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Report of the Kick off meeting

Deliverable 9.1

Hans Marvin/ Yamine Bouzembrak
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Report of the Kick off meeting

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Contributors

Name	Organisation
Consortium members present at kick-off meeting (in person/online)	All consortium partners
Ingeborg van Leeuwen-Bol	WFSR

Revision history

Version	Date	Reviewer	Modifications
1.1	2/12/22	PMT members	draft
1.2	12/12/2022	WFSR/Coordinator	final

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1 Executive summary

After the successful negotiation with the EU Commission, the 4-years EU Horizon Europe HOLiFOOD project (GA no 101059813) was launched on 1 October 2022. An hybrid online-inperson kick-off meeting was held on 3-4 November 2022 at Wageningen Food Safety Research (WFSR), building Vitae, Wageningen (NL) to discuss the workplan, individual tasks, deliverables and milestones as well as all organizational and managerial aspects. The meeting was attended by 26 participants in person, representing 13 organisations, while 23 participants followed the meeting online. All organisations were represented during the meeting, in person or online. The meeting was recorded for internal purposes.

The agenda consisted of a short welcome by the coordinator and an introduction round. The EC project Officer of HOLiFOOD and , EC Policy Officer of HOLiFOOD presented background information of Horizon Europe programme and the importance of engagement with the society and impact of the project.

Next, the coordinator presented in more details the EC guidelines regarding financials, and reporting and discussed some main points from the Consortium agreement, such as communication, project management and progress monitoring. Following these management topics, each WP leader presented the plans of their WP, interactions with other WPs and stakeholders.

2 Introduction

HOLiFOOD

The HOLiFOOD project started on 1-10-2022 and is funded under the the call "HORIZON-CL6-2021-FARM2FORK-01-16: Identification, assessment and management of existing and emerging food safety issues". HOLiFOOD "Holistic approach for tackling food systems risks in a changing global environment" is a four year project (2022-2026) in which WFSR together with 16 other partners from 11 different EU countries will aim to improve the integrated food safety risk analysis (RA) framework in Europe to:

- meet future challenges arising from Green Deal policy driven transitions in relation to climate driven changes,
- contribute to the UN's Sustainable Development Goals and
- support the realization of a truly secure and sustainable food production.

Unique consortium; HOLiFOODs' consortium harbours a unique combination of outstanding partners having the necessary background, expertise, experience and skills to perform the foreseen tasks successfully and all have experience working in EU framework projects. In total, 17 organisations from 11 EU countries are involved. All partners have worked in different settings with each other and can build on long outstanding collaborations. The consortium includes academia from universities (i.e., UVMB, QUB, UNEW, UNIVIE, WU) and research centres (i.e., WFSR, INRAE, BfR, DTU, CNR), technology companies (i.e., IMEC, CREME, AGROKNOW), consumer

organisation (i.e., EUFIC), food safety authority (i.e., ANSES), non-profit research organisation (i.e., DIA and APRE). The HOLiFOOD partners will be supported by carefully selected Advisory Board (i.e., FAO (international food safety risk management), ILSI EU (industry and science), RIVM (national food safety risk assessment)) and an extensive stakeholder panel. The research team will exist of social scientists, natural scientists and legal experts that have long term experience working together in previous or ongoing EU framework projects.

HOLiFOOD will apply a system approach supported by Artificial Intelligence (AI) and big data technologies to integrate data from the whole environment in which food is being produced, including economic, environmental and social factors. Three supply chains will be considered (i.e., cereals [maize], legumes [lentils] and poultry [chicken]).

Objectives

The overall objective of HOLiFOOD is to improve the integrated food safety risk analysis framework in Europe to i) meet future challenges arising from Green Deal policy driven transitions in particular in relation to climate driven changes, ii) to contribute to the United Nations' Sustainable Development Goals (SDG 2, 8, 9, 12, 15) and iii) to support the realisation of a truly safe and sustainable food production.

Specific objectives:

1.Early Warning and Emerging Risk Prediction. To apply Big Data technologies and Artificial Intelligence (AI) for the development of methods and tools to identify and monitor existing and emerging food safety risks (ERI) that will anticipate on the drivers of change due to a changing global environment and which will support risk managers to take timely mitigating measures (WP1).

2.Targeted and non-targeted detection of existing and emerging hazards. To develop and validate methods and devices for the identification and characterization of existing and (re-)emerging hazards (chemical and biological [bacteria and viruses]) with the aim of anticipating and possibly mitigating/preventing impacts (preparedness) (WP2).

3.Holistic risk assessment for regulation. To develop holistic risk assessment methods and tools to support regulation in a changing global environment. Food safety risk will be embedded in a comprehensive cost-benefit analysis of the food system including positive and negative health, environment and economic dimensions (WP3).

4.Data and knowledge sharing infrastructures. To design and develop an Integrated European Data and Knowledge Exchange Infrastructure that will be able to power an ecosystem of decision support systems for the identification, assessment and mitigation of (emerging) food safety issues. To integrate the HOLiFOOD infrastructure with software systems that already support food risk mitigation decisions for the multiple actors that the project engages with, demonstrating its value through pilot trials with real users (WP6).

5.Codesign and citizen science. To ensure that all stakeholders benefit from improved food safety, including consumers in vulnerable groups, small businesses and cooperatives within local supply chains, and to integrate knowledge exchange through all activities (WP4, WP5). Plain text Open Sans Regular 10pt single space. Lorem ipsum dolor sit amet, consectetur adipiscing elit.

3 Presentation and discussion of the planned work

3.1 Introduction into relevant managerial/administrative (WP9) and coordination issues

After the successful negotiation with the EU Commission, the 4-years EU Horizon Europe HOLiFOOD project (GA no 101059813) was launched on 1 October 2022. An hybrid online-inperson kick-off meeting was held on 3-4 November 2022 at Wageningen Food Safety Research (WFSR), building Vitae, Wageningen (NL) to discuss the workplan, individual tasks, deliverables and milestones as well as all organizational and managerial aspects. The meeting was attended by 26 participants in person, representing 13 organisations, while 23 participants followed the meeting online. All organisations were represented during the meeting, in person or online. The agenda of the meeting is given in Annex A

After a short welcome, in particular to Luca Cabello (EC HOLiFOOD project officer) and Molina Villanueva Jorge David (EC Policy Officer of HOLiFOOD), and a short personal presentation round of all participants, Hans Marvin from the project coordinator (WFSR) summarized on day 1 main goals, tasks/challenges and approaches that make up the HOLiFOOD concept. An overview on the structure and main tools of the project management (WP9) was presented including the composition, roles and responsibilities of the main management bodies within HOLiFOOD, being i) Daily Management Team (DMT), ii) Project management Team (PMT), and finally iii) General Assembly (GA). The consortium will be supported by a Scientific Advisory Board (SAB). It was explained that the planned deliverable as mentioned in the DoW will be uploaded in the web-based tool Participants Portal (i.e. ECAS). A HOLiFOOD template will be developed by EUFIC. Finally, the procedure for the distribution of the payment in general, and of the prefinancing already received from the Commission, was presented by WFSR.

3.2 Introduction into the scientific-technical work

To align all experts and to show the context and interrelationships, each WP leader presented their plans and interactions with other WPs, stakeholder and/ or other EU projects.

The following were presented:

- WP1: Big Data technologies and Artificial Intelligence (AI) for food safety detection and prevention
- WP2: Technology development for integrated monitoring
- WP3: Holistic risk assessment for regulation
- WP4: Stakeholder engagement and codesign in living labs
- WP5: Science to society and policy
- WP6: Integrated Decision Making & Mitigation
- WP7: Communication, dissemination, education, exploitation
- WP8: Legal and Ethical

All presentations can be found in Annex B.



Figure 1

HOLiFOOD Kick-off meeting 2-3 November 2022, WFSR, Wageningen, the Netherlands

4. Annex A

HOLiFOOD Kick-Off Meeting Agenda

Date	November 3-4, 2022	
Venue	Wageningen Food Safety Research (WFSR) Akkermaalsbos 2 Building 123; VITAE 6708 WB WAGENINGEN, The Netherlands (Google Map)	
Meeting rooms	0016 & 0017	
Meeting secretariat	Ingeborg van Leeuwen-Bol Phone: +31317486108 E-mail : ingeborg.vanleeuwen-bol@wur.nl Or: Hans Marvin Phone: +31317480342	
OnLine	link	MS teams. Meeting will be recorded
THURSDAY 3 NOVEMBER Microsoft Teams-Meeting Participating using computer or mobile app Click here to participate Meeting-id: 341 266 761 571 Passcode: qM85Sa Participating using a phone (only audio) +31 20 399 1197, Id for meeting by phone: 111 436 243# FRIDAY 4 NOVEMBER Microsoft Teams-Meeting Participating using computer or mobile app Click here to participate Meeting-id: 344 225 548 173 Passcode: U8aSCV Participating using a phone (only audio) +31 20 399 1197, Id for meeting by phone: 332 582 336#		
Organisation	Wageningen Food Safety Research (WFSR)	

Agenda

Thursday 3th of November, 2022 (day 1)

