Contractual Research relating to food safety and animal and plant health policy



Call for submission of new RT, RF & RI project proposals



2025 call



Deadline for submission of the project proposals: 12 April 2024 at 12 noon sharp



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1 INTRODUCTION

1.1 General context

The Federal Public Service Health, Food Chain Safety and Environment (FPS Health) allocates grants for scientific research supporting its food safety and plant and animal health policy. All Belgian research institutions may apply in response to this call. Collaboration between research institutions is possible as consortium, under the lead of a coordinator.

The Contractual Research unit oversees organising the call for proposals and oversees the selection procedure.

Research grants may be allocated for thematic (Targeted Research, RT), free (Free Research, RF or free call) and transnational (International Research, RI) projects. The FPS Health provides a total budget of up to 5,468,000 euros for this call. The Contractual Research unit organises an introductory webinar to the call on **Thursday 22 February 2024**, in the **afternoon**. If you would like to participate, you can register here till 20 February 2024 at te latest.

1.2 National call

1.2.1 Thematic call (RT projects)

The thematic call relates to the call for project proposals based on targeted research topics that have been determined by the competent Minister.

The evaluation and selection of the proposals are performed in two steps. In the **first step**, an RT pre-proposal is submitted. The relevance with respect to the topic, the applicability of the research results by the Government and the scientific quality of the pre-proposal are assessed.

For the selected pre-proposals an elaborated and detailed full proposal shall be submitted in the **second step**. This will be evaluated with regard to its relevance and scientific quality.

1.2.2 Free call (RF projects)

In the framework of the free call, policy supporting research proposals regarding food safety and animal and plant health can be submitted. The subject of the RF proposals is determined by the consortium.

In the **first step,** the research proposals are submitted in the form of a RF pre-proposal. A preselection is carried out, based on the relevance of the proposed research for food safety and plant and animal health policy as well as on its scientific quality.

For the selected proposals an elaborated and detailed full proposal shall be submitted in the **second step**. This will be evaluated in-depth with regard to the scientific quality of the proposal.

1.2.3 Composition of the consortium

A project proposal can be submitted by one or more institutions. Only Belgian research institutions can be part of the consortium. One partner acts as coordinator. Only one partner per research group of a specific institution can participate in the consortium.

Foreign expertise can only be brought in via subcontracting, under the conditions stated in section 5. Budgetary information.

In case of a favorable recommendation for grant of the project, the responsible persons of the research institutions involved will sign the basic contract, drawn up according to the model laid down in the Ministerial Decree of 4 August 2014 establishing the model contract provided for in Article 9 of the Royal Decree of 21 December 2013 establishing the conditions for awarding grants for scientific research in food safety, animal and plant health policy. The contract is signed by certified electronic signature. The partners thereby accept the conditions laid down in the contract.

1.2.4 Timeline of the national call

	Call opens	15 February 2024	
Step 1	Introductory webinar	22 February 2024, 13.30-15.30	
Pre-proposal	Deadline for submitting 12 April 2024, noon		
	Communication of results	end of June/early July 2024	
Step 2	Invitation for step 2	end of June/early July 2024	
Full proposal	Deadline for submitting	13 September 2024, noon	
Grant	Communication of results	at the latest Mid-February 2025	
Grant	Project start date	at earliest 1 April 2025	

1.3 Transnational call (RI projects): Euphresco-plant health

The transnational call relates to targeted international research topics in the field of plant health. These topics were selected out of a list set up by the Euphresco network members and the EUPHRESCO IIIⁱ partners.

1.3.1 Introduction

Euphresco is an international network of organisations active in the field of plant health. The network today consists of more than 70 organisations from more than 50 countries. The network secretariat is hosted by the European and Mediterranean Plant Protection Organization (EPPO, Paris). The network aims to promote coordination and cooperation in phytosanitary research funding.

 $^{^{\}mathrm{i}}$ This project has received funding from the European Union's HORIZON-WIDERA-2023-01-01 program under grant agreement No 101130467

More information about the network can be found on the website www.euphresco.net.

Every year Euphresco organizes a call to fund transnational research projects. Euphresco's transnational research funding is considered most appropriate for applied research in relatively small projects of short to medium duration (1–3 years). In this way, it can provide quick and targeted answers to the needs related to quarantine plant pests.

The funding mechanism and the project budget will be determined by participating funding institutions. Within the Euphresco network, three main funding mechanisms are applied: the real pot, the virtual pot and the non-competitive mechanism.

Within its regulatory framework, the FPS Health can only participate via the virtual pot mechanism, meaning that funding is restricted to its own, national research institutions through projects selected via a competitive procedure.

Since many Euphresco partners are able and prefer to go via the non-competitive mechanism, a mixed virtual pot / non-competitive mechanism is often set up. This is also the case here: the Contractual Research unit of the FPS Health launches a **virtual pot call for Belgian research institutions**. The selected Belgian consortium then joins the transnational research consortium composed of the non-competitive partners.

1.3.2 Procedure

The FPS Health has selected 3 topics from the list of 21 research priorities identified by the Euphresco network (see annex 1).

The project proposals will be selected in a two-step process. In the **first step**, there is a call for the submission of an Expression of Interest.

In a **second step** and after the proposal is found eligible, promoters will be invited to submit a full proposal. The elaborated and detailed full proposal must describe the specific tasks of the Belgian consortium as part of the transnational research project. This second step is **managed by the Euphresco secretariat**. The project proposal will be assessed by an international panel of experts with regard to its relevance and scientific quality.

This RI call is launched early in order to align the timing of the national call as closely as possible with the overarching Euphresco timing. Not later than **Friday**, **22 March 2024** the Contractual Research unit will publish a first update of the topics on its website. A final list will only be available mid-November 2024. This has the following consequences:

- If there is insufficient interest from the other transnational partners for certain selected topics, a number of themes may still be dropped after the start of the second step.
- Some topic descriptions, describing the transnational research ideas, are only concisely
 developed. Fully elaborated topic descriptions will be available mid-July 2024 and will
 only be communicated to the coordinators of the proposals selected for the second
 stage.

1.3.3 Timeline of the transnational call

	Call opens	15 February 2024	
	Introductory webinar	22 February 2024, 13.30-15.30	
Step 1 Pre-proposal	Update of the topics on the website of the Contractual Research unit	22 March 2024	
	Deadline for submitting	12 April 2024, noon	
	Communication of results	end of June/early July 2024	
Step 2	Invitation for step 2 and receiving guidelines/documents	mid July 2024	
Full proposal	Deadline for submitting	13 September 2024, noon	
Grant	Communication of results	mid November 2024	
Grant	Project start date	at earliest 1 april 2025	

1.4 Using the food consumption survey data

For project proposals that require using the data of the national food consumption survey (FCS 2014), it is recommended to contact Sciensano via fcs@sciensano.be.

In order to get an idea of the available data, the FPS Health provides the frequency tables set up by Sciensano enclosed in the Applicant's guide call. These tables, based on the FCS 2014, show the consumption frequency of foodstuffs, grouped in several levels according to the FoodExⁱⁱ food classification system. More specifically it shows how many people have consumed a particular foodstuff or group of foodstuffs during the survey.

These frequency tables can be used, for instance:

- for setting priorities;
- for defining a sampling scheme;
- for assessing the feasibility of intake calculations.

The national Food Consumption Survey 2022 is ongoing. The data will be available in 2025. The data access modalities have yet to be defined.

ii Please consult the latest FoodEx2 version for the last update of the terminology

2 THEMATIC CALL (RT PROJECTS)

The RT project proposals are evaluated in two steps:

Step 1: RT pre-proposal Step 2: RT full proposal

The maximum duration and the funding are topic-related and are mentioned in the topic description (Annex 1. Research topics RT projects). The requested grant and its distribution must correspond with the real cost in relation to the duration, the nature, the required equipment and expertise of the research needed to achieve the objectives pursued.

2.1 STEP 1: RT PRE-PROPOSAL

2.1.1 Drafting RT pre-proposals

The following documents are relevant for the thematic project proposals in step 1:

Annex 1 research topics of the thematic call

Annex 2 template for drafting the RT pre-proposal

Electronic versions are available on the website of Contractual Research.

2.1.2 Submitting RT pre-proposals

The RT pre-proposal (Annex 2) in Word and in searchable pdf format should be submitted **electronically** via e-mail to <u>contractual.research@health.fgov.be</u>. The deadline for submitting the RT pre-proposal (step 1) is <u>Friday</u>, 12 April 2024 at 12 noon sharp.

2.1.3 Evaluation of the RT pre-proposals

2.1.3.1 Eligibility of the RT pre-proposals

The eligibility of the RT pre-proposal is assessed by the Contractual Research unit, in consultation with the Directorate-General Animals, Plants and Food and the Federal Agency for the Safety of the Food Chain (FASFC).

Criteria are the following:

1. **timely submission**, date and time of the e-mail constitute proof.

2. the form:

- the proposal must be submitted in accordance with the template and the guidelines set out in Annex 2;
- the indicated limits must be respected and the font of the text (Times New Roman, font size 12) may not be modified;
- the application shall consist of no more than 6 pages, excluding the title page and the identification of the coordinator; annexes are not accepted;
- the application shall be drawn up in Dutch, French or English; the corresponding model must be used:

- the title of the project proposal should be drafted in Dutch, French and English.
- 3. accordance with a **topic**:

Only RT pre-proposals corresponding to one of the topics listed in Annex 1 are eligible. If the proposal does not cover all research questions or does not meet all the requirements, this shall be substantiated.

Even if the proposal goes beyond what has been requested, a motivation shall be included in the pre-proposal.

4. **absence of overlap** with existing or ongoing research:

Research that is complementary to existing or ongoing research is eligible, provided that its complementarity is clearly justified.

5. **composition of the consortium**, as detailed under section 1.2.3.

2.1.3.2 Evaluation of the content of the RT pre-proposals

Eligible RT pre-proposals are assessed by the Evaluation Committee according to the following modalities:

1. The **relevance score** (out of 30 points) is rewarded as an indication of the extent to which the pre-proposal corresponds to a topic and the potential impact of the proposed research.

In particular, the following elements are assessed:

- the extent to which the proposal meets the requirements listed in the topic description
- the value and usability of the expected results
- the solution-oriented approach of the research
- the added value compared to ongoing or existing research
- the timing in relation to the policy agenda
- the potential contribution to policy decisions.

Only the RT pre-proposals with a relevance score of at least 21/30 will be subject to the scientific evaluation.

- 2. The **scientific score** (out of 20 points) as an indication for :
 - the scientific level
 - the methodology
 - the originality
 - the feasibility

of the proposed research.

The RT pre-proposals that obtain a scientific score of at least 13/20 are ranked on the basis of their total score (50 points) and per topic. Based on this ranking and the advice of the Evaluation Committee, a **priority** list of RT pre-proposals is drawn up. The Contractual Research unit will communicate the results **at the end of June/early July 2024**.

2.2 STEP 2: RT FULL PROPOSAL

In the second step, the consortia of the priority RT pre-proposals are invited to submit an elaborated and detailed full proposal.

2.2.1 Drafting the RT full proposals

It is extremely important to draft the full proposal clearly, completely and with the greatest care. The full proposal shall not deviate from the pre-proposal with regard to the research questions and the methodology used, unless explicitly requested by the Contractual Research unit.

If you would like to make changes on your own initiative, you must contact the scientific counsellors of the Contractual Research unit (Dr. Ria Nouwen, Dr. Valérie Van Merris or Dr. Lena Vlaminck, see section 10. Contact information) before submitting the full proposal.

Changes compared to the pre-proposal must be stated and duly justified in the section "history of changes" provided for this purpose.

The following documents are relevant for the thematic project proposals in step 2:

Annex 3 template for drafting the RT full proposal

Annex 7 budgetary tables.

Electronic versions are available on the website of Contractual Research.

2.2.2 Submitting RT full proposals

The RT full proposal (Annex 3) in Word and in searchable pdf and the budgetary tables (Annex 7) in Excel should be submitted **electronically** via e-mail to contractual.research@health.fgov.be. The deadline for submitting the RT full proposals (step 2) is <u>Friday</u>, 13 September 2024 at 12 noon sharp.

2.2.3 Evaluation of the RT full proposals

2.2.3.1 Eligibility of the RT full proposals

The eligibility of the RT full proposals is assessed by the Contractual Research unit based on:

1. **timely submission**, date and time of the e-mail constitute proof.

2. form

- the proposal must be submitted in accordance with the template and the guidelines set out in Annex 3;
- the indicated limits must be respected and the font of the text (Times New Roman, font size 12) may not be modified;
- the application shall consist of no more than 30 pages, excluding the title page and the identification of the consortium, but including the budgetary tables and the bibliography;
- annexes are not accepted, with the exception of the budgetary tables that are expected both in the proposal and separately submitted as an Excel document;

• the application shall be drawn up in Dutch, French or English; the corresponding model must be used.

2.2.3.2 Evaluation of the contents of the RT full proposals

The full proposals will be assessed by an Expert panel based on the following **five criteria**:

- a. the scientific level compared with international standards, and the level of expertise of the research partners;
- b. the quality of the work plan;
- c. the originality of the approach;
- d. the feasibility in relation to the objectives set, the work plan, the organisation and the requested budgetary resources;
- e. the relevance of the project with regard to the objectives to be achieved as described in the topic description.

The consortia are invited to clarify their project proposal during the evaluation meeting with the expert panel. The evaluation of the expert panel is submitted to the Evaluation Committee for advise. At the latest in **mid February 2025**, the Contractual Research unit informs the consortia about the result.

In the event of a favorable advice for granting the project, the competent Minister ratifies this in a ministerial decree. A contract in which all modalities are laid down is drawn up between the Authorities and the research institutes involved.

3 FREE CALL (RF PROJECTS)

The RF project proposals are evaluated in two steps:

Step 1: RF pre-proposal Step 2: RF full proposal.

