

ENES Work Programme to 2020

Towards good quality information on the safe use of chemicals in the REACH chemical safety report and the extended safety data sheet

April 2018

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LIST OF ABBREVIATIONS

ACEA	European Automobile Manufacturers' Association
BAuA	Bundesanstalt für Arbeitsschutz und Arbeitsmedizin
Cefic	European Chemical Industry Council
CheMI	European Platform for Chemicals Using Manufacturing Industries
Chesar	Chemical Safety Assessment and Reporting tool
CLP	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures
CSA	Chemical safety assessment
CSR	Chemical safety report
DU	Downstream user
DUCC	Downstream Users of Chemicals Coordination Group
ECHA	European Chemicals Agency
ECETOC	European centre for ecotoxicology and toxicology of chemicals –
FIEC	European Construction Industry Federation
TRA	targeted risk assessment (TRA)
EEA	European Economic Area
EMKG	Einfaches Maßnahmenkonzept Gefahrstoffe (EMKG) Translation: <i>Easy-to-use workplace control scheme for hazardous substances</i>
ENES	Exchange Network on Exposure Scenarios
ES	Exposure scenario
ESCom	Exposure scenario for communication (ESCom) standard project
ETEAM	Evaluation of Tier 1 Exposure Assessment Models under REACH (eteam) Project
Fecc	European Association of Chemical Distributors
GES	Generic exposure scenario
IUCLID	International uniform chemical information database
LCID	Lead Component IDentification method
OC	Operational condition
ORGALIME	European Engineering Industries Association
REACH	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RMM	Risk management measure
SCED	Specific consumer exposure determinant
SDS	Safety data sheet
SECO	State Secretariat for Economic Affairs, Switzerland
SPERC	Specific environmental release category
SUMI	Safe Use of Mixture Information

SWED	Sector-specific worker exposure description
TUKES	Turvallisuus- ja kemikaalivirasto (Finnish Safety and Chemicals Agency)
UEAPME	European Association of Craft, Small and Medium-sized Enterprises

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1. Introduction

This document sets out a programme of actions to improve information on *safe use* in the supply chains for chemicals. Its focus is the generation, communication and application of use and exposure information on hazardous substances and mixtures under the REACH Regulation, and the corresponding roles of registrants, distributors, formulators and end users. The programme builds on earlier work on the so-called ENES tools, to help registrants and formulators in their tasks.¹ It includes new elements to address the needs of industrial and professional end users of chemicals. The actions have been identified in consultation with the corresponding stakeholders. The programme is a true collaborative effort, whose successful execution depends on the commitment and investment of all stakeholders.

The **ultimate objective of the improved communication in the supply chain** is that the use of chemicals would become increasingly safer in the European Economic Area (EEA) (i.e. decreasing concentration or absence of hazardous substances in humans and in the environment; decreasing incidents of ill health among workers and consumers). For the chemical safety assessment and risk management advice, this means:

- Manufacturers and importers of substances would assess their products against the real life conditions of use in their markets, and identify whether or not additional risk management measures or even the cessation of supply into certain uses (uses advised against) would be required.
- Downstream companies not exercising adequate control would increasingly implement better practices, based on the information received in the extended safety data sheets.

The sections beneath set out how this programme has emerged and the contributing organisations. The actions are set out in Section 3.2.

2. Background

Generating knowledge about chemicals, information in the supply chain and regulatory action (where needed) are the three main pillars of REACH. REACH, together with the CLP Regulation, is, in this respect, the EU's main contribution for implementing the overall goal of the United Nation's World Summit for Sustainable Development (WSSD): achieve the sound management of chemicals throughout their lifecycle so that, by 2020, chemicals are used and produced in ways that lead to the minimisation of significant adverse effects on human health and the environment.

