

6 December 2013

# Announcement of the CORE Organic Plus call

Call for pre-proposals for transnational research in organic food and farming systems launched by CORE Organic with co-funding from the European Union

Closing date for pre-proposals: 25 February 2014, 13.00 CET





CORE Organic Plus is an ERA-NET Plus funded by the European Commission's 7<sup>th</sup> Framework Programme; Contract no. 618107



#### **BACKGROUND TO THE CALL**

CORE Organic is the acronym for "Coordination of European Transnational Research in Organic Food and Farming Systems". As an ERA-NET action, it intends to increase cooperation between national research activities. CORE Organic Plus is the continuation of the ERA-Nets CORE Organic I and II. Compared to the previous CORE Organic ERA-Nets the Plus ERA-Net will benefit from an additional funding for research provided by the European Commission.

CORE Organic Plus consists of 24 partners from 21 countries/regions.

The overall objective of CORE Organic is to enhance quality, relevance and utilization of resources in European research in organic food and farming and to establish a joint pool for financing transnational research in organic food and farming.

The background for this objective is that the public European research and development effort in organic food and farming is characterized by small research communities, often scattered and fragmented both geographically and institutionally. This generates a need for gathering the dispersed expertise into a critical mass, to maintain and increase the competitive quality and relevance of research.

CORE Organic Plus is launching a transnational joint call for research project proposals based on funds from participating countries and an additional top-up funding by the European Commission. Within these research projects the participation of partners from private companies is welcome, and might be funded if the national rules allows for it.

The additional top-up funding of the EU aims at further contributing to a more ample selection of projects by filling in national financial short comings during project selection. In the Guideline for Applicants there is more information about the funding model.

### **THEMATIC RESEARCH AREAS**

Interested project consortia should apply to one of the four thematic research areas which will be funded according to the funding table given in Annex A. The pre-proposals should be structured around (one or more) sub-topics listed under each of the thematic research areas.

# **CALL TEXT**

# 1. Crop: Plant/Soil interaction in organic crop production

Organic farming aims to develop sustainable agricultural production with an emphasis on self-sustaining biological systems and minimal external inputs. Plant-soil interactions are at the core of this approach and soil conditions have a significant impact on the occurrence of weeds, diseases and pests. They also impact on crop



nutrient supply and root development which in turn affect product quantity and quality. Soil fertility is also influenced by interactions between the soil's physical environment, chemical environment and biological activity making. Multidisciplinary research is needed at field and farm level to understand the influence of soil processes on the healthy development of plants and the control of weeds, diseases and pests. This would provide growers with a set of management tools for maintaining healthy and productive soil levels under organic conditions.

A central component of such research will be to consider the relationships between plant, soil and microbiota and how these impact on plant nutrition and health. The extent of the diversity of microorganisms in soil is critical to the maintenance of soil health and quality. This is important for arable farming, open field horticulture and protected cropping but it is even more relevant for perennials where long term (soil) management is compulsory. In this area a more fundamental review is needed that focuses on farmers' practices and on current use of research outcomes.

Proposals should include one or both of the following topics:

- 1. Improving the understanding of the interaction between soil, plant and microbiota under different organic farming systems and management practices (such as tillage systems, recycling of organic matter etc.).
- 2. Developing improved strategies for soil and resource management to achieve optimal plant development and efficient pest, disease and weed control within different organic farming and management systems (e.g. with or without livestock manure application).

Proposals can also focus on the decrease of nutrient losses, GHG-emissions and the improvement of energy efficiency at soil, field and landscape levels, soil carbon storage /carbon sink enhancement.

Applicants should avoid duplication with FP7, CORE Organic and national projects (e.g. Tilman.org, IMPROVE-P).