The running time allowed for RF projects is minimum 12 months and maximum 48 months. The requested grant and its distribution must correspond with the real cost in relation to the duration, the nature, the required equipment and expertise of the research needed to achieve the objectives pursued. The target value per research year is 110,000 EUR.

3.1 STEP 1: RF PRE-PROPOSAL

3.1.1 Drafting the RF pre-proposals

Annex 4 is the template for drafting the RF pre-proposal. The electronic version is available on the website of Contractual Research.

3.1.2 Submitting RF pre-proposals

The RF pre-proposal (Annex 4) in Word and in searchable pdf format should be submitted **electronically** via e-mail to <u>contractual.research@health.fgov.be</u>. The deadline for submitting the RF pre-proposal (step 1) is, Friday 12 April 2024 at 12 noon sharp.

3.1.3 Evaluation of the RF pre-proposals

3.1.3.1 Eligibility of the RF pre-proposals

The eligibility of the RF pre-proposals is assessed by the Contractual Research unit, in consultation with the Directorate-General Animals, Plants and Food and the Federal Agency for the Safety of the Food Chain (FASFC).

This is done on the basis of the following administrative and content-related criteria:

1. **timely submission**, date and time of the e-mail constitute proof.

2. the form

- the proposal must be submitted in accordance with the template and the guidelines set out in Annex 4;
- the indicated limits must be respected and the font of the text (Times New Roman, font size 12) may not be modified;
- the application shall consist of no more than 6 pages, excluding the title page and the identification of the coordinator; annexes are not accepted;
- the application shall be drawn up in Dutch, French or English; the corresponding model must be used;
- the title of the project proposal should be drafted in Dutch, French and English.

- 3. **composition of the consortium**, as detailed in section 1.2.3.
- 4. **absence of overlap** with the topics in the thematic call (RT) or with existing or ongoing research. Research that is complementary to existing or ongoing research is eligible, provided that its complementarity is duly justified.
- 5. **fields of research involved:** the research topic must fit within the competences of Contractual Research.

In general, the research topics should fall within the fields of food safety, animal health and / or plant health. The research must support or help prepare the policy in these fields. More specifically this means that the research must provide knowledge that supports the Government, in particular the FPS Health and the FASFC, in one or more of its tasks, including:

- drafting or amending legislation, recommendations or advice;
- drafting or adjusting control programs or (auto)control guides;
- developing strategies for risk assessment or risk management strategies;
- implementing (analysis) methods for checking compliance with regulatory requirements;
- taking measures in crisis situations;
- setting priorities or responding to new developments.

The research topic may not fall within the competence of the regional authorities unless the aspects that fall within the regional competence are co-funded. If the project proposal contains work packages or tasks that are outside the specific scope of Contractual Research, these must be funded by an external funding source as well. Exceptions to this will be evaluated *on a case-by-case basis* taking into account their importance for animal health, plant health and food safety under the competence of the federal governments.

The table below provides a (non-exhaustive) overview of subjects that may and may not fit within the scope of Contractual Research. Since a sharp delineation is not always possible, experts of the FPS Health and the FASFC assess the substantive admissibility of each preproposal. Some of the examples included arise from the eligibility assessment of recent calls. The experts of the FPS Health and the FASFC reserve the right to evaluate any research project on the basis of its specific characteristics with regard to the eligibility criteria.

We recommend you to consult the overview of running and concluded projects as well, which is published on the <u>website of the Contractual Research unit</u>.

If you are unsure of the eligibility of your research idea, you can, before submission of the preproposal, contact the scientific counsellors of the Contractual Research unit (Dr. Ria Nouwen, Dr. Valérie Van Merris or Dr. Lena Vlaminck, see section 10. Contact information).

General	Eligible	Not eligible		
FOOD SAFETY				
Research into the safety of foodstuffs	 throughout the chain (primary production, processing, packaging, storage) up to the time of consumption: chemical and microbial contaminants, toxins, additives, flavourings, enzymes, processing aids, food contact materials, nutritional supplements, novel foods, GMOs, allergens, residues of plant protection products in foodstuffs, decontaminants, residues of biocides in foodstuffs, emerging risks antimicrobial resistance developing new risk assessment aspects or methods developing new methods for sampling and/or analysis risk assessments intake studies research into presence, concentrations and/or prevalences of chemical and microbial contaminants in foodstuffs research into sources, routes, reduction and prevention of contaminants in foodstuffs (when animal feed is a source, research can involve animal feeds) exploring the impact of existing and potential control measures in vitro, in silico and ex-vivo toxicological examination or animal tests for contaminants investigating the transfer of chemical and microbial contaminants of animal feed via animals to animal products developing methods in fraud research in relation to food safety 	 research in preparation for admission or reassessment files for additives, novel foods, flavours, food enzymes, plant protection products, decontamination products, biocides, (recycled) food contact materials, research into evidence of health claims and health benefits research into food safety of crops grown by private individuals, unless this influences or provides insights into the food safety of the general population human clinical examination pure environmental research unless, for example, research into environmental contaminants in food biodiversity research sustainability research, unless there is a clear link with food safety nutritional policy-based research (intake of sugar, salt, fat,) unless there is a clear link with food safety research into nutrient enrichment, unless this affects food safety policy (e.g. overdose risk) research into the impact of exposure to chemical agents (e.g. plant protection products) by inhalation or skin contact on the health of employees or individuals routine checks on compliance with existing standards 		

General	Eligible	Not eligible			
ANIMAL HEALTH	ANIMAL HEALTH				
Research into diseases, pathogens and/or their vectors in animals, including bees Research into contaminants in animal feed	 development of new diagnostic methods for animal diseases epidemiological research risk factor research antimicrobial resistance antiparasitic resistance developing new risk assessment aspects or methods developing new or improved methods for sampling and/or analysis basic research for the identification of vaccine antigens / proof-of-concept research for the testing of vaccine antigens and vaccine applications under specific Belgian animal husbandry conditions exploring the impact of possible disease control measures study of zoonotic pathogens (whether or not they are sickening to animals) research into chemical and microbial contaminants, toxins, which may adversely affect animal health, via animal feed or other contamination routes (re-)emerging risks disease warning and monitoring systems 	 mere clinical research in pet animals mere zootechnical research genetic selection except when it is related to disease resistance nutritional research mere animal welfare research (e.g. lameness) routine checks on compliance with existing standards research into diseases in wild fauna, companion animals or food-producing animals kept by private individuals, unless these have an impact on animal health or food safety research in preparation of registration or authorisation dossiers (supplements, veterinary medicinal products, biocides,) pure environmental research 			
	 basic research for the identification of vaccine antigens / proof-of-concept research for the testing of vaccine antigens and vaccine applications under specific Belgian animal husbandry conditions exploring the impact of possible disease control measures study of zoonotic pathogens (whether or not they are sickening to animals) research into chemical and microbial contaminants, toxins, which may adversely affect animal health, via animal feed or other contamination routes 	 individuals, unless these have an impact on animal health or food safety research in preparation of registration or authorisation dossiers (supplements, veterinary medicinal product biocides,) 			

General	Eligible	Not eligible		
PLANT HEALTH				
Research into organisms that are harmful to cultivated and / or wild plants, in particular quarantine organisms and organisms that are new, unknown or whose dissemination is limited and for which more information is required in the context of a future regulation (classification as quarantine organism) or future plant health policy (prevention, eradication, containment)	 determination of the occurrence, distribution (pest status) and settlement potential study of biology epidemiological research exploring the impact of possible control measures developing new risk assessment aspects or methods development of new methods for warning, surveillance, monitoring, sampling and / or diagnosis, identification or quantification risk assessments providing scientific elements for Pest Risk Assessments (PRA) 	 research into regulated non-quarantine organisms and organisms that clearly do not meet the criteria for classification as quarantine organism research into invasive species under Regulation 1143/2014 plant breeding research, except when the breeding concerns greater (phytosanitary) disease resistance research into sustainable agriculture, except when it is in the field of phytosanitary policy pure research into developing or improving integrated pest management (IPM) environmental research, except when it is in the field of phytosanitary policy biodiversity research, except when it is in the field of phytosanitary policy routine checks on compliance with existing standards 		

3.1.3.2 Evaluation of the content of the RF pre-proposals

Eligible RF pre-proposals are assessed by the Evaluation Committee according to the following modalities:

- 1. The **relevance score** (out of 30 points) is awarded as an indication of the opportunity and the suitability as a policy-supporting research and its potential impact. The following elements are assessed:
 - its positioning with regard to the priorities of the federal authorities
 - the value and usability of the expected results
 - the solution-oriented approach of the research
 - the added value with regard to ongoing or existing research
 - the potential contribution to policy decisions
 - the timing in relation to the policy agenda
 - the quantitative importance
 - the severity of the problem
 - the budgetary impact
 - the social and ethical impact
 - the relevance in relation to sectoral needs.

Only the RF pre-proposals with a relevance score of at least 21/30 will be subject to the scientific evaluation.

- 2. The **scientific score** (out of 20 points) is allocated as an indication for
 - the scientific level
 - the methodology
 - the originality
 - the feasibility

of the proposed research.

The RF pre-proposals that obtain a scientific score of at least 13/20 are ranked on the basis of their total score (50 points) and per area of activity. Based on this ranking, the advice of the Evaluation Committee and the available research budget of the FPS Health, a **priority and reserve** list of RF pre-proposals is drawn up. The Contractual Research unit will communicate the results **at the end of June/early July 2024**.

3.2 Step 2 : RF full PROPOSAL

In the second step, the consortia of the priority and reserve RF pre-proposals are invited to submit an elaborated and detailed full proposal. The reserve RF project proposals go through the same evaluation procedure as the priority project proposals.

3.2.1 Drafting the RF full proposals

It is extremely important to draft the full proposal clearly, completely and with the greatest care. The full proposal shall not deviate from the pre-proposal with regard to the research questions and the methodology used, unless explicitly requested by the Contractual Research unit.

If you would like to make changes on your own initiative, you must contact the scientific counsellors of the Contractual Research unit (Dr. Ria Nouwen, Dr. Valérie Van Merris or Dr. Lena Vlaminck, see section 10. Contact information) before submitting the full proposal. Changes compared to the pre-proposal must be stated and duly justified in the section "history of changes" provided for this purpose.

The following documents are relevant for the free project proposals in step 2:

Annex 5 template for drafting the RF full proposal

Annex 7 budgetary tables

Electronic versions are available on the website of Contractual Research.

3.2.2 Submitting RF full proposals

The RF full proposal (Annex 5) in Word and in searchable pdf and the budgetary tables (Annex 7) in Excel should be submitted **electronically** via e-mail to contractual.research@health.fgov.be. The deadline for submitting the RF full proposals (step 2) is Friday, 13 September 2024 at 12 noon sharp.

3.2.3 Evaluation of the RF full proposals

3.2.3.1 Eligibility of the RF full proposals

The eligibility of the RF full proposals is assessed by the Contractual Research unit based on the following administrative criteria:

1. **timely submission**, date and time of the e-mail constitute proof.

2. **form**

- the proposal must be submitted in accordance with the template and the guidelines set out in Annex 5;
- the indicated limits must be respected and the font of the text (Times New Roman, font size 12) may not be modified;
- the application may not exceed 30 pages, excluding the title page and the identification of the consortium, but including the budgetary tables and bibliography;
- annexes are not accepted, with the exception of the budgetary tables that are expected both in the proposal and separately as an Excel document;
- the application shall be drawn up in Dutch, French or English; the corresponding model must be used.

3.2.3.2 Evaluation of the content of the RF full proposals

The RF full proposals are assessed by an Expert panel on the following **four criteria**:

- a. the scientific level with respect to international standards and the level of expertise of the research partners
- b. the quality of the work plan
- c. the originality of the approach
- d. the feasibility in relation to the objectives set, the work plan, the organisation and the requested budgetary resources.

The consortia are invited to clarify their project proposals during the evaluation meeting with the expert panel. The evaluation of the expert panel is submitted to the Evaluation Committee for advise. The reserve projects can only be funded if budget becomes available from the RT or RI channel or the priority RF group. At the latest in **mid February 2025**, the Contractual Research unit informs the consortia about the result.

In the event of a favorable advice for granting the project, the competent Minister ratifies this in a ministerial decree. A contract in which all modalities are laid down is drawn up between the Authorities and the research institutes involved.

4 TRANSNATIONAL CALL (RI PROJECTS): Euphresco - plant health

The RI project proposals are evaluated in two steps:

Step 1: RI Expression of Interest

Step 2: RI full proposal

The FPS Health foresees € 330,000 for the transnational call. The maximum grant per topic is indicated in Annex 1.

This method is used because a number of the selected topics may be dropped at a later stage, for example because there is insufficient interest from the other transnational partners. At the latest on **Friday**, **22 March 2024**, the Contractual Research unit will publish a first update of the topics on its website. A definitive list will not be available until **mid November 2024**. Even after the start of the second step, topics can therefore still be dropped.

Applicants should take into account that the Belgian coordinator may also be designated as the scientific coordinator of the transnational project. This will at least be the case for the topic « 2024-A-463 The use of insect trap collection fluids for the surveillance of quarantine fungi in forests (FUN2TRAP)».

The requested grant must correspond with the real cost in relation to the duration, the nature, the required equipment and expertise of the research needed to achieve the objectives pursued.

4.1 STEP 1: RI EXPRESSION OF INTEREST

4.1.1 Drafting the RI Expressions of Interest

The following documents are relevant for the transnational project proposals in step 1:

Annex 1 research topics of the RI Euphresco call

Annex 6 template for drafting the RI Expression of Interest

Electronic versions are available on the website of Contractual Research.

4.1.2 Submitting the RI Expressions of Interest

The Expression of Interest (Annex 6) in Word and in searchable pdf format should be **submitted electronically**, via e-mail to contractual.research@health.fgov.be.

The deadline for submitting the RI Expression of Interest (step 1) is <u>Friday, 12 April 2024</u> at 12 noon sharp.

