

Developing a mechanism for supporting better decisions on our environment based on the best available knowledge.

## CALL FOR EXPERTS No.3/2017 EKLIPSE – August 2017

Which types and components of urban and peri-urban blue / green spaces have a significant impact on human mental health and mental well-being?

Deadline for Call: 17<sup>th</sup> of September, 2017

EKLIPSE is inviting professionals to join an expert working group (EWG) to assess and synthesize relevant knowledge related to the types and characteristics (components) of urban and periurban natural spaces (blue and green) that have significant impact on human mental health and mental well-being. This is a policy request from the Working Group Biodiversity & Health of the French National Action Plan Health & Environment lead by the French ministry of Environment. The goal of the EWG is to provide recommendations for the conservation, creation, design and management of green and blue spaces that will benefit urban citizens, by maintaining or enhancing their mental well-being and mental health.

The expert working group will cover diverse and complementary skills (including practitioners and policy experts and a broad geographical coverage) and will interact with relevant stakeholders to ensure appropriate methodological choices and uptake of outputs.

- Are you an expert in the relationship between nature, mental health and mental well-being, urban planning and landscape design and management, environmental psychology, or any other relevant discipline?
- Are you interested in knowledge assessment and knowledge synthesis?
- Would you like to contribute directly to a policy-relevant process in your field of expertise?
- Would you like to expand your network and learn about methods of knowledge synthesis?
- Are you interested in collaborating in a trans-disciplinary and multi-cultural programme?

Then please apply at <a href="http://www.eklipse-mechanism.eu/open\_calls">http://www.eklipse-mechanism.eu/open\_calls</a>



## Important dates and information:

- Interested experts should apply before midnight on the **17th September**, **2017** by following the rules and procedures detailed below.
- The members of the expert working group (EWG) will be selected by **6th of October**, **2017** and a kick-off meeting will be organised by EKLIPSE in the week starting October 23rd.
- The EWG will have opportunities and financial and administrative support to meet face-to-face at regular intervals, as appropriate.
- The final deliverables are due 30<sup>th</sup> October, 2018.
- Participation in this expert working group will require approximately 10% of your time please find more information on expectations of and support to EKLIPSE Expert Working Groups <a href="here">here</a>.

EKLIPSE is developing a European Mechanism to answer requests from policy makers and other societal actors on issues related to biodiversity and ecosystem services.

EKLIPSE organizes and facilitates knowledge synthesis processes, horizon scanning and societal dialogue on topics that relate to or impact on biodiversity and ecosystem services by making the best knowledge available. It invites experts to contribute their knowledge.

More information on the processes and the EKLIPSE project funded by the EU in H2020 is available at www.eklipse-mechanism.eu

## 2 Request to be addressed by this call

#### Background to this request:

This request was initially put to EKLIPSE by the Working Group Biodiversity & Health of the French National Action Plan Health & Environment led by the French ministry of Environment. The scoping of the request was discussed with scientists, policymakers and other stakeholders at different levels and through different platforms (conferences, social media, and face-to-face meetings) to ensure the policy relevance of the request detailed below. Furthermore, a first scoping activity has been carried out (« Call for Knowledge »). The results of this call can be found in the EKLIPSE KNOCK forum http://www.eklipse-mechanism.eu/forum\_discussion.

#### Context and justification

Even if the impact of the quality of the environment on human public health is well described and increasingly taken into account for urban and peri-urban design and policies, this may not always be the case for positive impact of biodiversity on mental health and mental well-being. Biodiversity may have a great impact on our mental health and mental well-being. A systematic review of the health and well-being benefits of biodiverse environments has been published in the Journal of Toxicology and Environmental Health (Lovell et al. 2014). It shows that a biodiverse nature has positive effect on mood and is good for health and that disturbed ecosystems might have a negative effect on human well-being.



Bowler et al (2010) also show evidence of the added benefits to health of exposure to natural environment by conducting a systematic review that compares measurements of health or well-being in natural and built environments. In 2010, a study of the Faculty of Public Health shows that green spaces are able to lower the incidence of hyperactivity or depression, but most of all, that people without access to green spaces are more likely to develop stress or anger (FPH 2010, Gidlofgunnarson & Ohrstrom 2007). The importance of natural elements and their impact on mental health can be demonstrated in initiatives such as the development of therapeutic gardens aiming to help Alzheimer patients (FPH 2010). Those studies suggest that there may be sufficient evidence available to enable the design of green spaces for the benefit of human mental health but further consideration and synthesis of the available evidence is needed.