REACH prescribes in a detailed way the information requirements, the scientific method for the chemical safety assessment (CSA), the format for the chemical safety report (CSR) and the format of the safety data sheet (SDS). However the process of generating exposure scenarios (ES) and the ways to express the operational conditions (OC) and risk management measures (RMM) leading to control of risk (i.e. *conditions of safe use*) for the various uses of a substance are largely left open in the legal text. To support the practical implementation of the REACH exposure scenario concept a group of industry associations, Member States and ECHA published the so-called *CSR/ES Roadmap - a cross-stakeholder plan of actions towards 2018*.

¹ CSR/ES Roadmap, https://echa.europa.eu/documents/10162/15669641/csr_es_roadmap_en.pdf

This document takes forward that work under the title *ENES Work programme*.

The work of the CSR/ES Roadmap between 2013 and 2016 focused on improving the quality of information at the top of the supply chain, for registrants to be able to carry out their chemical safety assessment. It also covered support to formulators in transposing the information they receive in the exposure scenarios for substances into *safe use* information for their mixtures.

In the context of this document, the term **safe-use information** is used with the following meaning: operational conditions and risk management measures suitable to ensure control of risk (= safe use), as demonstrated in a Chemical Safety Assessment under REACH. Those use (or task)-specific conditions and measures may be described:

- in the **ES** annexed to a SDS for a substance;
- in an annex to a SDS for of a mixture for end use, for example in the form of a **SUMI** (*Safe Use of Mixtures Information*).
- in Sections 7/8 of the main body of an SDS for a mixture.

By 2016, a basic set of tools had become available for generating and communicating exposure scenario information in an efficient and consistent way.

Figure 1 provides an overview on how the “machinery” for communicating on the conditions of use up and down the supply chain is foreseen to work.

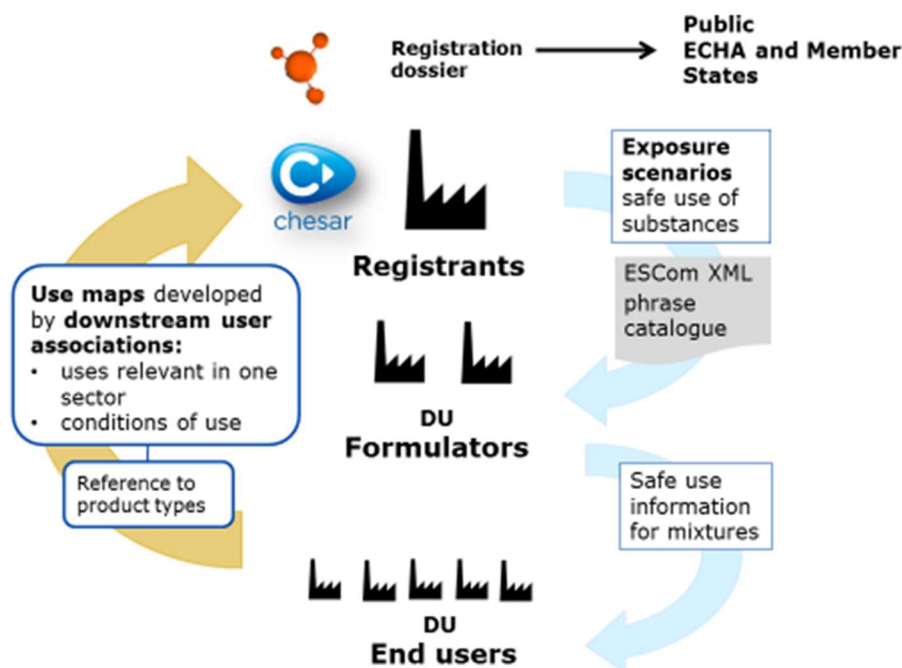


Figure 1: Tools supporting communication up and down the supply chain.

