# Contractual Research

relating to food safety and animal and plant health policy

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

## 2022 call

Deadline for submission of proposals:
April 30th 2021 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 for proposals. 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 open call) and transnational (International Research, RI) projects. The number of projects that may be funded depends on the budget that the FPS Health can allocate.

## 1.2 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 to 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 in-depth with regard to its relevance and scientific quality.

## 1.3 Open call (RF projects)

In the framework of the open 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 promoters.

In the **first step,** the research proposals are submitted in the form of a RF pre-proposal. A pre-selection 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.

## 1.4 Transnational call (RI projects): plant health - Euphresco

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.

### 1.4.1 Introduction

Euphresco is an international network of organisations active in the field of plant health. The network today consists of around 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.

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 funded 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 research consortium built of the non-competitive partners.

### 1.4.2 Procedure

The FPS Health has selected three 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.

**Attention**: this call is launched early in order to align the timing of the national call as closely as possible with the overarching Euphresco timing. This has the following consequences:

- A number of the selected topics can be deleted in a later stage, for instance when there is insufficient interest from the other transnational partners. Not later than **Monday, March 22rd, 2021** the Contractual Research unit will publish a first update of the topics on its website. A final list will only be available mid-November 2021. This means that even after the start of the second step, topics may still be dropped.
- Some topic descriptions, describing the transnational research ideas, are only concisely developed. Fully elaborated topic descriptions will be available **mid-July 2021** and will be communicated to the coordinators of the proposals selected for the second stage.

## 1.5 Using the food consumption survey data

Regarding project proposals that require using the **data of the Belgian national food consumption survey 2014 (FCS 2014)**, the options are the following.

1. Either access to the database containing the gross individual consumption data is obtained against payment for use within a specific project. To this end, a request must be submitted to the Chamber of Social Security and Health of the Information Security Committee. The pseudo-anonymised dataset is made available by Sciensano after drawing up an agreement for the transfer of data. Alternatively, an anonymised data set

can be made available for risk exposure assessments without a procedure via the Information Security Committee. In addition to food and food supplement consumption data (i. e. 24-hour recalls linked with the food composition tables and food frequency questionnaires), this dataset only contains the following personal data: age, gender, province, education level, pregnancy/breast feeding, height, weight and abdominal circumference. In this case, the researchers themselves must provide software, expertise and staff to perform the calculations. The procedure and documents for access to the data of the Belgian national Food Consumption Survey are available on the FCS website. For any questions on this subject, please contact Dr. Nicolas Berger (Nicolas.Berger@sciensano.be);

2. Or Sciensano is asked to perform the intake estimates. In this case, please contact Dr. Mirjana Andjelkovic of Sciensano's Chemical and physical health risks department at Sciensano (Mirjana.Andjelkovic@sciensano.be) prior to submitting the full proposal.

In order to get an idea of the available data, the FPS Health provides the frequency tables set up by Sciensano free of charge on the Contractual Research website. These tables show the consumption frequency of foodstuffs, grouped in several levels according to the FOODEX 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.

# 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 and templates are relevant for RT-project proposals. Electronic versions are available on the website of Contractual Research (https://www.health.belgium.be/en/contractual-research), under "Open Calls".

- The **research topics** of the thematic call are listed in **annex 1.**
- **Annex 2** provides the template to be used for drafting the RT pre-proposal.
- **Annex 7** contains important information for estimating the budget.
  *For your information: Annexes 8 and 9 must only be submitted in the second step.*

The RT pre-proposal shall be drawn up either in one or a combination of the national languages, or else entirely in English.

### 2.1.2 Submitting RT pre-proposals

The pre-proposal should only be **submitted electronically**, in Word and searchable pdf format, via e-mail to contractual.research@health.fgov.be.

**The deadline for submitting the RT pre-proposal (step 1) is FRIDAY 30th of APRIL 2021, 12.00 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). The criteria are the following:

1. **timely submission**: by **Friday 30th of April 2021, 12.00 noon sharp**. The date and the time of the e-mail shall constitute proof.
2. **the form**
   - the proposal must be submitted in accordance with 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 promoters;
- the application shall be drawn up either in one or a combination of the national languages, or entirely in English.

3. accordance with a **topic**
   Only RT pre-proposals corresponding to one of the topics in annex 1 and taking into account the listed research questions and requirements are eligible
4. **the absence of overlap** with existing or ongoing research
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 annex 7 - Important information regarding the budget.

**Please note: the pre-proposal will be declared ineligible if it does not comply with the above conditions.**

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) 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 toto ongoing or existing research
   - the potential contribution to policy decisions

   Only the RT pre-proposal with a relevance score of at least 21/30 will be included in the scientific evaluation.
2. The **scientific score** (out of 20 points) as an indication for
   - the scientific quality
   - 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-proposal is drawn up.

The coordinators will be informed about the result by the Contractual Research unit early July 2021.

## *2.2 STEP 2: RT FULL PROPOSAL*

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

### 2.2.1 Drafting the RT full proposals

The full proposal may, in principle, 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 or Dr. Valérie Van Merris, see also point 7. Additional information) before submitting the full proposal. Changes compared to the pre-proposal must be stated and justified in the section "history of changes" provided for this purpose.

***Attention!*** The requested grant stated in the full proposal cannot be higher than the amount specified in the pre-proposal.

The following documents and templates are relevant for the thematic project proposals. Electronic versions are available on the website of the Contractual Research unit (https://www.health.belgium.be/en/contractual-research), under "Open Calls".

- **Annex 3** provides the template to be used for drafting the RT full proposal.
- **Annex 7** contains important information for estimating the budget.
- **Annexes 8** and **9** are the templates to be used for the budget estimate.

The RT full proposal shall be drawn up either in one or a combination of the national languages, or else entirely in English.

### 2.2.2 Submitting RT full proposals

The RT full proposal and accompanying budgetary information should only be **submitted electronically** via e-mail to contractual.research@health.fgov.be

- RT full proposal (annex 3) in Word and searchable pdf
- budgetary tables (annexes 8 and 9) in Excel

**The deadline for submitting the RT full proposals (step 2) is FRIDAY 24th of SEPTEMBER 2021, 12.00 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:** by **Friday, 24th of September 2021, 12.00 noon sharp.**
   The date and the time of the e-mail shall constitute proof.
2. **form**
   - the proposal must be submitted in accordance with 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 promoters, but including the budgetary tables;
- the application shall be drafted either in one or a combination of the national languages, or entirely in English.

**Please note: the full proposal will be declared ineligible if it does not comply with the above conditions.**

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 quality compared with international standards, and the level of expertise of the research institution(s)
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 call.

The promoters are invited to explain their project at the consensus meeting of the Expert panel. Nevertheless, it is extremely important to draft the project proposal **clearly, completely and with the greatest care**.

The advice of the Expert panel is submitted to the Evaluation Committee. After this - and at the latest in February 2022 - the Contractual Research unit informs the promoters about the result. The competent Minister ratifies the final advice in a ministerial decree.

# 3. OPEN 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.

## *3.1 STEP 1: RF PRE-PROPOSAL*

### 3.1.1 Drafting the RF pre-proposals

The following documents and templates are relevant for RF project proposals. Electronic versions are available on the website of the Contractual Research unit (https://www.health.belgium.be/en/contractual-research), under "Open Calls".

- **Annex 4** provides the template to be used for drafting the RF pre-proposal.
- **Annex 7** contains important information for estimating the budget.
  *For your information: Annexes 8 and 9 must only be submitted in the second step.*

The RF pre-proposal shall be drawn up either in one or a combination of the national languages, or else entirely in English.

### 3.1.2 Submitting RF pre-proposals

The project proposals should only be **submitted electronically**, in Word and searchable pdf format, via e-mail to contractual.research@health.fgov.be.

**The deadline for submitting the RF pre-proposal (step 1) is FRIDAY 30th of APRIL 2021, 12.00 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 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**: by **Friday 30th of April 2021, 12.00 noon sharp**. The date and the time of the e-mail shall constitute proof.
2. **the form**
   - the proposal must be submitted in accordance with 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 promoters;

- the application shall be drawn up either in one or a combination of the national languages, or entirely in English;

3. **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 annex 7 - Important information regarding the budget.
4. **absence of an overlap** with the topics in the thematic call (RT) or with existing or ongoing research;
5. **fields of research involved:** the research topic must fit within the competences of Contractual Research

**Please note: the pre-proposal will be declared ineligible if it does not comply with the above conditions.**

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 Federal Agency for the Safety of the Food Chain (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 parts of these that are outside the specific scope of Contractual Research, these must be funded by an external funding source as well.

The valorisation of new knowledge by the Government can take place at national, European and / or international level.

The Government is entitled to a general and no-cost use of the results for the support of its policy. The project proposal must therefore be designed in such a way that all results can be communicated in detail to the Government (FPS Health and FASFC).

The table below provides a (non-exhaustive) overview of subjects that may and may not fit within the scope of Contractual Research. Because a sharp delineation is not always possible, experts of the FPS Health and the FASFC assess the substantive admissibility of each pre-proposal. Some of the examples included arise from the eligibility assessment of recent calls.

