

CEFIC Long-range Research Initiative Request for Proposals (RfP)

Title and Code Number

Optimizing the benefit of REACH worker exposure assessments: ensuring meaningful health risk communication – **LRI-B23**

Background

There is an increasing recognition and acceptance across stakeholders that within REACH the worker exposure assessment and Chemical Safety Assessment (CSA) need to better integrate available information on human exposure. At the same time risk communication via the Annex of the extended safety datasheet (ext-SDS) needs to offer meaningful advice. Recent discussion at the Exchange Network on Exposure Scenarios (ENES) and REACH Exposure Expert Group (REEG) have highlighted how information on key exposure determinants and effective exposure control strategies is communicated and particularly the critical role played by the ext-SDS Annex. In order to meet such ambitions, REACH exposure tools must be fit for purpose in terms of their abilities to generate reliable and representative estimates of exposure while at the same time deliver meaningful outputs (in terms of operational conditions (OCs) and risk management measures (RMMs)) that can be suitably communicated and understood by users in the workplace. Following on from this, it is now also accepted that Tier2 REACH worker models (such as advanced reach tool (ART)) need further refinement for them to be able to deliver more representative and reliable results.

However, there is currently no systematic understanding of how information (on chemical exposures) is understood and acted on within workplaces (both at the worker and enterprise levels). In the absence of this knowledge, it is uncertain which information is key and which has a lesser value. This, in turn, affects how exposure models (in terms of their inputs and outputs) might be structured to improve both their relevance (to everyday conditions) and usefulness (in terms of providing outputs that align with the 'needs' of different downstream user (DU) groups).

Objectives

This project is looking to:

- Building from recent work examining the interface of chemicals regulation and workplace health risk management practice/needs (e.g. ENES, VNCI, Dutch Occupational Hygiene Society), to undertake appropriate empirical research that helps clarify the type and form of OSH related information that might be considered as 'essential' for DUs of chemicals in order that they can be confident its implementation represents practical and effective means for controlling risk.
- Based on the research, to examine the extent to which the information is being made available to different DU groups (and particularly via the ext-SDS). This work would be expected to not only identify gaps (or superfluous information) but also what may

constitute suitable mechanisms for communicating any ‘missing’ information. At this point, the focus of the work should be on the avoidance of health risks.

- Identify a set of parameters that will serve as foundations for the improvement of exposure models in terms of their ability to not only provide reliable exposure estimates but also relevant and understandable output information on exposure control(s) i.e. as both key input variables and useful and understandable outputs that are aligned with REACH terminology
- Develop a picture of the relationship between the science of exposure assessment (models as well as use of exposure data) and those sociological and other factors that influence how such information is comprehended and implemented by different DU stakeholders that will enable the emphases within current chemicals and occupational safety and health (OSH) regulatory policies to be assessed. Included in this will be experiences from approaches currently used to share information on relevant use characteristics (e.g. DU use maps, SWED’s, GESs, etc.).

The project’s objectives are to:

1. Using appropriate surveys methods (which could include group interviews, workshops, and the development of case studies), work with/through key stakeholders to determine the core information required by DUs to effectively implement chemicals health risk control advice, with particular focus on the information contained in REACH ext-SDS ESs and supplied by DUs through use maps, SWED’s, etc.
2. Understand the relationship between how (worker) exposure models derive exposure estimates and how these various determinants are (and/or should be) communicated to DUs, as well as the capacity of DUs to understand and effectively implement such advice, and to communicate their use conditions back to the supplier.
3. Through suitable public engagement, share the understandings of the analysis with key stakeholders e.g. other ‘owners’ of REACH worker exposure tools and other stakeholders, for them to be able to identify where and how their models, and/or the processes and vehicles of worker risk communication, might be further improved.
4. Use the understandings to examine the extent to which the chemicals supply chain is able to provide appropriate information to describe the use conditions that are entered in the tools for exposure assessment in order that the current REACH worker exposure models (e.g. the ART Tier2 model) may be better aligned to REACH terminology (e.g. PROCs) and key exposure/risk management outputs (RMMs, OCs).

Scope

CEFIC is seeking to ensure that the information from exposure assessments communicated to downstream users, including information on controlling workplace chemical exposures is relevant and understandable and supports existing OSH regulation. Meeting this objective requires a combination of research approaches, as well as dialogue across interested stakeholders. It is anticipated that the research will provide a foundation for enabling workplace exposure models to be further improved (particularly

in terms of their relevance) as well as an assessment of the extent to which current methods of communication might be improved.

This project will need to account for:

- Previous discussions and activities in the area (such as those of ENES and REEG as well as those at DG EMPL and the Bilbao Agency)
- The views that different stakeholders may hold and the fact that such stakeholders will vary across different areas e.g. chemicals, OSH, environment
- The fact that information on chemicals exposures can be expected to have a wide relevance e.g. different regulatory fields and regimens
- The need to distinguish between statutory obligations and voluntary initiatives, and the fact that these may differ regionally and to respect such distinctions

Deliverables

The final report shall contain an executive summary (2 pages max), a main part (max. 50 pages) and a detailed bibliography together with comprehensive annexes including the results of the different surveys, stakeholder contacts, etc. It is expected that the findings will be developed into at least one peer-reviewed publication, following postering(s) and presentation(s) at suitable scientific conference(s). At least one publication shall be open-access.

Cost and Timing

Expected to start in Q1/2020, duration 18 months
Budget in the order of €200,000

Partnering/Co-funding

It is anticipated that this project will be multidisciplinary and apply research skills from both the natural and social sciences. It is also expected that based on the primary project objectives that successful applicants will show a knowledge of and build from recent stakeholder discussions and activities in the area (such as ECHA ENES / Member State regulatory authorities / OECD / CEFIC sector activities). In this respect, applicants should provide an indication of additional partners and funding opportunities that can be appropriately leveraged as part of their proposal. Partners can include, but are not limited to industry, government/regulatory organizations, research institutes, etc. Statements from potential partners should be included in the proposal package.

Fit with LRI objectives/Possible regulatory and policy impact involvements/Dissemination

Applicants should provide information on the fit of their proposal with LRI objectives and an indication on how and where they could play a role in the regulatory and policy areas. Dissemination plans should also be laid down.

DEADLINE FOR SUBMISSIONS: September 1st, 2019



Please see www.cefic-lri.org/funding-opportunities/apply-for-a-grant/ for general LRI objectives information, project proposal form and further guidance for grant applications.