2.1 Registrants and downstream users - the supply chain machinery

Based on the experience so far, there is a broad agreement among stakeholders that the characterisation of uses should ideally be carried out by downstream user (DU) sector

organisations for their market. Communication up the supply chain between downstream users and registrants is therefore essential so that registrants have the best knowledge possible on the use of their substance in their various markets. Based on the information obtained and their knowledge on the substance properties, registrants can assess more realistically how the substance can be safely used. They can then communicate information on the safe use relevant for their substance down the chain.

If the system described above functions as intended, good quality and relevant assessments will be carried out by registrants, and appropriate information for the safe use of the substance/mixture will be communicated in the supply chain, ensuring the control of risks. Member States and ECHA will utilise the information from the registration dossiers to focus their regulatory activities on the substances that matter. This means at the same time that substances for which industry convincingly demonstrates control of risk are less likely to be addressed by regulatory action.

The following tools specifically support the **communication up** the supply chain (see Figure 1):

- Harmonised templates for all the elements of sector use maps: use description, Sector-specific Worker Exposure Descriptions (SWEDs), Specific Consumer Exposure Determinants (SCEDs), and Specific Environmental Release Categories (SPERCs).²
- The sector use maps include references to categories of mixtures in order to facilitate the later transfer of the *safe use* information for substances to *safe use* information for mixtures.
- Chesar as a tool to carry out the chemical safety assessment and to make available its results (via IUCLID and the chemical safety report) to authorities.

The following tools specifically support the **communication down** the supply chain (see Figure 1):

- Chesar as a tool to carry out the chemical safety assessment and to export its results (the exposure scenario for communication) via the safety data sheet systems down the supply chain.
- Standard formats and phrases to communicate safe use advice on substances based on the ECom standard.
- Methods to generate safe use information for mixtures: Lead Component IDentification (LCID) methodology and the Safe Use of Mixtures Information (SUMI) approach.

Downstream users have to carry out three tasks:

1. Compare the received information on the conditions of safe use (received with the safety data sheet) with their own activities and establish whether their uses are covered and whether their conditions of use match.
2. Check whether the characteristics of their products (mixtures or articles, depending on the life cycle stage), such as the concentration of substances or amounts per

² In October 2016, industry (Cefic, DUCC) and ECHA signed a joint statement on the crucial role that **sector use maps** play for generating accurate and clear information on safe use of chemicals and for communicating it down the supply chain. <https://echa.europa.eu/documents/10162/13563/Joint+statement+on+use+maps/d76045c3-a4ad-40db-a617-e8c429130071>

application, match the conditions for safe use described in the safety data sheet they have received for their raw materials.

3. As a formulator, derive *safe use* information for their mixtures, taking into account safe-use information received for the single components. This advice may be directed to industrial and/or professional users of the mixture (to be communicated via the safety data sheet) or it may address consumers (communicated for example via the product label).

The information on *safe use* may also contribute to workplace risk assessment and to the identification of appropriate measures to control environmental emissions from industrial sites.

The processes and tools for performing the three tasks at the level of the single downstream user still need to be further developed. For example, tools to more automatically process the information on *safe use* (received for example via the EComXML) may be developed to support (small) downstream users.

It is essential to better integrate the safe-use information generated under REACH into the single companies' business IT systems, including product safety assessment, SDS authoring, OSH management and environmental management.

3. The ENES Work programme to 2020

3.1 Overview

During 2016, the programme underwent an evaluation³ that confirmed the usefulness of ENES and the tools developed for supply chain communication (see Figure 1). It emphasised the need to intensify the efforts to promote the use of the machinery (tools) to a broader audience. It also highlighted that more attention needs to be paid to the question of how the information on *safe use* can best support downstream users in fulfilling their obligations under other legislation (for example occupational safety, environmental emission controls, or product safety).

The particular **objective of the programme** is to make communication in the supply chains on uses and conditions of *safe use* work in practice. The actions until 2020 aim to:

- Determine information needs of the different actors (content and form of information).
- Connect practices under REACH with practices under other legislation (OSH, environment, consumer safety).
- Develop/maintain methods and tools to collect, process and communicate this information.
- Adapt exposure assessment methods/tools to support the REACH Safety Assessment Framework.
- Convince companies (and authorities) that it is worth the effort (demonstrate usefulness and feasibility).

