

Monday 13th February 2017

To all Academies of ALLEA, EASAC, Euro-CASE, FEAM, and Young Academies

Dear Sir/Madam

European Scientific Advice Mechanism
Scientific advice on the topic *Food from the Oceans*

Call for nominations for: international Working Groups, one Working Group Chair, independent reviewers, position of scientific writer, and published reports

The European Scientific Advice Mechanism (SAM) provides independent and transparent scientific advice to the European Commission, working with a High-Level Group of Scientific Advisors and the European Academies (SAPEA).

SAPEA (Science Advice for Policy by European Academies) comprises the five European Academy Networks: [Academia Europaea](#), [ALLEA](#), [EASAC](#), [Euro-CASE](#) and [FEAM](#) - representing over 100 Academies in more than 40 European countries, and spanning the disciplines of engineering, humanities, medicine, science and social sciences. The SAPEA project runs over four years and is funded through a grant from the EU's Horizon 2020 programme (see Annex 5).

The SAM has received from EU Commissioner Vella (Environment, Maritime Affairs and Fisheries) the following request for scientific advice to inform policymaking:

How can more food and biomass be obtained from the oceans in a way that does not deprive future generations of their benefits?

To address the topic, SAPEA is setting up international and interdisciplinary Working Groups. The work will be divided into two sub-groups, addressing sub-questions within the natural science/technology (WG1) and social science (WG2) domains respectively. The experts will provide their input and be prepared to meet at least twice before the summer of 2017, either in person or virtually, with a further meeting in the autumn. The organisational lead for the topic will be Academia Europaea (AE), working closely with the other European Academy Networks in SAPEA.

SAPEA offers the opportunity to raise the profile of your Academy's work and expertise on a European level, and we ask as a first step for the contribution and support of your Academy by:

- Nominating Academy Fellows or external experts for the Working Groups, in accordance with the expertise indicated in Annex 3
- Nominating an Academy Fellow that will chair the Working Group addressing sub-questions within the social science domain

- Nominating Academy Fellows with broad expertise in the overall topic for peer review
- Suggesting a Scientific Writer able to assist in conveying the complex scientific evidence in an accessible way (the costs of the working hours can be reimbursed by SAPEA)
- Submitting Academy reports or other published material that cover any of the topics listed in Annex 3

Please address your response to Louise Edwards (louise.edwards@sapea.info), SAPEA lead contact, by the **deadline of Friday 3rd March**.

Nominations of experts should be accompanied by a short curriculum vitae (please not more than 2 pages), together with a short explanation on how the nominee's experience meet the areas of expertise needed listed in Annex 3.

Travel costs will be reimbursed by SAPEA for attendance at face-to-face Working Group meetings.

Further details are provided in the annexes to this letter, including terms and conditions on the selection of candidates. A SAPEA Selection Committee will be responsible for the composition of the Working Group (criteria detailed in Annex 4).

Please contact us or Louise Edwards if you have questions or would like further information.

We look forward to hearing from you.

Yours sincerely



Professor Günter Stock
President of ALLEA
Chair of the SAPEABoard



Professor Dag Lorents Aksnes
Chair of Working Group 1

Annex 1

Background to the topic *Food from the Oceans*

Comprehensive information about the Scientific Advice Mechanism:

<https://ec.europa.eu/research/sam/index.cfm?pg=home>

The scoping paper for Food from the Oceans:

<https://ec.europa.eu/research/sam/index.cfm?pg=oceanfood>

Annex 2

Overall project objectives

The *Food from the Oceans* project will:

- Further define the sub-questions and issues to be examined in the context of the overall scoping paper [see annex 3]
- Undertake a review of the evidence, including published material and advice from Academies and leading international experts in the relevant fields, with a report delivered by 15th August. Tasks include:
 - Establishing an appropriate procedure for conducting the review process of interim and final outputs
 - Building a database of gathered evidence, including bibliographic references and abstracts of published material, datasets, interviews with experts, summaries of workshops, expert profiles etc.
- Support the organisation of consultation with wider stakeholder groups, with a workshop on 14th-15th September,
- Draft a report of the findings and analysis, which will undergo rigorous independent peer review in the autumn 2017
- Submit a final report to the High-Level Group by 1st December 2017
- Communicate the project's work and achievements in a transparent way, through effective collaboration between the SAM Unit and the SAPEA Communications Team.

Annex 3

List of issues to be covered and indicative areas of expertise sought

The scoping paper question is:

How can more food and biomass be obtained from the oceans in a way that does not deprive future generations of their benefits?

All following sub-questions should be broadly interpreted to cover different types of biomass potentially suitable for food and feed at all trophic levels. Examples include algae, crustaceans, echinoderms, molluscs and diverse fish species, harvested

through fishing or by other means, as well as through aquaculture, i.e. wild as well as farmed, including those not currently commercially exploited such as mesopelagic.