Time slot	Session	Leading Partner(s)
12:30 - 13:00	Arrival & Coffee	
13:00 - 13:30	Welcome and announcements - Welcome intro - Introduction of the participants - How are we going to work today	Hans Marvin, coordinator All
13:30 - 13:55	Horizon Europe and ambitions	Luca Capello (EC project officer of HOLiFOOD) Molina Villanueva Jorge David (EC Policy Officer of HOLiFOOD)
13:55 - 15:00	HOLiFOOD project vision - HOLiFOOD aim and objectives - Tasks and responsibilities - Communication - Progress monitoring & Reporting system - Advisory Board members - Consortium agreement - Financial aspects	Hans Marvin (WFSR) Roel Knuiman (WFSR)
15:00 - 15:15	Pitch: visual identity of HOLiFOOD	Matteo Sabini (EUFIC)
15:15 - 15:30	Coffee break	
15:30 - 16:00	WP1: Big Data technologies and Artificial Intelligence (AI) for food safety detection and prevention	WP1 leader: Hans Marvin/ Yamine Bouzembrak (WFSR)
16:00 - 16:30	WP2: Technology development for integrated monitoring	WP2 leader: Vincenzina Fusco (CNR)
16:30 - 17:00	WP3: Holistic risk assessment for regulation	WP3 leader: Jeanne-Marie Membré (INRAE)
17:00 - 17:30	WP4: Stakeholder engagement and codesign in living labs	WP4 leader: Claudia Iasillo (APRE)
17:30 - 17:45	Wrap-up	Hans Marvin
17:45	End day 1	
20:00	HOLiFOOD Dinner City center Wageningen	All

Friday 4th of November, 2022 (day 2)

<i>Time slot</i>	<i>Session</i>	<i>Leading Partner(s)</i>
8:30 - 9:00	Arrival & Coffee	
9:00 - 9:45	WP5: Science to society and policy	WP5 leader: Lynn Frewer (UNEW)
9:45 - 10:30	WP6: Integrated Decision Making & Mitigation	W6 leader: Manos Karvounis (AGROKNOW)
10:30 - 10:45	Coffee break	
10:45 - 11:30	WP7: Communication, dissemination, education, exploitation	WP7 leader: Maria Scherbov (EUFIC)
11:30 - 12:00	WP8: Legal and Ethical	WP8 leader: Nikolaus Forgo (UNIVIE), represented by Tima Anwana
12:00 - 12:30	General discussion & Closing (including identification/ engagement with other Horizon Europe projects)	Hans Marvin
12:30	Lunch (lunch boxes are available)	

4. Annex B

WP1: Big Data technologies and Artificial Intelligence (AI) for food safety detection and prevention

WP1: Big Data technologies and AI for food safety detection and prevention

Lead partner: WFSR

Contributing partners: UNEW, Creme, AGROKNOW, BfR, UVMB

Overall aim

To apply Big Data technologies and AI for the development of methods and tools to identify and monitor existing and emerging food safety risks (ERI) that will anticipate on the drivers of change due to a changing global environment and which will support risk managers to take timely mitigating measures.



1

WP1 Objectives

- Develop AI and Big Data based tools to identify current and future ERIs [chemical, biological],
- Implement the system approach in ERI based on impacting drivers of change,
- Integrate the developed ERI system(s) in the knowledge exchange platform (WP6),
- Support risk managers and risk assessors for the early detection of food safety risks and to test mitigation strategies.



2

WP1 tasks: Task 1.1

Task 1.1. Specifications setting & co-creation with stakeholders (M1-M48). **Task leader: UNEW.**

Participants: WFSR, BfR, UVMB, AGROKNOW.

For the selected supply chains, four co-creation events:

- Drivers, indicators, user requirements optimised & implemented in EWI
- Quality assessment of data sources
- Assessment of existing EWI systems (health & environment)
- Developments of specs



3

WP1 tasks: Task 1.2

Task 1.2. AI and system approach for early identification and real-time monitoring of drivers of (re)emerging food safety risk (M1-M48). **Task leader: WFSR.**

Participants: AGROKNOW, CREME.

Food safety prediction models; Automatic anomalies detection in the drivers



4

WP1 tasks: Task 1.3

Task 1.3. Identification of emerging risks from a corpus of text using AI (M1-M48). **Task leader: UVMB.**

Participants: WFSR, BfR.

- EMM-text mining news and social media, NewsRadar (3 filters)
- Word embedding scientific literature (titles & abstracts; Europe PMC etc)
- Network analysis
 - co-occurrence network with clustering algorithms
 - topic detection
- Weak signal detection
- Knowledge graphs



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WP1 tasks: Task 1.4

Task 1.4. Development of robust and responsive models for food safety crisis management (M12-M48). **Task leader: CREME. Participant: WFSR, BfR, UVMB.**

- Models of task 1.2 & 1.3 adapted for crises management
- Dashboards in the HOUFOOD knowledge exchange infrastructure



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WP1: Deliverables & Milestones

- D1.1- Interim and final reports detailing stakeholders' requirements, impact assessment & data sources (M14, updated M36, M48)
- D1.2- ERI models and crisis coordination (M24, updated M36, M48).
- M1.1 Stakeholders requirements determined (M12) (*First LL with stakeholders held*)
- M1.2 ERI methods (AI, text mining) tested for supply chain "Cereals", "Legumes", "Poultry" (M20) (*2nd LL held and models demonstrated*).



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WP1: Internal interactions

WP4=>WP1: will develop and provide training/ coaching on Living Lab (LL) and co-organize 4 co-creation events

WP5=>WP1: identified & prioritized drivers, indicators, data sources, user expectations & requirements for the EWS (5.2, 5.3)

WP1=>WP5: scientific results which will be translated into recommendations for policies and regulation (WP5.6)

WP1=>WP6: algorithms will be integrated in the knowledge exchange platform (WP6.2, WP6.3)

WP1=>WP7: publication, dissemination and training materials

WP8=>WP1: IPR and Data Management Plan



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WP1: External interactions

- Partnership "PARC"
- Horizon Europe projects (among others):
 - ECO-READY
 - EFRA
 - TheFSM
 - TITAN
 - FOODSAFETY4EU



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WP1: KPIs

Delivering:

- Scientific publications: >15
- Conferences and events:
 - Attending > 30
 - Presentations > 15

Contributing to:

- Webinars/user workshops
- Practice guides and abstracts
- Policy briefs/discussion papers
- Training/educational materials



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WP2: Technology development for integrated monitoring

WP2
Technology development for integrated monitoring

Dr. Francesca Fanelli, PhD – CNR-ISPAs
HOLIFOOD kick off meeting, Wageningen, The Netherlands, 3-4 Nov 2022

1

WP2

- Lead Beneficiary: CNR;
- Participants: ANSES, BfR, CREME, INRAE, IMEC, QUB, WR, WU;
- Effort (Person-Months): 243.05;
- Start month: 1; End month: 48;
- Tasks: 8; Deliverables: 7; Milestones: 9;
- WP Leader: Vincenzina Fusco (CNR-ISPAs);
- WP Deputy: Francesca Fanelli (CNR-ISPAs).

2

Objectives

To **develop** and **validate** methods and devices for the identification and characterization of existing and (re-) emerging hazards

Dr. Francesca Fanelli, PhD – CNR-ISPAs

3

Tasks

- 2.1 Expert elicitation
- 2.2 Untargeted methods for detection of existing and (re-) emerging pathogens
- 2.3 Untargeted methods for detection of chemical hazards
- 2.4 Comparative genomics and characterization of existing and re-emerging pathogens
- 2.5 Targeted on site/real time methods for early detection of existing and re-emerging pathogens
- 2.6 Targeted methods for on-site testing of chemical hazards
- 2.7 Persistence and adaptation capacity of existing and re-emerging pathogenic microorganism in food matrices and processing environments for improved microbial control
- 2.8 Integration of tools and data developed in WP2 in the knowledge and data exchanging platform/infrastructure

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Task 2.1 Expert elicitation (M1-48)
Leader: CNR; Participants: all

A half-day focus group meeting will be organized (M6) with at least 15 experts (external to the consortium and representing all targeted stakeholders), defined in WP4, to present and discuss with them the new methods and tools that HOLIFOOD is going to develop.

The focus group will ensure that methods are implemented according to stakeholders' needs; moreover, insights and suggestions – to be used also by other WPs will be gathered.

D2.1: Minutes of the focus group meeting (M7, CNR); Document, report

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Task 2.2: Untargeted methods for detection of existing and (re-)emerging pathogens (M1-48)
Leader: WU; Participants: WR, ANSES

An unbiased testing procedure that combines non-selective enrichments (WU, WR, ANSES) with metagenomics analyses (poultry (WU) and legumes chain (WR)) will be developed.

Metagenomics of the food microbiome will be performed to assess its predictive power with respect to food-associated risks (defined in WP3)

D2.2 Untargeted method for existing and (re-) emerging pathogens (M8, WU); Document, report

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H2020-00

Task 2.3: Untargeted methods for detection of chemical hazards (M1-48).
Leader: WR; Participants: BFR

Deep Learning for feature detection in LC-hrMS Data, tools for (metabolome-based) anomaly screening and marker identification including data management systems (WR, BFR) will be developed.