# 2. Functional biodiversity to improve management of diseases, weeds and pests

Diseases, weeds and pests, including rodents and invertebrates are a serious threat to organically produced products, including fruits and vegetables. Biological control has been a common practise for many years in greenhouses but in itself does not always guarantee successful control. Limited functional biodiversity in horticulture, greenhouse crops and perennials restricts the establishment and performance of natural enemy releases and/or their development due to the lack of food sources and suitable habitats for e.g. reproduction. There is a strong need to design more resilient agro ecosystems that are both economically viable and maximise the use of ecologically-based solutions to reduce pests, diseases and weeds in agriculture and enhance resilience of the system as far as possible by efficient biological and ecological control.

Proposals should include one or more of the following topics:

1. Strategies to improve crop diversity such as variety mixtures, crop mixtures and improved crop rotation.



- 2. Enhancing the performance of natural enemies by supplying alternative food/prey e.g. with companion plants, and habitat management.
- 3. Enhancing multi pest and multi disease control by using functional biodiversity approaches, including a wider use of resistant/tolerant cultivars, but also by inter and cover cropping and by the construction of diversified growing systems across different spatial and temporal scales.

Applicants should avoid duplication with FP7, CORE Organic and national projects (e.g. Bicopoll, Bio-incrop, Softpest multitrap, Vineman.org).

## 3. Livestock health management system including breeding

The maintenance of good animal health by management and prevention strategies in livestock systems is of increasing significance for economic and societal reasons. The application and use of medicines in livestock production is of public interest due to concerns about food safety and increasing antibiotic resistance in human and veterinary medicine. Organic livestock production focuses on health management, prevention of diseases and the sustainable use of adapted genetic origins. This has already proven to reduce the use of antibiotics and to reduce the level of some zoonoses. However, more research is needed on health and welfare in organic livestock production also in respect of combining farm management and genetic improvement. For example in dairy production optimized feeding schemes need to be identified while reducing the use of concentrates. Furthermore management and breeding strategies for energy balance through e.g. lactation which focus on a steady metabolism and animal health have to be developed. Nevertheless in other species like poultry it is a special challenge to realize a welfare oriented animal husbandry, the use of suitable breeds as well as the implementation of a feeding strategy which meets the real demand.

Proposals should include one or more of the following topics: 1,2,3

- 1. Improving animal health and welfare by means of farm organization, monitoring and control to enhance disease/parasite prevention and animal resilience, to reduce medications and prevent biotic and abiotic stresses in organic livestock farming systems.
- 2. Increasing focus on animal health traits within breeding-programs based on measurable traits and performances of animal health and adaptability of farm animals in relation to their organic and "low-input" production environment (e.g. under low-concentrate diets in dairy production) including the implementation of thorough animal recording schemes designed in coherence with selection index balancing productivity, health criteria and forage feed efficiency.
- 3. Identifying and characterizing robust genotypes suitable under organic and "low input" conditions e.g. by characterization of animal genetic resources.

<sup>&</sup>lt;sup>3</sup> The Netherlands will fund research on bullet 1 and 4 only in thematic research area 3



<sup>&</sup>lt;sup>1</sup> Austria will fund research on bullet 2, 3 and 4 only in thematic research area 3

 $<sup>^{\</sup>rm 2}$  Belgium, Flanders will fund research on bullet 4 only in thematic research area 3

4. Improving feed quality by better grassland management, including grazing, harvesting and forage preservation methods and the use of locally produced feedstuffs, new species or varieties, with the aim to better meet the farm animal requirements for energy, protein, minerals and vitamins (e.g. by low-concentrate diets).

Applicants should avoid duplication with FP7, CORE Organic and national projects (e.g. ProPIG, HealthyHens), and studies initiated by the ERA-NET ANIHWA http://www.anihwa.eu/

# 4. Ensuring quality and safety of organic food along the processing chain

Consumers expect organic food to be of high quality and produced in a sustainable context. Organic food processing needs to recognize that within the food market more products have become complex multi-step processed outputs. The impact of intensive processing might threaten the product quality and sustainability of organic alternatives.