The industry organisations and Member States that signed the CSR/ES Roadmap Charter in

³ See https://echa.europa.eu/documents/10162/22771348/external_evaluation_report_en.pdf/9f87dfe6-8670-4a12-b137-85991522955c

2013 as well as Member States in other forums have discussed a follow-up programme to 2020. This ENES Work programme is the result of that consultation. The programme will focus on **six main areas**, in which ECHA and these stakeholders believe more work is required. The Work programme defines 21 actions across these areas to be carried out between 2017 and 2020, which are described in section 3.2.

The five main areas are:

1. **Strategy and promotion.** Promotion of the ENES tools, including the illustration of their benefits for the various groups of REACH actors and encouraging the integration of these tools into the existing management systems at company level. This will also include developing mechanisms to measure progress and continuing the regular ENES meetings to ensure dissemination and exchange among the stakeholders.
2. **Information from downstream users to registrants.** This covers all actions around sector use maps, including the maintenance, adaptation and further development of tools used by registrants. More specifically, the collection and/or updating of use map information and organising the information in a harmonised manner. This covers for example:
 - Organising support and exchanges on experience for sectors who are developing their use maps.
 - Maintaining a one-stop-shop for registrants to retrieve the information on ECHA's web page. This will include the mapping of existing use map information and supporting alignment between them.
 - Carrying out further pilot trials on the utilisation of use map information by registrants and adapting the use map package if needed.
3. **Information processing by registrants.** Supporting registrants to apply use map information in their chemical safety assessments, and the efficient onward communication of safe use information to downstream customers via the ECom standard. Actions include the adaptation of Chesar, and making first steps in building a common framework for the various exposure estimation tools/methods regarding workers that better fits the needs of exposure assessment under the REACH Regulation.
4. **Information processing by formulators.** Piloting and method/tool development focused on the tasks at single formulators' level. Many of the activities of this programme focus for now on the tasks of formulators providing mixtures to (industrial/professional) end users.
5. **Information processing by end users.** Market research on the processes and tools to carry out the first two single downstream user tasks explained above under section 2.1, and to further develop them if needed. The development should focus on the connection to workplace risk assessment, and the control of environmental emission and product safety (consumer mixtures and articles). The different roles and types of downstream user companies and the corresponding information needs will be taken into account. For example, the information on conditions for safe use needed by large producers of articles (e.g. cars) is likely to be different from the needs of companies operating small industrial sites, and these are again different from the needs of micro-companies, such as those operating in the construction business. The actions under this area will also include a systematic comparison between the exposure scenarios generated and communicated under REACH and the safe-use conditions resulting from risk assessment under occupational safety and health (OSH).
6. A sixth area will research the coherence between the REACH chemical safety assessment, safety data sheet information and local workplace risk assessment to identify potential pitfalls which will be further addressed and thereby, improve the interface between REACH and occupational health and safety.

3.2 List of actions

Actions and the responsible lead organisation are described below for the main areas of work. Members of the Action Group(s), including particular roles per person (where relevant) are indicated in the List of Contributors.⁴ Detailed action descriptions will be published annually on the activities, contributors and outputs each year to support this programme (see Governance section 4 beneath.) *Please note: For some actions, no lead organisation has yet been identified, and thus the action is on hold for the time being.*

3.2.1 Strategy and promotion.

This set of actions supports the programme setting (planning) and justification.