D2.3 Untargeted methods to detect new and existing chemical hazards (M48, WR); Document, report

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H2020-00

Task 2.4: Comparative genomics and characterization of existing and re-emerging pathogens (M18-48).
Leader: CNR; Participants: WU

Selected relevant pathogens detected in task 2.2 will be isolated from poultry (WU) and legumes/cereals (CNR) samples and whole genome sequenced (WU, CNR) and analysed (CNR) (virulence determinants, antibiotic resistance, evolution, adaptation to specific ecological niches etc.) also to improve source attribution of foodborne illnesses.

D2.4 Genomic characterization of existing and (re-) emerging pathogens (M48, CNR); Document, report

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H2020-00

Task 2.5: Targeted on site/real time methods for early detection of existing and re-emerging pathogens (M18-48).
Leader: CNR Participants: WU, ANSES, IMEC

Species-specific primers and probes will be designed to develop (CNR) and validate (CNR, WU) real time PCR assays for the real time quantitative detection of emerging pathogenic bacteria in the targeted food supply chains.

An on-chip qPCR for on-site quantitative detection will be developed (IMEC).

Rapid tests (strip test, ELISA) for in field detection of mycotoxin producing fungi species will be developed and validated (CNR).

Molecular-based methods will be developed (ANSES) from the ISO 15216 and validated for the detection of viral genomes.

Integrity-RT-qPCR assays will be also developed and validated (ANSES).

D2.5 Targeted methods to detect existing and (re-) emerging pathogens (M48, CNR); Document, report

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H2020-00

Task 2.6: Targeted methods for on-site testing of chemical hazards (M1-48).
Leader: CNR; Participants: QUB

Development and validation according to official guidelines and tested in a real environment (CNR).

- lateral flow devices for glyphosate (antibody based) in cereals and products of animal origin (CNR).
- aptamer based rapid tests (strip tests, ELISA) for aflatoxins/tumourisins in maize, tyramine/histamine in poultry meat (CNR).

Rapid screening tests based on handheld molecular spectroscopy coupled to AI will be developed (QUB).

Up to 5 pesticides will be detected at EU regulatory limits simultaneously by using nanoparticle based SERS; aflatoxin in maize will be detected at the regulatory limit by using fluorescence +AI (QUB).

D2.6 Targeted methods for chemical hazards (M42, CNR); Document, report

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H2020-00

Task 2.7: Persistence and adaptation capacity of existing and re-emerging pathogenic microorganisms in food matrices and processing environments for improved microbial control (M1-48).
Leader: CNR; Participants: ANSES, WU, INRAE

Protocols of challenge testing will be defined to assess the persistence and the adaptability of pathogenic bacteria (CNR, WU, INRAE) and viruses (ANSES) in the target food matrices and processing environments; potential risks and effect of risk mitigation strategies will be estimated (WU, INRAE).

Persistence of viruses will be studied in term of virus infectivity by developing and validating cell-culture based methods that are able to detect infectious viral particles to better assess viral infectious risk (INRAE).

D2.7 Persistence and adaptation capacity of existing and (re-) emerging pathogens in food matrices and processing environments (M48, CNR); Document, report

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H2020-00

Task 2.8: Integration of tools and data developed in WP2 in the knowledge and data exchanging platform/Infrastructure (M12-48).
Leader: CREME; Participants: all WP2 partners

CREME's Proprietary technologies will be used to accommodate the processing loads required by data models.

Cloud-based tools: account management, data editors, file management and integration systems, data up-loaders, modelling engines.

Standardized protocols for file sharing and validation will be agreed and implemented for all partners within CREME's existing safe, secure file sharing network.

If required existing protocols will be implemented to allow for secure and confidential data downloads, storage and also anonymized, secure and confidential data sharing across multiple organizations.

D2.8 Integration of tools and data developed in WP2 in the knowledge and data exchanging platform/Infrastructure (M12-48); Document, report

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Milestones

- M3** Defined list of the 15 experts that will participate in the focus group (**M3, CNR**) (List confirmed by email).
- M4** Pathogenic bacteria genomes (**M26, WU**) (Genome sequences deposited in GenBank).
- M5** Bacterial isolates (**M19, WUR**) (Biological material (task 2.2) shared with partners of task 2.4).
- M6** Prototype on chip qPCR tested (**M40, CNR**) (Prototype available).
- M7** Analytical performances of prototype assays suitable for validation (**M24, CNR**) (Data on the analytical performances of prototype assays).
- M8** Protocols of challenge testing with emerging pathogenic bacteria (**M28, CNR**) (Report completed).
- M9** Performance of molecular-based assays for the quantification of viral genomes (**M24, CNR**) (Report with data on the analytical performance of the assays).
- M10** Cellular based methods suitable for the detection of infectious virus (**M24, CNR**) (Report completed).
- M11** Data and models deployed on infrastructure (**M40, CREME**) (Models and data accessible and tested on infrastructure).

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Estimated TRL (Technology Readiness Level)

- Task 2.3**: AI-based Deep Learning algorithms for feature detection in LC-hrMS **TRL2-4**.
- Task 2.5**: qPCR assays targeting (re-)emerging pathogens **TRL1-4**.
- Task 2.5**: Microfluidic chip-based device for the on-site/on-time quantitative detection of pathogens and viruses in food matrices and food processing environments **TRL4-6**.
- Task 2.6**: Novel aptamer-based test kit for the simultaneous detection of tyramine/histamine in poultry meat and AFB1/FUMB1 in maize **TRL2-4**.
- Task 2.6**: Lateral flow devices for detecting glyphosate in cereals and product of animal origin **TRL2-4**.
- Task 2.8**: Molecular spectroscopy- + AI-based rapid screening tests for the simultaneous detection of 5 pesticides and AFB1 in maize **TRL1-4**.

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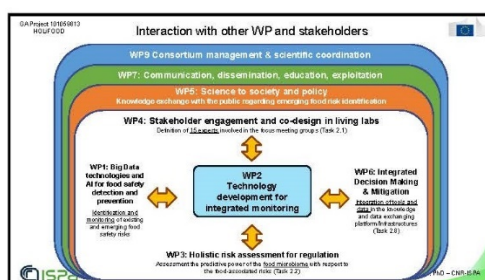
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H2020 FOOD

Contribution to KPI (Key Performance Indicators)

- Popular articles for the non specialists
- Social media
- Project website
- Partner's websites and newsletters
- Joint activities with relevant projects and initiatives
- Discussion papers
- Scientific Publications
- Webinars

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H2020 FOOD

CONTACT with other EU projects/International Institutions

EFSA (EFSA/EFSA/SCER/2020/02 (2021-2024) - WUR coordinator) **Input to WP2**, screening for Emerging Chemical Risks in the Food Chain.

IAEA (IAEA Research Agreement (2017-2022) - CNR principal contractor) **Development, validation and harmonization of analytical methods for multiple contaminant detection in food and feed. Input to WP2**, delivering of analytical methods for multiple contaminant detection and harmonized guidelines for multi-contaminant methods validation.

MycoTWIN H2020 (2020-2023) - CNR partner **To strengthen effective and sustainable mycotoxin management for minimising contamination in crops by exchange of knowledge and new pre- and post-harvest measures. Input to WP2**, supporting the entire value chain, from the planning of the cropping system to crop cultivation, harvest, storage, transport, processing and consumption.

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H2020 FOOD

CONTACT with other EU projects/International Institutions

One Health Joint Integrative Project (2021-2023), ANSES partner **Input to WP2**, SAFS-Cur/2 Research Integration and Preparedness.

H2020 (2020-2024), INRAE coordinator, CREME, WU partner **SAFPI (Safe Food for Infants in the EU and China) Input to WP2**, Developing an integrated approach to explain the identification, assessment, detection and mitigation of safety risks raised by microbial and chemical hazards all along EU and China infant food chains. Co-developing a PSS to enhance safety control all along the food chain.

TR4NSIT H2020-Marie Skłodowska-Curie Actions (2021-2024), WU (coordinator) **Input to WP2**, Optimizing sustainable technologies to keep food safe by implementation of low-energy use technologies and/or replacement of chemical preservatives to further reduce food waste, to responsibly produce food and feed to increasing population with high quality and safe food.

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Dr. Francesca Fanelli, PhD – CNR-ISA

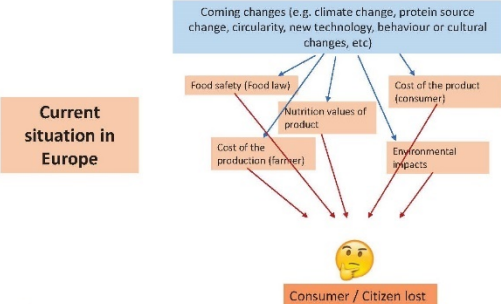
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WP3: Holistic risk assessment for regulation

Holifood – WP3
Holistic risk assessment for regulation
Jeanne-Marie Membré



Ambition

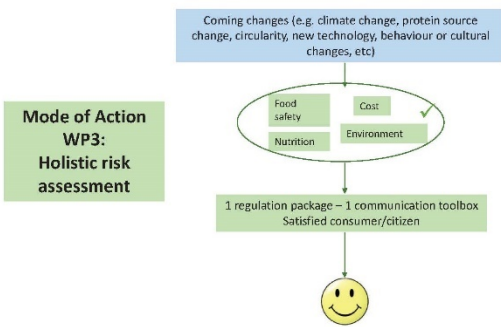


Current situation in Europe

 INRAE
Ho Food WP3
3-4 Nov 2022 / Wageningen / J.-M. Membré

p. 2

Ambition



Mode of Action WP3: Holistic risk assessment

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Objectives and Tasks

Objectives

Develop holistic risk assessment methods and tools to support regulation in a changing global environment.