4.1.3 Evaluation of the RI Expressions of Interest

The Expressions of Interest are assessed by the Contractual Research unit, in coordination with the Directorate-General Animals, Plants and Food and the Federal Agency for the Safety of the Food Chain (FASFC).

The criteria are the following:

1. **timely submission**, date and time of the e-mail constitute proof.

2. **form**

- the proposal must be submitted in accordance with the template and the guidelines set out in Annex 6;
- the indicated limits must be respected and the font of the text (Times New Roman, font size 12) may not be modified;
- the application shall consist of no more than 4 pages, excluding the title page and the identification of the coordinator; annexes are not accepted;
- the application shall be drawn up in English.

3. accordance with a topic

Only RI Expressions of Interest corresponding to one of the topics listed in Annex 1 (Euphresco - plant health) are eligible.

4. **absence of overlap** with existing or ongoing research

Research that is complementary to existing or ongoing research is eligible, provided that its complementarity is clearly justified.

5. composition of the consortium

Only Belgian research institutions may participate in the consortium.

Foreign expertise can only be introduced by subcontracting, under the conditions stated in section 5. Budgetary information.

If you are unsure of the eligibility of your research idea, you can contact the competent scientific counsellor of the Contractual Research unit before submitting your proposal (Dr. Ria Nouwen or Dr. Lena Vlaminck, see section 10. Contact information).

The Contractual Research unit will communicate the results at the end of June/in the beginning of July 2024 at the latest.

4.2 STEP 2: RI FULL PROPOSAL

In a second step, the consortia of the eligible RI Expressions of Interest are invited to submit an elaborated and detailed full proposal.

This step will be managed by the Euphresco-secretariat (Mr Baldissera Giovani, Euphresco coordinator). The applicants will receive the guidelines and templates by mid-July 2024.

The deadline for submitting the RI full proposal to Euphresco is <u>Friday, 13 September</u> <u>2024 at 12 noon</u> sharp.

The evaluation of the project proposals issued by the panel of international experts is submitted for advice to the Evaluation Committee. By **mid-November 2024**, the Contractual Research Unit will inform the consortia about the result.

In the event of a favorable advice for granting the project, the competent Minister ratifies this in a ministerial decree. A contract in which all modalities are laid down is drawn up between the Authorities and the research institutes involved.

5 BUDGETARY INFORMATION

5.1 Generalities

It is strongly advised to involve the accountancy department of the research institutions when drawing up the budget proposal.

In addition to the information listed here, the information provided in chapter 5 of the <u>reference</u> manual of Contractual Research may also be useful.

The expenses covered by the grant from the FPS Health shall be made in accordance with the statutory and regulatory provisions governing public procurement (see https://bosa.belgium.be/en/public-procurement). This particularly concerns purchasing and subcontracting.

5.2 Allocated grant

The requested grant and its distribution must correspond with the real cost in relation to the duration, the nature, the required equipment and expertise of the research needed to achieve the objectives pursued.

For RT and RI project proposals, the research grant is capped on the amount indicated in the topic description (Annex 1).

The amount of the requested grant in the RT, RF or RI full proposal (step 2) shall not exceed the amount stated in the pre-proposal (step 1).

Maximum share of the allocated grant awarded is 100%. The requested grant must be rounded off to an amount in $k\in$; if not, the amount will be automatically rounded off by the Contractual Research unit.

All non-fixed expenses, both those charged to the FPS Health and those of own contributions, must – if the project is funded – be substantiated by means of accountability documents.

In principle, any financial contribution is acceptable as an own contribution provided that it does not give rise to a conflict of interests and does not originate from federal authorities' resources. In addition, the limitations described in the paragraphs below must be taken into account.

5.3 Staffing costs

Only staffing costs of employees of Belgian research institutions can be filed. Foreign expertise can only be brought in via subcontracting.

The staffing costs for the coordinator and the promoters may not be included in the project budget, neither at the expense of the FPS Health, nor as an own contribution.

All staffing costs related to the project's execution – except the staffing costs for the coordinator and the promoters - must be reported under this heading. Exceptions to this rule are the wage costs included in the budget for subcontracted work.

In order for doctoral grants to be considered as an own contribution, they must be financed from the own resources of the research institution concerned, or come from a funding source outside the federal government.

The staffing costs are calculated based on the pay scales of the institutions where the staff is employed. The detailed budget specifies the pay scale, seniority and time spent on the project (in person-months) per calendar year. If staff members are nominally known, their name should be provided. The staffing costs are split in gross wages on the one hand, and other wage costs on the other hand. The costs for a research fellow (PhD student), who by definition is not an employee, are presented in a single budgetary article.

5.3.1 Staffing costs which can be paid with the research grant

Research grants can be used to cover the following staffing costs:

- indexed gross monthly salary or grant (including and if applicable NSSO employee contribution, withholding tax and if appropriate, the employee contribution for meal vouchers);
- employer contribution NSSO, holiday pay and year-end bonus;
- other wage costs, if applicable, including:
 - o statutory insurance (e.g. for occupational accidents);
 - o statutory compensation or benefit as a supplement to the employee's salary (e.g. household or residence allowances if applicable, a premium for bilingual employees, benefits in kind set out in a CLA...);
 - o statutory interventions in the cost for commuting from home to work based on the price of a public transport pass (for train passes: 2nd class only, as regards the car if applicable: amount corresponding at most to the price of a public transport season ticket, 2nd class);
 - o bike allowances as stated on the employee's pay slip or the individual annual statements in accordance with the Federal Authorities' statutory tariff;
 - o if applicable, the flat-rate contribution for the work of prevention advisors of the External Services for Prevention and Protection at Work (Royal Decree of 27 March 1998, Royal Decree of 28 May 2003 health monitoring).

5.3.2 Staffing costs which cannot be covered with the research grant

The following costs (non-limitative list) cannot be covered by a research grant unless they are statutory benefitsⁱ:

- extra-legal insurance costs (hospitalisation, group insurance plan ...);
- administration costs of the social secretariat;
- extra-legal benefits (overtime, employer contribution for meal vouchers, company car, benefits in kind, supplementary family allowance, child-care allowance, representation costs, work clothes, extra-legal pension, extra-legal premiums);
- attendance fees.

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ⁱ For example legislation for staff working in public administrations, as set out in a royal decree or decree published in the Belgian Official Gazette, a CLA which is declared to be universally applicable following its publication in the Belgian Official Gazette

5.4 Operational costs

Operational costs include all project-related costs relating to the purchase and/or the operational use of goods or services and costs directly related to the research activities.

The operational costs are divided into standard operational costs and specific operational costs.

5.4.1 Standard operational costs

The standard operational costs are flat-rate costs and include normal expenses related to the research activities such as:

- ordinary supplies and products for the lab (e.g. glassware, pipettes, detergents), the workplace (e.g. recipients, carts, commonly used tools) and the office (e.g. perforators, ink cartridges);
- documentation (e.g. purchase of books, fees for ordering scientific articles);
- travel and accommodation in Belgium and abroad;
- the use of computers;
- frequently used software;
- ...

No own contributions can be budgeted under the standard operational costs.

The amount of standard operational costs is a lump sum, based on a percentage of the staffing costs <u>funded</u> by the FPS Health. This percentage may not exceed 15% of the <u>funded</u> staffing costs for the coordinator and 10% of these costs for the other promoters.

5.4.2 Specific operational costs

Specific operational costs include all the special operational costs that are directly related to the research activities. Specific operational costs include:

- usage costs for equipment (includes specific IT equipment needed for the use of this equipment);
- maintenance costs for equipment;
- costs for analyses;
- travel expenses (car) for sampling;
- costs for subcontracted work.
- a) The cost for the usage of <u>equipment acquired through purchase</u> or <u>hire purchase</u> are calculated as follows:

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\frac{\textit{purchase price}}{\textit{amortisation period in months}} \times \textit{number of months the device is used in the project} \times \% \textit{ of use for the project}
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The amortisation period (economic lifespan) is the period indicated in your accounts. In general, this period is 5 to 10 years for scientific equipment.

An example:

- you have a device that costs 30,000 euros at purchase
- the device is written off over a period of 60 months
- although the duration of the project is 36 months, the device will only be used for 10 months of the project
- during these 10 months the device will also be used for other projects. The average usage percentage for the project during this period is 20%

The usage cost is then calculated as follows:

$$usage\ cost = \frac{\text{ } \& 30,000}{60\ months} \times 10\ months \times 0.2 = \& 1,000$$

b) When renting equipment the usage cost is calculated as follows:

monthly rent \times number of months the device is used in the project x % of use for the project

If the device in the above example costs \in 600 a month to rent, the usage cost is calculated as follows:

c) The <u>cost of subcontracting work</u> includes the cost that a promoter pays to a third party to carry out tasks or to provide services, for which specific scientific or technical skills are required and which are not part of the consortium's ordinary activities.

Subcontracting is only admissible if

- it provides demonstrable added value to the project;
- the subcontractor does not take over the core activity and is only responsible for part of the project;
- the cost of subcontracting is no more than 25% of the overall grant to the promoter;
- detailed budgetary information is provided;
- the budget for subcontracting the work is not provided as a lump sum (as a % of the total budget).

In case no or insufficient standard operational costs can be reported for one or more partners due to limited or lacking staffing costs funded by the FPS Health, costs related to for example inland or foreign travel may be introduced as specific operational costs, provided that this can be motivated.

5.5 General costs

The general costs include the costs for administration, phone, the maintenance of the premises, heating, lighting, electricity, rent or insurance.

No own contributions may be budgeted under general costs.

These general costs must be budgeted as a lump sum based on maximum 10% of the staffing costs <u>funded</u> by the FPS Health.

6 VALORISATION OF RESEARCH RESULTS

The valorisation of new knowledge by the Government can take place at national, European and / or international level. The Government has a general and free right (no-cost) of use on the results for the support of its policy. The project proposal must therefore be designed in such a way that all results can be submitted in detail to the Government. The Contractual Research Unit can request at any time to submit a valorisation report, with the aim of scientifically supporting valorisation and service actions by the Government.

If applicable and at the request of the FPS Health, the consortium must provide data that can be used to supplement national, European or international databases, in accordance with the required data format. An example of this is the EFSA data collection for chemical contaminants in food (https://www.efsa.europa.eu/en/resources/data-collection). After validation, the EFSA Data Collection Team of the FPS Health takes care of the data transfer to EFSA via the Data Collection Framework. From the development of the project proposal, the consortium should be aware of the workload that this entails. Therefore, the use of the correct data format must be foreseen from the start of the research project. If it is not clear whether a data transfer should be provided, the Data Collection Team EFSA of the FPS Health can be contacted in advance, via the Contractual Research Unit (see section 10. Contact information).

7 INSTRUCTIONS RELATED TO THE COMPULSORY NOTIFICATION

7.1 Background

The Royal Decree of 14 November 2003 on self-checking, compulsory notification and traceability in the food chainⁱⁱ provides that each laboratory shall notify the Federal Agency for the Safety of the Food Chain (FASFC) when it has reason to believe that a **product placed on the market** does not comply with food safety regulations (https://www.fasfc.be/control-system/compulsory-notification/). The Ministerial Decree of 22 January 2004 regarding the modalities of compulsory notification in the food chainⁱⁱⁱ describes in more detail how the notification should be done.

7.2 Actions during the drawing up of the project proposal

When a project is related to notifiable organisms (regulated animal or plant diseases) or when the project proposal aims to analyse samples that may give rise to non-conformities in products placed on the market, it is important for the applicants to consult with the FASFC as soon as the detailed project proposal is being drawn up. A central contact point has been established for this purpose: researchcontactpoint@favv-afsca.be. This provides the opportunity for the researchers to consult on potential problems that might arise during the research in connection to the compulsory notification. This can clarify mutual expectations, which can allow to anticipate potential problems from the development of the project proposal onwards.

The organisms for which notification to the FASFC is mandatory are listed in the document called "Notification obligatoire et limites de notification, version 23 d.d. 2023-03-17" (in French and Dutch only) which can be found on the FASFC website under "Notification obligatoire".

It is important to know what is meant by "non-conformities". Products that are imported, produced, grown, cultivated, processed, manufactured or traded are considered not compliant

- if the maximum levels are exceeded, specifically the standards set in the legislation or the action limits established to exclude harmful effects on consumer, animal or plant health
- if they are dangerous, i.e., likely to be harmful to consumer, animal or plant health or unfit for consumption.

ii Consolidated version

iii https://www.ejustice.just.fgov.be/mopdf/2004/02/13_3.pdf#Page2 (in French and Dutch only)

7.3 Actions during the execution of the research

In connection to **animal or plant health:** When organisms are detected during the execution of the research for which notification to the FASFC is compulsory, this must be immediately reported to the Local Control Unit (LCU) of the FASFC to which the laboratory of the research team geographically belongs. The notification must comply with the provisions of the MD of 22 January 2004. Besides, it is appropriate to simultaneously communicate the results to the FASFC's research contact point (researchcontactpoint@favv-afsca.be).

In connection to **food safety**: During the execution of the research, the following applies:

- Any non-conformity associated with exceeding a standard or action limit must be reported **immediately** to the Local Control Unit (LCU) of the FASFC to which the laboratory of the research team geographically belongs. This reporting must comply with the provisions of the MD of 22 January 2004. Besides, it is appropriate to simultaneously communicate the results to the FASFC's research contact point (researchcontactpoint@favv-afsca.be).
- Products that are considered to be potentially dangerous/harmful to consumer health (but which poses a potential hazard that is not yet covered by a standard or an action limit), must undergo a prior risk analysis. Such results may therefore be communicated to the research contact point (researchcontactpoint@favv-afsca.be), which will determine whether notification to the LCU is required based on a risk assessment.

8 PROTECTION OF PERSONAL DATA

The following information relates to the protection of your personal data. This is the data that allows you to be identified, directly or indirectly.