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

If you are unsure of the eligibility of your research idea, you can, before submitting it, contact the scientific counsellors of the Contractual Research unit (Dr. Ria Nouwen or Dr. Valérie Van Merris, see also point 7. Additional information).

| General | Eligible | Not eligible |
|---|---|---|
| **Food Safety** | | |
| Research into the safety of foodstuffs | • throughout the chain (primary production, processing, storage) up to the time of consumption: chemical and microbial contaminants, toxins, additives, food contact materials, nutritional supplements, novel foods, GMOs, allergens, …<br>• emerging risks<br>• antimicrobial resistance<br>• developing new risk assessment aspects or methods<br>• developing new methods for sampling and/or analysis<br>• risk assessments<br>• intake studies<br>• research into contamination<br>• research into sources, routes, reduction and prevention of contamination<br>• exploring the impact of possible control measures<br>• *in vitro* toxicological examination or animal tests for contaminants<br>• investigating the transfer of chemical and microbial contaminants of animal feed via animals to animal products | • research in preparation for admission or reassessment files for additives, novel foods, flavours, food enzymes, plant protection products, decontamination products, ….<br>• research into evidence of health claims<br>• research into food safety of crops grown by individuals<br>• drug research<br>• human clinical examination<br>• environmental research<br>• biodiversity research<br>• sustainability research, unless there is a clear link with food safety<br>• nutritional policy-based research (intake of sugar, salt, fat, ...) unless there is a clear link with food safety<br>• research into nutrient enrichment, unless this affects food safety policy (e.g. overdose risk)<br>• 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<br>• routine checks on compliance with existing standards |

| General | Eligible | Not eligible |
|---|---|---|
| **Animal Health** | | |
| Research into diseases, pathogens and/or zoonotic agents in livestock and bees, and in wildlife if it can act as a reservoir for diseases in livestock<br><br>Research into contaminants | • development of new diagnostic methods for animal diseases<br>• epidemiological research<br>• risk factor research<br>• antimicrobial resistance and other cross-species risks<br>• developing new risk assessment aspects or methods<br>• developing new or improved methods for sampling and/or analysis<br>• 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<br>• exploring the impact of possible disease control measures<br>• study of zoonotic diseases<br>• research into chemical and microbial contaminants, toxins, ... which may adversely affect animal health, via animal feed or other contamination routes<br>• (re-)emerging risks<br>• disease warning and monitoring systems | • mere clinical research in pet animals<br>• mere zootechnical research<br>• genetic selection except when it is related to disease resistance<br>• nutritional research<br>• mere animal welfare research (e.g. lameness)<br>• routine checks on compliance with existing standards |

| General | Eligible | Not eligible |
|---|---|---|
| **Plant Health** | | |
| Research into organisms that are harmful to cultivated and / or wild plants, including quarantine organisms, organisms that are new, unknown or whose dissemination is limited and for which more information is required in the context of future regulation or policy | • determination of the occurrence, distribution (pest status) and settlement potential<br>• study of biology<br>• epidemiological research<br>• exploring the impact of possible control measures<br>• developing new risk assessment aspects or methods<br>• development of new methods for sampling and / or diagnosis, identification or quantification<br>• risk assessments<br>• providing scientific elements for Pest Risk Assessments (PRA) | • research into quality organisms<br>• research into invasive species under Regulation 1143/2014<br>• plant breeding research, except when the breeding concerns greater (phytosanitary) disease resistance<br>• research into sustainable agriculture, except when it is in the field of phytosanitary policy<br>• environmental research, except when it is in the field of phytosanitary policy<br>• biodiversity research, except when it is in the field of phytosanitary policy<br>• 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. More specifically the following elements will be assessed:
    a. its positioning with regard to the priorities of the federal authorities
    b. the value and usability of the expected results
    c. the solution-oriented approach of the research
    d. the added value with regard to ongoing or existing research
    e. the potential contribution to policy decisions
    f. the timing in relation to the policy agenda
    g. the quantitative importance
    h. the severity of the problem
    i. the budgetary impact
    j. the social and ethical impact
    k. the relevance in relation to sectoral needs

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

2. The **scientific score** (out of 20 points) is allocated as an indication for
    a. the scientific level
    b. the methodology
    c. the originality
    d. 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 coordinators will be informed about the result by the Contractual Research unit early July 2021.

## *3.2 STEP 2: RF FULL PROPOSAL*

In the second step, the coordinators of the priority and reserve RF pre-proposals are asked 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

The full proposal may, in principle, 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 or Dr. Valérie Van Merris, see also point 7. Additional information) before submitting the full proposal. Changes compared to the pre-proposal must be stated and justified in the section “history of changes” provided for this purpose.

***Attention!*** The requested grant stated in the full proposal cannot be higher than the amount specified in the pre-proposal.

The following documents and templates are relevant for the free project proposals. Electronic versions are available on the website of the Contractual Research unit (https://www.health.belgium.be/en/contractual-research), under "Open Calls".

- **Annex 5** is the template to be used for drafting the RF full proposal.
- **Annex 7** contains important information for estimating the budget.
- **Annexes 8** and **9** are the templates to be used for the budget estimate.

The RF full proposal shall be drawn up either in one or a combination of the national languages, or else entirely in English.

### 3.2.2 Submitting RF full proposals

The RF full proposal and accompanying budgetary information should only be **submitted electronically** via e-mail to contractual.research@health.fgov.be

- RF full proposal (annex 5) in Word and searchable pdf
- budgetary tables (annexes 8 and 9) in Excel

**The deadline for submitting the RF full proposal (step 2) is FRIDAY 24th of SEPTEMBER 2021, 12.00 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**: by **Friday, 24th of September 2021, 12.00 noon sharp.** The date and the time of the e-mail shall constitute proof.
2. **form**
   - the proposal must be submitted in accordance with 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; the only admissible annex is a bibliography (not included in the 30 pages);
   - the application shall be drawn up either in one or a combination of the national languages, or entirely in English.

**Please note: the full proposal will be declared ineligible if it does not comply with the above conditions.**

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 quality with respect to international standards, and the level of expertise of the research institution(s)
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 promoters are invited to explain their project at the consensus meeting of the Expert panel. Nevertheless, it is extremely important to draft the project proposal **clearly, completely and with the greatest care**.

The advice of the Expert panel is submitted to the Evaluation Committee. After this - and at the latest in February 2022 - the Contractual Research unit informs the promoters about the result. The reserve projects can only be funded if budget becomes available from the RT channel of the priority RF group. The competent Minister ratifies the final advice in a ministerial decree.

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

The RI project proposals are evaluated in two steps:

- step 1: RI Expression of Interest
- step 2: RI full proposal

The FPS Health foresees € 200,000 to the transnational call. A maximum of € 100,000 can be requested per topic. Since three topics are included, this means that there may be insufficient budget for one of the three topics.

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 Monday March 22nd, 2021, Contractual Research will publish a first update of the topics on its website. A definitive list will not be available until mid-November 2021. 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 "2021-A-373 Fast detection methods for quarantine Tephritidae (TEPHRIFADE)" as this transnational topic was identified by the FPS Health.

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.

## *4.1 STEP 1: RI EXPRESSION OF INTEREST*

### 4.1.1 Drafting the RI Expressions of Interest

The following documents and templates are relevant for the international project proposals. Electronic versions are available on the website of the Contractual Research unit (https://www.health.belgium.be/en/contractual-research), under "Open Calls".

- The **research topics** of the international call are listed in **annex 1.**
- **Annex 6** is the template to be used for drafting the RI Expression of Interest.
- **Annex 7** contains important information for estimating the budget.
  *For information: annexes 8 and 9 must not be submitted.*

The RI Expression of Interest shall be drawn up entirely in English.

### 4.1.2 Submitting the RI Expressions of Interest

The Expressions of Interest should only be **submitted electronically**, in Word and searchable pdf format, via e-mail to contractual.research@health.fgov.be.

**The deadline for submitting the RI Expression of Interest (step 1) is FRIDAY 30th of APRIL 2021, 12.00 noon sharp.**

### 4.1.3 Evaluation of the RI Expressions of Interest

The Expressions of Interest 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). The criteria are the following:

1. **timely submission:** by **Friday, 30th of April 2021, 12.00 noon sharp**. The date and the time of the e-mail shall constitute proof.
2. **form**
   - the proposal must be submitted in accordance with 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 promoters;
   - 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 (plant health – Euphresco) are eligible.
4. **absence of overlap** with existing or ongoing research.
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 annex 7 - Important information regarding the budget.

**Please note: the Expression of Interest will be declared ineligible if it does not comply with the above conditions.**

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, see also point 7. Additional information).

The coordinators will be informed of the result by the Contractual Research unit the beginning of June 2021 at the latest.

### *4.2 STEP 2: RI FULL PROPOSAL*

In a second step, the promoters of eligible RI Expressions of Interest are asked 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 2021.

**The deadline for submitting the RI full proposal to Euphresco is FRIDAY 24th SEPTEMBER 2021, 12.00 noon sharp.**

The evaluation of the project proposals is performed by an international panel of experts and should be finalised no later than **mid-November 2021.**

The evaluation of the panel of experts is submitted for advice to the Evaluation Committee. The competent Minister ratifies the final advice in a ministerial decree.

# 5. 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 of a project proposal, the unit Contractual Research 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).

## 5.1 Legal bases and purposes of the processing operations

In the context of the legal assignment relating to the allocation of grants for scientific research[i], 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 the projects that concern you

## 5.2 Processed data

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

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

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

## 5.3 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 (cfr. https://www.health.belgium.be/en/privacy). The cookie policy is described on the website of the FPS Health (https://www.health.belgium.be/en/cookie-policy).

## 5.4 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.

[i] Koninklijk Besluit van 18 november 2015 tot vaststelling van de voorwaarden van toekenning van toelagen voor wetenschappelijk onderzoek inzake voedselveiligheid en sanitair beleid van dieren en planten.

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.

## 5.5 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

## 5.6 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

# 6. DEFINITIONS & ABREVIATIONS

**Areas of activity**
The areas of activity of Contractual Research are food safety and health policy (sanitary policy) of animals and plants.

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

**Contractual Research**
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.

**Evaluation Committee**
The advisory board, 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 and 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.

**FPS Health**
Federal Public Service Health, Food Chain Safety and Environment.

**Promoter**
The representative of an institution that is part of (the consortium of) the research project.

**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(s).

# 7. ADDITIONAL INFORMATION

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

Dr. Ria NOUWEN
Tel. 02 524 90 92 – ria.nouwen@health.fgov.be

Dr. Valérie VAN MERRIS
Tel. 02 524 90 94 – valerie.vanmerris@health.fgov.be

# ANNEXES

# Annex 1
# Research topics

## Research topics RT-projects

| | TOPICS | Maximum duration (months) | Maximum grant |
|---|---|---|---|
| | **Animal Health** | | |
| 1 | Gene analysis on social behaviour of honeybees in the fight against varroasis (GENOVARR) | 36 | € 300,000 |
| 2 | Brucellin skin test in pigs as confirmatory test in the event of positive serology for *Brucella suis* (BRU-PIG) | 12 | € 100,000 |
| 3 | Effect of altered antibiotic use in food-producing animals on antimicrobial resistance in animal and human pathogens (AB-changeR) | 24 | € 200,000 |
| | **Plant health** | | |
| 4 | Risk analysis of harmful bark and ambrosia beetles in the Belgian context (SCOLIBE) | 36 | € 250,000 |
| 5 | Design of a statistically sound and risk-based survey plan for the detection of *Xylella fastidiosa* in Belgium (RIBSURX) | 12 | € 75,000 |
| | **Food Safety** | | |
| 6 | Occurrence and exposure to dioxins, furans and halogenated biphenyls in foodstuffs (TEQFOOD) | 24 | € 250,000 |
| 7 | Mycotoxins in vegetarian protein-rich and fibre-rich food (MYCOPROF) | 18 | € 150,000 |
| 8 | Intake monitoring of food flavourings (INFLAVOUR) | 36 | € 300,000 |

## Research topics RI-projects: plant health - Euphresco

| | TOPICS | Maximum duration (months) | Maximum grant[i] |
|---|---|---|---|
| | **Plantengezondheid** | | |
| 2021-C-368 | Heat- (incl. hot water) treatments | 24-36 | € 100,000 |
| 2021-A-373 | Fast detection methods for quarantine Tephritidae (TEPHRIFADE) | 24-36 | € 100,000 |
| 2021-A-378 | Inventory and validation of quality control procedures for the extraction of nucleic acids used for diagnosis | 12-24 | € 100,000 |

[i] The FPS Health foresees **€ 200,000** to the transnational call. A maximum of € 100,000 can be requested per topic. Since three topics are included, this means that there may be insufficient budget for one of the three topics (see also p. 18).