Food safety risk will be embedded in a comprehensive cost-benefit analysis of the food system including positive and negative health (Nutritional, Chemical, Microbiological), Environmental and Economical dimensions.

The approach will be validated against poultry, cereals and legumes supply-chains to finally deliver proven, generic, holistic risk assessment methods and tools

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Objectives and Tasks

3.1: Running a Living Lab M1-M42

3.2: RBA, from science to decision making M1-M10

3.3: Holistic assessment framework M3-M12

3.4: Assessment of poultry, cereals and legumes supply-chains M9-M48

Cereals: Health RBA, i.e. N, C, M assessments + health aggregation (/Task 3.2)	Poultry: N, C, M + Eco + Env assessments + cost-benefit aggregation	Leguminous plants: N, C, M + Eco + Env assessments + cost-benefit aggregation
--	---	---

3.5: Generic methods and tools for holistic assessment of food systems M24-M48

 INRAE
Holifood WP3
3-4 Nov 2022 / Wageningen / J.-M. Membré

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Objectives and Tasks

Tasks

Task 3.1. Running a Living Lab (M1-M42). Task leader: UNEW. A cocreation process integrated along the whole WP3 through application of the LL methodology. Three topics will be covered: (i) specific scope of each case-study and associated mitigation strategies, (ii) prioritization of risk and benefits by stakeholders, (iii) formats of the holistic assessment outputs.

Task 3.2. Health risk-benefit assessment: from science to decision making (M1-M10). Task leader: DTU. Bottlenecks in having health risk-benefit approach adopted by regulatory authorities identified and discussed. A workshop with regulatory bodies organized, conclusions used to tailor current practice of evaluating and communicating Health RB.

Task 3.3. Holistic assessment framework (M3-M12). Task leader: INRAE. State of the art of current integration methods performed by INRAE and URM. The strengths and weaknesses of the candidate methods analysed and assessed against the feasibility of integrating the recommendations made in 3.2 and 3.4, practicability and operability.

Task 3.4. Assessment of poultry, cereals and legumes supply-chains (M9-M48). Task leader: DTU

Performing holistic assessments under current and alternative scenarios.

- i) Cereals: DTU performs the health risk-benefit assessment with microbiological inputs from INRAE to validate specifically Task 3.2;
- ii) Poultry: DTU provides the nutritional and chemical health assessment, UNEW the microbiological and economic assessments, INRAE the environmental assessments. URM in charge of the cost-benefit aggregation;
- iii) Leguminous plants: DTU provides the nutritional and chemical health assessment, INRAE the microbiological and economic assessments, UNEW the environmental assessments. INRAE in charge of the cost-benefit aggregation

Task 3.5. Generic methods and tools for holistic assessment of food systems (M24-M48). Task leader: WU. A generic cost-benefit analysis of the food value-chains in a changing global environment designed (based on initial framework + lessons learnt from case-studies). Generic methods/guidelines for both intermediate and longer times scales, materials for tool development in WP3

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Contribution to KPI

Dissemination

Holifood as a whole
30+ scientific publications
70+ events attended by partners, 40+ talks given by partners
6 webinars streamed/recorded; 100 views/webinar
30+ practice abstracts uploaded to the EIP-AGRI project database
4 policy briefs produced & disseminated, sent to 30 relevant policy makers each
6 pieces of educational material produced, uptake by 3+ European food safety educational courses
30+ networks

WP3
6+ scientific publications
10+ events attended by partners, 5+ talks given by partners
1 webinars streamed/recorded; 100 views/webinar
3+ practice abstracts uploaded to the EIP-AGRI project database
1 policy briefs produced & disseminated, sent to 30 relevant policy makers each
1 piece of educational material produced, uptake by 3+ European food safety educational courses
10+ networks

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Holifood WP3
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Contribution to KPI

Communication

Holifood as a whole
At least 50K unique pageviews; News items: at least 6 per year; Blog posts: at least 6 per year.
At least 10 partners linking to project website.
500K+ people reached through project and multipliers (incl. website, social media, events etc).
4+ infographics produced and Distributed to 10+ food safety education/training courses.
At least 5 press releases distributed.
At least 5 articles in generalised media outlets.
2M+ impressions across channels (Eufic)
Briefs produced: 430 recipients per brief.
6 webinars streamed/recorded; 100 views/webinar.
100 participants at Joint activities with relevant projects and initiatives

WP3
At least 5K unique pageviews; News items: at least 1 per year; Blog posts: at least 1 per year.
At least 5 partners linking to project website.
Not specific to WP3 but to the whole project.....
1+ infographics produced and Distributed to 1+ food safety education/training courses.
At least 1 press release distributed.
At least 1 article in generalised media outlets.
Not specific to WP3 but to the whole project
Not specific to WP3 but to the whole project
1 webinar streamed/recorded; 100 views
Not specific to WP3 but to the whole project

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Interaction with other WPs

Identify the coming changes, establish priorities	From WP1, From WP5 ?
Cost-benefit (=holistic) assessment framework in co-creation with stakeholders (living lab)	From WP4
Health Risk-benefit assessment refined to get it adopted by regulators (workshop)	From WP8 (ethics) to organize the workshop, from WP5 (regulators)?
Case-studies assessment	From WP2 (partial info at least)
Health risk-benefit assessment endorsed by consumer/citizen and adopted by regulators	To WP7 (communication)
Holistic assessment (framework)	To WP5 to explore how citizen perceive holistic RA and to get regulator acceptance
Holistic assessment (generic methods + prototype tools)	To WP5 to get regulator acceptance
Case-studies assessment	To WP5 to get regulator acceptance, to WP6 (tools) & WP7 (dissemination)
	To WP7 (dissemination)

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Interaction with stakeholders

Task 3.1. Running a Living Lab (M1-M42). Task leader: UNEW.
Participants: INRAE, WU, UVMB, DTU.

A co-creation process will be integrated along the whole WP3 through application of the LL methodology (WP4).

Three topics will be covered:

- specific scope of each case-study and associated mitigation strategies
- prioritization of risk and benefits by stakeholders
- formats of the holistic assessment outputs

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Contacts to other EU projects

H2020 "SafeConsume" (2017-2022). INRAE (partner)
Safer food through changed consumer behaviour: Effective tools and products, communication strategies, education and a food safety policy reducing health burden from foodborne illnesses. Input: to WPs3 and WPs5.

H2020 "PROTECT" (2019-2022). INRAE and CREME (partners)
This project will develop predictive modelling approaches (including Multicriteria Decision) and tools to evaluate the effects of climate change on food safety. Input to WP1, WP3 and WP6.

H2020 "SAFFI" (2020-2024). INRAE (coordinator), CREME (partner), WU (partner)
SAFFI (Safe Food for Infants in the EU and China). Developing an integrated approach to enhance the identification, assessment, detection and mitigation of safety risks raised by microbial and chemical hazards all along EU and China infant food chains. Co-developing a DSS to enhance safety control all along the food chain. Input to WP1, WP2, WP3, WP6.

H2020 "TRANSIT" (2021-2024). WU (coordinator)
TRANSIT aims to optimize sustainable food production by implementation of low-energy use technologies and/or replacement of chemical preservatives to further reduce food waste, to responsibly produce food and feed to increasing population with high quality and safe food. Input to WP2 and WP3.

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WP specific points

Question marks / suggestions

To be completed

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WP4: Stakeholder engagement and codesign in living labs

APRE
Agenzia per la Promozione della Ricerca Europea

HOLIFOOD WP4
Stakeholder engagement and codesign in living labs

Kick-off meeting
3-4 November 2022

TEAM

Claudia Iacillo
Project Manager

Alessio Livio Spina
Project Manager

Chiara Pocaterra
Head of Projects Department

3-4 November 2022

APRE

WP Objectives

Establish three virtual HOLIFOOD Living Labs (LLs), aimed at addressing the following priorities:

1. Identification and monitoring of food safety risks (WP1).
2. Holistic risk assessment and acceptance (WP3).
3. Platform co-design (WP6).

Bridge the gap between research and practice by facilitating discussions among the stakeholders, while systematically integrating the **Multi Actor Approach (MAA)** into all HOLIFOOD activities.

