ANNEX I

EFSA's Scientific Panels and Scientific Committee

Scientific Committee (SC)

The Scientific Committee has a central role in supporting EFSA's scientific work. It is composed of the Chairs of each Scientific Panel and six (6) other senior scientific experts. EFSA's Scientific Committee has the task of supporting the work of EFSA on scientific matters of a horizontal nature and providing strategic advice to EFSA's Executive Director. It is also responsible for general co-ordination to ensure consistency in the scientific opinions prepared by the Scientific Panels. In view of the strategic role of the Committee, its members are usually prominent scientists with recognized scientific excellence, competences spreading across disciplines, seniority and prior experience with scientific bodies

Visit the SC key topics section on the EFSA website for more details: http://www.efsa.europa.eu/en/panels/sc.htm

The Scientific Committee's work in 2015-2018 continues to focus on preparing scientific advice on matters of a cross cutting nature, such as , the preparation of guidance on the harmonisation of the assessment of human exposure, on the interpretation of epidemiology studies, on harmonisation of risk assessment terminology, on import risk assessment, on combined exposure to multiple chemicals, on assessment of food allergenicity, and on the safety assessment of the application of new technologies in the area of food and feed.

The required expertise to contribute to the work of the Scientific Committee should be within the field of EFSA's remit, e.g. in:

- human health risk assessment
- animal health risk assessment,
- environmental risk assessment,
- food consumption and exposure assessment
- toxicology,
- microbiology,
- human nutrition,
- epidemiology,
- animal welfare,
- human medicine,
- veterinary medicine,
- food hygiene,
- food technology,

- chemistry,
- biology,
- biochemistry,
- omics technologies and genetics,
- immunology,
- life sciences.
- statistics and probabilistic modelling.

Panel on Animal Health and Welfare (AHAW)

The AHAW Panel provides independent scientific advice on all aspects of animal health and welfare, including those that have implications for human health. Its work chiefly, but not exclusively concerns food-producing animals, including fish. Animal health is a public good that may affect but also benefit all segments of the society; animal welfare is another dimension of this public good. The core activity of the AHAW Panel is to assess animal production systems and practices, and the conditions pertaining to animal health and welfare. It also addresses risks at the human-animal ecosystems interfaces. Ethical, socioeconomic, cultural and religious aspects are outside the AHAW remit.

Further information can be found under the AHAW key topics section on the EFSA website: http://www.efsa.europa.eu/en/panels/ahaw.htm

Most of the AHAW Panel work is carried out in response to ad-hoc requests on issues where risk managers require scientific advice to support the risk management process and its decisions. On its own initiative, the Panel also identifies scientific issues which require further attention. As part of its remit, the AHAW Panel produces a number of Guidance Documents to clarify its approach to risk assessment and to ensure transparency in its work. In the 2015-2018 period, the Panel will face, among others, the major task of advising the Commission in relation to the new regulatory framework on animal health. Against this background, the present call is especially directed at scientists who have expertise in the following areas:

- Risk assessment, qualitative and quantitative risk assessment, modelling: the Panel has a permanent need for methodological expertise to ensure best practice risk assessment and balanced multidisciplinary approach;
- Epidemiology: the Panel needs strong expertise in this area;
- Microbiology and pathology (preferably related to infectious diseases of food-producing animals, including aquatic animals): expertise is regularly required on diseases listed by the OIE and in the EU regulation on animal health. Expertise is also required on production diseases of animals:
- Animal welfare: expertise is required on the Panel in relation to impact of the different animal production practices on the welfare of animals. Expertise is also needed on

application of risk assessment methodology to animal welfare and the use of animal-based measures and welfare indicators:

- Animal production (husbandry, housing and management, animal transport and stunning and killing of animals, genetic selection): expertise may also be needed in this area although this is not of primary importance for the work of the Panel.