## 1. Gene analysis on social behaviour of honeybees in the fight against varroasis (GENOVARR)

### Context

Honeybees are essential pollinators and are vital to both the food chain and the health of ecosystems. Significant losses to honeybee populations[i] have been recorded in recent years due to a combination of different stressors, including the use of pesticides (neonicotinoids), single-crop farming, climate change, bacterial and viral pathogens and (non-native) parasites. The Varroa destructor mite appeared in Europe in the 1980s and has since become endemic. Beekeepers try to control this mite in various ways, either through biotechnical methods or by using veterinary medicinal products. Unfortunately, there is currently no adequate treatment and resistance to various veterinary medicinal products has been confirmed. In recent years, research has been conducted on the genetic potential of bees in order to build up natural resistance to Varroa. Recent scientific publications reveal that honeybees have the genetic potential for resistance to Varroa, to pathogens and possibly to other stressors.

The finalised VARRESIST project[ii], funded by the FPS, focused on reducing mite reproduction, in particular the reproduction of the mite in the drone brood (drone brood resistance). Although the Varroa mite can reproduce in both drone brood and worker brood, it has been observed that drone brood becomes more infested with Varroa. However, no further research has been conducted to identify which characteristics are responsible for this, in order to reduce the infection pressure of the V. destructor mite in the worker brood and on the bees present in the hive.

The hypothesis of reducing mites through the social behaviour of worker bees was not studied in the VARRESIST project financed by the FPS. However, Broeckx *et al.* (2019)[iii] state that social and individual characteristics of the honeybee influence the defence mechanism against the V. destructor mite. These social characteristics are expressed by the detection, opening and removal and cleaning of the affected combs. This is described as "*Varroa sensitive hygiene"* (VSH) behaviour. These social characteristics are independently inheritable and are expressed by the worker.

The ongoing MAS-BEE-VAR project[iv] continues the VARRESIST project and investigates whether genetic markers of the phenotype 'reduced mite reproduction' are present in the Belgian bee population. This study of a single phenotype can be complemented by a study of multiple social characteristics (e.g. detection of infected cells, opening of the infected cells, active removal of the infected pupae, etc.), which must be present simultaneously in order resistance to this Varroa mite can be expressed.

Important conditions for the usability of this genetic potential are

(1) the identification of relevant genes,
(2) the identification of underlying genomic variants and
(3) the development of minimally invasive testing methods.

[i] HealthyBee monitoring programme of the FASFC: http://www.afsca.be/bijenteelt/dierengezondheid/#HealthyBee

[ii] RT 13/4 VARRESIST - Study of Varroa tolerance in honeybees in Belgium.

[iii] Broeckx, B.J.G., De Smet, L., Blacquière, T. et al. Honeybee predisposition of resistance to ubiquitous mite infestations. Sci Rep 9, 7794 (2019). https://doi.org/10.1038/s41598-019-44254-8

[iv] RF 19/6336 MAS-BEE-VAR - Marker-assisted selection in honeybees, *Apis mellifera*, for higher Varroa resistance

The ultimate goal is to develop rapid and easily deployable tests based on genetic and genomic research for both monitoring and targeted selection. The availability of such test(s) will also have a positive contribution to a durable solution to the problem of Varroa and the related bee mortality.

**Objectives**

- Identifying genomic variants associated with genes focusing on the social behaviour of the honeybee worker which is relevant for resistance to the *Varroa destructor* mite.
- Developing a minimally invasive test method for the social behaviour of honeybees based on genomic variants. This test method will be used by beekeepers in the field in selection programmes in order to improve the resistance of honeybees to varroasis.

**Maximum budget:** € 300,000

**Maximum duration:** 36 months

**2. Brucellin skin test in pigs as confirmatory test in the event of positive serology for *Brucella suis* (BRU-PIG)**

## Context

Belgium has been free from *Brucella suis* in domestic pigs for many years. However, *Brucella* is endemic to the wild boar population. Sporadic cases of brucellosis in pigs have been reported in some EU Member States.

The existing serological tests for brucellosis in pigs detect antibodies directed against the lipopolysaccharides of the external membrane. Some other bacteria, such as *Salmonella enterica* serotype Urbana, *E. coli* O:157, *E. coli* O:116, *Pseudomonas maltophilia* and especially *Yersinia enterocolitica* O:9, share the same epitopes on the O-polysaccharides, resulting in cross-reactions.

Breeding boars used in artificial insemination centres must be tested for brucellosis, among other things, before introduction. Seropositive reactions are regularly declared. Only additional and sometimes time-consuming tests can prove that it relates to a false positive. In many cases, boars are slaughtered for bacteriological research. Pending the results of the additional studies, the movement of breeding pigs and semen is prohibited. This leads to significant economic losses. Specific feeding strategies influence the gut microbiota but are probably unable to prevent infection with *Y. enterocolitica*, among others. Isolating bacteria such as *Y. enterocolitica* does not rule out an infection with *Brucella suis* either.

In Belgium, the brucellin skin test is used as a confirmatory test for brucellosis in bovines.

## Objectives

- The aim of this project is to develop and validate a brucellin skin test in pigs. The results of the available serological tests need to be compared with the results of the newly developed skin test.
- A workshop for experts should be organised for performing the skin test and interpreting the results.

**Maximum budget:** € 100,000

**Maximum duration:** 12 months

***References***

## 3. Effect of altered antibiotic use in food-producing animals on antimicrobial resistance in animal and human pathogens (AB-changeR)

### Context

In recent years, efforts have been made, both by the government and by sectoral organisations, to reduce the use of antibiotics in food-producing animals to the necessary level, with a view to tackling antimicrobial resistance (AMR). Tackling AMR means protecting public and animal health. In 2016, a covenant[i] was concluded between the government (Minister of Agriculture and Minister of Health) and the relevant partner organisations to work within a framework of co-regulation towards achieving three targets by the end of 2020, namely a reduction as compared to 2011 of (1) 50% in the use of antibiotics by 2020, (2) 50% in the use of antibiotics in medicated feed by 2017 and (3) 75% in the use of critically important antibiotics by 2020. The last two targets were successfully achieved; only the 50% reduction in the use of antibiotics still needs to be achieved.

The relevant partner organisations are willing to continue tackling AMR in the coming years, primarily by less use and more responsible use of antibiotics. This has been laid down in a second covenant that will run from 2021 to 2024. The covenant itself is an integral part of the strategic objective "One-Health Governance" of the One-Health National Action Plan against AMR (OH NAP AMR) which still needs to be validated at the political level.

The proposed topic is part of the strategic objective "Innovative and targeted research: targeted and innovative research projects for more effective control measures and a better understanding of the transmission sources of resistant micro-organisms between humans, environment, food chain and animal populations" and the operational objective '70. Fund or encourage research projects to fill knowledge gaps on AMR and ensure effective implementation of policies to tackle AMR, in line with the One Health approach'.

At present, there is no clear understanding on the impact of reducing antibiotic use in food-producing animals on public and animal health, translated into the impact on resistance in animal pathogens and human pathogens whose resistance has a link to animals. The aim of this study is to evaluate the outcome of the policy decision, namely focusing on a reduced and more responsible use of antibiotics, and to draw lessons for the period after 2024. The results of the ongoing RU-BLA-ESBL-CPE[ii] research project can be used to evaluate the trend in the occurrence of resistance genes and profiles in humans and animals.

### Research questions

- What are the trends in the resistance profiles and genes in major animal pathogens in food-producing animals over the last 5 years? What is the impact of altered antibiotic use in food-producing animals on these trends?

  The food-producing animals covered by this research question are pigs, veal calves, broilers and laying hens.

[i] Covenant between the Federal Government and all the relevant sectoral partners on reducing the use of antibiotics in the animal sector.
https://www.amcra.be/swfiles/files/NL_FR%20convenant%20AB%2020160630_9.pdf

[ii] RF 17/6317 RU-BLA-ESBL-CPE – Emergence or decline of classical beta-lactamases (BLAC), of cephalosporinases (BLAAmpC), of extended spectrum beta-lactamases (BLAESBL), and of carbapenemases (BLACPE) amongst coliform enterobacteria from bovines: encoding gene identification and antibody neutralization.

- What are the trends in the resistance profiles and genes with a link to animals in human pathogens in the last 5 years? What is the impact of altered antibiotic use in animals on these trends?
  The research should not be limited to zoonotic human pathogens but should focus on (genotypic) resistance profiles of human pathogens with a (molecular) link to the animal sector.
- What recommendations can be formulated for future policy in the context of the responsible use of antibiotics in food-producing animals, the use of critically important antibiotics, the development of cross-resistance, etc.?

**Maximum budget:** € 200,000

**Maximum duration:** 24 months

## 4. Risk analysis of harmful bark and ambrosia beetles in the Belgian context (SCOLIBE)

### Context

In recent decades, bark beetles and ambrosia beetles have attracted worldwide attention, due to introduction in many new areas, with significant damage being observed in certain cases.

Various names are used to designate this large group of insects, due to a recent change in the taxonomic classification. Based on morphological characteristics, these insects were previously considered to be a separate family, the Scolytidae. However, recent phylogenetic research classifies these beetles as a subfamily, the Scolytinae, under the Curculionidae (EFSA, 2020[i]). In a recent study from the European and Mediterranean Plant Protection Organization (EPPO, 2020[ii]), the Platypodinae subfamily of the Curculionidae was also designated as ambrosia beetles.

