingredients and the dose that could express an effect on non-target organism)
12:15-13:00	Practical 3: Effect characterisation in ERA. Exercise from Aquatic GD PPPs
13:00-14:00	Lunch break
14:00-15:00	Presentation 4 : Risk characterisation (comparison of effect with exposure); General approach in defining the non-target organism, the food chain, the bioaccumulation and biomagnification, the ecosystems and examples of risk characterisation.
15:00-15:30	Coffee break
15:30-16:30	Practical 4 : Endpoint and risk assessment exercise from EFSA Guidance on PPPs (e.g. Aquatic GD, or ERA of soil organisms)
18:00-22:00	Social activity and dinner in the city

TIME	Session Title
08:45-09:00	Registrations
09:00-10:00	Workshop with the use of video and tutor material or selected in OPENTea: Point Source Contamination and Diffuse Source Contamination
10:45-11:00	Coffee break
11:00-12:30	 Practical 5: Dissemination activities: Introduction led by tutor Divide the trainees into working groups to discuss: -the importance of dissemination -platforms networks available -awareness raising campaigns and material at different national levels Training activities using the on-line and off-line self-directed training materials: Each group of participant will prepare and will present a 10min training session and the other groups participate with question and answers &
	reporting back
12:30-14:00	Lunch break
14:00-15:30	 Presentation 6: Non-target exposure evaluation and the mitigation measures applicable: tools available for the evaluation of different sources of exposure (The decision supporting systems available to prevent environmental contamination after a pesticide treatment; the comparative management assessment) Workshop with the use of video and tutor material or selected in OPENTea or in other platform as TOPPS (diagnostic tools of run off in different contexts; drift diagnosis tools: machine calibration and SDRT and Mitigation Measure for drift limitation in different contexts)
15:30-16:00	Coffee break
16:00-17:00	 Practical 6: Case study: Tutor will present the MAgPie toolbox of measure and guideline available for management of pesticide risk;

	and Practical exercise on mitigation measure: trainees act out a real-life situation Group discussion analysis and exchange on risk assessment methodologies applied at national level for the assessment of plant protection products and authorisations process.
15:30-16:30	Presentation 7 : Practical exercise on mitigation measure: trainees act out a real- life situation.
19:30-21:30	Dinner at the hotel restaurant

TIME	Session Title
08:00	Registrations and travel
10:00-12:30	Field visit at owner João Coimbra of the Estate (intensive production, green infrastructures on less productive areas to improve natural pest control and pollinators and where they use decision support systems to minimise PPP input; focus on soil and arthropod organisms).
12:30-14:00	Lunch break
11.00-13.00	Field visit at the owner João Coimbra of the Estate (intensive production, green infrastructures on less productive areas to improve natural pest control and pollinators and where they use decision support systems to minimise PPP input; focus on soil and arthropod organisms).
16:00-16:30	Coffee break
16:30	Return to the hotel
19:30-21:30	Dinner at the hotel restaurant

TIME	Session Title			
08:45-09:00	Registrations			
09:00-10:00	Presentation 8 part a: Special issues in ERA:			
10.00-11.00	Presentation 8 part b: Special issues in ERA:			
	New developments case study - Nano-based pesticides and environmental risk assessment			
11:00-11.15	Coffee break			
11:15-12:00	Wrap-up discussion on the MAgPie and related mitigation, and ERA approaches; On-line evaluation by the participants;			
12.00 12.20				
12.00-12.50	Recommendation Importance of dissemination and networking			
12.30-14.00	Lunch break			

Table 3: Training dates

Training session	Proposed dates	Location	Deadline for registration
Session 1 Toxicological risk assessment	09-11 Feb 2022	Athens- Greece	28 Dec 2021
Session 2 Assessment of efficacy of plant protection products	16-18 Mar 2022	Alba - Italy	14 Jan 2022
Session 3 Eco-toxicological risk assessment for the terrestrial and aquatic environment	18-22 Apr 2022	Aveiro - Portugal	10 Feb 2022
Session 4 Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water	03-07 Oct 2022	Piacenza - Italy	10 Jul 2022
Session 5 Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water	06-10 Mar 2023	Piacenza - Italy	10 Jan 2023
Session 6 Eco-toxicological risk assessment for the terrestrial and aquatic environment	15-19 May 2023	Aveiro - Portugal	12 Feb 2023
Session 7 Assessment of efficacy of plant protection products	21-23 Jun 2023	Alba - Italy	15 Mar 2023
Session 8 Toxicological risk assessment	06-08 Sep 2023	Athens- Greece	10 Jun 2023

Annex 1: Agenda

Toxicological risk assessment



Assessment of efficacy of plant protection products



Eco-toxicological risk assessment for the terrestrial and aquatic environment



Eco-toxicological risk assessment on the environmental fate and behaviour in soil, air and water



Annex 2: 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.

Dissemination questionnaire

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.

Self-assessment test

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. Participant agree to be registered in the BTSF Academy and agree to be recorded during Training sessions and to take a group photo of the participants and tutors at the end of the training. Videos and photo will be published in the BTSF Academy in the corresponding Training course section and will be visible only to the registered participants in that Training course.

Please find more information regarding data protection here:

https://btsfacademy.eu/training/mod/page/view.php?id=417

Annex 6: Contractor contact details

The project is managed by Deutsche Gesellschaft fur Internationale Zusammenarbeit GmbH GIZ, International Services Brussels Office

Project Manager is Mr. Sergio Ninotti

Training Coordinators for the training courses are Mr. Ettore Capri and Ms Eugenia Chaideftou

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 <u>info@trainsaferfood.eu</u> or by phone to **+ 3222292790** telephone number.

The project website is <u>www.trainsaferfood.eu</u>. The website will be regularly updated with details of forthcoming courses.