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Programme item: A.2

Discussion document

CSR/ES Roadmap Action 2.3 Exposure Assessment inputs for workers

Concept Document – communication in the supply chain with respect to safe use of chemicals by workers

The objective of Roadmap action area 2.3A is to develop a template for exposure assessment inputs for workers, analogous to SpERCs and SCEDs. These inputs are intended to provide realistic, sector-based conditions of use to support registrants in carrying out their CSA and generating their ES for communication.

This action area is part of a wider strategy for the communication system in the supply chain with respect to safe use of chemicals. The objective of this document is to present the overall concept, to ensure that it is understood and agreed by all stakeholders involved.

1. Communication elements

The exposure assessment input is termed a Sector-specific Worker Exposure Description (SWED). The SWED is one element of several communication elements that are already in use or are under development, each of which are described here.

Sector use maps

Sector organisations have developed use maps to provide information on uses and conditions of use of their products (mixtures) to registrants. These use maps are currently being improved under roadmap action area 2. The use maps include links to exposure assessment inputs for the environment (SpERCs), consumers (SCEDs) and workers (SWEDs), which provide details on the operational conditions and risk management measures.

Sector-specific Worker Exposure Description (SWED)

SWEDs provide information on the use and the conditions of use of substances, as such or in mixtures, for use by the registrant in developing their CSA for a substance. SWEDs were initiated by downstream user sector organisations and have been adapted to fulfil the broader needs identified for Roadmap action area 2.3A.

A draft SWED template has been agreed that:

- is easy to map to the inputs for exposure estimation tools (and allows for automation with tools such as Chesar)
- includes input to ECETOC TRA as a starting point, including accommodating potential updates to ECETOC TRA

- accommodates input to other models (beyond TRA) and measured data (optional)
- incorporates standard phrases from the ECom phrase catalogue to facilitate the generation of the ES for communication.

A completed SWED describes the conditions of use relevant for one or more contributing scenario (CS). It is envisaged that the SWEDs would be used to describe the more relevant and realistic uses only, and not all possible uses/conditions of use. Where conditions of use differ depending say, on the hazardousness or concentration of the product applied by the end-user, different CS and corresponding SWED information should be defined for the same activity (e.g. flooring with water based primers and flooring with solvent based primers).

The template also includes the option to provide more specific description of risk management measures (when needed), based on information available in sources such as control guidance sheets or risk management libraries, etc.

Safe Use of Mixtures Information (SUMI)

In tandem with SWED development, downstream user sector organisations are developing a template for safe use of mixtures information (SUMI) sheets for end-users (Roadmap Action Area 4.4.B). SUMIs are sector-specific and describe the conditions of safe use for a given use of a mixture in a readily understandable way for the worker. They provide information for all the activities contributing to the use of a mixture (e.g. preparing mixture for application, applying and clean-up for a coating material). They address worker aspects but environmental advice may be included (optional).

The formulator forwards the relevant SUMI to the end-user with the safety data sheet for the mixture. A cross-reference between SWED and SUMI can support formulators in selecting the appropriate SUMI, in order to communicate with the end-user.

The SUMI are presently under development by DUCS sectors. A template has been agreed and presented at ENES 8 and the completion of the contents is planned for early 2016.

Exposure Scenario/Generic Exposure Scenario

Generic exposure scenarios were developed by some sector organisations a number of years ago to provide registrants with exposure scenarios¹ on which to base their CSA, and to support communication in the supply chain. They are generally applicable for a group of substances with a similar risk profile and often aggregate individual Exposure Scenarios for a particular area of application such as a process chemical, cleaning agent or coating.

Their current implementation and usage varies with sectors.

2. Overview of proposed system and roles

The proposed system for the SWED/SUMI is illustrated in figure 1 and the activities of the key players are described below.

Sector Organisations

Once the templates are agreed and available, sector organisations generate the SWED and SUMI, in dialogue with suppliers, formulators and end-users.

¹ GESs on workers describe the conditions of use in form of contributing scenarios.

Registrants

The registrant selects the relevant use maps and uses as a basis for the chemical safety assessment (CSA) for his substance. The exposure scenarios for the substance will be based on the realistic conditions reflected in the use map/SWEDs. The relevant information is communicated using the standard phrases indicated in the use map/SWEDs. The exposure scenarios for the substances could potentially refer to the relevant SWEDs, to assist the formulator in selecting the appropriate SUMI. Note: the way in which the registrants select the uses relevant for his substance from the use map has not been tested so far.

Formulators

For a given mixture and use, the formulator may select the appropriate SUMI to send downstream with the safety data sheet for his mixture. Reference to SWEDs may be included in the ES of incoming substances. If it is not, the formulator needs to check whether the conditions of use communicated to him in the ES of incoming substances correspond to the information provided in the SUMI to be selected for the mixture.