At the time of the implementation of the plant health legislation, the bark and ambrosia beetles which are considered quarantine for the EU were still listed in Annex II of Implementing Regulation (EU) 2019/2072[iii] as "*Scolytidae* spp. (non-European) [1SCOLF]". In addition, a number of them have also been included in the list at species level (*Pseudopityophthorus minutissimus*, *Pseudopityophthorus pruinosus*, *Pityophthorus juglandis*, …), and some have already been proposed for inclusion in the first revision of this list (*Euwallacea fornicatus* sensu lato, …). From horizon scanning (EPPO alert list, EFSA Plant health Newsletters, etc.) other species have been deemed important for further analysis (*Dendroctonus valens*, *Xylosandrus crassiusculus*, *Xylosandrus compactus*, etc.).

In view of a revision of the standardisation and listing of non-European Scolytidae on Coniferae in Directive 2000/29/EU Annex IIAI, the EFSA has already worked on a categorisation at species level for non-EU Scolytinae on conifers (EFSA pest categorisation[i]).

For the complete revision of the current list, the EFSA is considering conducting an analogous study on host plants other than Coniferae, in the near future.

EPPO also recently listed a number of representative bark and ambrosia beetles that are considered as examples for introduction or spread via imports of non-coniferous wood[ii].

There is a need for more data and a risk analysis specific for Belgium of this large group of insects, in order to support future regulation and a more targeted monitoring and control of the identified quarantine species.

[i] EFSA Panel on Plant Health. 2020. Pest categorisation of non-EU Scolytinae of coniferous hosts. EFSA Journal 18(1):5934. https://doi.org/10.2903/j.efsa.2020.5934

[ii] EPPO Technical Document No. 1081, EPPO Study on the risk of bark and ambrosia beetles associated with imported non-coniferous wood. EPPO Paris https://www.eppo.int/media/uploaded_images/RESOURCES/eppo_publications/TD-1081_EPPO_Study_bark_ambrosia.pdf

[iii] Commission Implementing Regulation (EU) 2019/2072 of 28 November 2019 establishing uniform conditions for the implementation of Regulation (EU) 2016/2031 of the European Parliament and the Council, as regards protective measures against pests of plants, and repealing Commission Regulation (EC) No 690/2008 and amending Commission Implementing Regulation (EU) 2018/2019.

**Research questions**

- Which species of bark and ambrosia beetle pose the biggest risk for Belgium? This must include a study of the potential for establishment, the possible impact, the available host plants and existing introduction pathways based on an analysis of the lists compiled by the EFSA (non-EU Scolytinae on conifers) and the EPPO (case studies of bark beetles and ambrosia beetles on non-coniferous wood), including other non-EU Scolytinae and Platypodinae on deciduous trees that may be proposed by the EFSA in the future.
- What is the pest status of selected Scolytinae and Platypodinae in Belgium?
  Preference is given to Scolytinae and Platypodinae that have already been reported to a limited extent (in the EU) or where, on the basis of the risk analysis, there is the greatest likelihood of wider spreading, with the aim of underpinning an EU versus non-EU list. The status should be determined according to the IPPC standards, based on a representative and targeted survey, on sites identified as risk areas. Organisms that have recently been included in a phytosanitary status determination in Belgium should not be included again in the survey.
- Which elements can be identified to organise the continuous monitoring of Scolytinae and Platypodinae species (traps, sites, etc.), with a view to preventing introduction or early detection of possible outbreaks?
  The aim is to achieve, where possible, more generic monitoring plans at risk sites in the future.
- Are (rapid) detection and identification methods available at the species level, depending on intercepted stages?

  If relevant, additional work in this regard can be included in the proposal.
- Which control measures for the relevant Scolytinae and Platypodinae species for Belgium can be proposed? An inventory of measures that are or have been applied elsewhere can serve as a basis in this regard.

**Maximum budget:** € 250,000

**Maximum duration:** 36 months

## 5. Design of a statistically sound and risk-based survey plan for the detection of *Xylella fastidiosa* in Belgium (RIBSURX)

### Context

Article 2 of Implementing Regulation (EU) 2020/1201 as regards measures to prevent the introduction into and the spread within the Union of *Xylella fastidiosa* (Wells et al.) obliges Member States to conduct annual surveys in their territory to detect the possible presence of this organism. This survey must be carried out on the basis of the risk level. These surveys must take place outdoors, as well in plots, orchards and vineyards, as in nurseries, garden centres and/or shopping centres, in nature reserves and in other relevant locations. Samples must be taken from plants, and from plants intended for planting, and must be tested for the presence of *Xylella fastidiosa*. In this regard, the EFSA guidelines[i] for statistically sound and risk-based surveys of *Xylella fastidiosa* must be taken into account.

From 2023 onwards, it will be mandatory that the sampling scheme used could detect a level of infection in 1% of the plants, with at least 80% reliability. The RiBESS+ tool developed by the EFSA must be used in this regard.

The aim of the study is to develop such a survey plan for Belgium. The results of research projects already completed (RT 15/7 XYLERIS[ii]) and still ongoing (RF 18/6323 XYFABEL[iii], RF 19/6331 Xfast[iv]) can provide valuable input in this respect.

This study will also provide useful experience for the design of future statistically sound risk-based surveys for other quarantine organisms. This meets the objective of the European Commission.

### Research questions

- What are the relevant host plant species of *Xylella fastidiosa* for Belgium and what is their part in the host plant population?
- What is the sensitivity of the sampling and analysis methods used?
- What are the relevant epidemiological units and inspection units to design the survey plan?
- What are the relevant risk factors for Belgium, what are their risk levels and what is the relative risk of each level?
- How should the samples calculated with the RiBESS+ tool need to be allocated in the survey area, taking into account the available information about the target population and risk factors in order to develop an efficient survey plan in terms of costs and manpower whilst ensuring the required reliability?

**Maximum budget:** € 75,000

**Maximum duration:** 12 months

[i] https://doi.org/10.2903/sp.efsa.2020.EN-1873

[ii] RT 15/07 XYLERIS - Study on Xylella fastidiosa plant hosts and vectors in Belgium and the influence of specific plant growth conditions on disease development

[iii] RF 18/6323 XYFABEL - The fate of Xylella fastidiosa in common woody plant species in Belgium and the analysis of communities of endophytic xylem-inhabiting bacteria as possible markers for its presence and lifestyle

[iv] RF 19/6331 Xfast - Biological characteristics of potential vectors of Xylella fastidiosa to support sampling and containment procedures

## 6. Occurrence and exposure to dioxins, furans and halogenated biphenyls in foodstuffs (TEQFOOD)

### Context

Persistent organic pollutants (POPs) are widely present the environment. Various studies have been devoted to chlorinated dioxins and furans (PCDD/F). However, there are very few studies on the occurrence of brominated dioxins and furans (PBDD/F) and other halogenated compounds.

Dioxins and furans are halogenated organic compounds which are essentially formed during incomplete combustion processes.

The presence of brominated dioxins could be explained mainly by the presence of brominated organic compounds in waste, and more specifically brominated flame retardants. Over the last 30 years, brominated flame retardants have been widely used in consumer products (plastics, textiles, electrical and electronic equipment, mattresses, etc.), and at their end of life, they are either recycled or incinerated.

PBDD/Fs are primarily found in emissions from waste incinerators, from accidental fires and when plastic is recycled. Three main formation pathways are described: formation from precursors, de novo synthesis and the presence of PBDD/F contained in brominated flame retardants in the form of impurities. In addition to anthropogenic sources of brominated dioxins, the literature also highlights a biological formation pathway. Some lower brominated PBDDs (Tri-PBDD and Tetra-PBDD) therefore appear to be formed via precursor pollutants present in the aquatic environment and bioaccumulated in certain aquatic species including fish and shellfish.

The co-combustion of materials containing bromine and chlorine (e.g. accidental fire involving products containing brominated flame retardants and PVC) leads to the formation of PXDD/F, i.e. dioxins and furans substituted by both chlorine and bromine.

Investigations carried out in various countries have confirmed the presence of PBDD/F in all environmental matrices (outdoor air, soil, water, sediment, the food chain, dust and indoor air). As PBDD/Fs can be present in terrestrial and aquatic environments (marine and freshwater sediments), they are likely to contaminate both the terrestrial and aquatic food chain.

A non-exhaustive compilation of the concentrations observed in different foodstuffs was produced by INERIS in 2020. These data show high concentrations in green vegetables and fresh fruits (maximum of 4.46 pg toxic equivalent (TEQ)/g of fresh matter) despite a low fat content (<1%). Offal and meat (with a maximum of 2.04 and 3.5 pg TEQ/g fat), fish (with a maximum of 1.87 pg TEQ/g fat) and seafood (with a maximum of 0.23 pg TEQ/g fresh matter) are among the products with the highest concentrations of PBDD/F.

PBDD/Fs have also been measured in human biological matrices. A study carried out by the Belgian National Environment-Health unit as part of a campaign by the World Health Organization (WHO) between 2006 and 2009 on POP concentrations in breast milk in Belgium allowed to quantify PBDD/F at a concentration of 0.67 pg/g of lipids. Concentrations of PXDD/F were below the analytical limit of quantification at 0.03 pg/g for each congener.

PXBs, i.e. biphenyls substituted with both chlorine and bromine, are also found in foodstuffs such as eggs, milk, meat, offal, fish and shellfish.

Biomonitoring data show that the Belgian population is also exposed to brominated dioxins. A study of the concentrations in foodstuffs on the Belgian market therefore appears necessary.

In humans, cases of chloracne have been reported following exposure to TBDD. There is currently no toxicological reference value for brominated dioxins and furans. The mechanism of action and type of toxicity of brominated compounds are deemed to be similar to those of chlorinated compounds. As with chlorinated compounds, it has been shown that most of the biological and toxic effects are mediated by the Ah receptor (AhR).

The main route of exposure to dioxins is though food. In 2018, the EFSA (European Food Safety Authority) revised the tolerable weekly intake (TWI) for dioxins and dioxin-like PCBs (DL PCBs) downwards. Exposure of the population exceeds the new TWI of 2 pg TEQ per kg body weight per week. With a view to eliminating the uncertainties regarding exposure, the EFSA recommends revising the toxic equivalency factors (TEFs). It is therefore necessary to perform congener-specific analyses, so that in the future the TEQ values found can be converted using possibly revised TEF values.

In the absence of specific data for each brominated congener, Van den Berg *et al.* (2013) reported that the WHO and the United Nations Environment Programme (UNEP) recommend provisionally applying the TEF values calculated for chlorinated compounds to brominated derivatives, pending specific values for brominated derivatives.