3-4 November 2022

APRE

Living Lab

Living labs are defined as **user-centred**, open innovation ecosystems based on a systematic **user co-creation approach** integrating research and innovation processes in **real life communities and settings**. 5 key elements must be present in a living lab:

- **active user involvement** (i.e. empowering and users to thoroughly impact the innovation process)
- **real-life setting** (i.e. testing and experimenting with new artefacts "in the wild")
- **multi-stakeholder participation** (i.e. the involvement of technology providers, service providers, relevant institutional actors, professional or residential end users)
- **a multi-method approach** (i.e. the combination of methods and tools originating from a.o. ethnography, psychology, sociology, strategic management, engineering)
- **co-creation** (i.e. iterations of design cycles with different sets of stakeholders).

Thus, LLs operate as intermediaries among the so-called **quadruple Helix** (Civil society, Public Administration, Business and Research & Education) for joint value co-creation or validation, to scale up innovation and businesses.

3-4 November 2022

APRE

*<https://livinglabs.eu/> (2020-2021) in Italy (42)

WP Tasks

Task number	Task Title	Leader	Duration (beginning-end)
T4.1	Setting up the HOLIFOOD Living Labs	APRE	M1-M8
T4.2	HOLIFOOD Living Labs: implementation phase	APRE	M9-M44
T4.3	HOLIFOOD Living Labs: cross-fertilisation workshops and results	CNR	M5-M48

3-4 November 2022

APRE

T4.1 Setting up the HOLIFOOD Living Labs (M1-M8)

Set up the 3 virtual HOLIFOOD LLs and a common methodological approach

Structure:

- 1 **LL Manager**, responsible for the coordination of the LL activities and stakeholders
- 1 **Facilitator**, facilitate discussions and knowledge exchange within the LL

3-4 November 2022

APRE

T4.1 Setting up the HOLIFOOD Living Labs (M1-M8)

Set up the 3 virtual HOLIFOOD LLs and a common methodological approach

Structure:

- 1 LL **Manager**, responsible for the coordination of the LL activities and stakeholders
- 1 **Facilitator**, facilitate discussions and knowledge exchange within the LL
- Around 15 **stakeholders**

6/6 participants from HOLIFOOD WP3 external stakeholders

D4.1 - HOLIFOOD Living Labs Guidelines

3-4 November 2022

APRE

7

T4.1 Setting up the HOLIFOOD Living Labs (M1-M8)

Set up the 3 virtual HOLIFOOD LLs and a common methodological approach

Structure:

- 1 LL **Manager**, responsible for the coordination of the LL activities and stakeholders
- 1 **Facilitator**, facilitate discussions and knowledge exchange within the LL
- Around 15 **stakeholders**

6/6 participants from HOLIFOOD WP3 external stakeholders

D4.1 - HOLIFOOD Living Labs Guidelines

3-4 November 2022

APRE

8

T4.1 Setting up the HOLIFOOD Living Labs (M1-M8)

Set up the 3 virtual HOLIFOOD LLs and a common methodological approach

Structure:

- 1 LL **Manager**, responsible for the coordination of the LL activities and stakeholders
- 1 **Facilitator**, facilitate discussions and knowledge exchange within the LL
- Around 15 **stakeholders**

6/6 participants from HOLIFOOD WP3 external stakeholders

The action operating in the food safety risk sector (research, innovation, ES services, consumers' associations, industry and farmers' associations, communities)

At least one representative from risk management and/or risk management and/or risk management representative of each HOLIFOOD value chain

A representative of the project funded under the same EU call will be involved, as well as representatives of other existing initiatives (D4-AGRI, D4-CCN, other EU networks) and funded projects in the field (FoodSafety4EU, etc.)

D4.1 - HOLIFOOD Living Labs Guidelines

Training to LL Managers at M7

3-4 November 2022

APRE

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T4.1 Setting up the HOLIFOOD Living Labs (M1-M8)

Set up the 3 virtual HOLIFOOD LLs and a common methodological approach

Structure:

- 1 LL **Manager**, responsible for the coordination of the LL activities and stakeholders
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At least one representative from risk management and/or risk management and/or risk management representative of each HOLIFOOD value chain

A representative of the project funded under the same EU call will be involved, as well as representatives of other existing initiatives (D4-AGRI, D4-CCN, other EU networks) and funded projects in the field (FoodSafety4EU, etc.)

D4.1 - HOLIFOOD Living Labs Guidelines

Training to LL Managers at M7

3-4 November 2022

APRE

10

T4.2 HOLIFOOD Living Labs: implementation phase (M9-M46)

Co create tailor-made action plans of each Living Labs (WP1, WP3 and WPS) that will address the identified needs of each LL

3-4 November 2022

APRE

11

T4.2 HOLIFOOD Living Labs: implementation phase (M9-M46)

Co create tailor-made action plans of each Living Labs (WP1, WP3 and WPS) that will address the identified needs of each LL

4 workshops

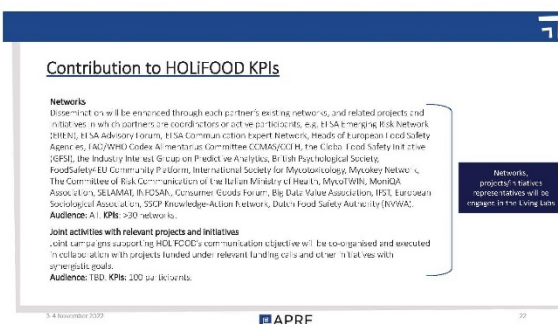
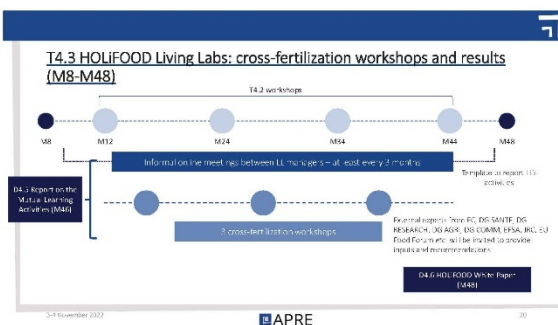
Onsite Online Online Onsite

M12 M13 M14 M15

3-4 November 2022

APRE

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WP5: Science to society and policy

Holifood WP5

Professor Lynn J Frewer
Dr Richard Francksen



<https://realis4food.com/magazine/online-magazine/food-safety-and-quality/food-safety-and-quality-newsletters-to-the-point-of-the-ready>



RECIPES: JON DILLON, LUCASIA, ORRIN



1

Background

If HOLiFOOD is to be adopted by stakeholders and end-users... ..

- Information must be exchanged with the public about emerging food safety risks and what is being done to prevent and mitigate these.
- Interactions with multiple stakeholders with interests in emerging food risks, (food security and public health), agriculture and the environment.
- Identification of stakeholder priorities in relation to ERI methodology, mitigation priorities and practices.



2

Objectives

- To optimise adoption and acceptance of the emerging food safety risk framework developed in HOLIFOOD.
- To identify barriers to, and facilitatory of, policy adoption.
- To ensure effective knowledge exchange with the public regarding emerging food risk identification



3

WP 5 Task 5.1
Examining stakeholder influence; Social Network Analysis (M1-M3).

Task Leader **UNEW.**

Partners involved: **ALL.** Social Network Analysis (SNA) will be used to identify key players in the food systems being considered, and how they relate to and influence each other. (D5.1)



<https://socioviz.net/>



4

WP5 task 5.2 Vulnerability analysis of the existing European food systems, from “Farm to Fork” (M3-M12).

Task leader: **WFSR**.

Partners involved: **UNEW, UVMB, DTU, INRAE**.

Existing and emerging food safety risks linked to changes in food supplies associated with the European “Green Deal”, will be assessed in relation to the three supply chains.

- **5.2.1 A holistic assessment from earlier crises**
 - assessment of user requirements
- **5.2.2 Expert foresight analysis, using group Delphi methodology and experts**
 - drawn from 5.1. to assess the effects of changes by the Green Deal and climate change on Emerging Food Risks (D5.2).



5

WP 5 task 5.3

Structuring policy priorities and levels of concerns (M12-M24).

Task Leader. INRAE.

Partners involved: UNEW, WFSR, DTU, UVM6.

The results of 5.2 will be prioritised using Failure Mode and Effects Analysis.

- Stakeholders will be drawn from 5.1 to identify critical points in the system in relation to emerging food safety risks.
- *Multi Criteria Decision Mapping (MCDM)* will be applied to identify policy priorities, including those relating to mitigation of human and environmental health risks and benefits, and economic and social risks and benefits within the supply chains
 - inputs from DTU and UNEW.

The two methods will be triangulated as a synthesis activity (D5.3)



6

WP 5 task 5.4
Citizen Science.

Task leader: UNEW.

Partners involved: DIA, INRAE, APRE, UVMB, BFR. A semi-automated social media analysis ("crowd sourcing") will be conducted by **UVMB**:

- To demonstrate the utility of crowd sourcing and emerging food risk trends within key project countries (**UVMB, lead: Hungary, UK, Italy**), and to enable knowledge exchange with the broader community regarding emerging food risk concerns and priorities.
- To demonstrate citizen science and ERI, a Mobile/web-based APP will enable citizen reporting of emerging food risks, including in relation to human and environmental health, validated against specific case (the Asian Hornet threat to honey bees in **Germany, France Italy and the UK**). (D5.4)



<https://www.wired.com/2016/02/>



7

WP 5 task 5.5
Risk Communication in the digital age: using "citizen science" to co-produce best practice in risk (benefit) communication. (M6-M48).