When you submit a project proposal, the Contractual Research unit collects personal data in accordance with the legislation in force and the procedure applied by the FPS Health (https://www.health.belgium.be/en/privacy).

8.1 Legal bases and purposes of the processing operations

In the context of the legal assignment relating to the allocation of grants for scientific research^{iv}, the Contractual Research unit collects and processes personal data with the aim of:

- informing you (transmission of the call for submission of new project proposals);
- answering your questions;
- handling project proposals and projects that concern you.

8.2 Processed data

The table below lists the situations wherein personal data is collected and processed automatically.

Situations	Data collected and processed
	Surname, first name and e-mail address that you have provided.
You submit a project proposal, you contact us through an electronic form, an e-mail or a telephone call.	Exchange of e-mails through the contact form and exchanging messages.
	Meta data that may or may not be related to your email.
	Your postal address for the sending of documents and/or publications.
You visit the internet pages of Contractual Research.	IP address.

Other personal data that may be processed are listed in the data processing register.

⁻

^{iv} Royal Decree of 18 November 2015 establishing the conditions of awarding grants for scientific research on food safety and animal and plant health policy

8.3 Storage duration

Data related to the project proposals will be stored by the Contractual Research unit up to 10 years after the finalisation of the project. The storage duration of IP-addresses is 12 months. The cookie policy is described on the website of the FPS Health.

8.4 Security

The FPS Health guarantees the security (integrity and confidentiality) of your personal data. It is protected against unauthorised access, unauthorised use, loss and unauthorised changes.

To this end, security methods and procedures are being used. Appropriate physical, technical and organisational measures are taken to guarantee a level of security that is appropriate with regard to the risks.

8.5 Right of inspection, modification, objection and deletion

You have certain rights relating to the personal data that we use: the right of inspection, the right of modification, the right to object and the right to have data deleted.

In order to exercise your rights, please send an e-mail or letter to our Data Protection Officer together with a scanned copy or paper copy of your identity document containing your signature to the following address:

FPS Health, Food Chain Safety and Environment Galileelaan 5/2 1210 Brussels dpo@health.fgov.be

8.6 Complaints

If you consider that the FPS Health has not processed your personal data in accordance with the applicable regulations, you are entitled to lodge a complaint with the Data Protection Authority:

Data Protection Authority
Drukpersstraat 35
1000 Brussel
contact@apd-gba.be

9 DEFINITIONS & ABBREVIATIONS

Areas of activity

The areas of activity of Contractual Research are food safety and sanitary policy of animals and plants.

Consortium

Set of Belgian institutions or departments that perform the research project, represented by a coordinator and the promoters.

Contractual Research unit

The administrative unit of the FPS Health in charge of

- the organisation and management of the selection of projects within the areas of activity;
- the administrative, financial and scientific follow-up of the projects selected for funding.

Coordinator

Promoter leading the project and acting as the contact person for the consortium.

EFSA

European Food Safety Authority

EPPO

European and Mediterranean Plant Protection Organization

Evaluation Committee

The advisory board is composed of representatives from the FPS Health, from the FASFC and from experts who are part of the research institutions of the communities. The Evaluation Committee advises the Minister on

- the modalities of the call,
- the granting of the subsidies,
- the procedures regarding the selection, follow-up and evaluation of the projects.

Expert panel

A group of experts who carry out a scientific evaluation of project proposals.

FASFC

Federal Agency for the Safety of the Food Chain

FPS Health

Federal Public Service Health, Food Chain Safety and Environment

FCS

National Food Consumption Survey

Promoter

The representative of an institution that is part of the consortium.

RF

Free Research

Free research projects where the promoters determine the research topic.

RI

International Research

Transnational research projects, the research topics of which fall within the areas of activity.

RT

Targeted Research

Targeted research projects, the research topics of which have been established in advance by the authorised Minister.

10 CONTACT information

Please contact the scientific counsellors of the Contractual Research unit for additional information:

Dr. Ria NOUWEN Tel. +32 2 524 90 92 ria.nouwen@health.fgov.be

Dr. Valérie VAN MERRIS Tel. + 32 2 524 90 94 valerie.vanmerris@health.fgov.be

Dr. Lena VLAMINCK Tel. + 32 2 524 90 35 lena.vlaminck@health.fgov.be

Annexes



Annex 1: Research topics

Research topics RT projects

	TOPICS	Maximum duration (months)	Maximum grant
	Animal health		
1	Research into risk factors related to antibiotics benchmark colour code (AMURISK)	48	€ 440,000
2	Integrated animal disease control in veal calves, pigs and broilers (ANDICO)	48	€ 440,000
3	Salmonella in the environment of poultry farms (SALMENVI)	24	€ 220,000
4	The nutritional requirements of the honeybee (StrongBee)	36	€ 330,000
	Plant health		
5	Destruction methods of quarantine organisms (DESTRUQO)	24	€ 220,000
	Food safety		
6	Presence of ochratoxin A in ripened meat products and ripened cheeses in Belgium (OTACHAM)	18	€ 165,000
7	Nitrosamines in foodstuffs (TCNA-FOOD)	36	€ 330,000
8	Microbiological safety of plant-based alternatives to dairy products (PADAL)	36	€ 330,000
9	Plant toxins in foods derived from hemp (HEMPPLATOX)	15	€ 110,000

Research topics RI projects: Euphresco - plant health

	TOPICS	Maximum duration (months)	Maximum grant
	Plant health		
2024-A-463	The use of insect trap collection fluids for the surveillance of quarantine fungi in forests (FUN2TRAP)	24-36	€ 170,000
2024-A-468	Improved detection of regulated Torradoviruses (Detectorrado)	12-24	€ 80,000
2024-A-478	Towards spread and detection of <i>Diplodia</i> bulgarica in Europe	24-36	€ 80,000

1. Research into risk factors related to antibiotics benchmark colour code (AMURISK)

Context

Since 2017, antibiotic use in veal calves, pigs, broilers and laying hens is been recorded in the government's central database, SANITEL-MED. In accordance with the agreements laid down in the "Antibiotics Convenant", pigs (by category), veal calves (by herd), broilers and laying hens (by animal category) are benchmarked. The farmers and farm veterinarians involved have this information available on the basis of the benchmarking reports. Most of the broiler and laying hen farms lie within the green zone. For veal calves and pigs, there is more variation among the benchmark colour scores. This variation makes it interesting to study the underlying factors for low, medium or high antibiotic use on these Belgian farms in order to better guide farms toward reducing their antibiotic use. Farms with veal calves and broilers use more critically important antibiotics compared with other sectors. Again, identifying the underlying factors of the use of critically important antibiotics can help in identifying needs and guiding farms towards reducing use.

Research questions

- What are significant risk factors for high and low use of <u>antibiotics</u> on a herd of broilers, veal calves or pigs (presence of disease, biosecurity, purchasing policy, vaccination policy, health status, genetics/productivity, weaning age (pigs), age of supply, stocking density, relationship between different animal categories/age groups on a farm, effect of the veterinarian and possible coach, etc.)?
- What are significant risk factors for high and low use of <u>critically important antibiotics</u> on a herd of veal calves and broilers (presence of disease, biosecurity, purchasing policy, vaccination policy, health status, genetics/productivity, age of supply, stocking density, relationship between different animal categories/age groups on a farm, effect of the veterinarian and possible coach, etc.)?
- What is the impact of controlling these risk factors?
- What roadmap can be recommended, based on these risk factors, to guide a farm towards a better benchmark colour score?

To answer the research questions, the data made available by the farmer and farm veterinarian on the use of antibiotics, as registered in Sanitel-Med in accordance with the benchmarking reports will be used. No data is made available by the government.

The first two questions can be answered based on the results of surveys. The third question requires field research.

Maximum grant: € 440,000

Maximum duration: 48 months

2. Integrated animal disease control in veal calves, pigs and broilers (ANDICO)

Context

Infection prevention and control are an important component in combating the prevention and spread of antimicrobial resistance. Infections, such as Salmonella and Mycoplasma in veal calves, Streptococci and *Actinobacillus pleuropneumoniae* in pigs, and *Escherichia coli* and *Enterococcus* spp. in broilers, cause unfavourable health conditions on farms and a need for antibiotic use. By the same token, reducing the preventative use of antibiotics or reducing the use of broad-spectrum antibiotics may allow infections to break out or new infections to emerge more easily. As requirements concerning the use of antibiotics tighten, the need for an integrated approach to these infections within a sector is becoming increasingly apparent. Veal calf farms but also piglet farms are additionally in a difficult situation because animals from different farms are put together at a young age. As a result, animals differ in terms of

maternal immunity (colostrum, vaccination of young animals and breeders, infections on breeding farms, etc.), health status, needs, and so on.

Research questions

- What are the most common bacterial infections on veal calf farms, pig farms and broiler farms that prompt the use of antibiotics in Belgium (literature review / survey of farmers-veterinarians)? What co-infections play a role in the occurrence of these bacterial infections on Belgian farms?
- What are the risk factors for these infections throughout the production column?
- Which pathogens can be controlled in a technically and economically feasible way, taking into account the structure of the three sectors in Belgium?
- Based on the risk factors study and with technical and economic feasibility, what are the steps to be performed within the chain for the prevention, management/control of the most relevant pathogens? What is the feasibility of the steps to be implemented for control/control within a column and preventative measures at the farm level?
- What is the expected impact on the use of antibiotics in the prevention or control of one or more of these infections?

At the end of the project, a cross-sector workshop will be organized to stimulate cooperation between the different sectors.

Maximum grant: € 440,000

Maximum duration: 48 months

3. Salmonella in the environment of poultry farms (SALMENVI)

Context

For more than 20 years, a control programme for zoonotic salmonella in poultry and also feed sector has been applied in Belgium. With the intensive surveillance and vaccination programme, the prevalence of zoonotic salmonella in poultry has decreased significantly. However, prevalence has not continued to decline for several years now. In breeding poultry, laying hens and broilers, sporadic occurrences of salmonella have been observed, without the exact origin being traceable. In some cases, the farms concerned observe a high level of biosafety in their operations. A possible source is the presence of salmonella in the environment of poultry farms: the yard, footwear of personnel used outside the barn, machinery and equipment outside the barn, pests (rodents, insects), birds, companion animals, litter, etc. If greater clarity could be achieved as to the source, the biosafety recommendations could be adapted if necessary.

A study on farms where poultry are not yet infected with salmonella could shed light on the source of these new occurrences. Subsequently, biosafety recommendations could be adapted.

Research objectives

- To collect data relating to the presence of salmonella in the vicinity of poultry farms. Sampling must take place on a statistically sound number of poultry farms where salmonella contamination has not been detected recently. To allow comparison with isolates derived from poultry, food and feed, the serotype and profile of antimicrobial resistance should be determined, preferably using Whole Genome Sequencing (WGS).
- To formulate recommendations to prevent introduction of salmonella from the environment.

Maximum grant: € 220,000

Maximum duration: 24 months

4. The nutritional requirements of the honeybee (StrongBee)

Context

There are many environmental factors affecting the health of the honeybee (climate, diseases, beekeeper management techniques, feed deterioration, ...). If the sum of these factors weighs too heavily, it can lead to the death of the colony.

The quality and quantity of the bee's diet is essential. Bees fly out to bring enough nectar and pollen to their hive so the larvae can develop into adult bees. This requires several plants that provide them with these nutrients. Due to landscape degradation and climatic influences, the honeybee is unable to find the necessary nutrients, if at all, and the beekeeper will provide for supplementary feeding to the colonies during the wintering period to support the health of his hives. Today, this is often done unilaterally by offering sugar water or dough.

Amino acids have been found to be important for the proper development and the immunity of honeybees. De Groot's studyⁱ dating from 1953 is still cited in recent publications as a basic reference when it comes to the amino acid metabolism of bees. It is well-established that there are ten amino acids that are essential for the honeybee. Fat intake also enhances immunity. On the other hand, high-fat foods containing different fatty acids disrupt the gut microbiota in honeybees. The gut microbiota play a crucial role in nutrient absorption, and dysbacteriosis could affect metabolic processes in bees, causing weakening that could eventually lead to the death of the entire bee colony.

Thus, the nutrition supplied to the bees by the beekeeper, particularly the winter nutrition, seems crucial to help them overwintering. The optimal ratio of amino acids, fats and vitamins in feed according to the life stage of the bees is unknown. The final goal of the study is to formulate recommendations to beekeepers on the optimal composition of bee nutrition in order to strengthen the colonies' immunity.

Research objectives

1. Determining the amino acid, fat and vitamin requirements of

- bees in different life stages (larvae, pupae, adults, with different functions in the hive)
- individual tissues (including fat body, flight muscle, gut, nervous system) from healthy hives and from hives that are not doing well.
- 2. Identification of the synergy between the established amino acid and vitamin requirements and the absorption of fats by the fat body that stimulates immunity, in order to strengthen the health of the bees.

Determining amino acid, vitamin and fat requirements whilst strengthening immunity during the season and late in the season, in preparation for winter without adversely affecting gut microbiota.

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ⁱ De Groot AP. Protein and amino acid requirements of the honeybee (Apis mellifica L.). Physiol comp. Oecol. 1953;3:1–83.

3. Formulating recommendations for beekeepers on the nutritional composition of bee nutrition to enhance the hives' immunity.

In the framework of this research, the most widely used breeds in Belgium should be considered (Carnica and Buckfast). The proposed methodology must be supported by a thorough literature review.

Maximum grant: € 330,000

Maximum duration: 36 months

5. Destruction methods of quarantine organisms (DESTRUQO)

Context

To prevent the introduction of quarantine organisms into the European Union (EU), Regulation (EU) 2016/2031 on protective measures against plant pests introduces a more proactive approach involving in-depth surveillance of the territory, eradication measures in the event of confirmed outbreaks and import rules. For priority quarantine pests likely to enter and establish themselves on Belgian territory (Regulation (EU) 2019/1702), the FASFC must also draw up emergency plans (Article 25 of Regulation (EU) 2016/2031) so that it is ready to deploy the necessary measures to prevent their spread and eliminate them.