Brominated dioxins give a response in biological tests for dioxin-like substances because they are an agonist of the AH receptor (EFSA, 2018). For example, brominated dioxins and PXDD/F and PXB DL are not currently included in the TEQ principle for dioxin-like substances. This could lead to an underestimation of exposure to persistent agonists of the AH receptor (EFSA, 2018). The recommendations of the EFSA in the 2018 opinion on dioxins and dioxin-like PCBs include:

- There should be an evaluation of the relative exposure contribution of other persistent chemicals, acting as agonists on the AH receptor, taking into account their toxic potencies.
- To improve human exposure estimation to dioxins and DL PCB, more occurrence data are needed on foodstuffs of plant origin, especially where individual results of certain foodstuffs indicate potential higher contamination.

In a previous Belgian research project on the intake of dioxins and dioxin-like PCBs by the Belgian population, there was a contribution from food of plant origin, which has not been entirely clarified, e.g. the contribution of chocolate spreads (Windal *et al*., 2010). As concentrations change significantly over time, the contribution of foodstuffs of animal and plant origin could be revised. A recent study (Test Aankoop / Test Achats, 2021) also highlighted the role of certain foodstuffs of plant origin in the total exposure in Belgium.

Considering the use of brominated flame retardants and the potential formation of PBDD/F and mixtures of bromochloro-dioxins and furans (PXDD/F), the fact that these compounds act on the AH receptor, and the fact that there are some gaps in the occurrence data for dioxins and DL PCBs, there is a need for conducting a study on the occurrence in the food chain of dioxins and DL PCBs, brominated dioxins and a mixture of bromochloro-dioxins in foodstuffs in order to determine the exposure levels of the Belgian population. This study should include mixtures of bromochlorobiphenyls (PXB).

The data can be used to revise the exposure assessment when the new TEF are available. They are necessary in order to take risk management measures to reduce exposure.

The EFSA (2010) reports that the risk of exposure of the European population to polybrominated biphenyls (PBBs) via food is not of concern. Given that PBBs are no longer produced in Europe and taking into account the declining concentrations in the environment, the EFSA concludes that PBBs are a low priority for research and monitoring programmes.

**Objectives**

1) Development and validation of a congener-specific method of analysis for PBDD/F, PXDD/F and PXB in foodstuffs. This method must make it possible to analyse chlorinated and brominated congeners and mixtures, to ascertain the impact of the TEF and to calculate a TEQ concentration.
2) Study of the concentrations of PCDD/F, PBDD/F, PXDD/F as well as PCB and PXB in foodstuffs (animal and vegetable) on the Belgian market.
3) Estimation of the intake by the Belgian population (children, adolescents, adults) of PCDD/F, PBDD/F, PXDD/F, PCB and PXB; estimation of the contribution of PBDD/Fs to the total intake.

The occurrence data collected in the context of the research project must be transmitted to the EFSA.

**Maximum budget:** € 250,000

**Maximum duration:** 24 months

**References**

, Institut national de l'environnement industriel et des risques (https://www.ineris.fr/sites/ineris.fr/files/contribution/Documents/Rapport-Ineris-19-177734-00120B_Dioxines%20et%20furanes%20brom%C3%A9s-v1.0.pdfLin Y, Le S, Feng C, Qiu X, Xu Q, Jin S, Zhang H, Jin Y, Wen Y, Xu H, Liu P, Rao Q, She J, Lu D. 2021. Exposure and health risk assessment of secondary contaminants closely related to brominated flame retardants (BFRs): Polybrominated dibenzo-p-dioxins and dibenzofurans (PBDD/Fs) in human milk in shanghai. Environ Pollut. 268:115121.

, Wall R.J., Fernandes A., Rose M., Bell D. R., Mellor I. R. 2015. Characterisation of chlorinated, brominated and mixed halogenated dioxins, furans and biphenyls as potent and as partial agonist of the aryl hydrocarbon receptor. Environment International 76, 49-56.

## 7. Mycotoxins in vegetarian protein-rich and fibre-rich food (MYCOPROF)

### Context

In light of the current protein transition, plant proteins are being steadily used in foodstuffs. Increased consumption of these products requires research on the contaminants that might be present. Vegetarian protein-rich ingredients are used not only in meat substitutes, but also in sports nutrition and in meal replacements for weight control. These products have not been deeply studied for mycotoxins.

The protein transition is also going hand in hand with the valorisation of by-products and the reduction of waste. The protein fractions that were used previously more frequently in animal feed are now more often found in food for human consumption. Well known examples of this are whey, oilseed pressed cakes. When the by-products are valorised, there is sometimes insufficient attention paid to the possible presence of contaminants.

The most recent dietary guidelines also advise consumption of fibre-rich rather than refined cereal products. There is also a trend towards a larger variety of fibre-rich foods, such as a wider range of cereals types consumed (spelt, etc.). At the same time, there is a growing trend in valorisation of fibre-rich by-product fractions (hemp cake, fruit pulp from pressing fruit juice, etc.) in the context of a circular economy.
When food is fractionated, contaminants may be unevenly distributed among the different fractions. For example, starch is known to be a pure fraction, while contaminants concentrate in bran and gluten. In this context, it is necessary to gain insight in the current risks of mycotoxin contamination associated with these changing consumption patterns.

This research is in line with the transition targeted by the European 'Green Deal' and 'Farm to Fork Strategy'. In this respect, it is important that the transition is not at the expense of food safety.

Some concrete examples of indications of contamination:

- In 2020, Starch Europe revealed that significant levels of ergot alkaloids can be present in wheat gluten. In this fraction, the issue of ochratoxin A concentrations has been known for some time and was included in the contaminants regulation.
- The EFSA opinion from 2020 on ochratoxin A[i] highlighted the need for further research on ochratoxin A contamination in cheese. There are indications that the danger is primarily in the edible cheese rind, and its presence in processed cheese, grated and ground cheeses. This needs to be further studied, in order to take an appropriate policy decision.
- The project RF 16/6308 CITRIRISK[ii], funded by the FPS Public Health, revealed that vegetarian alternatives to meat are a source of citrinin intake. Further research is recommended.
- If cured meats are replaced by peanut butter as spread, the intake of aflatoxins increases. The EFSA opinion from 2020 on aflatoxins identified peanut butter as a relevant food group.

[i] EFSA Journal 2020;18(5):6113, https://doi.org/10.2903/j.efsa.2020.6113
[ii] RF 16/6308 CITRIRISK - The incidence of citrinin in the Belgian food and feed chain and the risk for human and animal health

In the case of deoxynivalenol, the study should include all congeners included in the EFSA's tolerable daily intake (TDI) group: DON, 3-acetyl-DON, 15-acetyl-DON and DON-3-glucoside. More data is also needed on this series of mycotoxins in whole-grain wheat products, to ascertain whether it is necessary to better protect consumers who consume whole-grain products, by extending the standard for DON to total DON. Up-to-date data are required in this regard, as fungal populations evolve under the influence of climate change. A comparison with existing data can shed light on the evolution over time.

In the study, it is advisable to consider good practices for the prevention and reduction of mycotoxin contamination for the studied foodstuffs, such as the sorting of mouldy products.

The research should be policy oriented and is not intended to verify compliance with current legislation and standards (such as ochratoxin A in wheat gluten). Nor should its aim be the preparation of a novel food dossier. The results may be valorised by the Government in the context of developing new standards for combinations of mycotoxins and food groups (e.g. ergot alkaloids in wheat gluten). In this context, the research should develop new knowledge.

**Objectives**

- On the basis of targeted sampling and analysis: study into mycotoxin contamination of vegetarian protein-rich foods and vegetarian protein-rich ingredients, including ochratoxin A in processed cheese, grated and ground cheese.
- On the basis of targeted sampling and analysis: study into mycotoxin contamination of fibre-rich by-products and cereal products valorised as a foodstuff, from cereals which are not widely consumed.
- On the basis of targeted sampling and analysis: study into total deoxynivalenol levels in cereal products (pasta, wholemeal wheat bread, etc.): DON, 3-acetyl-DON, 15-acetyl-DON and DON-3-glucoside.
- Based on the results of the study: identification of high-risk combinations of mycotoxin/foodstuffs to be monitored and possible critical factors of good practice.

**Maximum budget:** € 150,000

**Maximum duration:** 18 months

## 8. Intake monitoring of food flavourings (INFLAVOUR)

### Context

The European Commission is currently developing a "Guidance for Monitoring of the Consumption and Use of Food Additives and Food Flavourings". This document is a first step in establishing monitoring guidelines for food flavourings, which is mandatory under Article 20 of the Flavouring Regulation (EC) No 1334/2008. The aim is that Member States establish risk-based systems to monitor the consumption and use of the flavourings set out in the Community list (Annex I of the Flavouring Regulation) and the consumption of the substances listed in Annex III. Member States must collect information on the consumption and use of flavourings in order to assess, via intake estimates, whether the intake is safe.

The RT 18/08 MULTIMADD[i] project has shown that analytical methods can be developed to measure a whole range of additives at the same time. In the ongoing project RT 19/07 FLAVOURAN 1[ii], a multimethod approach is also being developed, to analyse (potentially) genotoxic flavouring substances in food. Multimethods also proved successful for analysing plant toxins, mycotoxins and pesticides.

For this first monitoring ('pilot monitoring'), the aim is to use a multimethod approach to analyse relevant flavourings, calculate a preliminary intake and carry out a risk assessment. In selecting flavourings, the priorities listed in the Commission's guidance document, analytical capabilities and other relevant information should be taken into account. The selected flavourings for this pilot monitoring should be from Annex III of the Flavouring Regulation 1334/2008 and from the EU list of approved flavourings (Annex I). Smoke flavourings are excluded from the study.

### Objectives

1. Selection of priority flavourings for intake monitoring using (the working document of) the European guidance document and other relevant information (flavouring groups, concerns for intake above the threshold of concern, analytical capabilities, intake model in the EFSA opinion, etc.).
2. Developing a sampling plan so that a preliminary intake estimate can be calculated (analysis of different foodstuffs in different food categories). In this regard, it can also be investigated whether the analysis of intermediate flavouring preparations could be used instead of the analysis of end products.
3. Development and validation of (several) multimethod(s) for the analysis of selected flavourings in different foodstuffs.
4. Perform preliminary intake calculations based on the analysis data.
5. Carry out a risk assessment (compare the calculated intake with the intake taken into account in the EFSA evaluation for that flavouring).
6. Enter the findings of the study into standardised templates to facilitate the transfer of the data to the European Commission.

[i] RT 18/08 MULTIMADD - Development of a multi-method for the analysis of additives in foodstuffs.
[ii] RT 19/07 FLAVOURAN – Analysis of genotoxic flavouring substances in foodstuffs.