	Action	Description of actions	Expected impact from action	Responsible lead organisation
1.1	Strategy setting for ENES work programme	Regularly review state of the programme and decide on orientations. Steer individual actions of the programme. Set up and implement mechanism to measure progress.	Develop future work programme if still relevant.	ENES Coordination Group
1.2	Promotion of ENES products	Define projects by stakeholder groups (e.g. industry, Member States), by supply chains and/or by product types that support and promote implementation through 2018-2020 with corresponding business cases and appropriate communication channels. For example: <ul style="list-style-type: none"> Set up a link to the use map library (including some explanation) from the national helpdesks. Identify incentives for the registrants to update their dossiers using developed ENES tools (e.g. use maps). Analyse how the ENES tools could be better 	Increased use of the available ENES tools by manufacturers, distributors, formulators and end users. Capability in industry and authorities enhanced regarding creation, understanding, processing, implementation and verification of exposure scenario contents.	ENES Coordination Group

⁴ Note: Provide link in due course (eventually on ENES programme web page) to the List of Contributors document.

	Action	Description of actions	Expected impact from action	Responsible lead organisation
		integrated into safety data sheet (SDS) systems.		
1.3	ENES meetings for dissemination and exchange	Organise events (workshops, conferences etc.) and publication of proceedings, lessons learnt and proposals for improvement / harmonisation. Identify and invite new organisations (sectors, companies etc.) to participate, in particular downstream end users.	Dissemination and exchange of good practice, and identification of needs and organising of future work.	ENES Coordination Group
1.4	Promote cooperation among registrants of the same substance to increase the consistency among the <i>safe-use information</i> communicated down the chain by each of them	<p>Explore where the safe use information for a substance communicated along the supply chain significantly differs between the different registrants.</p> <p>Where identified differences are likely to have an impact for downstream users (in terms of safety or efficiency of information processing), identify the root causes and explore suitable solutions, which may include for example:</p> <ul style="list-style-type: none"> Promote methods and efforts to extend the joint development of the CSR among registrants to a joint development of the extended SDS, being consistent with the information in the CSR. Maintain a coordinated/consistent CSR among the registrants of the same substance also post-registration (e.g. when the lead registrants update their CSR) Improve the connection between single registrants' registration documents and the SDS authoring systems. <p><i>Note: Potential exchange of learnings with action 6.</i></p>	<p>Improve knowledge on differences in the risk management advice from different registrants for the same substance, and the potential root causes.</p> <p>Consistent communication down the supply chain.</p>	<p>Fecc</p> <p>Cefic</p>

3.2.2 Information from downstream users to registrants.

Covers all actions around sector use maps.

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
2.1	Content development	Develop use maps elements by individual sectors.	Developing new use maps. Completing/updating existing use maps (including SPERC, SCEDs, SWEDs) including for example standard phrases for communication, information on "frame formulations" per use when relevant. ⁵ Development of Chesar files. <i>Note: See also promotional action above to activate inactive sectors.</i>	More complete use maps available for registrants.	DU sectors
2.2	Content development	Support to sectors developing/ updating use maps.	Regular exchanges among use maps developers and ECHA. High-level feedback from ECHA prior to publication. Development of support material. Identification of improvement/ harmonisation needs.	Increased harmonisation and consistency of use maps available (including in Chesar format).	ECHA
2.3	Quality review	Set up review process on the use maps element(s).	Set up a (third party) review mechanism to ensure that published use maps are complete, understandable and that data sources are well documented. <i>Note: For SPERCs, an industry working group is developing criteria for quality reviews.</i>	Increased quality and buy-in by the authorities (e.g. via Member State forums like the REACH Exposure Expert Group, REEG) and increased buy-in by registrants.	Member State lead: no lead identified yet. For SPERCs, industry lead: Eurometaux ⁶

⁵ *Frame formulation* is the term applied by many formulating sectors to denote the main functional components (and their concentration) that make up a certain type of product (mixture) e.g. solvent, binder, pigment etc.

⁶ For SPERCs, 2018: quality criteria and industry internal review. 2019-2020: third party review.