Panel on Biological Hazards (BIOHAZ)

The BIOHAZ Panel provides independent scientific advice on biological hazards in relation to food safety and food-borne diseases. This covers: food-borne zoonoses (animal diseases transmissible to humans), transmissible spongiform encephalopathies (BSE/TSEs), food microbiology, and food hygiene and associated waste management issues. The BIOHAZ Panel carries out most of its work in response to requests from the European Commission, but also initiates its own scientific activities. The BIOHAZ Panel also handles occasional applications in the area of treatment of animal by-products (ABPs), and on the evaluation of decontamination substances for the removal of the microbial surface contamination of foods of animal origin. The BIOHAZ Panel develops scientific guidance documents containing the administrative, technical and scientific requirements for compiling an application dossier.

Further information can be found under the BIOHAZ key topics section on the EFSA website: http://www.efsa.europa.eu/en/panels/biohaz.htm

General work areas for 2015-2018 (therefore, areas of expertise required in the Panel).

The BIOHAZ Panel typically works in reaction to unanticipated developments concerning health or policy issues. Its activity doesn't easily lend itself to planning and forecasting. For this reason, the BIOHAZ Panel must always be in a position to solicit expertise across the following areas:

- Food pathogens
- Food Hygiene
- Food microbiology
- Food virology
- Epidemiology of food borne zoonoses;
- Exposure assessment of food-borne pathogens
- Exposure assessment of transmissible spongiform encephalopathies (BSE/TSE's)
- Risk assessment of food-borne pathogens
- Quantitative microbiological risk assessment, risk ranking, and predictive modelling
- Epidemiology, testing and risk assessment of BSE/TSE's
- Monitoring of food-borne zoonotic agents
- Monitoring of BSE/TSE's

- Waste management: environmental Microbiology
- Waste management: processing technology
- Antimicrobial resistance
- Molecular epidemiology

Panel on Contaminants in the food chain (CONTAM)

The CONTAM Panel carries out risk assessments in relation to human and animal health due to the presence of chemical contaminants in food and feed.

The CONTAM Panel has the following working themes:

- Chemical compounds which are not intentionally added to food and feed such as metals and organometals, and persistent organic pollutants and other compounds;
- Chemical compounds naturally found in food and feed such as mycotoxins, phycotoxins, plant toxicants, or other compounds;
- Chemical compounds formed during food and feed processing;
- Non-authorised substances in feed and food.

In the framework of risk assessment on contaminants in food and feed, the CONTAM Panel collects and assesses information on the chemical contaminants in the public domain, their occurrence in food and feed, exposure to humans and animals, toxicokinetics, and toxicity including dose-response data. Depending on the available data and the nature of the toxic effects expected, the CONTAM Panel may establish health-based guidance values for contaminants and conclude on the risks for humans or animals related to the exposure to the established heath-based guidance value, or may apply the Margin of Exposure approach to advise on the magnitude of a potential public health issue due to chemical exposure.

These risk assessments provide the basis for risk managers to take effective and timely measures on contaminants occurring in foods and feeds.

Visit the CONTAM key topics section on the EFSA website for more details: http://www.efsa.europa.eu/en/panels/contam.htm

The CONTAM Panel responses to requests in which risk managers require scientific advice to support their risk management decisions. The CONTAM Panel work areas for 2015-2018 are connected to developments concerning human and animal health, and related food and feed policies. Therefore the CONTAM Panel should be in a position to address the new developments in food and feed safety, and changes in food and feed policies by possessing expertise in various scientific fields. Against this background, the present call is especially directed at scientists who have expertise in the following areas:

- Chemistry: (organic, inorganic, analytical chemistry, food and feed processing) in the area of chemical contaminants;
- Exposure assessment: expertise is required especially in relation to dietary exposure assessment of chemical contaminants including knowledge on food consumption surveys;

- Human and veterinary toxicology (preferably experience in risk assessment of chemicals), expertise is regularly required in the following areas: toxicokinetics and toxicodynamics, general toxicology and organ toxicology, molecular and cellular toxicology, genotoxicology, developmental and reproductive toxicology and carcinogenicity. Expertise is also required in areas such as neurotoxicology, allergenicity and immunotoxicology. The CONTAM Panel also needs expertise in conducting toxicological tests in experimental animals and in interpreting toxic effects of chemical contaminants in farm and companion animals;
- Epidemiology: expertise is required especially in relation to biomarkers of the effects and exposure and interpretation of human data;
- Statistics: expertise is required especially in relation to assessing dose-response relationships by e.g. benchmark dose modelling and analysis of complex (epidemiological) data sets;
- Animal nutrition: expertise is required especially in relation to animal exposure assessment of contaminants.