7. Evaluation of the applied methodology for intake monitoring with a view to future monitoring programmes.

**Maximum budget:** € 300,000

**Maximum duration:** 36 months

## 2021-C-368 Heat- (incl. hot water) treatments

### Short description

Hot water treatments can be used on Vitis against *Viteus vitifoliae* (EPPO Standard PM 10/16), against Grapevine flavescence dorée phytoplasma (EPPO Standard PM 10/18) and considered efficient against X. fastidiosa (EFSA, 2015). The question was raised whether other time-temperature combinations should be used to reduce plant mortality.

It would be useful to compare how these treatments are done in practice in different countries. Heat- treatments can also be used on strawberry plants to control *Aphelenchoides besseyi* and *Aphelenchoides fragariae* (EPPO Standard PM 10/19). Hot air treatments have been shown to eliminate *Verticillium dahliae* from Olive plants (Morello et al., 2016). The use of these treatments should be investigated for other pest/host combinations (e.g. on Olive plants against *X. fastidiosa*). These treatments could be used for the exportation or circulation of plant reproductive material from infected areas, or in the context of certification schemes[i].

### Description of the end product

Validation of heat-treatments as phytosanitary measures.

### Provisional other funders (to be completed in a later stage)

- European and Mediterranean Plant Protection Organization, France (Contact: Ms Françoise Petter, fp@eppo.int)
- Council for Agricultural Research and Economics, Italy (contact: Mr Luca Riccioni, luca.riccioni@crea.gov.it)

### Provisional project duration

24-36 months

[i] Regarding the research for which a grant from the FPS Health is requested, the applicants should limit themselves to quarantine pests and measures that are within the competences of the FPS Health.

## 2021-A-373 Fast detection methods for quarantine Tephritidae (TEPHRIFADE)

### Short description

Non-European Tephritidae are categorised as quarantine pests (EU 2019/2072, annex II A). Furthermore, *Anastrepha ludens, Bactrocera dorsalis, Bactrocera zonata* and *Rhagoletis pomonella* have been included in the list of priority pests (EU 2019/1702). Identification of intercepted and detected Tephritidae to genus or species level is important for adequate follow-up, risk assessment and evaluation of measures.

The list of non-European Tephritidae was analysed in more detail by EFSA (2020). The EFSA pest categorization is taken on board in the ongoing discussions on the revision and possible amendment of the EU quarantine pest list, preferring a classification at species (or genus) level. If a modification to genus/species listing enters into force, it is even more important to have diagnostics adapted to that level for all life stages and in particular for the most intercepted ones (larvae). Morphological identification methods exist for adult and later larval stages, whereas identification of the most intercepted earlier stages currently requires upfront rearing or sequencing. Alternative methods that are faster and potentially applicable on-site are under development on a national level and in European projects (e.g. FF-IPM). Moreover, fast detection methods are preferred as the majority of interceptions relate to perishable goods.

### Potential objectives

- Compilation of an international inventory of fast diagnostics (for example but not exclusively LAMP tests) for Tephritidae genera and species that are currently available or being developed.
- Transnational exchange of protocols and best practices, and organisation of interlaboratory tests among the partners for specific fast detection methods.
- Compilation of an overview of available sequences necessary for (more classical) diagnostics for Tephritidae genera and species and identification of gaps.
- Collecting type species and performing sequencing experiments in order to fill the identified gaps.

### Description of the end product

Inventory, enhanced knowledge and knowhow of fast methods for the detection of Tephritidae at genus and species level.

Expanded panel of available sequences for Tephritidae species.

### Provisional other funders (*to be completed in a later stage*)

/

### Provisional project duration

24-36 months

**2021-A-378 Inventory and validation of quality control procedures for the extraction of nucleic acids used for diagnosis.**

### Short description

Diagnostic activities for phytopathogenic organisms concern organisms with DNA genomes such as fungi, bacteria or certain families of plant viruses, but also other organisms whose genome is composed of RNA, such as the majority of plant viruses or viroids. The titer of these organisms in infected tissues can sometimes be high, but in many cases involving bacteria, phytoplasmas or viruses infecting seed lots, dormant tubers and lignified tissues, the titer can also be very low, close to the detection limit of diagnostic tests. Given this diversity of situations, quality control of the extraction is an important element required to deliver a negative diagnosis on a sound and standardised basis.

To date, the different control procedures for the extraction step are not always applicable or relevant and when they are, they are rarely validated and formalised in the form of recommended procedures and threshold values. The aim of this project is to take stock of the extraction procedures used in the participating laboratories and in the literature. These procedures will be tested and compared on a wide range of plant matrixes infected with pathogens of interest in order to formulate recommendations for diagnostic laboratories.

### Description of the end product

Results of the comparative tests carried out in the different laboratories. The participants will formulate recommendations in the form of a written communication to the diagnostic laboratories.

### Provisional other funders (*to be completed in a later stage*)

- Federal Office for Agriculture, Switzerland (Contact: Mr Andreas von Felten, andreas.vonfelten@blw.admin.ch)
- Council for Agricultural Research and Economics, Italy (contact: Mr Luca Riccioni, luca.riccioni@crea.gov.it)

### Provisional project duration

12-24 months

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

*Send this form in digital form (Word and searchable pdf) to:*

contractual.research@health.fgov.be

**CONFIDENTIAL**

# RT PRE-PROPOSAL
# (RT PROJECT step 1)

## MAX. 6 PAGES
**(EXCL. TITLE PAGE AND THE IDENTIFICATION OF THE PROMOTERS**

## 1. CONTEXT OF THE PROJECT PROPOSAL

**[TITLE OF THE TOPIC]**

**[ACRONYM OF THE TOPIC]**

**[Title of the project proposal]**

## 2. IDENTIFICATION OF THE COORDINATOR

| | |
|---|---|
| **Name** | : |
| **First name** | : |
| **Titele** | : |
| **Institution and department** | : |
| **Adress for correspondence** | : |
| **(Mobile)phone** | : |
| **E-mail** | : |

| **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)** |
|---|
| |

## 3. CONTEXT

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

### 3.2 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?

### 3.3 To your knowledge, which other projects were recently conducted or are currently ongoing or planned on the subject, excluding the projects listed under 4.2? (about 10 lines)

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

## 4. RESEARCH QUESTIONS (about 20 lines)

To which research question(s) must the proposed study provide an answer to contribute to a solution to the problem described in the topic?

## 5. IMPACT OF THE RESEARCH SUBJECT (about 10 lines)

Can the proposed research provide a solution to the described problem?

What will be the (direct or indirect) applicability of the intended results for the authorities, in the short, medium or long term?

## 6. DESCRIPTION OF THE PROJECT PROPOSAL

If necessary, brief references may be included in the text (e.g. Johnson *et al.*, 2012).

### 6.1 Methodology (about 40 lines)

Describe the methodology you will use for this research. Has this methodology been previously used, by the applicants, by other Belgian researchers or by foreign researchers?

### 6.2 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. In which respect is the current project proposal innovative?

**6.3 Required data (about 10 lines)**

Are there any data and/or preliminary knowledge available, which is required for this study? If yes, is it available in accessible databases? If no data are available yet, then please explain how these data can be obtained.

**6.4 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

## 8. BUDGETARY INFORMATION

**Please refer to the important information in Annex 7.**

The requested research grant cannot exceed the maximum grant stated in the topic description. The requested grant must be rounded up to an amount in k€. The co-funding percentage is rounded to 2 decimal places.

*For your information: annexes 8 and 9 must only be submitted in the second step*

**8.1 Total duration of the proposed project** … months

**8.2 Total budget for this project proposal** € …….

**8.3 Requested research grant** € …….

The requested grant – 1 figure only – can be equal to the overall budget or to a percentage of this budget. In the latter case, please state the origin of your external financial contribution.

**8.4 In which case: percentage of co-funding** …… %

**8.5 In which case: origin of the co-funding**

**8.6 Persons included in the budget, their qualification (e.g. PhD, PhD student, engineer, Ma., pharmacist, lab technician, et al.), affiliation and time spent on the research in person-months (P-M)**

| *Qualification* | *Name (if known)* | *Institution (research centre)* | *P-M* |
|---|---|---|---|
| | | | |

**NB : have the conditions below been respected?**
**If not, your proposal will be considered ineligible:**

- timely submission: by Friday, 30th of April 2021, 12.00 noon sharp
- the application shall consist of no more than 6 pages, excluding the title page and the identification of the promoters
- the font of the text (Times New Roman, font size 12) may not be modified
- the application shall be drawn up either in one or a combination of the national languages, or else entirely in English
- only Belgian research institutions may participate in the consortium.

*Date, name and signature of the coordinator, as representative of the consortium*

# Annex 3
# Template RT full proposal (step 2)

*Send this form in digital form (Word and searchable pdf, and Excel for annexes 8 and 9) to:*

contractual.research@health.fgov.be

**CONFIDENTIAL**

# FULL THEMATIC PROPOSAL
# (RT PROJECT step 2)

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

---

**[TITLE OF THE TOPIC]**

**[ACRONYM OF THE TOPIC]**

**[Title of the project proposal]**

**Total budget required for the research:** € …….

**Requested research grant and % of the overall budget:** € …….
…… %

**In which case: origin of the co-funding:** ……..

**Proposed start date:** …/…/……

**Proposed duration of the project:** ……. months

## 1. IDENTIFICATION OF THE CONSORTIUM

### 1.1 IDENTIFICATION OF THE COORDINATOR

*NB : maximum one coordinator*

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

### 1.2 IDENTIFICATION OF PROMOTER 2 (optional)

*NB: maximum one promoter per research group*

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

### 1.3 IDENTIFICATION OF PROMOTER 3 (optional)

*NB: maximum one promoter per research group*

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

### 1.4 IDENTIFICATION OF PROMOTER 4 (optional)

*NB: maximum one promoter per research group*

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

## 2. HISTORY OF CHANGES

**Have significant changes been made to the full proposal compared to the pre-proposal?**
Indicate

- in which section(s), such as *consortium, budget, project duration, objectives, methodology,*
- which change(s),
- justification / motivation fort he change

## 3. GENERAL INFORMATION

### 3.1 Title of the project in English, Dutch and French + acronym

**[EN]**

**[NL]**

**[FR]**

**[Acronym]**

### 3.2 Research questions to be answered in this research project, in English and Dutch or English and French (about 20 lines each)

**[EN]**

**[NL/FR]**

### 3.3 Executive summary of the project (about 20 lines)

### 3.4 Motivation for submitting the project proposal under this topic (about 15 lines)

### 3.5 Context: scientific specificity and setting in relation to existing research (about 2.5 pages)

- 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 study and are these available or accessible? A bibliography may be appended.
- 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.
- The proposed specific approach to the problem must be justified.