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
2.4	Piloting	Pilot trial for utilising use map information in the registrant's chemical safety assessment and communicating exposure scenarios down the supply chain.	"Real life" exercises based on selected substances/ use maps. Learnings from extended experience (e.g. trials with full use maps and with GES; assessments beyond Tier 1) <i>Note: Aspects related to the processing of ES information described in an action 4.1 below.</i>	Practical experience gained on how downstream sector use map information can be processed by registrants in their chemical safety assessments to generate exposure scenarios for communication.	Cefic
2.5	Tools/ methods	Maintain and further develop the use maps' library as a central repository for information on uses and conditions of uses	Maintain ECHA use map website. Develop tracking system on downloads of use map elements Improve communication related to new elements/updates in use map library Explore possibility to organise a feedback mechanism on use maps	One stop shop (also linked from national helpdesks) for registrants to easily access the use map information.	ECHA
2.6	Tools/ methods	Maintain and adapt the use maps machinery including templates: (a) use map, (b) SWED, (c) SPERC, (d) SCED.	Template(s) better support the reporting of conditions of use (e.g. beyond TRA inputs for workers, harmonised set of conditions of use for environment). Identify key information to be communicated (interface to ESCom) via SWEDs, SPERCs, SCEDs. <i>Note: The network of use map developers (see Action 2.2) will be the major source of experience and the platform to discuss maintenance and development issues.</i>	Better support registrants using various exposure tools on the basis of use map information. Maintain consistency between IT formats.	Co-lead ⁷ : ECHA, Eurometaux, Concawe.

⁷ Use description (ECHA), SPERC (Eurometaux), SCED (Concawe), SWED (ECHA via lead on Action 3.2 (first WP) and Action 2.2).

3.2.3 Information processing by Registrants.

This set of action focuses on tasks at the registrant's level. This also includes an action related to worker exposure tools. Please note, during the period of this Work programme, ECHA together with stakeholders will also carry out preparatory work to update the environmental assessment tool, EUSES. Though this work mainly concerns the environmental modelling part of EUSES, some interrelationship with use description and related SPERCs may occur, and thus some interaction may need to be organised (if relevant).

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
3.1	Tools/ methods	Adapt Chesar to use map experience.	<p>Collect feedback to adapt Chesar to better support the needs of (i) use maps developers, (ii) registrants using use maps for their assessment and (iii) formulators receiving ES from registrants made with Chesar on the basis of use maps.</p> <p><i>Link to action 2.4 and 4 for collection of feedback.</i></p> <p>This may for example explore how more exposure tools could be linked to Chesar.</p>	More use maps developed with Chesar and more registrants using them for updating their registration dossiers and generating their ES for communication.	ECHA
3.2	Tools/ methods	Consolidate the different worker exposure tools into a common framework.	<p>Short-term: Identification of potential platform, partners and process for the consolidation process; workshop to take stock on what has been done in field during the last years.</p> <p>Analysis where the tools overlap and where they complement each other (based on SECO and ETEAM work). Identify weaknesses that may lead to significantly wrong assessments. Agree on a consolidation and update plan.</p> <p><i>Requires involvement from Member States and tool owners.</i></p>	Long-term: More transparent assessments, less challenges by authorities (e.g. in context of substance evaluation (SEVs) and authorisation); more consistent communication down the chain.	ECHA for scoping