In the coming years, the CONTAM Panel foresees to develop risk assessments particularly in the following areas:

- Natural toxins in food and feed e.g. Fusarium, Aspergillus and Penicillum mycotoxins, and plant toxicants;
- Non-allowed pharmacologically active substances in food and feed e.g. malachite green, chlorpromazine;

Also other areas such as persistent organic pollutants, metals and process contaminants will likely be covered.

Panel on Feed Additives and products or substances used in animal feed (FEEDAP)

The FEEDAP Panel carries out risk assessments of additives, products and substances used in animal nutrition, evaluating the safety for the target species, the user, the consumer of products of animal origin and the environment. It also looks at the efficacy of biological and chemical products/substances intended for deliberate use in animal feed. The Panel performs much of its work in relation to the evaluation/assessment of substances before they are authorised for use and placed on the market in the European Union.

The FEEDAP Panel also develops scientific guidance stating the principles of the approaches followed in the assessments and to assist the industry for preparing technical dossiers in support of feed additive applications. When developing guidance documents, the Panel can hold meetings and public consultations to dialogue with external partners such as stakeholders.

All along, in the period 2015-2018, one of the key objectives of the FEEDAP Panel will be the assessment linked to the renewal the authorisation of feed additives, which takes place 10 years after the original authorisation of the product. It is expected that by 2015, the reevaluation of existing products will arrive to an end. Another important area of work will be

the risk assessment of new products or the extension of use to other target species, in the framework of applications for authorisation. The Panel remains committed to further work, when necessary, for the preparation, review and update of current guidance documents according to the needs within the areas of its remit.

Taking into consideration the areas of work and in order to ensure that an overall and balanced multidisciplinary approach is adopted, the present call is directed to scientists who have expertise in the following areas:

- Animal nutrition/animal physiology/production: the Panel has a permanent need for expertise in this area, for the assessment of efficacy and safety for the target animals. In particular, expertise is required in among others, the following areas:
 - Nutrition of food-producing animals (pigs, poultry, ruminants, fish) and in companion and other non food-producing animals, including nutrient requirements, allowances and toxicity/tolerance and feed formulation.
 - Animal physiology, specially related to e.g., digestive processes, nutrient metabolism, endocrinology, immunology.
 - Other aspects of animal production and management, including feeding techniques, feed formulation and processing.
- -Toxicology: expertise in the following areas is permanently needed in the Panel: general toxicology, genotoxicity and mutagenicity, carcinogenicity, developmental and reproductive toxicity and occupational toxicology.
- Pharmacokinetics/pharmacodynamics/metabolism studies and exposure assessment: expertise is regularly required in absorption, distribution, metabolism, and excretion (ADME) of substances, as well in exposure assessment to residues via food in view of assessing safety for consumers/users (e.g., setting of maximum residue levels).
- Microbiology, molecular biology and biotechnology as an important number of products to be evaluated are either microorganism-based additives or are produced by fermentation, some by genetically modified microorganisms.
- Environmental risk assessment: expertise in ecotoxicity is required for the evaluation of the impact of using feed additives in terrestrial and aquatic environments.

It is expected that experts joining the FEEDAP Panel could support the work of the Panel in participating in plenary and working group meetings and in the preparatory work related to these. In the last years, the FEEDAP Panel held, as an average per year, 8 plenary meetings (2.5 days) and 6 meetings (1 day) for a given working group.

