



# EKLIPSE

Knowledge & Learning Mechanism  
on Biodiversity & Ecosystem Services

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

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

More information on the processes and the EKLIPSE project funded by the EU in H2020 is available at  
[www.eclipse-mechanism.eu](http://www.eclipse-mechanism.eu)

**CALL FOR KNOWLEDGE FOR INITIAL SCOPING, EKLIPSE – FEBRUARY 2017**

**Deadline to answer the Call: the 18<sup>th</sup> of April, 2017**

**TOPIC:**

***What are the impacts of electromagnetic radiation on wildlife  
(invertebrates, vertebrates and plants)?***

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## **1 Invitation to share knowledge for informed decision-making**

EKLIPSE is inviting scientists, policy makers, practitioners and other societal actors to share their knowledge on this specific selected request to explore available resources and evaluate if the **request requires a structured knowledge gap analysis and consultation on research priorities.**

A literature screening exercise was done prior to the selection of the request and resulted in a compilation of research papers and reports related to the topic. The compilation can be found [here](#).

***We would welcome the following type of information:***

- ***published articles on studies related to measuring potential impact of electromagnetic radiation on invertebrates or vertebrates, , including studies demonstrating no impacts.***
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- **Grey literature / unpublished report compiling results of scientific studies looking at impacts of electromagnetic radiation on any group of invertebrate or any group of vertebrate, including studies demonstrating no impacts.**
- **Any existing studies looking at the role of invertebrates or vertebrates as indicators for assessing potential electromagnetic radiation on human health**
- **Existing knowledge synthesis of impact of electromagnetic radiation on human health**

In [physics](#), electromagnetic radiation (EM radiation or EMR) refers to the waves (or their quanta, [photons](#)) of the [electromagnetic field](#), propagating (radiating) through space carrying electromagnetic [radiant energy](#). It includes [radio waves](#), [microwaves](#), [infrared](#), [\(visible\) light](#), [ultraviolet](#), [X-](#), and [gamma](#) radiation. .Electromagnetic radiation has both electric and magnetic field components, which oscillate in phase perpendicular to each other and perpendicular to the direction of energy propagation. Electromagnetic radiation can be classified into ionizing radiation and non-ionizing radiation, based on whether it is capable of ionizing atoms and breaking chemical bonds<sup>1</sup>

**Please contribute with comments and relevant knowledge/references on the topic by providing information and/or participating in the discussion on this topic in the [KNOCK Forum](#)**

## 2 Background on EKLIPSE

EKLIPSE is an EU-funded project that started in February 2016. With the support from the European Commission and a high-level advisory board, the project aims to establish a robust and flexible long-term mechanism for policy support on biodiversity and ecosystem services, communicating and engaging a wide set of knowledge holders in its work and ensuring tailor-made outreach of results in this field – to knowledge requesters and society more broadly.

The success of EKLIPSE and its resulting mechanism is in everyone’s hands:

- the ‘requesters’ from policy and society who need to know what knowledge is out there to answer their policy or societal needs;
- the knowledge holders (be they scientists or other citizens) who want their knowledge to mean something; and
- the extensive networks working on biodiversity and ecosystem services who have the enthusiasm and knowledge to make the mechanism work in the long term.

## 3 Objective of the call and request to be addressed by this call

EKLIPSE coordinates innovative and transparent approaches for science, policy and societal actors to jointly provide the best available evidence leading to better informed decision-making and to identify current and future research priorities. The request was proposed by Buglife, a charity promoting conservation of invertebrates, through the EKLIPSE call for Request (CfR.1/2016). The objective of the present call for knowledge is to launch an initial scoping on the request to assess available assessments, existing studies and resources – both published and unpublished.

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<sup>1</sup> [https://en.wikipedia.org/wiki/Electromagnetic\\_radiation](https://en.wikipedia.org/wiki/Electromagnetic_radiation)

Further information on the request as submitted by the requester can be found on the [KNOCK Forum](#)

## **4 Next steps: How EKLIPSE will answer the request**

If EKLIPSE and the requester reach an agreement on proceeding with the request, the request will be framed and finalised jointly with some targeted experts on the topic and a **first knowledge gap analysis** will be performed before the organisation **of a larger consultation of relevant science, policy and societal actors to identify research priorities.**