## Knowledge gap to understand the impacts on human mental health

The most recent systematic review on green spaces and mental health was published by Bowler et al. in 2007. As new studies have been published since then, an update could be of great interest for policy makers and urban stakeholders. Bowler et al. (2007) provided evidence of an improvement in mental health after activity in green space compared with activity in built environments, but they did not identify what characteristics of green spaces had an effect. Furthermore, they were not able to provide robust evidence of a link between green space and physical health due to heterogeneity of research approaches, contexts and measurements, as well as numerous confounding factors. More recent studies have linked improvement of mental health and well-being to activity in green space but again, without mentioning the specific effects of the features or components responsible. In addition, while there seem to have been numerous studies published in this area, there is currently no systematic review on the relationship between green and blue spaces, mental health and mental well-being. The present request aims to provide a synthesis of knowledge on the impact on mental health of different components of nature and types of natural space.

### Population of interest

The request concerns human beings of all age, gender, nationalities, educational backgrounds and income. The knowledge assessment will include studies on people affected by mental diseases requiring psychiatric supervision (such as schizophrenia, autism, bipolar and borderline, psychosis, Alzheimer, dementia and neurodegenerative illnesses linked to age, etc.), and will includes studies addressing stress, depression and negative mood (anger, aggressiveness, fear...) as well as positive mood (happiness, sense of place, psychological restoration, etc.).

### Types of intervention to be considered

The assessment will include any action that is related to the design, management and creation of natural spaces in urban or suburban areas to promote human mental health and mental well-being (e.g. feeling of wellness, lowering stress, fatigue and repression, etc.). Management actions will include both



traditional maintenance of green space (e.g. mowing) and policies that result in any changes of interventions (such as not weeding or no longer pruning trees, planting flowerbeds or setting up green walls). Any sort of exposure to green or blue space in an urban or suburban area will be included, whether planned (going for a walk in a forested park or therapeutical garden) or not (e.g. when experiencing the sight of weeds when walking in cities).

The assessment will not address the generic relationship between greenness and well-being/mental health but will seek to find, assess and synthesize the evidence related to the types of habitats (green, blue) and components of nature that have a significant impact on mental health and well-being. Similarly exposure to plants indoors or seen from inside a building (e.g. from a workplace) will not be included.

The aims of the request are to provide recommendations regarding the design, management and creation of natural spaces in urban or suburban areas in order to promote health of urban inhabitants. Such recommendations need to be applicable by various practitioners (such as managers, city-planners...) and should be applicable beyond the French context to include other European Member States.

## 3 Objectives of the call and suggested programme of work

EKLIPSE is looking for an expert working group to assess and synthesize relevant knowledge related to which types of urban and peri-urban blue and green spaces and which characteristics (components) of such spaces have a significant impact on human mental health and well-being.

The EWG supported by the EKLIPSE Team will review, collect and communicate the best available knowledge based on using among those potential methods:

- 1. Cochrane-style systematic review
- 2. Solution scanning
- 3. Meta-analysis
- 4. Rapid evidence assessment
- 5. Causal Chain analysis

The suggested methods aim for a structured step-wise approach in comprehensive identification of the existing research evidence (Figure 1). In the Figure 1, detailed information about the suggested methods and its potentiality to answer the request are shown.



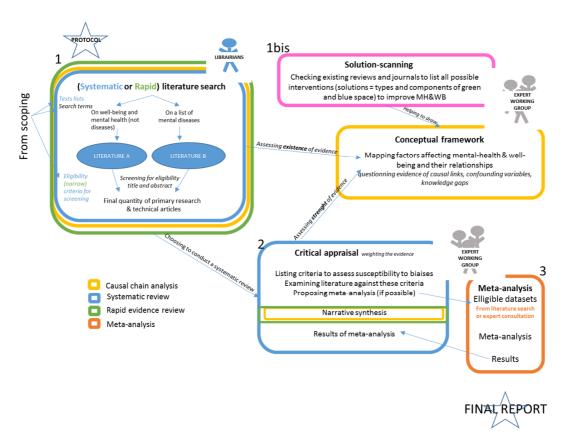


Figure 1. Workflow of suggested different options of methods and their possible combination

## 4 Implementation steps and timeline

The work is expected to follow the EKLIPSE <u>knowledge synthesis process</u>, i.e. it will include the following steps:

- **Kick-off dialogue meeting with EKLIPSE** Knowledge Coordination Body (KCB) to ensure common understanding of the request among experts (within 3 weeks of nomination of expert group).
- Preparation of the work (to be concluded within 12 weeks of nomination)
  - Develop a methodological protocol based on the above suggestions, (with support of the EKLIPSE expert group for knowledge synthesis methods)
  - o Refining agenda and needs for support (e.g. librarian), budget.
  - o Agreement of protocol with KCB and requesters and publication
  - o Review of protocol through open consultation (organized by EKLIPSE)
  - Respond to and integrate the results of extended peer review on the methodological protocol

### Conducting the work

- Collating and assessing existing knowledge relevant for the request (possible help of librarians to be agreed)
- Draft report including recommendations for measures potentially effective across
  Europe concerning policy, management and research.