Visit the FEEDAP key topics section on the EFSA website for more details: http://www.efsa.europa.eu/en/panels/feedap.htm

Panel on Genetically Modified Organisms (GMO)

The GMO Panel provides scientific advice on the safety of genetically modified organisms with respect to human and animal health and the environment. To date, this covers primarily genetically modified crop plants and derived products for food and feed uses as well as

genetically modified crop plants for cultivation. The GMO Panel carries out much of its work in the context of assessing GM crop plants market registration applications from industry . EFSA has a centralised role in this pre-marketing assessment since all GM food and feed derived products as well as all living GMOs to be released into the environment are subject to prior evaluation at EU level. The GMO Panel also examines annual post-market environmental monitoring reports concerning each GMO that has been authorised for cultivation within the EU. The GMO Panel interacts with competent authorities of EU Member States, in particular for the environmental risk assessment.

The GMO Panel also carries out work as a response to requests from the European Commission, as well as initiating its own scientific activities. The GMO Panel develops scientific guidance laying down the principles and approaches to be followed by applicants in preparing their GMOs market registration applications. When developing guidance documents, the GMO Panel can hold meetings and embark into dialogue with key stakeholders (e.g. EU Member States, NGOs) through public consultations.

Further information can be found under the GMO key topics section on the EFSA website:http://www.efsa.europa.eu/en/panels/gmo.htm

Against this background, in the period 2015-2018, the present call is especially directed to scientists that have expertise in the following areas:

Biochemical/compositional analysis of crop plants; food and feed toxicology; immunology and food allergy; human and animal nutrition; dietary exposure; horizontal gene flow; vertical gene flow; impact of GM plants on target and non-target organisms; impact on the environment of changed agricultural practices due to cultivation of GM plants; effect of GM plants on biogeochemical cycles (soil communities); post-market environmental monitoring of GM plants; plant genetic transformation and plant breeding; molecular characterisation of plants (e.g., genome stability, expression analysis, protein biochemistry); plant genome biology; experimental design, statistical data analysis, and modelling

Panel on Dietetic products, nutrition and allergies (NDA)

The NDA Panel deals with questions related to the scientific substantiation of health claims, dietary reference values, the safety of novel foods (defined by EU legislation as "foods or ingredients which have not been consumed in the EU to a significant degree before 15 May 1997"), the safety and suitability of substances for use in infant formulae, the potential of certain food ingredients to cause allergic or intolerance reactions, upper tolerable intake levels of vitamins and minerals, and other generic questions related to human nutrition.

A substantial part of the Panel's work is carried out in the context of authorisation procedures pursuant to applications submitted by applicants to the European Commission or Member States, for example applications for health claims or novel foods. The Panel produces scientific opinions in order to deliver independent advice to risk managers, and develops scientific guidance documents in order to assist food business operators in the preparation of applications.

Further information can be found under the NDA key topics section on the EFSA website, http://www.efsa.europa.eu/en/panels/nda.htm

During the period 2015-2018, the NDA Panel's work will focus in particular on the setting of Dietary Reference Values for micronutrients, the safety assessment of novel foods, the evaluation of the scientific substantiation of health claims, and the development/update of relevant guidance documents to assist applicants (taking into account experiences gained with the evaluation of applications in the field of novel foods and health claims). In the framework of the revision of the Novel Food Regulation, it is expected that once it has come into force the NDA Panel will play a central role in the safety assessment of novel food applications, including traditional foods from third countries. In addition, the NDA Panel may be asked to deliver scientific advice on dietetic foods, including the safety and suitability of substances for use in infant formulae, on the potential of certain food ingredients to cause allergic or intolerance reactions, and on generic questions related to human nutrition.

Against this background, the present call is especially directed to scientists who have expertise in at least one of the following areas:

- Human nutrition;
- Infant nutrition/paediatrics;
- Sport nutrition;
- Nutrient requirements;
- Nutritional biochemistry;
- Nutritional epidemiology;
- Human medicine;
- Toxicology;
- Food allergy and intolerance;
- Clinical immunology;
- Food microbiology/microbiota;
- Food technology/chemistry and food processing;
- Food consumption, dietary surveys, intake data / exposure assessment;
- Biostatistics.

Given the complexity of the Panel's mandate, a broad and complementary expertise of future NDA Panel members in the above mentioned areas is required.

