Date: 26th November 2019

Subject: 2019-2021 Call for Data on Critical Loads

Dear Madam or Sir,

The International Co-operative Programme on Modelling and Mapping is pleased to invite you to participate in the Call for Data 2019-2021 on Critical Loads which has been adopted by the Working Group on Effects (WGE) during the 5th joint Session of the EMEP Steering Body and the Working Group on Effects (Geneva, 9 – 13 September 2019).

The main objective of this Call for Data is to review and update empirical Critical Loads and steady-state Critical Loads. The deadline for the deliverables for the empirical Critical Load topic will be spring 2020 for the first report and spring 2021 for the second report. The deadline for the deliverables for the steady-state Critical Load topic will be spring 2020 for the status report and spring 2021 for the most recent data delivery. Below you will find initial information on the envisaged review process to plan your activities and resources until spring 2021. More detailed information will follow in the coming weeks.

Review of empirical Critical Loads

The contribution of the NFCs to the review process of empirical Critical Loads in 2020 will include inputs for the submission of two reports and the preparation and participation in approximately two expert workshops.

1) For the preparation of the review process of empirical Critical Loads the CCE encourages every NFC to submit a **first report by 1st April 2020** answering the following questions for their country:
    a. Are empirical Critical Loads applied at local and/or national level in your country?
    b. Are empirical Critical Loads (ranges) used as parameters (or limitations) for modelling steady-state Critical Loads in your country?
    c. How are the modifying factors applied in your country?
    d. According to which methods are empirical Critical Loads mapped in your country (e.g. spatial resolution, range, modifying factors)?
    e. Which habitat type classification in terms of Critical Load modelling or the assessment of ecosystem effects is mainly used in your country (e.g. EUNIS, Annex 1 Habitat Directive)?
    f. The review of empirical Critical Loads should be carried out in cooperation with the NFCs and further national experts. Therefore, the report shall include a list of national experts whose skills addresses *inter alia* empirical Critical Loads including contact details structured based on EUNIS classes.
    g. The review process will be accompanied by expert workshops which shall be organized and carried out jointly by the ICP Modelling & Mapping, CCE, NFCs and further national experts. The CCE asks NFCs to examine whether they would wish and would be able to organize one of these. The potential dates for the workshops will be discussed at the next Task Force meeting in Stockholm from 21st till 23rd April 2020.

2) A **second report** shall be submitted by every NFC **by 1st March 2021**. This report shall contain national findings - originated from experiments or research work - on dose-response relationships which are likely to be included within the review of empirical Critical Loads. This literature review should summarize the national, scientific state of the art, available data and a recommendation for revision depending on the results of the assessment.

Review of steady-state Critical Loads

In preparation of the update of national steady-state Critical Loads we ask the NFCs to prepare and send a brief **status report by 1st April 2020** to the CCE and ICP Modelling and Mapping in which tentative methods and challenges of the national modelling of the steady-state Critical Loads are assessed critically. This may include the availability and robustness of input data to calculate the different terms of the SMB-equation (e.g. denitrification, critical nitrogen leaching, weathering of basic cations). The objective is to prepare for the modelling task and to identify aspects of the model which require improvement. We kindly ask the NFCs to present their status report at the next **Task Force Meeting Modelling and Mapping in Stockholm from 21st till 23rd April 2020**.

In view of the upcoming review of the Gothenburg Protocol, we ask the NFCs to send their latest national steady-state Critical Load **data including report** to the CCE by **1st March 2021**. This updated data shall be policy relevant (i.e. also for the Review of the Gothenburg Protocol) and will have a medium-term validity (approx. 5 years) for political processes and decisions. More detailed technical information in order to prepare the update of steady-state Critical Loads will follow in summer 2020.

The Chair of the Task Force of the ICP Modelling & Mapping and the CCE expect results of this call to be an important step in meeting the requirements of the Long-Term Strategy of the Convention. Please send any input to both CCE and the Chair of ICP Modelling and Mapping (contact details below) and do not hesitate to contact us if you have any questions.

Kind regards,

Alice James Casas
Chair of the ICP Modelling & Mapping
INERIS, Verneuil-en-Halatte, France
Email: Alice.JAMES@ineris.fr

Markus Geupel
On behalf of the Coordination Centre for Effects
UBA, Dessau-Roßlau, Germany
Email: cce@uba.de

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