Task Leader: UNEW.

Partners involved: DIA, EUFIC, INRAE, UVMB, APRE, BFR.

- Qualitative methodology will be used to coproduce the objectives and dissemination structures required by citizens to develop best practice in communication (interviews, n=20 in each of **Germany, France, Hungary and the UK**). This will inform the online communication experiments (n=1000 in each
- participating country, **plus dedicated interview-based research with vulnerable groups**).
- A subset of experiments with SMEs and local cooperatives will be used to explore communication in localised food chains, based on the cases used in HOLIFOOD. *The results will inform the communication practices being developed in the dissemination in WP7 (D5.5)*



8

WP5 Task 6
Guidance on translating scientific results into recommendations for policies and regulation (M24- M48).

Task Leader: BFR.

Partners involved: AIL.

- A desk-based study, which integrates and translates the results of WP 5 into an actionable impact pathway.
- An online consultation combined with stakeholder interviewing with our stakeholders (from 5.1) will enable translated into *concrete and actionable policy actions*.



www.Dreamstime.com



9

Contribution to KPIs

- Primarily open access (gold) peer reviewed publications**
 - 15 anticipated over course of the project
- Fully anonymised data will be placed in open access repositories (hosted by Holifood or as supplementary data files in publications? To discuss)**
 - Ethical code of conduct in relation to authorship etc (*to be circulated and agreed?*)
 - Citizen Science APP for public use
 - Impact pathway for WP 5 outcomes
 - Knowledge exchange with stakeholders will contribute to
 - Policy briefs
 - Pragmatic and actionable communication practices for government and industry
 - Materials for research led teaching at HEI /CPD level.



10

Interaction with other WPs and stakeholders

Interaction with other WPs

- WP 1, 2, 3 –will inform WP activities – Science to Policy and Society
- Build on outcomes of WP 4 ("living lab") through continuous interaction
- Inform WP 7 (Communication, dissemination, education, exploitation)
 - e.g risk communication
- Inform WP 8 (Legal and Ethical)

Interaction with stakeholders: Occurs in all tasks in



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Contacts with other EU projects

- SuperG (stakeholder mapping and involvement, environmental impacts of food production) <https://www.super-g.eu/>
- Food safety 4 EU. Food Safety System of the Future. <https://foodsafety4.eu/>
- TITAN (n0 website yet)
- Others - to discuss**



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Thank you for your attention



13

WP6: Integrated Decision Making & Mitigation

HOLiFOOD

Holistic approach for tackling food systems risks in a changing global environment

Kick-off Meeting 3-4 November 2022
WP6 presentation

Presenter: Manos Karvounis (Agroknow)

WP6

Integrated Decision Making & Mitigation

Grant Agreement ID: 101055813
 Funded by the European Union
 Grant Agreement ID: 101055813

HOLiFOOD

WP Objectives

To design and develop an integrated European **data and knowledge exchange platform** that will be able to power an ecosystem of **decision support systems** for the identification, assessment and mitigation of **emerging food safety issues**

HOLiFOOD

Overview

WP1
Data
Models

WP4
Requirements
Feedback

Grant Agreement ID: 101055813
 Grant Agreement ID: 101055813

HOLiFOOD

WP6 Tasks & subtasks Overview

T6.1 Technology, data & stakeholder requirements for HOLiFOOD infrastructure

T6.2 HOLiFOOD infrastructure development

T6.3 HOLiFOOD decision support demonstrators

HOLiFOOD

Involved partners

	T6.1	T6.2	T6.3	WP Effort (PMs)
Agroknow	Leader	Contributor	Leader	35.00
Wageningen University & Research	Contributor	Contributor	Contributor	21.91
Creme Global	Contributor	Leader	Contributor	24.00
University of Burgundy	Contributor		Contributor	7.00

Grant Agreement ID: 101055813
 Grant Agreement ID: 101055813

HOLiFOOD

T6.1: Technology, data & stakeholder requirements for HOLiFOOD infrastructure

This task will coordinate with & participate in the horizontal meetings of the WP4 LLs in order to collect, analyse and process requirements that stakeholders have in terms of data, models and computation that the HOLiFOOD infrastructure should offer to each pilot. Frequent interactions and revisions with all LLs will take place, to update and validate these requirements, as WP4 work continues

Expected outputs

- Requirements to guide infrastructure dev
- Frequent updates & iterative dev approach

Start Agreement ID: 101005913

HOLiFOOD

T6.2: HOLiFOOD infrastructure development

This task includes: the development of services for data & knowledge integration / publication (AGROKNOW), services for predictive models integration / publication (CREME), the deployment of an HPC infrastructure for hosting & computation (CREME), the creation of a shared encrypted database with private / confidential data (CREME), as well as additional services such as federated querying & learning services (WFSR)

Expected outputs

- Infrastructure offering
 - Data services
 - Predictions services
 - Encryption services
 - Federated query/learning services

Start Agreement ID: 101005913

HOLiFOOD

T6.3: HOLiFOOD decision support demonstrators

This task will develop, enhance and evolve the software tools that will be used to support decision support scenarios within WP4 pilots

Expected outputs

- Decision support dashboards

Start Agreement ID: 101005913

HOLiFOOD

WP Contractual Obligations

M18, M24, M36, M48
D6.1, D6.2, D6.3, D6.4 [PU, R]

HOLiFOOD infrastructure & demonstrators deployment report

- M14 Requirements collected and consolidated
- M17 Initial HOLiFOOD infrastructure deployed
- M24 HOLiFOOD demonstrators ready for testing
- M35 Initial pilot trials completed & recommendations used to improve WP6 outcomes

Start Agreement ID: 101005913

HOLiFOOD

Contacts with other Projects

- EFRA: Extreme Food Risk Analytics
 - HORIZON-CL4-2022-DATA-01-05
- TITAN: Transparency solutions for transforming the food system
 - HORIZON-CL6-2021-FARM2FORK-01-17
- STELAR: Spatio-Temporal Linked Data Tools for the Agrifood Data Space
 - HORIZON-CL4-2021-DATA-01-03

Start Agreement ID: 101005913

HOLiFOOD

Key priorities

- Establish communication link with WP4 LLs (requirements, decision support) & WP1 (data & models)
- Understand the background assets of each WP6 partner and how they wish to extend them in HOLiFOOD
- Plan our work for our first deliverable and how to reach our first milestone
- Establish internal WP6 coordination routines

Start Agreement ID: 101005913

HOLiFOOD

Thank you ☺

Start Agreement ID: 101005913

WP7: Communication, dissemination, education, exploitation



WP7 aims

- **Maximise outreach and Impact** by increasing visibility of the project actions and widely disseminating project results to end-users and relevant stakeholders.
- **Foster collaboration** with relevant projects, initiatives and dissemination multipliers.
- **Co-create educational materials** to strengthen food safety risk analysis teaching in Europe.
- **Raise awareness of (emerging) food safety issues** among consumers and citizens.
- **Design a sound exploitation strategy** for the innovations developed and build the necessary agreements between the parties needed for effective, fast post-project exploitation.

Who is involved?

- All partners must contribute
- **WP7 task leaders:**
 - EUROPEAN FOOD INFORMATION COUNCIL (EUFIC)
 - DIALOGIK GEMEINNUTZIGE GESELLSCHAFT FÜR KOMMUNIKATIONS UND KOOPERATIONSFORSCHUNG MBH (DIA)
 - AGROKNOW IRE (AGROKNOW)
 - WAGENINGEN UNIVERSITY (WU)
- **Other core partners:**
 - CREME SOFTWARE LTD (CREME)
 - AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA (APRE)
 - ALLATORVOSTUDOMANNI EGYPTEM (UVMB)
 - NEWCASTLE UNIVERSITY (UNEW)
 - BUNDESINSTITUT FUER RISIKOBEWERTUNG (BfR)

Specific tasks

- Task 7.1. **Development of the dissemination, exploitation and communication plan and set up of project communication tools** (M1-M6). Task leader: EUFIC
- Task 7.2. **Communication and dissemination to key stakeholders and end-users** (M1-M48). Task leader: DIA
- Task 7.3. **Education and training materials** (M1-M48). Task leader: WU
- Task 7.4. **Consumer food safety awareness raising campaigns** (M25-M48). Task leader: EUFIC
- Task 7.5. **Collaboration with existing networks, initiatives and dissemination multipliers** (M1-M48). Task leader: EUFIC
- Task 7.6. **Exploitation** (M6-M48). Task leader: AGROKNOW