Panel on Plant Health (PLH)

The Panel on Plant Health was established in 2006, with the Commission Regulation (EC) No 575/20063. The Panel provides scientific opinions on risks posed by non-endemic living organisms harmful to plants and/or plant products that are associated with movement of plants and/or plant products and that may enter, establish, spread and cause harmful effects on plant production and plants in the environment.

The remit of the Panel includes:

- -conduct of pest risk assessments for the whole EU territory;
- -identification and evaluation of the effectiveness of options reducing the risk of entry, establishment and spread of exotic pests;
- -evaluation of pest risk assessments produced by third parties and/or adaptation to the EU territory of initial assessments done by third parties;
- -evaluation of third party dossiers submitted in support of requests for derogations or amendment of existing EU phytosanitary measures; and development of scientific guidance documents and methodologies for pest risk assessment;

The range of pests of concern includes phytopathogenic microorganisms (viruses and viroids, bacteria, phytoplasmas, oomycetes and fungi), phytophagous invertebrates (insects, mites and nematodes), weeds and parasitic plants. The Panel assesses the impacts of pests on food and feed crops, other plant resources such as ornamental plants and forest trees, and on plant health in natural environments.

For more information on the Panel work please visit: http://www.efsa.europa.eu/en/plhtopics/topic/planthealth.htm

Most of the PLH Panel work is carried out in response to ad-hoc requests on issues where risk managers require scientific advice to support the risk management process and its decisions. On its own initiative, the Panel also identifies scientific issues which require further attention. As part of its remit, the PLH Panel produces a number of Guidance Documents to clarify its approach to risk assessment and to ensure transparency in its work. In the 2015-2018 period, the Panel will face, among others, the major task of advising the Commission in relation to the new regulatory framework on plant health. It is essential that the Panel combines knowledge on the whole spectrum of harmful organisms with horizontal expertise along the pest risk assessment process (modelling, statistics, diagnosis etc.). Against this background, the present call is especially directed at scientists who have expertise and proven scientific excellence in the following areas:

- Pest risk assessment with particular regard to quantitative methods;
- Quantitative pathway analysis;
- Spatial-temporal modelling of pest dynamics, including aerobiology;
- Experimental design and statistical data processing;
- Plant pathology (diseases caused by viruses and viroids, bacteria, phytoplasmas, oomycetes and fungi);
- Plant disease epidemiology and management;
- Invertebrate pests (phytophagous insects, mites and nematodes);
- Integrated pest management and biological control;

- Weed science, including parasitic plants;
- Landscape ecology in relation to plant health.

Plant Protection Products and their residues (PPR)

The Panel on Plant Protection Products and their Residues (PPR Panel) provides independent scientific advice on the risk assessment of plant protection products (commonly known as pesticides) and their residues. This includes, in particular, looking at risks for users of pesticides, for workers in treated areas, for residents, for consumers of treated food commodities and for wildlife.

The PPR Panel may provide opinions on the effects of specific active substances used in plant protection products or on any generic issue related to the safety of the use of pesticides. An additional activity of the PPR Panel is to develop new Guidance Documents on the risk assessment of plant protection products or to review existing ones. This activity includes the development of risk assessment approaches, methodologies and models. In the period 2015-2018, it is anticipated that the activities of the PPR Panel will mainly focus on generic issues and guidance documents.

The present call aims at selecting candidates with expertise and proven scientific excellence in the following areas, alone or combined:

- Plant protection products and their chemical active substances;
- Plant protection products and their microbiological active substances (viruses, bacteria, fungi, etc);
- Physical-chemical properties of plant protection products and their active substances;
- Methods of analysis of plant protection products and of their residues;
- Toxicology and regulatory toxicology;
- Non dietary exposure and risk assessment of plant protection products;
- Dietary exposure and risk assessment of residues of plant protection products in food and feed commodities;
- Environmental fate and behaviour of plant protection products;
- Ecotoxicology;
- Ecology and population dynamics;
- Ecological / Environmental exposure and risk assessment.
- Regulatory toxicology of plant protection products

For more information on the Panel work please visit: http://www.efsa.europa.eu/en/panels/pesticides.htm