The appropriate eradication measures in accordance with the principles set out in Annex II of Regulation (EU) 2016/2031 must be imposed whenever a quarantine organism is found. These measures are either specified in the emergency measures adopted for certain quarantine organisms (e.g. Regulation (EU) 2023/1584 for *Popillia japonica*, Regulation (EU) 2023/1032 for tomato brown rugose fruit virus and Decision (EU) 2019/2032 for *Fusarium circinatum*), or must be determined on the basis of the available scientific and technical knowledge for rapid and effective eradication. In each case, the harmful organism must be destroyed and the host plants and other contaminated plant material or objects (e.g. wood or wood shavings, growing medium, etc.) must be treated to render the material at risk harmless. Destruction methods include for example burial, incineration, treatment with plant protection products or biocides, bio-waste treatment (composting, anaerobic digestion, thermal treatment),....

In view of the above, Belgium must be prepared for the emergence of quarantine organisms on its territory and, more specifically, of organisms known to be present on EU territory (Annex II, Part B of Regulation (EU) 2019/2072) as well as priority quarantine organisms. To take rapid action, the FASFC needs to know the minimum requirements necessary for destroying, eliminating or sterilising these organisms at a given efficacy. The FASFC must also take other factors into account when approving/validating phytosanitary treatments, including effects on human health and safety, animal health and environmental impact.

The aim of the project is to study the efficacy and practical feasibility of different treatments that eliminate and render harmless plant material contaminated by quarantine organisms already present in the EU and by priority quarantine organisms. A desktop study will verify which methods and parameters have already been studied and validated for certain organisms, and an inventory of these methods will be made. This project will develop treatment schemes for organisms for which this information is not available and test methods and procedures (e.g. in bioreactors). The study may be restricted to a selection of quarantine organisms (organism/host plant combination) but should cover as many types of organisms as possible. A selection of unregulated model organisms that are closely related to quarantine organisms (proxies, native pests) can be considered for testing in an experimental set-up. Mould treatments for wood packaging have already been studied in the RF 23/07 CHECKWOOD project and are therefore excluded from this project.

An EPPO Standard (PM 3/66) has recently been published (https://onlinelibrary.wiley.com/doi/epdf/10.1111/epp.12879) and provides examples of specific treatment conditions for a number of pests (including references). This EPPO Standard, together with ISPM 28, can be used as a starting point for the project. Options other than for example incineration could be considered. More environmentally-friendly, lower-cost

treatments are encouraged, as is a study of cases where the infested area extends into a Natura 2000 protected zone, for example.

Research objectives

- List the methods and parameters that have already been studied and validated for certain organisms.
- Develop a treatment scheme (specific parameters; physical, chemical or biological treatment) for plants, plant products, growing media and other infested objects to enable the destruction and elimination of quarantine organisms already present in the EU and priority quarantine organisms.
- Consider selecting unregulated model organisms that are closely related to quarantine organisms (proxies) and testing them in an experimental set-up.
- Consider more environmentally-friendly treatments, including anaerobic digestion.
- Test procedures and validate methods to ensure that the treatment process and final product comply with the requirement for being free from quarantine organisms.
- Based on the biological characteristics of model organisms and their hosts, extrapolate or model parameters to ensure that treatments completely destroy quarantine organisms already present in the EU and priority quarantine organisms.
- Determine and indicate the degree of efficacy, specificity and practical feasibility of each treatment.
- Specify the development stage of the pest targeted by the proposed treatment.
- Document phytosanitary treatments to show that data on efficacy in eliminating quarantine organisms has been established on the basis of the appropriate scientific procedures.

Maximum grant: € 220,000

Maximum duration: 24 months

6. Presence of ochratoxin A in ripened meat products and ripened cheeses in Belgium (OTACHAM)

Context

Ochratoxin A (OTA) is a mycotoxin, i.e. a toxin produced by fungi, in particular the species Aspergillus ochraceus and Penicillium verrucosum. This mycotoxin is present in many plant products worldwide, such as cereals, coffee beans, cocoa, spices and nuts, and is mainly produced during storage. The substance has also been found in products such as wine, beer and grape juice, as well as in animal products such as pork kidneys and cured ham.

In May 2020, EFSA published its revised <u>scientific opinion</u> on the public health risks associated with the presence of OTA in food. In this opinion, EFSA used new data on the substance's toxicology and the presence of OTA in food since the last assessment in 2006. The EFSA concludes that OTA is potentially genotoxic and can have carcinogenic effects on kidneys.

According to this advice, meat products such as cured ham, sausages and salami can also be contaminated during processing or storage (maturing and drying). EFSA also points out that several studies have shown the possible presence of OTA in ripened cheese. These studies attribute the presence of OTA as most likely due to fungal growth on the surface of the cheese. Although common fungi on the surface of cheese do not produce OTA, the uncontrolled growth of moulds during ripening can lead to the production of mycotoxins.

Recently, the research project RT 22/07 MYCOPROF, financed by the FPS Health, also identified the presence of OTA in parmesan as a significant risk that requires further research to better assess exposure to this mycotoxin through long-ripened cheeses. Although this category bears the highest risk for OTA contamination, scientific literature indicates that mould growth also affects blue cheeses (Gorgonzola, Roquefort, etc.), thus contributing to overall exposure.

Currently, Commission Regulation (EC) No. 2023/915 on maximum levels for certain contaminants in food does not set a maximum limit for the presence of this mycotoxin in ripened meat products or in the various types of ripened cheese. The data on the presence of OTA in these foods in the EFSA opinion and their consumption in the European Union, particularly in Spain and Italy, may represent an increased exposure for consumers who enjoy these products.

For this reason, the European Commission and the Member States are working on a recommendation on data collection, with the aim of gathering sufficient data to be able to establish risk management measures where necessary.

In view of the above, Belgium should plan a prospective study to complement national knowledge on this issue with up-to-date data. More specifically, research should be built along two pillars: on the one hand, to study the occurrence of OTA in the food industry in Belgium and describe the production process to establish the steps likely to encourage the presence of this mycotoxin and thus remedy it; on the other hand, to estimate the presence of OTA in products that are produced abroad but commercialised on the Belgian market, like prosciutto crudo, jamón ibérico/serrano and parmesan.

The availability of a sampling procedure is a priority to guarantee the implementation of any type of control activity. It is essential that the sampling methods used enable representative samples of the analysed foods to be collected, and therefore that they therefore comply with the conditions set out in the legislation in force for official inspections (where applicable). With this research project, we also want to validate the methods applied to the foodstuffs in question. In the specific case of hams, a sampling procedure proposed by the Spanish authorities is being discussed at the European level to develop a harmonised approach. By following the same procedure, Belgium could contribute to its validation, as Italy has done in a recent study.

The results of the project will be communicated to the FPS Health, Food Chain Safety and Environment and to the FASFC, which are the competent authorities concerning the discussions of future European regulations on maximum limits and official inspections. Relevant data will also be sent to EFSA using the SSD2 format, enabling EFSA to update its OTA exposure and risk assessment.

Research questions

- Develop and/or use a representative sampling method to determine the distribution of OTA in the food products to be analysed
- Obtain an overview on the presence of OTA in ripened meat products (cold cuts and raw, dried hams) and ripened cheeses
 - produced in Belgium
 - produced outside Belgium and available on the Belgian market
- Identification of the steps that are likely to promote the presence of ochratoxinproducing moulds in the absence of control of certain process parameters in food production
- Elaboration of recommendations for good manufacturing practices addressed to operators producing these products
- Provision of concentration data in SSD2 format, ready for submission to EFSA.

Maximum grant: € 165,000

Maximum duration: 18 months

7. Nitrosamines in foodstuffs (TCNA-FOOD)

Context

According to the European Food Safety Authority (EFSA) 2023 <u>risk assessment</u>, there is cause for concern for consumer health in terms of current dietary exposure to nitrosamines. To follow up this assessment with risk management, a further policy preparatory study is indicated.

The aim of this study is to identify the presence, sources, origin and (prevention of) formation of nitrosamines in foods.

The results of the research will serve as input to set maximum levels for nitrosamines at the European level in the Contaminants Regulation (Regulation (EU) 2023/915) to protect consumers. It may also lead to good practice guidance for prevention and reduction of nitrosamines in foodstuffs.

The EFSA has identified the following ten carcinogenic N-nitrosamines (TCNAs) as being relevant in food:

- 1. NDMA: N-nitrosodimethylamine
- 2. NMEA: N-nitrosomethylethylamine
- 3. NDEA: N-nitrosodiethylamine
- 4. NDPA: N-nitrosodipropylamine
- 5. NDBA: N-nitrosodibutylamine
- 6. NMA: N-nitrosomethylaniline
- 7. NSAR: N-nitrososarcosine
- 8. NMOR: N-nitrosomorpholine
- 9. NPIP: N-nitrosopiperidine
- 10. NPYR: N-nitrosopyrrolidine

The abovementioned 2023 EFSA opinion mentions the following research recommendations:

- Standardise a sensitive analytical method to quantify the 10 carcinogenic nitrosamines, i.e. both volatile and non-volatile nitrosamines in different foodstuffs
- Collect data on nitrosamines in processed foodstuffs other than processed meat (i.e. raw meat, vegetables, cereals, milk and dairy products, fermented foods, pickled preserves, spiced foods, etc.) and from products that have been heat-treated in various ways with and without the addition of nitrate and nitrite.

Belgian data are also needed to gain insight into the exposure of the Belgian population. Therefore, we also need concentration data for TCNAs in meat products and the possible relationship with recipe choices and processing.

In the earlier MEATNOX project (RF 11/6250, 2012-2015), observations were made regarding the formation of DNA adducts related to N-nitroso compounds upon digestion of different types of meat products.

There are also Belgian studies such as those by De Mey et al. 2014ⁱ and Drabik-Markiewicz et alⁱⁱ. The current project is obviously intended to be complementary to research already conducted and thus to obtain new information. The study should also be complementary to a study to be conducted for EFSA on the formation of nitrosamines. It is recommended to contact European laboratories working on the nitrosamines analysis in food in order to progress as efficiently as possible.

Research objectives

- To perform a literature review (method of analysis, concentration data of nitrosamines in food, identification of precursors and sources of precursors, mechanism of formation, factors influencing nitrosamine formation, effectiveness of prevention measures)
- To develop and validate a method for all TCNAs in all food groups that may be relevant to intake. The method must be reliable and sensitive (a maximum LOQ of 0.5 ppb per nitrosamine)
- To analyse at least 400 food samples available on the Belgian market. The sampling plan should take into account contamination risks and data gaps to be derived from findings in the literature review. The following food groups should at least be included: meat products, raw meat, beer, cereal products, milk and dairy products, fermented foods, processed vegetables, pickled preserves, spiced/peppered foods, compound foods with additional heating steps such as pizza.
 - The measurements should be sufficient to estimate the intake of Belgian consumers and should cover individual samples to gain insight into the variation of contamination within food groups.
- To estimate the exposure of the Belgian population (age groups, percentiles of intake such as P95) to TCNAs, and contributions of food groups to the total intake.
- To develop a proposal of a guideline for prevention of formation and reduction of presence of nitrosamines in food, based on literature and input from the Guidance committee.

Should the European Commission develop a monitoring recommendation, the project should take into account the specifications of this European recommendation.

Food analyses should be performed early in the project so that these data are available for standards discussions at the European level. The concentration data from the market study should be delivered in the appropriate format to the FPS Health for transfer to the EFSA database. Samples should be well described (ingredients, processing, ...).

Maximum grant: € 330,000

Maximum duration: 36 months

ⁱ De Mey et al, The occurrence of N-nitrosamines, residual nitrite and biogenic amines in commercial dry fermented sausages and evaluation of their occasional relation. Meat Science 96 (2014) 821-828.

ⁱⁱ Drabik-Markiewicz et al, Evaluation of the influence of proline, hydroxyproline or pyrrolidine in the presence of sodium nitrite on N-nitrosamine formation when heating cured meat. Analytica Chimica Acta 657 (2010) 123-130.

8. Microbiological safety of plant-based alternatives to dairy products (PADAL)

Context

The shift in consumer diets from animal protein to plant-based alternatives has resulted in rapid growth in the supply of new dairy and meat alternatives. Although the raw materials (e.g. soy, lentils, beans) are not new to the food industry, the way they are processed and used in these plant-based alternatives is proving to pose new challengesⁱ. For example, the recent RISK_LMO_RTE project found, based on sampling and challenge testing, that several types of "new" plant-based ready-to-eat foods pose a high to very high risk for presence and growth of *Listeria monocytogenes*ⁱⁱ.

Moreover, the European Union One Health 2021 Zoonoses Reportⁱⁱⁱ linked several outbreaks to plant-based alternatives to animal products. For example, outbreaks of listeriosis and salmonellosis were reported in several Member States and linked to a cheese alternative based on almond, walnut and cashew nut^{iv}.

There are still knowledge gaps concerning microbiological risks, especially with regard to plant-based alternatives to dairy products (e.g. plant-based drinks, cheeses (both hard and soft), plant-based alternative to yogurt^v). The long survival time of foodborne pathogens on nuts, the potential microbiological growth when nuts are soaked, the lower pasteurisation temperatures, and the rapid growth of foodborne pathogens in plant-based drinks compared to animal milk, among other factors, create a need for research. The study by Kyrylenko *et al.* (2023) examined the levels and types of microbiological contaminants in various plant ingredients (e.g. peas, beans, etc.) used for dairy alternatives. This study highlights the importance of spore formers in these raw materials.