### 3.6 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

### 3.7 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 contain a clear description of the research activities as planned for the total duration of the project.
- Important elements in the description of the various subtasks of the research programme are:
  - an overview of the proposed research, subdivided into work packages and (sub)tasks, including an indication of the estimated budget for every work package;
  - the proposed methods and technologies with their respective (dis)advantages, limitations, risks and alternatives, …
  - the milestones to be achieved, linked to possible reorientations in the project where applicable;
  - the time frame and evolution over time based on the following chronogram, including milestones and deliverables:

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

t: trimester

* 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) | P-M |
|---|---|---|---|---|
| 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

- Please state whether you are working with foreign partners or participating in networks, insofar as this is relevant to this project proposal.
- Also indicate whether you are planning a cooperation or whether complementarity exists with research groups that do not request a financial contribution from the FPS Health for this project but receive research grants from other bodies to conduct their own research.
- Indicate whether you submitted your project (or sub-project) to another organisation or wether it is financed by another organisation 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

- Please refer to annex 7 – Important information regarding the budget.
- 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 €.

### 5.1 Budgetary overview table

Please insert the table which you can find in **annex 8** on the website (https://www.health.belgium.be/en/contractual-research) under "open calls" **here and** submit the table separately as well as an Excel sheet.

### 5.2 Detailed budget proposal

Please draft the detailed budget proposal using the Excel sheet provided in **annex 9**, which can be downloaded from the website (https://www.health.belgium.be/en/contractual-research) under "open calls". The budget proposal is to be inserted **here and** submitted separately as an Excel sheet.

## 6. ADMINISTRATIVE INFORMATION

### 6.1 Proposal for a guidance committee (minimum 8 persons, mentioning the institution and e-mail address)

| Title – Name – First name | Institution | E-mail |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
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| | | |
| | | |
| | | |

### 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, subject to selection for funding

| | |
|---|---|
| Company registration number | : |
| Establisment unit registration number | : |
| IBAN | : |
| BIC | : |
| Name and address of the account holder | : |

## 7. BIBLIOGRAPHY

**NB: have the conditions below been respected?**
**If not, your proposal will be considered ineligible:**

- timely submission: by Friday, 24th of September 2021, 12.00 noon sharp
- the application shall consist of no more than 30 pages, excluding the title page and the identification of the promoters, but including the budgetary tables
- the font of the text (Times New Roman, font size 12) may not be modified
- the application shall be drawn up either in one or a combination of the national languages, or else entirely in English
- only Belgian research institutions may participate in the consortium.

*Date, name and signature of the coordinator, as representative of the consortium*

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

*Send this form in digital form (Word and searchable pdf) to:*

contractual.research@health.fgov.be

**CONFIDENTIAL**

# RF PRE-PROPOSAL
# (RF PROJECT step 1)

## MAX. 6 PAGES
**(excluding the title page and identification of the consortium)**

## 1. IDENTIFICATION OF THE PROJECT PROPOSAL

**Project title (max. 3 lines) + proposal for an acronym**

| **Most important field of activity to which this project proposal relates (only tick one field please)** | **Additional field(s) of activity to which this project proposal relates** |
|---|---|
| ☐ Food safety<br>☐ Animal health<br>☐ Plant health | ☐ Food safety<br>☐ Animal health<br>☐ Plant health |

## 2. IDENTIFICATION OF THE COORDINATOR

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

| **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)** |
|---|
| |

## 3. CONTEXT

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

What is the problem? What causes it?

**3.2 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?

## 4. RESEARCH QUESTIONS (about 20 lines)

To which research question(s) must the proposed study provide an answer to contribute to a solution to the problem listed under 4.1?

## 5. IMPACT OF THE RESEARCH SUBJECT

**5.1 Incidence (about 5 lines)**

Does this research proposal relate to a quantitatively important problem, which occurs frequently or affects a large number of individuals?

**5.2 Seriousness of the problem (about 5 lines)**

Does the research subject present a serious risk or could it present a serious risk for food safety or the health policy of animals and plants in terms of

- their health, quality of life?
- the effectiveness or the quality of actions (cures, recommendations, drugs or measures)?
- social or ethical questions?

**5.3 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?

**5.4 Does the research subject correspond with a concern of society or the population? (about 5 lines)**

**5.5 Is the implementation of the results yielded by this research acceptable for the sector involved? In other words, does the research fulfil the sector's expectations? (about 5 lines)**

**5.6 Possibilities for improving the situation (about 5 lines)**

Can the proposed research provide a solution to the described problem? If yes, for which of the levels listed under 6.2.-6.3 would this be the case and is this a short, medium or long-term solution?

## 6. RELEVANCE FOR THE AUTHORITIES' DECISIONS (about 10 lines)

How can this research potentially support the decisions that the Authorities must take? What would be the risk if the situation remains "as is"?
Who is involved in the execution of this study and who are the stakeholders for the implementation of the research results?

## 7. DESCRIPTION OF THE PROJECT PROPOSAL

If necessary, brief references may be included in the text (e.g. Johnson *et al.*, 2012).

### 7.1 Methodology (about 40 lines)

Describe the methodology you will use for this research. Was this methodology previously applied, by the applicants, by other Belgian researchers or by foreign researchers?

### 7.2 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. In what respect is the current project proposal innovative?

### 7.3 Required data (about 10 lines)

Are there any data and/or preliminary knowledge available, which is required for this study? If yes, are these data available in accessible databases? If no data are available yet, then please explain how these data can be obtained.

### 7.4 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?

## 8. 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

## 9. BUDGETARY INFORMATION

**Please refer to the important information in Annex 7.**
The requested research grant must be rounded up to an amount in k€. The percentage of co-funding will be dropped to 2 decimal places.
*For your information: annexes 8 and 9 are only to be submitted in the second step of the selection procedure.*

**9.1 Total duration of the proposed project (min. 12 months – max. 48 months)** …… months

**9.2 Total budget for this project proposal** € …….

**9.3 Requested research grant** € …….

The requested grant – 1 figure only – can be equal to the overall budget or to a percentage of this budget. In the latter case, please state the origin of your external financial contribution.

**9.4 In which case: percentage of co-funding** …… %

**9.5 In which case: origin of the co-funding** **…….**

**9.6 Persons included in the budget, their qualification (e.g. PhD, PhD student, engineer, Ma., pharmacist, lab technician, et al.), affiliation and time spent on the research in person-months (P-M)**

| *Qualification* | *Name (if known)* | *Institution* | *P-M* |
|---|---|---|---|
| | | | |

**NB: have the conditions below been respected?**
**If not, your proposal will be considered ineligible:**

- timely submission: by Friday, 30th of April 2021, 12.00 noon sharp
- the application shall consist of no more than 6 pages, excluding the title page and the identification of the promoters
- the font of the text (Times New Roman, font size 12) may not be modified
- the application shall be drawn up either in one or a combination of the national languages, or else entirely in English
- only Belgian research institutions may participate in the consortium.

*Date, name and signature of the coordinator, as representative of the consortium*

# Annex 5
# Template RF full proposal (step 2)

*Send this form in digital form (Word and searchable pdf, and Excel for annexes 8 and 9) to:*

contractual.research@health.fgov.be

**CONFIDENTIAL**

# RF FULL PROPOSAL
# (RF PROJECT step 2)

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

---

**[ACRONYM]**

**[Title of the project proposal]**

| | |
|---|---|
| **Total budget required for the research:** | € ……. |
| **Requested research grant and % of the overall budget:** | € ……. <br> …… % |
| **In which case: origin of the co-funding:** | ……. |
| **Proposed start date:** | …/…/…… |
| **Proposed duration of the project:** | ……. months |

## 1. IDENTIFICATION OF THE CONSORTIUM

### 1.1 IDENTIFICATION OF THE COORDINATOR

*NB : maximum one coordinator*

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

### 1.2 IDENTIFICATION OF PROMOTER 2 (optional)

*NB: maximum one promoter per research group*

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

### 1.3 IDENTIFICATION OF PROMOTER 3 (optional)

*NB: maximum one promoter per research group*

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

### 1.4 IDENTIFICATION OF PROMOTER 4 (optional)

*NB: maximum one promoter per research group*

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

## 2. HISTORY OF CHANGES

**Have significant changes been made to the full proposal compared to the pre-proposal?**
Indicate

- in which section(s), such as *consortium, budget, project duration, objectives, methodology,*
- which change(s),
- justification / motivation fort he change

## 3. GENERAL INFORMATION

### 3.1 Title of the project in English, Dutch and French + acronym

**[EN]**

**[NL]**

**[FR]**

**[Acronym]**

### 3.2 Research questions to be answered in this research project, in English and Dutch or English and French (about 20 lines each)

**[EN]**

**[NL/FR]**

### 3.3 Executive summary of the project (about 20 lines)

### 3.4 Context: scientific specificity and setting in relation to existing research (about 2.5 pages)

- 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 study and are these available or accessible? A bibliography may be appended.
- 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.
- The proposed specific approach to the problem must be justified.

### 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 contain a clear description of the research activities as planned by you for the total duration of the proposed project.
- Important elements in the description of the various subtasks of the research programme 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 to be achieved, linked to possible reorientations in the project where applicable;
  - the time frame and evolution over time based on the following chronogram, including milestones and deliverables:

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

t: trimester
* total budget per work package: staffing + operational + 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) | P-M |
|---|---|---|---|---|
| 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

- Please state whether you are working with foreign partners or participating in networks, insofar as this is relevant to this project proposal.
- Also indicate whether you are planning a cooperation or whether complementarity exists with research groups that do not request a financial contribution from the FPS Health for this project but receive research grants from other bodies to conduct their own research.
- Indicate whether you have also submitted your project (or sub-project) to another organisation or wether it is financed by another organisation 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

- Please refer to Annex 7 – Important information regarding the budget.
- 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€.

### 5.1 Budgetary overview table

Please insert the table which you can find in **annex 8** on the website (https://www.health.belgium.be/en/contractual-research) under "open calls" **here and** submit the table separately as well as an Excel sheet.

### 5.2 Detailed budget proposal

Please draft the detailed budget proposal using the Excel sheet provided in **annex 9**, which can be downloaded from the website (https://www.health.belgium.be/en/contractual-research) under "open calls". The budget proposal is to be inserted **here and** submitted separately as an Excel sheet.