Organic food-processing standards generally prohibit the use of synthetic chemicals, many preservatives and other food additives that are widely used in the processing of conventional foods. Maintaining an extended shelf life is therefore a greater challenge for organic food processors.

The specific principles and methods of processing are not precisely defined and standards have not been elaborated. Therefore, tools need to be developed and made available to assess quality characteristics for organic food processing and to align the processing of organic food, while minimizing environmental impact and safeguarding food quality.

Proposals should include one or more of the following topics:<sup>4</sup>

- 1. Defining, identifying, evaluating and developing careful processing methods and technologies to meet the requirements of organic food production and consumer expectations.
- 2. Ensuring the quality—including taste, appearance and shelf life—of processed organic food by taking into account the whole production chain and identifying relevant quality indicators.
- 3. Improving processing efficiency of organically produced food to reduce impacts on climate, energy, water resources, biodiversity and waste.
- 4. Developing natural functional ingredients or new technologies to improve food quality and replace additives and non-organic ingredients, in accordance with the organic principles.

Applicants should avoid redundancy with FP7, CORE Organic and national projects, and projects initiated by the ERA-NET SUSFOOD https://www.susfood-era.net

<sup>&</sup>lt;sup>4</sup> The Netherlands will fund research on bullet 1 and 4 only in thematic research area 4. Concerning the 4th bullet point, proposals should focus on new technologies rather than on functional ingredients.



# WHO CAN APPLY?

Project consortia are eligible if they consist of partners from at least five Core Organic Plus partner countries providing funds for the call and with a maximum requested budget of 1.5 million euro. Research institutions, public or private, and private companies must be eligible for funding by their national funding bodies. Applicants should consult the national regulations:

http://www.coreorganic.org/pdf/COPlus National Regulations.pdf and/or contact their National Contact Points, see Guideline for Applicants, Annex A.

#### **SUBMISSION OF PRE-PROPOSALS**

All necessary information for the preparation and submission of a pre-proposal are available at the CORE Organic call submission website <a href="http://eracall.eu/">http://eracall.eu/</a>. Pre-proposals must be submitted by 25 February 2014 at 13.00 CET.



ANNEX A. INDICATIVE CALL BUDGET Funder contribution table the CO Plus call per country and thematic area including 1 million euro from EU (in 1000)

Country	Plant/Soil interaction	Functional Biodiversity	Livestock	Food Processing	Funds <sup>5</sup> in 1000 €
Austria	0	0	221	0	221
Belgium (Flanders)	74	74	73	0	221
Belgium (Wallonia)	74	74	73	0	221
Denmark	441	376	332	332	1481 <sup>6</sup>
Estonia	111	0	0	110	221
Finland	0	111	111	110	332
France (MAAF and INRA)	175	230	230	83	718
Germany	0	221	552	332	1105
Italy	276	221	0	221	718
Latvia	56	55	0	0	1117
Lithuania	56	0	55	0	1118
Netherlands	111	0	111	110	332

Funds: National contribution and 1 million euro EU funds pre-distributed according to allocation of national funds
 11,048,000 DDK
 78,000 LVL
 383,000 LTL



Country	Plant/Soil interaction	Functional Biodiversity	Livestock	Food Processing	Funds <sup>5</sup> in 1000 €
Norway	311	0	0	311	622 <sup>9</sup>
Poland	111	111	110	0	332
Romania	0	166	0	166	332
Slovenia	83	0	138	0	221
Spain	221	0	0	0	221
Sweden	492	492	492	491	1967 <sup>10</sup>
Switzerland	148	147	147	0	442
Turkey	200	86	60	96	442 <sup>11</sup>
United Kingdom	0	0	144	0	144 <sup>12</sup>
Total	2940	2364	2849	2362	10.515

For contact & support, please refer to the Guideline for applicants.



<sup>&</sup>lt;sup>9</sup> 5,227,000 NOK <sup>10</sup> 17,435,000 SEK <sup>11</sup> 1,228,000 TRY <sup>12</sup> £120,000