Sub-questions under consideration:

- 1) Which species, or groups of species, can potentially provide more food and biomass from the ocean in a sustainable way? The biological potential for increased sustainable harvest should be seen in the light of uncertainties associated with effects of climate change, ocean acidification and pollution. For instance, under what levels of climate change are certain options suggested here no longer feasible? Assessment should also be made of the consequences out-take will have on other uses and on the ecosystem, for example, competing uses as well as impact on ecosystem functions.

Experts needed in the fields of marine biology/ecology, fisheries, aquaculture, climate change

- 2) What are today's technical constraints to realising the biological potential for increased sustainable harvest? How, and on what timescale, might these be overcome? Can unwanted by-catch be reduced to safe levels? Can harm and waste from harvest and production be minimised? How can the preservation of valuable nutrients for consumers be maximised? How can environmental sustainability of aquaculture activity be maximised? How can components related to environmental pollution and potential outtake (such as plastic microparticles and risks to the oceans from these) be managed?

Experts needed in the fields of marine biology/ecology, fisheries, aquaculture, marine and coastal technical expertise

- 3) What are the current and anticipated future cost-efficiencies of various types of production alternatives? What requirements apply to different industries in the supply chain (e.g. alternatives such as wild/farmed harvesting – processing – food production – feed production)?

Experts needed in the field of economics

- 4) What are the health and food safety considerations and measures required in regards to nutritional value and potential pollutants? What are the levels of risk under different climate change/acidification scenarios? What other risks exist? What types of intake would be safe?

Experts needed in the fields of marine health, health and safety, biological expertise

- 5) What governance arrangements would be required to develop and ensure sustainable harvest? For instance, legal, certification and other means of ocean governance that limit overharvesting, impacts on the environment and ecosystems and assure continued production.

Experts needed in the fields of political science, legal studies, certification

- 6) What are the consequences for coastal and other populations of any of these types of food production extension? Who is likely to benefit from the extension? Who might be disadvantaged? What are the social and economic development considerations to be taken into account, both within countries and regions, and between countries?

Experts needed in the fields of regional development, regional development economics, fisheries and aquaculture experts more generally, sociologists/anthropologists at specific regional research institutes with marine/coastal expertise

- 7) What is the expected public reaction to the production and consumption of different types of food from the sea? This includes new species and forms of consumption, for example, the promotion of foreign and specific food cultures such as Japanese/sushi, market positioning of other types of food, conversion of non-acceptable fish to surimi for human consumption, the use of hydrolysates as supplements for fish feed and human foods, bio-concentration and increased concentration of nutrients.

Experts needed in food systems research in the natural and social sciences, marketing researchers involved with marine/fish products

Annex 4

Criteria for selection of members to the international Working Group

A SAPEA-appointed Selection Committee will select the experts according to demonstrated excellence in one or more of the fields listed in Annex 3 and other criteria such as:

- Interdisciplinarity; all the relevant disciplines should be included
- Broad geographical coverage of Europe
- Inclusion of experts from non-European countries, as appropriate
- 20% female members as a minimum

Please note that nomination does not guarantee selection to any of the positions (Working Group, reviewers, scientific writer).

Annex 5



SAPEA: Science Advice for Policy by European Academies

- Spanning the disciplines of engineering, humanities, medicine, science and social sciences, **SAPEA** brings together the outstanding knowledge and expertise of Fellows from over 100 Academies, Young Academies and Learned Societies in more than 40 countries across Europe
- SAPEA is part of the [European Scientific Advice Mechanism \(SAM\)](#) which provides independent, interdisciplinary and evidence-based scientific advice on policy issues to the European Commission, working closely with the [SAM High Level Group of Scientific Advisors](#)
- The project is funded through a grant from the EU's Horizon 2020 programme



= countries with SAPEA Member Academies

Academies' independence, academic expertise and convening power make them a critical source of evidence for policymakers and the wider public, providing an unbiased, balanced and transparent perspective. Academies within SAPEA are members of one or more of the European Academy Networks: [Academia Europaea](#), [ALLEA](#), [EASAC](#), [Euro-CASE](#) and [FEAM](#).

SAPEA will provide a means for closer collaboration between Academies, combining Fellows' expertise in engineering, human, medical, natural, social and technical sciences in a unique way.

All Member Academies across Europe are part of SAPEA and are encouraged to participate actively. Opportunities for involvement include:

- **suggesting scientific topics**
- **communicating their latest major scientific outputs to SAPEA**
- **nominating Fellows** to the SAPEA Working Groups, or other events requiring the advice of an expert (e.g. experts' workshops or stakeholder meetings). Fellows' travel costs will be reimbursed
- **hosting Working Group meetings**
direct costs can be covered
- **acting as "Lead Academies"** for a selected scientific topic
- **hosting outreach events** event support can be provided
- **raising the visibility of Academy work at a European Level** by sharing news of activities with the SAPEA Communications Office for the project website