## 6. ADMINISTRATIVE INFORMATION

### 6.1 Proposal for a guidance committee (minimum 8 persons, mentioning the institution and e-mail address)

| Title – Name – First 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, subject to selection for funding**

| | |
|---|---|
| Company registration number | : |
| Establisment unit registration number | : |
| IBAN | : |
| BIC | : |
| Name and address of the account holder | : |

## 7. BIBLIOGRAPHY

**NB: have the conditions below been respected?**
**If not, your proposal will be considered ineligible:**

- timely submission: by Friday, 24th of September 2021, 12.00 noon sharp
- the application shall consist of no more than 30 pages, excluding the title page and the identification of the promoters, but including the budgetary tables
- the font of the text (Times New Roman, font size 12) may not be modified
- the application shall be drawn up either in one or a combination of the national languages, or else entirely in English.

*Date, name and signature of the coordinator, as representative of the consortium*

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

*Submit this form electronically (Word and searchable pdf) to:*

contractual.research@health.fgov.be

**CONFIDENTIAL**

# Contractual Research Euphresco call
# EXPRESSION OF INTEREST
# (RI PROJECT step 1)

**MAX. 4 PAGES**
**(excluding the title page and identification of the consortium)**

---

## 1. TITLE OF THE PROJECT PROPOSAL

**[CODE AND TITLE OF THE TRANSNATIONAL TOPIC]**

**[Title of the Belgian consortium's project proposal]**

**[proposed acronym]**

## 2. IDENTIFICATION OF THE COORDINATOR

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

| **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)** |
|---|
| |

## 3. EXPRESSION OF INTEREST – PROPOSAL DETAILS

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

**3.2 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 **3.3.**

**3.3 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?

**3.4 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.

## 4. BUDGETARY INFORMATION

**Please refer to the important information in Annex 7.**
The requested research grant must be rounded up to an amount in k€. The percentage of co-funding should be dropped to 2 decimals.

**4.1 Total duration of the proposed project** … months

**4.2 Total budget for this project proposal** € …….

**4.3 Requested research grant** € …….

**4.4 In which case: percentage of co-funding** …… %
**In which case: origin of the co-funding**

**NB: have the conditions listed below been respected? If not, your Expression of Interest will be considered ineligible:**

- timely submission: by Friday 30th of April 2021, 12.00 noon sharp
- the application shall consist of no more than 4 pages, excluding the title page and the identification of the promoters
- the font of the text (Times New Roman, font size 12) may not be modified
- the application is drawn up entirely in English
- only Belgian research institutions may participate in the consortium proposed by this Expression of Interest.

*Date, name and signature of the coordinator, on behalf of the consortium*

# Annex 7

## Important information about the budget

### 1. Generalities

- We firmly recommend you involve your accountancy service when drawing up your budget.
- Apart from the information in this annex, the information which is mentioned in chapter 5 of the manual of Contractual Research can be useful (cf. website https://www.health.belgium.be/en/contractual-research under "Project follow-up").
- The expenses covered by this grant must be made in accordance with the statutory and regulatory provisions governing public procurement (see https://www.publicprocurement.be/fr/publicprocurementbe-english-0). This applies in particular for purchases and subcontracting.

### 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 proposals, the research grant is capped on the amount indicated in the topic description (Annex 1).
- The amount of the requested grant in the full proposal (step 2) may not exceed the amount stated in the pre-proposal (step 1).
- The requested grant must be rounded off to an amount in k€; if not the amount will be automatically rounded off by our services (e.g. a requested grant of € 215,321 will be rounded down to € 215,000).
- When drawing up your budget, you must bear in mind that all non-lump sum expenses, those at the expense of the FPS as well as those from own contributions, will be checked against the vouchers to be provided.
- Maximum share of the allocated grants: 100% (royal decree of November18th, 2015).
- In principle, any financial contribution is acceptable as an own contribution as long as it does not give rise to a conflict of interests and as long as it is not granted by the federal authorities. The restrictions in paragraphs 3, 4 and 5 below must also be taken into account.

### 3. Staffing costs

- The staffing costs for the coordinator and the promoters may not be included in the project budget, nor at the expense of the FPS, nor as an own contribution.
- All staffing costs related to the project's execution, excluding the staffing costs for the coordinator and the promoters, must be indicated in this section. Exceptions to this rule include labour costs included in the budget for subcontracted work.

  If your project is selected for a grant, staffing expenses declared in the financial reporting that are included in the operational costs (e.g. analysis costs) will be rejected.

- In order for doctoral grants to be considered as an own contribution, these must be funded with the research institution's own resources or must be funded by another body than the federal government.
- The staffing costs are calculated based on the pay scales of the institutions where the staff is employed.
- The detailed budget is to show the pay scale, seniority and time spent on the project (in person-months) per calendar year. If the names of the staff members are known, they must be stated.
- The staffing costs are split in gross wages on the one hand and other costs on the other hand. The costs for a research fellow (PhD student), who per definition is not considered an employee, are to be presented as a whole in a single article.

### 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 applicable, the employee contribution for meal vouchers);
- employer contribution NSSO, holiday pay and year-end bonus;
- other wage costs, if applicable, including:
    - statutory insurance (e.g. for occupational accidents);
    - 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…);
    - 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);
    - bike allowances as stated on the employee's pay slip or the individual annual statements in accordance with the Federal Authorities' statutory tariff;
    - 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 March 27th, 1998, royal decree of May 28th, 2003 - health monitoring).

### 3.2 Staffing costs which cannot be covered with the research grant

The following costs (non-limitative list) cannot be covered with a research grant unless they are statutory benefits[i]:

- 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.

[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

# 4. Operational costs

Operational costs are project-related costs that are incurred with a view to the purchase and/or the operational use of goods or services, and costs that are directly related to the project activities.

The operational costs will be split into flat-rate standard operational costs and specific operational costs.

## 4.1 Standard operational costs

The standard operational costs are flat-rate costs and include usual expenses related to the project's execution 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 these operational costs is a lump sum that is established based on a percentage of the staffing costs funded by the FPS Health. This percentage may not exceed 15% of the funded staffing costs for the coordinator and 10% of these costs for the other promoters.

## 4.2 Specific operational costs

Specific operational costs include all the special operational costs that are directly related to the project's execution. 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;
- subcontracted work.

a) The cost for the usage of <u>equipment acquired through purchase or hire purchase</u> are calculated as follows:

$$\frac{purchase\ price}{amortisation\ period} \times number\ of\ months\ the\ device\ is\ used\ in\ the\ project\ \times \%\ of\ use\ for\ the\ project$$

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:

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

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

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

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

$$usage\ cost = €\ 600 \times 10\ months \times 0.2 = €\ 1{,}200$$

c) The cost of subcontracting work comprises 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 for the project;
- the subcontractor does not take over the core activity and only is 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 duty travel may be introduced as specific operational costs, provided that this can be well motivated.

## 5. General costs

The general costs include the costs for administration, phone, postage, 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 funded by the FPS Health.

# Annex 8

## Template to be used for the budgetary overview

*(Excel document to be added in step 2 of the RT and RF full proposal)*

| **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 | | | | | |

# Annex 9

## Template to be used for the detailed budgetary information

*(Excel document to be added in step 2 of the RT and RF full proposal)*

***All promoters of the consortium must be listed for each category of expenses, even if for some of them no expenses are foreseen in one or more of the categories (=PM).***

***Indicate own contributions with ****

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **4.1.** | **Staffing costs** | | | | | | **0** |
| | | year | seniority in years | number of person-months | budget in euros | | |
| 4.1.1. | Lab of X (Affiliation) | | | | | | 0 |
| 4.1.1.1. | N. | | | | | 0 | |
| | Fellow | 2022 | *[0]* | *[3]* | … | | |
| | | 2023 | *[1]* | *[12]* | … | | |
| | | …. | | | | | |
| 4.1.1.2. | N. | | | | | 0 | |
| | Pay scale | 2022 | *[4]* | *[1]* | … | | |
| | | 2023 | *[5]* | *[9]* | … | | |
| | | … | …. | … | | | |
| 4.1.1.3. | - double holiday pay | | | | … | | |
| | - employer contributions (social security, insurance) | | | | | | |
| | - year-end bonus | | | | | | |
| | - other | | | | | | |
| 4.1.2. | Lab of Y (Affiliation) | | | | | | 0 |
| 4.1.2.1. | N. | | | | | 0 | |
| | Pay scale | 2022 | *[4]* | *[3]* | … | | |
| | | 2023 | *[5]* | *[12]* | … | | |
| | | … | …. | … | … | | |
| 4.1.2.2. | - double holiday pay | | | … | | | |
| | - employer contributions (social security, insurance) | | | | | | |
| | - year-end bonus | | | | | | |
| | - other | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.1.2.3. | N. | | | | | 0 | |
| | Pay scale | 2022 | *[4]* | *[1]* | … | | |
| | | 2023 | *[5]* | *[9]* | … | | |
| | | … | … | … | … | | |
| 4.1.2.4. | - double holiday pay | | | … | … | | |
| | - employer contributions (social security, insurance) | | | | | | |
| | - year-end bonus | | | | | | |
| | - other | | | | | | |
| **4.2.** | **Operational costs** | | | | | | **0** |
| 4.2.1. | Lab of X (Affiliation) | | | | | | 0 |
| 4.2.1.1. | Standard operational costs (flat-rate) | | | | | … | |
| 4.2.1.2. | Specific operational costs | | | | | 0 | |
| *4.2.1.2.1.* | *e.g. Reagents for PCR* | | | | … | | |
| *4.2.1.2.2.* | *...* | | | | … | | |
| *4.2.1.2.3.* | *...* | | | | … | | |
| *4.2.1.2.4.* | *...* | | | | … | | |
| … | | | | | | | |
| 4.2.2. | Lab of Y (Affiliation) | | | | | | 0 |
| 4.2.2.1. | Standard operational costs (flat-rate) | | | | | … | |
| 4.2.2.2. | Specific operational costs | | | | | 0 | |
| *4.2.2.2.1.* | *e.g. Purchase of plants* | | | | … | | |
| *4.2.2.2.2.* | *e.g. Cell cultures* | | | | … | | |
| *4.2.2.2.3.* | *...* | | | | … | | |
| … | | | | | | | |
| **4.3.** | **General costs** | | | | | | **0** |
| 4.3.1. | Lab of X (Affiliation) | | | | | | 0 |
| 4.3.1.1. | Overheads | | | | | … | |
| 4.3.2. | Lab of Y (Affiliation) | | | | | | 0 |
| 4.3.2.1. | Overheads | | | | | … | |
| **TOTAL** | | | | | | | **0** |

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