Research objectives

- Identification of the main (types of) dairy alternatives (e.g. plant-based drinks, cheeses (both hard and soft), plant-based alternatives for yogurt, cream and dairy desserts) and raw materials (e.g. cereals (oats, spelt, rice, etc.), nuts and seeds, pulses, fava beans...) on the Belgian market
- Identification of relevant pathogens by type of dairy alternative and raw material, with special attention to spore formers
- Sampling and analysis of products on the Belgian market (complementary to available FASFC monitoring data)

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ⁱ Kyrylenko et al. 2023. Levels and types of microbial contaminants in different plant-based ingredients used in dairy alternatives. International journal of food microbiology, 407,110392. https://doi.org/10.1016/j.ijfoodmicro.2023.110392

ii https://www.health.belgium.be/fr/mise-en-place-dun-profil-de-risque-de-listeria-monocytogenes-dans-des-denrees-alimentaites-pretes

iii European Food Safety Authority and European Centre for Disease Prevention and Control, 2022. The EU One Health 2021 Zoonoses Report. EFSA Journal 2022;20(12): 7666, 273 pp.

^{iv} BSFM symposium presentation – Lieve Herman 12/10/2023 "EFSA/FAVV reports with details on EU zoonosis and AMR report, aged meat, vacuum food preparation"

^v Part et al. 2023. Microbiological, chemical and sensorial characterisation of commercially available plant-based yoghurt alternatives. 2023. Future Foods, 7, 100212.

- Mapping key process stages to produce these (types of) dairy alternatives. Investigation of behaviour (growth / inactivation / survival / toxin production) of foodborne pathogens throughout the process steps (taking into account heat resistance of spores present in powdered ingredients (which have already undergone heat treatment) and may clump, thus further increasing heat resistance; lower pasteurisation temperatures/times due to heat-sensitive proteins, growth during soaking of e.g. nuts, ...)

This should involve challenge tests, possibly in combination with predictive models.

- Estimation of the risk of relevant foodborne pathogens and identification of critical parameters for the mitigation of this risk.

Maximum grant: € 330,000

Maximum duration: 36 months

9. Plant toxins in foods derived from hemp (HEMPPLATOX)

Context

Hemp seeds and derivatives are marketed as food products. In 2015, the Scientific Panel on Contaminants in the Food Chain of the European Food Safety Authority (EFSA) issued a scientific <u>opinion</u> on human health risks associated with the presence of tetrahydrocannabinol (THC) in milk and other foods of animal origin. THC, specifically $\Delta 9$ -THC, is the most relevant component of the hemp plant *Cannabis sativa*. EFSA established an acute reference dose (ARfD) of 1 µg $\Delta 9$ -THC/kg body weight.

European Commission Recommendation (EU) 2016/2115 of 1 December 2016 on the monitoring of the presence of $\Delta 9$ -tetrahydrocannabinol, its precursors and other cannabinoids in food has not been implemented in Belgium to date.

In its <u>Advice 25-2017</u>, the Scientific Committee of the FASFC proposed action thresholds for THC in food of animal origin.

On 7 January 2020, EFSA published a scientific report assessing acute human exposure to $\Delta 9$ -THC taking into account the data on its presence as generated in accordance with Recommendation (EU) 2016/2115. According to certain estimates of acute exposure, the ARfD of 1 μ g/kg body weight was exceeded. Although exposure estimates are expected to overestimate acute exposure to $\Delta 9$ -THC in the Union, current exposure to $\Delta 9$ -THC poses a potential health risk.

Since the publication of Commission Regulation (EU) 2022/1393 of 11 August 2022 amending Regulation (EC) No 1881/2006 as regards maximum levels of delta-9-tetrahydrocannabinol ($\Delta 9$ -THC) in hemp seeds and products derived therefrom, there are European standards for THC equivalents ($\Delta 9$ -THC and $\Delta - 9$ -THCA) in hemp seeds and hemp seed oil, applicable as from 1 January 2023. Currently, the standards are contained in Regulation (EU) 2023/915 on maximum levels for certain contaminants in foodstuffs and repealing Regulation (EC) No 1881/2006.

However, there are not yet specific standards for all derived consumer products. It is not clear whether consumers are already adequately protected by current standards. Since this is an acute reference dose, intake via a serving of a consumer product is relevant. This study could provide a basis for deciding whether standards development for compound foods with hemp seed ingredients is important.

There is also a demand for data for delta-8-THC so that we can make informed decisions on whether or not to include this substance in the standards for THC equivalents.

There is significant added value in including even more cannabinoids in the project, especially psychoactive substances and their precursors. A range of substances were listed in Recommendation 2016/2115. According to more recent literature, other substances have been found as wellⁱ.

In terms of the method of analysis, contacts with the <u>EURL</u> are desirable. The method should yield reliable results.

The sampling method should provide analysis results that are representative of the sampled lot. Therefore, the sample must be large enough to accommodate heterogeneity within the lot. The

¹ (Cinzia et al, Analysis of cannabinoids in commercial hemp seed oil and decarboxylation kinetics studies of cannabidiolic acid (CBDA), Journal of Pharmaceutical and Biomedical Analysis 149 (2018) 532-540)

official sampling method as described in <u>Regulation 2023/2783 laying down sampling</u> procedures and methods of analysis for monitoring plant toxin levels in foodstuffs and <u>Regulation 2023/2782 laying down sampling procedures and methods of analysis for monitoring mycotoxin levels in foodstuffs</u> should be respected. The entire sample should be homogenised during sample preparation.

Following the European Contaminants Regulation, there are plans for amendments to the <u>Royal Decree of 31 August 2021 on the production of and trade in foodstuffs composed of or containing plants or plant preparations.</u> The current situation is explained on the FPS website.

This project is a policy-preparing study, for the possible extension of standards to other cannabinoids and the possible establishment of specific safe standards for compound foods containing hemp, and the evaluation of the safety of current standards for Belgian consumers. It is not meant to be a control action with respect to existing standards. Nonetheless, exceedances of the current standards, if identified, should be notified to FASFC.

In this project, estimates of acute intake of THC equivalents ($\Delta 9$ -THC and $\Delta - 9$ -THCA) can be done based on analytical measurement results, portion sizes and acute consumption figures as resulted from the survey, for comparison with EFSA's acute reference dose. It would be interesting to calculate the impact of any inclusion of delta-8-THC in the exposure assessment. No estimates need to be made for other substances. EFSA may use the data later, when a risk assessment is performed for other cannabinoids.

Research objectives

- 1) Determine delta-9-THC, delta-8-THC and THCA and other cannabinoids (see also Recommendation (EU) 2016/2115, as well as other cannabinoids that may be psychoactive, or their precursors) in a representative number of (compound) foods based on hemp seeds or derivatives. A validated analytical method with a limit of quantification (LOQ) no higher than 0.1 mg/kg per substance and low enough to identify an acute risk should be used (an upperbound estimate of a negative sample should not lead to an exceedance of the acute reference dose). For beverages, an LOQ of 0.02 mg/kg is aimed for. A minimum of 60 samples should be analysed, of which about half are compound foods and the other half are products that already have a standard for THC equivalents in the Annex to Regulation 2023/915. The portion size of the food containing hemp should be noted in grams, e.g. the weight of a burger with hemp sampled and analysed.
- 2) Conduct a survey of consumers of different age groups who use hemp oil or hemp seeds or derivatives in the kitchen and consume them as food to estimate the acute intake of THC equivalents from a serving of food containing hemp products. For this, it is necessary to know per consumer (with a known body weight) how much is typically and maximally consumed in one day of the hemp oil, hemp seeds, etc.
 - The survey should be conducted among people living in Flanders, Brussels and Wallonia.
- 3) Estimation of acute intake of THC equivalents based on portion sizes of the included foods and the maximum consumption figures for one day as resulted from the survey, for scenarios of different age groups, and comparison with EFSA's acute reference dose.

The data should be submitted in EFSA's SSD2 format to the FPS HFCSE.

Maximum grant: € 110,000

Maximum duration: 15 months

2024-A-463 The use of insect trap collection fluids for the surveillance of quarantine fungi in forests (FUN2TRAP)

Short description

Early detection is crucial for an effective outbreak management of quarantine organisms. For most quarantine fungi, the surveillance is based on visual inspection, followed by sampling in case of symptoms. Since the effectiveness of visual inspection is considerably lower in forests and natural areas compared to in orchards and arable crops, spore traps are used in addition. Insect surveillance is often done by pheromone traps loaded with collection fluids. In Canada and Australia, experience has learned that these fluids can also be used for the surveillance of fungal quarantine species, both insect-associated fungi as fungi spread by air borne spores (Tremblay *et al.* 2019; Bérubé *et al.* 2022; Trollip *et al.* 2023).

The use of a single trap for multiple organisms, fungi and insects, could significantly reduce labour and material costs. The aim of this topic is to test the feasibility of detecting EU quarantine fungi in collection fluids from traps that are currently used by NPPO for quarantine insect surveillance. If found successful, protocols can be developed for the implementation of this technique.

Potential outcomes:

- Types of insect traps, fluid containers and collection fluids that are most effective for the detection of fungi
- Comparison of the effectiveness with spore traps used specifically for fungi
- Development of an established method of sampling and processing
- Development of cost-effective detection technique(s) adapted to quarantine fungi found in traps in defined environments
- Validation of the technique

Description of the end product

- Protocols to use collection fluids of insect traps for the detection of quarantine fungi: sampling method, sample treatment and molecular detection method
- Validation of the detection technique

Provisional other funders

- Canadian Food Inspection Agency-Plant Research & Strategies, Canada (contact: Ms Brittany Day, brittany.day@canada.ca)
- Federal Ministry of Agriculture, Forestry, Regions and Water Management, Austria (contact: Mr Alois Egartner, alois.egartner@ages.at)
- National Plant Protection Organization, Netherlands Food and Consumer Products Safety Authority, the Netherlands (contact: Mr Maikel Aveskamp, M.M.Aveskamp@nvwa.nl; s.vanderlinde@nvwa.nl)
- Forestry Commission, United Kingdom (contact: Ms Joan Webber, joan.webber@forestresearch.gov.uk)
- Ministry of Agriculture Forestry and Food, Slovenia (contact: Ms Erika Oresek, erika.oresek@gov.si)

Provisional project duration

24-36 months

2024-A-468 Improved detection of regulated Torradoviruses (Detectorrado)

Short description

Torradoviruses are a recently described genus, with 8 member species. Of these, two species are regulated Quarantine pathogens in the UK, Switzerland and the EU (Torradovirus marchitezum and Tomato chocolate virus), with a further species having quarantine status in the UK and Switzerland (Torradovirus lycopersici/tomato torrado virus). Additionally, a potato infecting torradovirus (potato rugose stunting virus) has recently been described in Peru and intercepted entry to the USA and the Netherlands. At a recent EPPO virology panel the limited validation data for the detection of these viruses by existing assays was highlighted as a potential issue for proceeding with drafting a detection standard. Additionally, specific realtime RT-PCR tests are being developed for the detection of the viruses from the genus which are covered by regulations in the EPPO region, and the recent potato infecting torradovirus. The project would aim to validate both an existing generic torradovirus assay, and novel specific assays for the regulated torradoviruses. Within the project control isolates would be sought and artificial controls would also be designed. Following validation and evaluation of these assays a Test performance study would be conducted with the partners with a view to providing essential validation data to support drafting an EPPO standard for detection of these viruses.

Description of the end product

The outputs of this project would be the provision of validation data to support the implementation and use of both generic and specific tests intended for inclusion in a future EPPO diagnostic standard. These viruses are tested for as part of multi-annual surveys, and this would allow a more streamlined approach to the current testing regimes. These quarantine viruses of tomatoes and potato could severely impact on the production of those crops in the UK and the EPPO region, and early interception and diagnosis would prevent spread should they occur.

Provisional other funders

- Department for Environment Food and Rural Affairs, United Kingdom (contact: Mr Pete Seymour, Peter.Seymour@defra.gov.uk)
- Bioreba AG, Switzerland (contact: Mr Marco Keiser, kaiser@bioreba.ch)
- US Department of Agriculture, Animal and Plant Health Inspection Service, United States of America (contact: Ms Heike Meissner, heike.e.meissner@usda.gov; vessela.a.mavrodieva@usda.gov)
- Federal Ministry of Agriculture, Forestry, Regions and Water Management, Austria (contact: Mr Alois Egartner, alois.egartner@ages.at)
- Council for agronomic research and economic analysis, Italy (contact: Mr Sauro Simoni, sauro.simoni@crea.gov.it; antonio.tiberini@crea.gov.it)
- Ministry of Agriculture Forestry and Food, Slovenia (contact: Ms Erika Oresek, erika.oresek@gov.si)
- French Agency for Food, Environmental and Occupational Health & Safety, France (contact: Ms Géraldine Anthoine, geraldine.anthoine@anses.fr)
- Ministry of Agriculture, Plant Biosecurity, Plant Protection and Inspection Services, Israel (contact: Ms Shlomit Zioni, shlomitz@moag.gov.il)

Provisional project duration

12-24 months

2024-A-478 Towards spread and detection of *Diplodia bulgarica* in Europe

Short description

Diplodia bulgarica causes black canker on hosts in the family Rosaceae, but mainly on apple and pear with economically important impact. In the EU, D. bulgarica has been reported from Bulgaria and Germany. This currently known distribution must be taken with caution, and this pest may be widely distributed in Europe but has not been detected because of lacking or insufficient research. In addition, plants for planting represent the main pathway of the further spread and there is ongoing trade of host planting material within EU member states. Besides D. bulgarica, reported as predominant species in Germany, other Diplodia species (e.g. D. intermedia, D. malorum, D. mutila, D. seriata) and other members of the Botryosphaeriaceae family affect apple and pear even though causing similar symptoms. Gaining an understanding of current distribution of D. bulgarica in the EU and facilitating its detection and identification will increase awareness of the disease in the MSs.

Description of the end product

The project will provide information about the dissemination of *D. bulgarica* in Europe and the Mediterranean and support the development of sound detection measures.