- o Early draft (to be discussed with KCB and requesters)
- o Full draft completed for review

### Finalisation

- Extended peer review of the draft report by scientists (selected by EKLIPSE) and involving also requester and stakeholders (via open consultation, organised by EKLIPSE)
- o Respond to and integrate the results of extended peer review on the final report
- o Disseminate final report and its results as required, by October 2018.

## 5 Support provided by EKLIPSE

**EKLIPSE team:** The expert working group will be supported in all steps by the EKLIPSE Secretariat in communication, documentation (via the EKLIPSE website), and dissemination of products as required for this request. The working group will be supported thematically and strategically by the KCB.

**Financial support**: EKLIPSE activities rely on in-kind contributions as in similar science-policy processes. The benefits for experts and institutions arise from the networking in the group and the visibility of expertise to policy and society via the products. EKLIPSE will actively support the expert working group with a maximum budget of €30.000 that can be granted for the following tasks:

- the kick-off meeting, and a second EWG group meeting will be hosted by and travel costs covered via EKLIPSE funds.
- upon specific request, individual experts from low income European countries or experts not having financial support from their institution (e.g. NGOs, consultants) might be supported via honorary contracts by an EKLIPSE partner institution.
- literature review and management (for this a separate contract is required see section 6).

**Technical support**: EKLIPSE will cover the layout, printing, and dissemination of interim and final products, i.e. using the OPPLA Platform<sup>1</sup>.

# 6 Eligibility and applicant information

### 6.1 Selection criteria for the composition of the Expert Group

Selection of the expert working group will be done by the KCB according to selection process and criteria outlined below (6.2) and on the EKLIPSE website.

The expert working group should cover all relevant disciplines including natural, social, economic and planning sciences.

Gender balance and geographical diversity of EU countries will be considered in the selection. If teams are applying, this will also apply, and the KCB may decide to complement a team selected with additional individual experts.



The working group is expected to have up to 10 experts.

## 6.2 Selection criteria for individual experts

- Demonstrated expertise in relation to the call covering one or more of the following: mental health, public health, health policy, health and biodiversity, environmental psychology, ecology and conservation biology, landscape ecology planning and design, urban planning, methods for knowledge synthesis, and any other relevant discipline.
- Experience with biodiversity and ecosystem services and/or sustainable development as well as with European policy processes is desirable.
- Experience in inter- and transdisciplinary work on similar topics and in science-policy interface processes is desirable.
- Experts will have to comply with the principles and rules of EKLIPSE (e.g. conflicts of interest policy (see http://www.eklipse-mechanism.eu/our\_ethical\_framework for more detail).
- Project partners of EKLIPSE, or members of their institutions and KCB members are excluded.

## 6.3 Process and eligibility criteria for supporting contracts

Based on the needs identified by the EWG in its kick-off meeting, EKLIPSE may support the work of the group by sub-contracting some tasks to individual experts or institutions, from and beyond the Expert working group via working contracts.

The aim of these would be, for instance, to allow the recruitment of at least one skilled person for the literature search and screening based on the details provided in the protocol written by the EWGroup. An EKLIPSE partner would prepare and issue a (restricted) call for tender for this purpose.

Moreover, honorary contracts will be given upon request to experts chosen for the expert groups on an individual basis, if they could not contribute otherwise. This may be applicable to experts from low income European countries or experts not having financial support from their institution (e.g. NGOs, consultants). In case you require such support please contact the EKLIPSE secretariat (secretariat@eklipse-mechanism.eu).

### 6.4 Data and information policy

All results will be made publicly available through the EKLIPSE website and transparent procedures will apply, following Creative Commons Agreement 4.0<sup>2</sup>, which includes the reference of authorship and involvement<sup>9</sup>.

<sup>&</sup>lt;sup>2</sup> See http://creativecommons.org/licenses/by/4.0/. It permits unrestricted use, distribution, and reproduction in any medium, provided appropriate credit is given to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.



## 6.5 Information to provide

The EKLIPSE form should be completed, including a list of relevant publications and outlining relevant experience on the topic and details of experience in previous assessments or knowledge synthesis processes.

# 7 Application and notification of results

## 7.1 How to apply

The EKLIPSE expert form can be found on the EKLIPSE website under 'Open calls'. The completed form should be submitted at latest by midnight on September 17th, 2017.

Should you require any further information do not hesitate to contact us: secretariat@eklipsemechanism.eu.

### 7.2 Announcement of the results

Successful applicants will be notified directly by EKLIPSE by **October 6th, 2017**. As soon as they accept the nomination, names of selected experts will be made public on the EKLIPSE website.

EKLIPSE has received funding from the European Union's Horizon 2020 program under grant agreement 690474