Deliverables

- D7.1 Visual identity and communication package - templates, initial website (M3/Lead: EUFIC)
- D7.2 Communication and dissemination plan (M6/Lead: EUFIC)
- D7.3 Interim report on communication and dissemination to key target audiences (M24/Lead: DIA)
- D7.4 Interim Sustainability and Commercialisation Roadmap for HOLIFOOD (M18/Lead: CREME)
- D7.5 Final report on communication and dissemination to key target audiences (M48/Lead: DIA)
- D7.6 Education and training materials (M36/Lead: WU)
- D7.7 Report on consumer food safety awareness raising campaigns (M48/Lead: EUFIC)
- D7.8 HOLIFOOD Market Research Report (M24/Lead: AGROKNOW)
- D7.9 Future Sustainability and Commercialisation Roadmap for HOLIFOOD (M48/Lead: CREME)

Milestones

- Communication plan updates II (M24/Lead: DIA)
- Communication plan updates III (M36/Lead: DIA)

Task presentations

Task 7.1: Development of the dissemination, exploitation and communication plan and set up of project communication tools (M1-M6)

- A Dissemination, Exploitation and Communication (DEC) plan will be developed by M6 (D7.2) in consultation with all partners defining:
 - Initial strategy for the HOLIFOOD exploitation - to be further developed by AGROKNOW in T7.6
 - All the C&D activities, including key messages, target audiences, tools & channels, timing and Key Performance Indicators (KPIs) to revise the strategy
 - Guidelines and strategies to liaise with other networks and projects (T7.5).
 - A project visual identity (logo, layout, project leaflet, presentation templates etc.) for all C&D materials (D7.1).
- A website will be set up and maintained + search engine optimization strategies applied (to maximise visibility).
- Partners involved: all core partners

Elements of the DEC plan

Contents	
Introduction.....	2
1. Purpose ("why?").....	2
2. Target audiences & key messages ("what/what?").....	3
Key concepts and terms/glossary (emerging risks).....	4
3. Objectives.....	5
4. Method: tools & channels ("how?").....	5
4. Timing and KPIs ("when?").....	7
5. Exploitation Strategy.....	14
6. Management and Implementation.....	14
7. Annexes.....	14

Target audiences

Target audience	Timeline	Key messages	Attainment
Policy makers (local, national, regional, international) (e.g. Ministers, Members of Parliament, etc.)			
Food industry and retail sector (e.g. processors, retailers, etc.)			
Scientific community (e.g. researchers, scientists, etc.)			
End users and risk managers			
Stakeholders in the field of risk assessment			
Science dissemination, education and outreach (e.g. schools, universities, etc.)			
The general public (citizens and consumers) (e.g. citizens, etc.)			

Task 7.1: Year 1

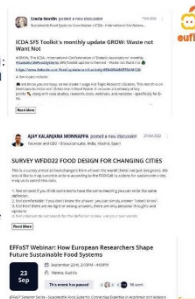
Activity	Timeframe
Visual identity (logo, layout, presentation templates etc.) for all C&D materials	M3
Website (demo)	M3
Website with relevant sections:	M4
• Populated with news items and blog posts (3+), lay articles etc and partners linking to project website	M6
Regular monthly meetings with WP7 core partners: to define individual aspects of the DEC plan (key messages, target audiences, tools & channels, timing and KPIs)	M1-M6
All sections of the DEC plan clearly defined, and relevant tools set up:	M6
• Target audiences & key messages;	M2-M3
• Tools & channels	M4
• Timing and key Performance Indicators (KPIs);	M4
• Exploitation strategy	M4-M5

Task 7.1: Critical points

- Exploiting synergies with other tasks:**
 - Task 7.2 and several areas of DEC plan (DIA)
 - Task 7.6 concerning exploitation plan (AGROKNOW)
- The DEC plan:**
 - Structure proposed in slide 9: is anything missing?
- Sections for the website:**
 - Describing project objectives, partners, work areas, news, blog posts, project updates, public deliverables... other?
- Tools & channels:**
 - EUPIC's @SciFoodHealth social media account for EU-funded projects (28k+ followers)
 - The Sustainable Food Systems Network (an active and self-sustained network of people exchanging knowledge and resources with 1400+ subscribers)

SFSN potential for HOLIFOOD

- Subgroup focused on Food Safety (with other projects):
 - Reach stakeholders across the food system interested in food safety.
 - Share a space with other projects focused on food safety to share best practices & learn from each other.
 - Publish posts, events, polls, job offers, etc.
 - Send newsletters to all members
 - Create monthly campaigns on a specific topic
- Create a repository for results/resources from the project:
 - Project outcomes available after the initiative ends for future projects touching upon food safety.
 - Become the "go-to place" for relevant resources.
- Raise awareness within the SFS community of the importance of food safety



Choosing the visual identity of HOLIFOOD

Scan the QR code & cast your vote!

Or join at slido.com/j2296112



Option 1

Option 2

Option 3

Task 7.2. Communication and dissemination to key stakeholders and end-users (M1-M48)

- Tailored communication and dissemination activities for the main audience groups will be carried out including:
 - submission of abstracts and posters to international conferences, participation to both national and international events (congresses, workshops, etc.)
 - Industry engagement: attendance at exhibitions/trade fairs, training on HOLIFOOD tools
 - scientific publications
 - leadership activities: discussion papers, webinars, practice guides and EIP abstracts European Innovation Partnership
- Partners involved: all core partners, chaired by DIA

Task 7.2: Year 1 plans

No	Sub-Task	Examples and ideas
0	Preparation	Discussion within WP7-Team, integrate the ideas into the Holifood dissemination plan, ask Holifood partners about their plans
1	Conferences, participation to both national and international events	10 presentations (oral or poster) at workshops or conferences 20 other events attended by Holifood partners, e.g. - ISEK Food Conference, date not yet scheduled - OpenLivingLab Days (OLLD) 2023, date not yet scheduled - IAFP's Symposium on Food Safety, May 2023, Aberdeen, Scotland - German Society for Nutrition, congress, March 2023, Bonn Germany
2	Industry engagement: attendance at exhibitions/trade fairs, training on HOLIFOOD tools	Attendance to one or two national or international industry driven events (e.g. from New Food conference food integrity)
3	Scientific publications	3 publications at well-known journals, if possible open access, e.g. - Current Research in Food Science - Food control - Trend in Food Science and Technology
4	Leadership activities: discussion papers, webinars, practice guides and EIP abstracts	1-2 discussion papers on specific topics (e.g. Holifood case study, approach of living labs and stakeholder engagement, Holifood strategy as an overview)

Task 7.2: Critical points

At present, we do not see major critical points concerning the task communication and dissemination.

- In principle, many workshops and conferences with relevant themes around food and food safety will take place nearly at the same time. Holifood will compete for recruiting participants with many others in the field. Tailored approaches, good planning and close cooperation with other Food-Projects are needed. Holifood planned 70 times attendance and 40 presentations in total, which is feasible.
- Attendance to trade fair shows with industry engagement could be very expensive and a check is needed if this is worth the money.
- Concerning publications, Holifood promised 30 publications during the project lifetime, which is high. The process and submission of articles take time, and results for Holifood are expected in the second half. The best solution is to start with the publication process already in the first two years of the project.
- We do not see issues for the leadership activities.

Task 7.3: Education and training materials (M1-M48)

- Creation of digital training materials (e.g., audio-visual, interactive) to support existing food safety risk analysis teaching with an inter- and transdisciplinary systems approach.
- Materials co-created with input on education needs gathered from stakeholders engaged in WP4 LIs and translational activities in WPs.
- Driving the embedding of the developed resources into existing food safety training courses and relevant Massive Open Online Courses (MOOCs) and Small Private Online Courses (SPOCs).
- Partners involved: WU, EUFIC, UVMB, DIA, APRE

Task 7.3: Year 1 plans



Sub-task	Examples and ideas
Preparation (Y1, M3-9)	Discussion within WP7-Team/Holifood partners/stakeholders to come to - a list of topics for development of education materials - selection of target group, scale, reuse - selection of suitable platform for sustainable dissemination
Creation first materials (M10 - continue)	E.g. knowledge clips, animation, assignment to practice

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Task 7.4: Consumer food safety awareness raising campaigns (M25-M48)



- Using insights from task 5.5, living labs (WP3) and WP6, digital communication campaigns will be created aimed at raising consumer awareness of emerging food safety issues, with a focus on vulnerable groups
- Visibility and outreach to the public will be enhanced via engagement of selected influencers/dissemination multipliers the field of food safety (e.g., chefs, bloggers, medical professionals etc.)
- Content will be co-created with selected influencers for their social media channels and the Sustainable Food Systems Network (SFSN)
- Partners involved:** UNEW, APRE and EUFIC

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Task 7.4: Year 1 plans



What	Timeframe
Preparation: i) identification of target audience and vulnerable groups (under D7.2)	M1-M6
Preparation: identification of influencers and dissemination multipliers in the field of food safety (e.g., chefs, bloggers, medical professionals) (under D7.2)	M1-M6 To be continuously updated

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Task 7.5: Collaboration with existing networks, initiatives and dissemination multipliers (M1-M48)



- Drawing upon the existing wide stakeholder network, scanning & mapping of all relevant projects, programmes, and initiatives will be performed to develop and implement a plan for cooperation with those actors
- Joint C&D activities with key actors identified in this task, to strengthen HOLIFOOD's visibility, reach, and promote uptake of the tools developed in other WPs.
- Partners involved:** all core partners