Provisional other funders

- Federal Ministry of Food and Agriculture, Germany (contact: Ms Silke Steinmöller, silke.steinmoeller@julius-kuehn.de)
- Federal Ministry of Agriculture, Forestry, Regions and Water Management, Austria (contact: Mr Alois Egartner, alois.egartner@ages.at)
- Council for agronomic research and economic analysis, Italy (contact: Mr Sauro Simoni, sauro.simoni@crea.gov.it; massimo.pilotti@crea.gov.it; angela.brunetti@crea.gov.it)
- BENAKI PHYTPATHOLOGICAL INSTITUTE, Greece (contact: Ms Irene Vloutoglou, i.vloutoglou@bpi.gr; e.kalogeropoulou@bpi.gr)
- Ministry of Food Agriculture and Forestry, General Directorate of Food and Control, Turkey (contact: Mr Suat Kaymak, suatkaymak@tarimorman.gov.tr)
- Ministry of Agriculture, Plant Biosecurity, Plant Protection and Inspection Services, Israel (contact: Ms Shlomit Zioni, shlomitz@moag.gov.il)

Provisional project duration

24-36 months



Annex 2: Template RT pre-proposal (step 1)

CONFIDENTIAL

Targeted Research, step 1 RT PRE-PROPOSAL

MAX.~6~PAGES (excluding title page and identification of the coordinator) i

[TITLE OF THE TOPIC]

[ACRONYM OF THE TOPIC]

Title of the project proposal

[EN]

[NL]

[FR]

Total duration	months
Total budget	€
Requested grant The requested research grant must be rounded up	€ To an amount in k€.
If appropriate:	
percentage of own contribution The percentage of own contribution shall be	% e dropped to 2 decimal places
origin / nature of own contribution	

ⁱ grey, italic text is only for clarification of the heading, it can be deleted

1. IDENTIFICATION OF THE COORDINATOR

Cf. applicant's guide section 1.2.3. Composition of the consortium					
:					
:					
:					
:					
:					
:					
:					

Will this research be conducted in a consortium of Belgian research institutions (with the partners included in the budget)? If yes, please list the other promoters here (name, institution and e-mail address). Note: Only one partner per research group of a specific institution can participate in the consortium.
group of a specific institution can participate in the consortium.

2. CONTEXT OF THE PROJECT PROPOSAL

2.1 Description of the context of this project proposal, taking into account the topic description (about 20 lines)

2.2 To which extent are you involved in the general problem on which this project proposal is based? (about 20 lines)

What is your expertise in this field? Have you already conducted research in this field or are you currently conducting research? If yes, please list the project title(s), the start and end dates of your research and identify the institution that provided a grant for the research

Are you working with other institutions in Belgium and/or abroad? If yes, are you a member of a network?

2.3 To your knowledge, which other projects were recently conducted or are currently ongoing or planned on the subject, excluding the projects listed under 5.3? (about 10 lines)

Please list the project title(s), the start and end dates of the research and identify the funding institutions.

3. RESEARCH OBJECTIVES (about 25 lines)

3.1 Research questions/objectives of the project proposal

Formulate the research questions / objectives that will be answered in the research project.

3.2 Justification of the submission under this topic

If the proposal does not fully meet what is requested in the topic decription or if the proposal goes beyond the objectives/research questions stated in the topic description, this must be substantiated.

4. IMPACT OF THE RESEARCH SUBJECT (about 10 lines)

Can the proposed research provide a solution to the problem described? What will be the applicability of the intended results for the authorities - directly or indirectly - in the short, medium or long term?

5. DESCRIPTION OF THE PROJECT PROPOSAL

Be clear and specific so that your proposal can be unambiguously compared with competing proposals within this topic. If necessary, references can be briefly included in the text (e.g. Johnson et al., 2012).

5.1 Methodology (about 40 lines)

Describe the methodology that will be used for this research, structured by work packages and tasks. Has this methodology been applied previously before by the applicants, by other Belgian researchers or by researchers abroad?

5.2 Personel deployment

Persons foreseen in the budget: institution to which they are affiliated, the level of education, diploma and time spent in person-months (PM)

Institution	Level of eduction	Diploma	PM

5.3 Available scientific proof in relation to the proposed research (about 20 lines)

Has other research in relation to the proposed subject already yielded convincing elements ("proof") which can be used as a starting point for this project? List this research in order of importance. Are there own preliminary data? In which respect is the current project proposal innovative?

5.4 Required data (about 10 lines)

Do data and/or preliminary knowledge necessary for this research exist? If yes, are they available through accessible databases? If these data are not (yet) available, describe how the data can be obtained.

5.5 Risks (about 10 lines)

What are the inherent obstacles and/or risks to the proposed project that may compromise its chances of success? Which solutions do you propose?

6. USE OF THE RESEARCH RESULTS (about 10 lines)

How do you intend to use the results?

- as an intermediary stage for complementary research activities,
- for the development, realisation, or dissemination of a procedure or a service,
- for the dissemination of new knowledge through scientific publications.

On behalf of the consortium,					
Date, name and signature of the coordinator					



Annex 3: Template RT full proposal (step 2)

CONFIDENTIAL

Targeted Research, step 2 RT FULL PROPOSAL

MAX. 30 PAGES
(excluding title page and identification of the consortium, including the budgetary tables and bibliography)ⁱ

[TITLE OF THE TOPIC]

RT 25/	[ACRONYM OF THE TOPIC]
T	itle of the project proposal
	[EN]
	[NL]
	[FR]

Total duration	months
Total budget	€
Requested grant The requested research grant must be round	€ led up to an amount in k $€$.
If appropriate:	
percentage of own contribution The percentage of own contribution sh	% all be dropped to 2 decimal places
origin / nature of own contribution	
Proposed start dateii	/ /

ⁱ grey, italic text is only for clarification of the heading, it can be deleted

ⁱⁱ At the earliest 1 April 2025, and in function of the research plan, the availability of personnel and resources and any seasonality.

1. IDENTIFICATION OF THE CONSORTIUM

Cf. applicant's guide section 1.2.3. Composition of the consortium

1.1 IDENTIFICATION OF THE COORDINATOR

Name :
First name :
Title :
Institution and department :
Address for correspondence :
(Mobile) phone :
E-mail :

1.2 IDENTIFICATION OF PROMOTER 2 (optional)

Name : First name : Title : Institution and department : Address for correspondence : (Mobile) phone : E-mail :

1.3 IDENTIFICATION OF PROMOTER 3 (optional)

Name : First name : Title : Institution and department : Address for correspondence : (Mobile) phone : E-mail :

1.4 IDENTIFICATION OF PROMOTER 4 (optional)

Name :
First name :
Title :
Institution and department :
Address for correspondence :
(Mobile) phone :
E-mail :

2. HISTORY OF CHANGES

Have significant changes—based on the recommendations formulated in the invitation for step 2 — been made to the full proposal compared to the pre-proposal?

Cf. applicant's guide section 2.2.1 Drafting the RT full proposals Indicate

- *in which section(s)*,
- which change(s),
- *justification / motivation for the change.*

3. GENERAL INFORMATION

- 3.1 Description of the context of the project proposal, taking into account the description of the topic (maximum 1,5 pages)
- 3.2 Summary of the project proposal (about 20 lines)
- 3.3 Research objectives (about 2x 20 lines)

Formulate the research questions / objectives that will be answered in the project, in English and Dutch or French.

[EN]

[NL/FR]

3.4 Justification of the submission under this topic (about 15 lines)

If the proposal does not fully meet what is requested in the topic decription or if the proposal goes beyond the objectives/research questions stated in the topic description, this must be substantiated.

3.5 Positioning of the project proposal (about 1 page)

- How is the current project proposal scientifically and technically innovative? Has other research in relation to the proposed subject already yielded convincing elements that can be used as a starting point for this project? Which data and preliminary knowledge are required for this research and are these available or accessible?
- What are the achievements of the applicants and/or the researchers in this field? Have you already conducted research in this field or are you currently conducting research? If yes, please list the project title(s), the start and end dates of your research and identify the institution that provided a grant for the research.

3.6 Use of the expected research results (about 5 lines)

How do you intend to use the research results?

- as an intermediary stage for complementary research activities,
- for the development, realisation, or dissemination of a procedure or a service,
- *for the dissemination of new knowledge through scientific publications,*
- ...

3.7 Risks (about 15 lines)

What are the inherent obstacles and/or risks to the proposed project that may compromise the chances of achieving the objectives within the term you propose? Which solutions do you propose?

4. SPECIFIC INFORMATION

4.1 Scientific and operational methodology of the proposed research (about 15 pages)

- This section constitutes the core of the project proposal. It must include a clear description of the research activities as they are planned for the total duration of the proposed project.
- *Important elements in the description of the various parts of the research program are:*
 - an overview of the proposed research, subdivided into work packages and (sub)tasks, including an indication of the estimated budget needed for every work package;
 - the proposed methods and technologies with their respective (dis)advantages, limitations, risks and alternatives...;
 - the milestones and deliverables to be achieved, linked to possible reorientations in the research program where applicable;
 - the time frame and evolution based on the following chronogram:

		Yea	ar 1			Yea	ar 2			Yea	ar 3		Year 4			Total budget	
Code	t1	t2	t3	t4	t1	t2	t3	t4	t1	t2	t3	t4	t1	t2	t3	t4	per WP*
WP 1																	
T1.1.																	
T1.2.																	
•••																	
WP 2																	
T2.1.																	
T2.2.																	
T2.3.																	
WP 3																	

t trimester

WP work package

* Total budget per work package: sum of staffing, operational and general costs

4.2 Structure and organisation of the research (about 2 pages)

Indicate the distribution of the various tasks among the consortium partners using the following table:

Code Task description		Task description Contracting institution(s)				
WP 1						
T1.1.						
T1.2.						
WP 2						
T2.1.						
T2.2.						
T2.3.						
•••						

WP work package

T task

PM person-months

4.3 Collaboration, complementarity and/or parallel applications

- State any cooperation with foreign partners and participation in networks if useful for this project proposal.
- Also indicate whether collaboration is planned, or whether complementarity exists with research groups that do not request a financial contribution from the FPS Health for this project but are funded by other bodies for conducting their own research.
- Indicate whether your project proposal (or sub-project) is submitted to / funded by another funding institution than the FPS Health.

 State the duration of the project, the project title, the funding organisation and the research partner(s). List the research questions and intended milestones.

4.4 Own publications in peer-reviewed international journals in this field of research in the past five years

5. BUDGETARY INFORMATION

Cf. applicant's guide section 5. Budgetary information

- The amount of the requested research grant may not exceed the amount stated in the pre-proposal.
- The requested research grant must be rounded up to an amount in $k \in \mathbb{N}$.

Please insert the tables from annex 7 and submit also as an Excel document. Depending on the number of partners (one or more) in the consortium, use the respective sheet in the document for the overview table and for the detailed budget proposal.

5.1 Budgetary overview table

5.2 Detailed budget proposal

6. ADMINISTRATIVE INFORMATION

6.1 Proposal for a guidance committee

(minimum 8 persons, mentioning the institution and a valid e-mail address)

Title – First name – Name	Institution	E-mail

6.2 Name and identification of the persons who must sign the contract if the project is eligible for a research grant

Institution coordinator	Located at	Name representative institution coordinator	Position
		Name coordinator	Position
Institution promoter 2		Name representative institution promoter 2	Position
Institution promoter 3		Name representative institution promoter 3	Position
Institution promoter 4		Name representative institution promoter 4	Position
Institution promoter 5		Name representative institution promoter 5	Position

6.3 Identification and bank details of the coordinating institution as to be included in the contract, when subject to selection for funding

Company registration number : IBAN : BIC : Name and address of the account holder :

On behalf of the consortium,	

7.

BIBLIOGRAPHY

Date, name and signature of the coordinator



Annex 4: Template RF pre-proposal (step 1)

CONFIDENTIAL

Free Research, step 1 RF PRE-PROPOSAL

MAX. 6 PAGES (excluding title page and identification of the coördinator)ⁱ

Title and acronym of the project proposal
[EN]
[NL]

[FR]

[Acr	onym]
Most important field of activity to which this project proposal relates (tick only one field please)	Additional field(s) of activity to which this project proposal relates
☐ Food safety ☐ Animal health ☐ Plant health	☐ Food safety☐ Animal health☐ Plant health
Total duration	months
Total budget	€
Requested grant The requested research grant must be rounded	€ d up to an amount in k€.
If appropriate:	
percentage of own contribution The percentage of own contribution shall origin / nature of own contribution	% Il be dropped to 2 decimal places.
origin / nature of own contribution	

i grey, italic text is only for clarification of the heading, it can be deleted

1. IDENTIFICATION OF THE COORDINATOR

Name : First name : Title : Institution and department : Address for correspondence (Mobile) phone : E-mail : :

Cf. applicant's guide section 1.2.3. Composition of the consortium

Will this research be conducted in a consortium of Belgian research institutions (with the partners included in the budget)? If yes, please list the other promoters here (name, institution and e-mail address). Note: Only one partner per research
nere (name, institution and e-man address). Were, Only one partner per research
group of a specific institution can participate in the consortium.

2. CONTEXT OF THE PROJECT PROPOSAL

Is it a resubmission of an earlier project proposal?

YES / NO Delete what does not apply.

If YES, please complete:

Year of call:

Acronym:

Title:

3.1 Description of the context of this project proposal (about 20 lines)

What is the problem, what are the causes?

3.2 To what extent are you involved in the general problem on which this project proposal is based? (about 20 lines)

What is your expertise in this field? Have you already conducted research in this field or are you currently conducting research? If yes, please list the project title(s), the start and end dates of your research and identify the institution that provided a grant for the research.

Are you working with other institutions in Belgium and/or abroad? If yes, are you a member of a network?

3. RESEARCH OBJECTIVES OF THE PROJECT PROPOSAL (about 20 lines)

To which research question(s) / objective(s) should the proposed research provide an answer in order to contribute to a solution to the problem mentioned under 2.1? Formulate if possible the research hypothesis.

4. IMPACT OF THE RESEARCH TOPIC

4.1 Incidence (about 5 lines)

Does this research proposal address a quantitatively important problem that occurs frequently or affects a large number of individuals?