End users

The benefit of SUMIs is that the end user receives clear, realistic and relevant information for the mixture that supports chemical risk management at his site under REACH and other environmental health and safety legislation. In the less frequent situation where the end user purchases substances and receives exposure scenarios, the improvements with respect to harmonisation should facilitate the checking of ES and implementation of the measures.

3. Next Steps

It is intended to develop full worked examples before finalisation of the draft template. Initially, the use map/SWED/SUMI elements will be developed by DU sector organisations, led by EFCC / FEICA / A.I.S.E. (mid November). These will be further developed with associated CSR and ES for communication by ESIG (mid to end November). This should allow for finalisation of the template by year end. This will then be filled by sector organisations in the first half of 2016. IT related issues relating to generation of XML files, link to Chesar etc., will also be resolved.

Opportunities to align the REACH-based SWED/SUMI approach with risk assessment under other legislations (CAD/CMD) will be explored.

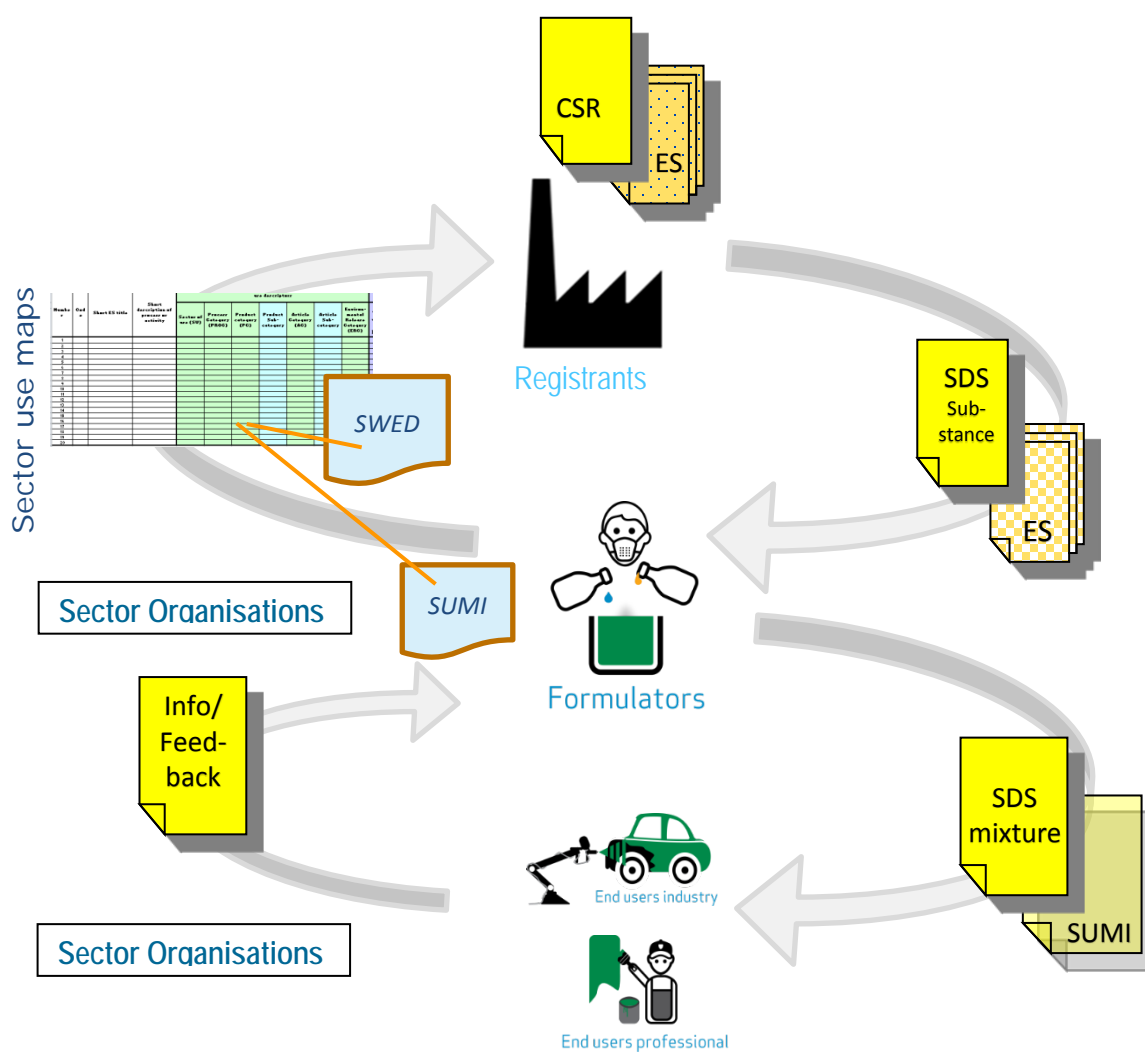


Figure 1 Illustration of proposed communication system