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Task 7.5: Year 1 plans



Activity	Timeframe
Preparation: internal discussion about coordination of mapping exercise among core partners, tools & methods (e.g., via a shared excel file)	M1-M3
Preparing guidelines and strategies to liaise with other networks and projects (under D7.2)	M3-M6
Mapping out programmes & initiatives to collaborate with and developing a plan	Continuous
Implementations: exploiting cooperation opportunities with stakeholders, incl. with other EU projects funded under same call, and FSAEU (e.g., via creation of a subgroup in the SFSN).	Continuous

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Task 7.6: Exploitation (M6-M48)



- Using D7.2 strategy, identify users for HOLIFOOD infrastructure & decision support tools (WP6), e.g.,
 - (a) EU organisations developing risk mitigation & management software
 - (b) public sector authorities & agencies
- Develop data & tech governance mechanism
 - set up entity to operate and sustain HOLIFOOD infrastructure & decision support tools
- Design, execute and monitor community engagement strategy to develop ecosystem of data, services and users around HOLIFOOD infrastructure
- Partners involved:** AGROKNOW, CREME, WR, UVMB, APRE, EUFIC

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Task 7.6: Year 1 plans

Activity	Timeframe
Based on the expected output of WP6 tools, identify the target groups for the HOLIFOOD infrastructure and contact an initial market segmentation and pain/values analysis	M6-M10
Initiate the continuous market analysis processes that will lead to delivering D7.8 - Market Research Report at M24	M10-M12



Interaction with other WPs and stakeholders



- T7.2 communication with SMEs informed by **WP5** communication experiments
- T7.3 Digital training materials will be co-created with input on education needs gathered from stakeholders engaged in **WP4** LLs and translational activities in **WP5**.
- T7.4 digital communication campaigns will use outputs and insights from **WP5**, living labs (**WP3**) and **WP6**;
- T7.5 and other **networks or EU projects** funded under the same topic
- All tasks will interact with **predefined target audiences** (policymakers, food industry, consumers, scientific community, risk assessors, educators etc.)
- Overall, all WPs expected to interact with WP7 activities

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Next steps



The first 6 months (internally)



1. **Common understanding of the project and communication around the project** (incl. roles & responsibilities of core partners)
2. **How to utilise our network**
3. **Refining target audience** (incl. key objectives, messages and tools/approach)
4. **WP7 preferred communication structure** (e.g. monthly meetings, brainstorming sessions, email updates and feedback mechanisms etc.)



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WP specific points to discuss



Contacts with other EU projects



- **All partners are ambassadors**
 - Comments, engage, tweet and re-tweet
 - C&D plan: coordination aspects (e.g. EUFIC could prepare skeleton of the plan & organise regular sessions/meetings)
- **Keeping track of important events and engagement opportunities** (e.g. Food Safety Awareness Day) – all core partners
 - Excel spreadsheet
- **Introductory project presentation**
 - Aligned introduction to project for all partners to use when presenting the project externally
- **Communication structure of WP7 team**
 - Monthly meetings via Teams.
 - Update partners on a regular basis (e.g. email exchange, excel spreadsheet, Teams? etc.)
- **Partners to send logos of their organisation and contact details of their press department**

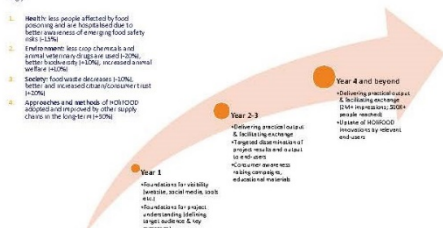
- FoodSafety4EU (2021 - 2023) (EUFIC)
- Cleverfood (2023 -) (EUFIC)
- SAFEFOODS (2004 - 2008) (Dialogik)
- INPROFOOD – “Towards inclusive research programming for sustainable food innovations” (2011 - 2014) (Dialogik)
- TRANSIT (2021-2025) WU

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Beyond 12 months: delivering impact

e.g.:



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Thank you!

Questions?



WP8: Legal and Ethical



Outline

- Meet the UNIVIE Team
- WP8 Tasks
- WP8 Deliverables
- T8.1 IPR & Data Management Plan
- T8.2 Legal and Ethical Framework
- T8.3 Establishing Internal Data Protection Roles & Platform Terms of Service
- T8.4 Ethical and Legal Monitoring Team
- Other Task related to Legal and Ethical Matters

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Meet the UNIVIE Team working in HOLIFOOD



Univ.-Prof. Dr. Nikolaus Forró
PI & WPL



Tima Anwana
Research Associate



Marie-Catherine Wagner
Research Associate



Katja Hartl
Research Assistant & Administration

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Affiliation to other EU Projects

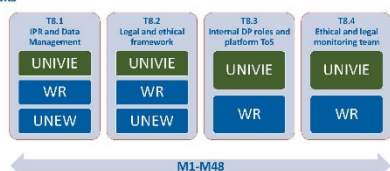
- UNIVIE is currently involved in 19 research Projects (EU and nationally funded)
- TheFSM: The Food Safety Market closest connection with HOLIFOOD

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WP8 Tasks



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WP8 Deliverables

Deliverable	Name	Lead Beneficiary	Month
D8.1	Data Management Plan and IPR Strategy	UNIVIE	M6
D8.2	Initial Legal and Ethical Framework Report	UNIVIE	M12
D8.3	Final Legal and Ethical Framework Report	UNIVIE	M48
D8.4	Data Management Plan Update	UNIVIE	M24
D8.5	Final Data Management Plan	UNIVIE	M48

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T8.1 IPR & Data Management Plan (I)

Objectives

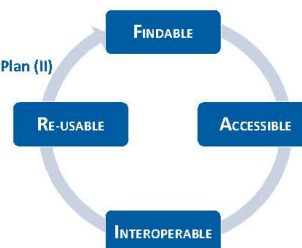
- Monitor **data collection, generation and processing**.
- Ensure compliance with **legal, ethical and technical standards** for data generation, use, storage, and sharing
- Explore the possibilities of **open data exploitation**
- **Standardisation of terms** used in different WPs
- **IPR Management Strategy** – rules protecting the designs, techniques and tools developed

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T8.1 IPR & Data Management Plan (II)

- Types of data collected?
- Origin of the data?
- Expected size of the data?
- Personal data processed?
- Lawfulness of processing?
- Metadata?
- Quality assurance processes?
- Re-use of data?



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T8.1 IPR & Data Management Plan (III)

Create a Data Management Plan

- Gather project specific information from partners (kick-off, questionnaire, ...)
- Develop a plan according to EU research and ethical guidelines
- **Input from the whole consortium is necessary to collect information on data flow**
- Continuous process; updates required

Deliverables Timeline: M1-M48



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T8.2 Legal and Ethical Framework

Objective

- Examining the existing ethical and legal frameworks applicable, in particular in relation to the use of AI and big data analytics for a holistic risk assessment
- Adoption of a human-rights focused approach to ensure the protection of the fundamental rights of individuals

Desk research

Input from all partners and cooperation with partners' Legal Teams maybe required

Deliverables Timeline: M1-M48



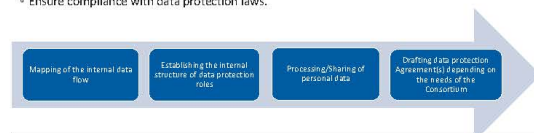
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T8.3 Establishing Internal Data Protection Roles & Platform Terms of Services (I)

Establishing Internal Data Protection Roles – Roadmap

- Ensure compliance with data protection laws.



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T8.3 Establishing Internal Data Protection Roles & Platform Terms of Services (II)

Platform Terms of Services

- Development and Validation of the terms of service governing the platform operations
- Include appropriate provisions about applicable disclaimers, warranties and liabilities

Deliverable of T8.3

- No dedicated deliverable
- Results of this task: Current version of the DMP and Legal and Ethical Framework Report

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T8.4 Legal and Ethical Monitoring Team

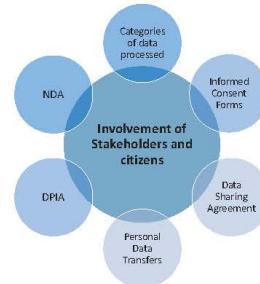
- **Guidance and Support**
all legal and ethical questions related to the project
- **Communication**
 - One-on-one contacts
 - Webinars (when necessary)
 - Information sheets
 - FAQ collected
- **PLEASE reach out to us as early as possible**

How to Contact Us

- **Standard Proceeding**
e-mail: holifood-helpdesk.id@univie.ac.at
- **In Urgent Cases**
office: +43 1 4277 34201
- **In Cases of Emergency:**
Univ.-Prof. Dr. Nikolaus Forgo:
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T5.1 Social Network Analysis (SNA)

- **Objective**
 - Identification of key players in the food system and how they relate to and influence each other
- **Consideration of legal and ethical issues**
 - Any processing of personal data foreseen?
 - How do you plan to deal with accidental processing of personal data?
- **Lead Beneficiary:** UNEW
- **Deliverable D5.1:** M4

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THANK YOU!

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