4.2 Seriousness of the problem (about 5 lines)

Does the research topic pose or could it pose a serious risk regarding food safety or the health policy of animals or plants in terms of

- health, quality of life?
- the effectiveness or the quality of actions (remedies, recommendations, medicines or measures)?
- social or ethical questions?

4.3 Financial impact (about 5 lines)

Does the subject potentially have an influence on

- the current impact of the problem (including on sustainable development)?
- the resources that are used for the problem and their effectiveness?

- 4.4 Does the research topic respond to a concern of society or the population? (about 5 lines)
- 4.5 Is the implementation of the results resulting from this research acceptable for the sector concerned? In other words, does the research meet the sector's expectations? (about 5 lines)

4.6 Possibilities to improve the situation (about 5 lines)

Can the proposed research provide a solution to the problem described? If yes, for which under 4.2-4.3 mentioned levels would this be the case and is this solution in the short, medium or long term?

5. RELEVANCE FOR AUTHORITIES' DECISIONS (about 10 lines)

What is the potential of this research in terms of supporting decision making by the Authorities? What would be the risk if the situation remains as it is? Who are the parties involved in the execution of the research and who are the stakeholders in the implementation of the research results?

6. DESCRIPTION OF THE PROJECT PROPOSAL

If necessary, references can be briefly included in the text (e.g. Johnson et al., 2012).

6.1 Methodology (about 40 lines)

Describe the methodology that will be used for this research, structured by work packages and tasks. Has this methodology been applied previously before, by the applicants, by other Belgian researchers or by researchers abroad?

6.2 Personel deployment

Persons foreseen in the budget: institution to which they are affiliated, the level of education, diploma and time spent in person-months (PM)

Institution	Level of eduction	Diploma	PM

6.3 Available scientific proof in relation to the proposed research (about 20 lines)

Has other research in relation to the proposed subject already yielded convincing elements ("proof") which can be used as a starting point for this project? List this research in order of importance. Are there own preliminary data? In what respect is the current project proposal innovative?

6.4 Required data (about 10 lines)

Do data and/or preliminary knowledge necessary for this research exist? If yes, are they available through accessible databases? If these data are not (yet) available, describe how the data can be obtained.

6.5 Risks (about 10 lines)

What are the inherent obstacles and/or risks to the proposed project that may compromise its chances of success? Which solutions do you propose?

7. USE OF THE RESEARCH RESULTS (about 10 lines)

How do you intend to use the results?

- as an intermediary stage for complementary research activities,
- for the development, realisation, or dissemination of a procedure or a service,
- for the dissemination of new knowledge through scientific publications.

On behalf of the consortium,									
Date, name and signature of the coordinator									



Annex 5: Template RF full proposal (step 2)

CONFIDENTIAL

Free Research, step 2 RF FULL PROPOSAL

MAX. 30 PAGES

(excluding title page and identification of the consortium, including the budgetary tables and bibliography)ⁱ

Title of the project proposal [EN]

[NL]

ACRONYM

[FR	[]
Total duration	months
Total budget	€
Requested grant The requested research grant must be rounded u	ϵ up to an amount in $k\epsilon$.
If appropriate:	
percentage of own contribution The percentage of own contribution shall be	% De dropped to 2 decimal places.
origin / nature of own contribution	
Proposed start date ⁱⁱ	//

ⁱ grey, italic text is only for clarification of the heading, it can be deleted

and any seasonality.

RF 25/..

"At the earliest 1 April 2025, and in function of the research plan, the availability of personnel and resources

1. IDENTIFICATION OF THE CONSORTIUM

Cf. applicant's guide section 1.2.3. Composition of the consortium

Note: Only one partner per research group of a specific institution can participate in the consortium.

1.1 IDENTIFICATION OF THE COORDINATOR

Name : First name : Title : Institution and department : Address for correspondence : (Mobile) phone : E-mail :

1.2 IDENTIFICATION OF PROMOTER 2 (optional)

Name
First name
Title
Institution and department
Address for correspondence
(Mobile) phone
E-mail

: Since the content of the

1.3 IDENTIFICATION OF PROMOTER 3 (optional)

Name : First name : Title : Institution and department : Address for correspondence : (Mobile) phone : E-mail : :

1.4 IDENTIFICATION OF PROMOTER 4 (optional)

Name : First name : Title : Institution and department : Address for correspondence : (Mobile) phone : E-mail :

2. HISTORY OF CHANGES

Have significant changes—based on the recommendations formulated in the invitation for step 2 — been made to the full proposal compared to the pre-proposal?

Cf. applicant's guide section 3.2.1 Drafting the RF full proposals Indicate

- in which section(s), such as consortium, budget, project duration, objectives, methodology,
- which change(s),
- justification / motivation for the change.

3. GENERAL INFORMATION

3.1 Description of the context of the project proposal (maximum 1,5 pages)

3.2 Summary of the project proposal (about 20 lines)

3.3 Research objectives (2x 20 lines each)

Formulate the research questions / objectives that will be answered in the project, in English and Dutch or French.

[EN]

[NL/FR]

3.4 Positioning of the project proposal (about 1 page)

- How is the current project proposal scientifically and technically innovative? Has other research in relation to the proposed subject already yielded convincing elements ("proof") that can be used as a starting point for this project? Which data and preliminary knowledge are required for this research and are these available or accessible?
- What are the achievements of the applicants and/or the researchers in this field? Have you already conducted research in this field or are you currently conducting research? If yes, please list the project title(s), the start and end dates of your research and identify the institution that provided a grant for the research.

3.5 Use of the expected research results (about 5 lines)

How do you intend to use the results?

- as an intermediary stage for complementary research activities,
- for the development, realisation, or dissemination of a procedure or a service,
- *for the dissemination of new knowledge through scientific publications,*
- ...

3.6 Risks (about 15 lines)

What are the inherent obstacles and/or risks to the proposed project that may compromise the chances of achieving the objectives within the term you propose? Which solutions do you propose?

4. SPECIFIC INFORMATION

4.1 Scientific and operational methodology of the proposed research (about 15 pages)

- This section constitutes the core of the project proposal. It must include a clear description of the research activities as they are planned for the total duration of the proposed project.
- *Important elements in the description of the various parts of the research program are:*
 - an overview of the proposed research, subdivided into work packages and (sub)tasks, including an indication of the estimated budget needed for every work package;
 - the proposed methods and technologies with their respective (dis)advantages, limitations, risks and alternatives...;
 - the milestones and deliverables to be achieved, linked to possible reorientations in the research program where applicable;
 - the time frame and evolution based on the following chronogram:

	Year 1		Year 2		Year 3		Year 4				Total budget						
Code	t1	t2	t3	t4	t1	t2	t3	t4	t1	t2	t3	t4	t1	t2	t3	t4	per WP*
WP 1																	
T1.1.																	
T1.2.																	
WP 2																	
T2.1.																	
T2.2.																	
T2.3.																	
WP 3																	

t trimester WP work package

^{*} Total budget per work package: sum of staffing, operational and general costs

4.2 Structure and organisation of the research (about 2 pages)

Indicate the distribution of the various tasks among the consortium partners using the following table:

Code	Task description	Contracting institution(s)	Required personnel (qualifications)	PM
WP 1				
T1.1.				
T1.2.				
••••				
WP 2				
T2.1.				
T2.2.				
T2.3.				

WP work package

T task

P-M person-months

4.3 Collaboration, complementarity and/or parallel applications

- State any cooperation with foreign partners and participation in networks if useful for this project proposal.
- Also indicate whether collaboration is planned, or whether complementarity exists with research groups that do not request a financial contribution from the FPS Health for this project but are funded by other bodies for conducting their own research.
- Indicate whether your project proposal (or sub-project) is submitted to / funded by another funding institution than the FPS Health.

 State the duration of the project, the project title, the funding organisation and the research partner(s). List the research questions and envisaged milestones.

4.4 Own publications in peer-reviewed international journals in this field of research in the past five years

5. BUDGETARY INFORMATION

Cf. applicant's guide section 5. Budgetary information

- The amount of the requested research grant may not exceed the amount stated in the pre-proposal.
- The requested research grant must be rounded up to an amount in $k \in \mathbb{N}$.

Please insert the tables from annex 7 and submit also an Excel document. Depending on the number of partners (one or more) in the consortium, use the respective sheet in the document for the overview table and for the detailed budget.

5.1 Budgetary overview table

5.2 Detailed budget

6. ADMINISTRATIVE INFORMATION

6.1 Proposal for a guidance committee

(minimum 8 persons, mentioning the institution and a valid e-mail address)

Title – First name– Name	Institution	E-mail

6.2 Name and identification of the persons who must sign the contract if the project is eligible for a research grant

Institution coordinator	Located at	Name representative institution coordinator	Position
		Name coordinator	Position
Institution promoter 2		Name representative institution promoter 2	Position
Institution promoter 3		Name representative institution promoter 3	Position
Institution promoter 4		Name representative institution promoter 4	Position
			•••••
Institution promoter 5		Name representative institution promoter 5	Position

6.3 Identification and bank details of the coordinating institution as to be included in the contract if the project is eligible for a research grant

Company registration number : IBAN : BIC : Name and address of the account holder :

7.	BIBLIOGRAPHY	
(On behalf of the consortium,	
	,	

Date, name and signature of the coordinator



Annex 6: Template RI Expression of Interest (step 1)

CONFIDENTIAL

Euphresco Transnational Call, step 1 RI EXPRESSION OF INTEREST

MAX. 4 PAGES (excluding the title page and identification of the coordinator)ⁱ

[CODE AND TITLE OF THE TRANSNATIONAL TOPIC]

Title of the Belgian consortium's project proposal
[EN]
[Acronym]

Total duration	months
Total budget	€
Requested grant The requested research grant must be rounded up to an o	€ amount in k€.
In which case:	
percentage of own contribution The percentage of own contribution should be drop	% sped to 2 decimals.
origin / nature of own contribution	

i grey italic text is only for clarification, it can be deleted

1. IDENTIFICATION OF THE COORDINATOR

Surname : First name : Title : Institution and department : Address for correspondence (Mobile) Phone : E-mail : E-mail

Cf. applicant's guide section 1.2.3. Composition of the consortium

(with the partners included in the budget)? If yes, please list the other phere (name, institute and e-mail address). Note: Only one partner per restfrom a particular institution can participate in the consortium.	•

2. DETAILS OF THE PROJECT PROPOSAL

2.1 Description of the context of this project proposal, taking into account the topic description (about 20 lines)

2.2 Proposed transnational project outline (about 15 lines)

Please outline the transnational project approach you would propose to the future transnational research consortium in order to reach the objectives of the topic. The specific Belgian tasks are to be described under 2.3.

2.3 Research capacity (about 30 lines)

Please describe your own research capacity within the project. Which part of the proposed transnational project programme could you address? Which research questions / objectives could you address? Consequently, which work packages / tasks do you propose to address? Which infrastructure and staff (qualification, proposed number of person-months) can you deploy?

2.4 Expertise and experience (about 30 lines)

Please describe the relevant expertise and experience that you have in the topic area. Please list up to 5 key relevant publications per partner.

On behalf of the consortium,								
Date, name and signature of the coordinator								



Annex 7: Templates for the budgetary tables

The template is available on the <u>website of Contractual Research</u>. The Excel document to be added to the RT and RF full proposal in step 2.

Budgetary overview

Type of cost	[Identification Coordinator]	[Identification Promoter 2]	[Identification Promoter 3]	[Identification Promoter 4]	Total per item
Staffing					
Operational					
General					
Total per					
partner					
Own					
contribution					
% own					
contribution					
FPS Grant					
% FPS Grant					

Detailed budgetary information

All consortium services must be listed for each category of expenses, even if for some of them no expenses are foreseen in this category (pro memoria, PM).

Indicate own contributions with *

4.1.	Staffing costs						•	€ 0
		year	seniority in years	number of person-months	budget in euros			
4.1.1.	Service of X (Affiliation)						<u>0</u>	
4.1.1.1.	N.					0		
	Fellow	2025	[0]	[3]				
		2026	[1]	[12]				
4.1.1.2.	N.					0		
	Pay scale	2025	[4]	[1]				
		2026	[5]	[9]				
4.1.1.3.	double holiday payemployer contributions (syear-end bonusother	social securi	ity, insurance	e)				
4.1.2.	Service of Y (Affiliation)						<u>0</u>	
4.1.2.1.	N.					0		
	Pay scale	2025	[4]	[3]				
		2026	[5]	[12]	•••			
			••••	•••	•••			
4.1.2.2.	double holiday payemployer contributions (syear-end bonusother	social securi	ity, insurance	 e)				

4.1.2.3.	N.					0		
	Pay scale	2025	[4]	[1]				
		2026	[5]	[9]				
4.1.2.4.	- double holiday pay							
	- employer contributi							
	- year-end bonus							
	- other							
4.2.	Operational costs							€ 0
4.2.1.	Service of X (Affiliati	on)					<u>0</u>	
4.2.1.1.	Standard operational of							
4.2.1.2.	Specific operational co					0		
4.2.1.2.1.	e.g. Reagents for PCR	•						
4.2.1.2.2.	e.g. Serology							
4.2.1.2.3.					•••			
•••								
4.2.2.	Service of Y (Affiliati	on)					<u>0</u>	
4.2.2.1.	Standard operational of	costs (flat-rate)						
4.2.2.2.	Specific operational co	osts				0		
4.2.2.2.1.	e.g. Purchase of pigs							
4.2.2.2.2.	e.g. Cell cultures							
4.2.2.2.3.								
•••								
4.3.	General costs							€ 0
4.3.1.	Service of X (Affiliati	on)					<u>0</u>	
4.3.1.1.	Overheads							
4.3.2.	Service of Y (Affiliati	on)					<u>0</u>	
4.3.2.1.	Overheads					•••		
TOTAL								€ 0

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