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
3.3(a)	Tools/method	Adaptations in the ES for communication (to fit the needs of the recipient)	Define content need/format for exposure scenario for communication supporting the needs of the recipient of the information. This activity complements <i>action 3.3(b)</i> on ECom, for example to define rules for structured short titles, Table of Contents, etc.	Long-term: Ensure that the exposure scenario for communication meets the needs of its users and that the information they require can be readily identified and extracted for their business processes.	ENES Coordination Group
3.3(b)	Tools/methods	Maintain and further develop the ECom package.	<p>Identification of improvement/ harmonisation needs in the Catalogue of standard phrases (e.g. for covering use maps content) and XML exchange standard for the exposure scenario for communication on the basis of formulators' needs (<i>see action 4.3 beneath</i>).</p> <p>Development of support material. (<i>Links with action 1.2</i>)</p>	Enriched ECom package in order to better support formulators in the processing of the ES received. Potentially also helps to better connect CSA output with SDS authoring systems.	Cefic
3.4	Tools/methods	Materials' flow analysis for metals supporting REACH assessment.	<p>Further develop how information on volumes/uses can support the registrant's chemical safety assessment (interface with sector use maps) and risk management activities, including authorities' processes for prioritisation of substances that matter (exemplify for metals).</p> <p>Understand better how volume information per use can be specified in sector use maps.</p>	Understand better how volumes/uses information in the metals' and potentially other supply chains may be transferable to IUCLID.	Eurometaux

3.2.4 Information processing by Formulators.

This set of actions focuses on the tasks at formulators' level. Most of the activities of this programme focus for now on the tasks of formulators providing mixtures to (industrial) end users.

In the following, the term **safe-use information** (alternatively: *conditions of safe use*) is used with the following meaning: operational conditions and risk management measures suitable to ensure control of risk (= safe use), as demonstrated in a Chemical Safety Assessment under REACH. Those use (or task)-specific conditions and measures, may be described:

- in the **ES** annexed to a SDS for a substance;
- in an annex to a SDS for of a mixture for end use, for example in the form of a **SUMI** (*Safe Use of Mixtures Information*).
- in Sections 7/8 of the main body of an SDS for a mixture.

Under the ENES programme, so far two methods have been developed to process the information from ES for single substances to *safe use* information for mixture:

- **Lead Component Identification Method (LCID)** helps to select the exposure scenario (ES) for the substance(s) determining the hazards of the mixture. In a second step, these ES are combined into safe-use information for the whole mixture.
- **SUMI Selection Method** is based on downstream sector use maps (including their exposure assessment inputs SWEDs, SPERCs, SCEDs), and supports the selection of **pre-defined SUMI** from a library of SUMIs defined by the sectors. Up to now, only workers' health aspects are addressed in the SUMI, however DU sectors plan to include also environmental information.

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
4.1	Piloting	Test and/or exemplify the available methods to generate <i>safe-use-information</i> for mixtures based on exposure scenarios coming down the supply chain (SUMI).	<p>a) A sample of volunteer formulating companies (TBD) applies the <i>SUMI-Selection</i> Method for a range of their mixtures, based upon <u>homogenous</u> (= use map-based) incoming exposure scenarios for substances, in order to generate/assign appropriate <i>safe use information</i> for the mixture. This information is meant to be attached to the SDS for the mixture. The outputs from the pilot trials (action 2.4) may be the starting point.</p> <p>b) In a subsequent step formulating companies apply the methods to <u>heterogeneous</u> (= (partly) non-use map based) incoming exposure scenarios for substances (this may be the realistic scenario for the years to come).</p>	Practical experience gained on how registrants' exposure scenarios can be processed by DU companies. Demonstration that it can work (motivation). Easy to understand description of method (promotion of dissemination).	TBD by ENES Coordination Group
4.2	Piloting	Exemplify the available methods to generate <i>safe-use-information</i> for mixtures based on exposure scenarios coming down the supply chain (LCID)	Elaboration of representative examples how the output of the application of the LCID methodology (see introduction paragraph to action area 4 for meaning of term, LCID) may be communicated via the safety data sheet of a mixture – thereby covering the different options i.e. incorporation of LCID output in the main sections of the SDS or in an annex; differentiation between contributing activities or not.	Practical experience gained on how registrants' exposure scenarios can be processed by DU companies. Document best practices in using the LCID output when drafting SDSs for mixtures.	Cefic/VCI

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
4.3	Piloting	Explore existing approaches for generating safe use information for mixtures for use in mixtures.	<p>Explore, try out and discuss available approaches to generate safe use information in the case of mixtures being in mixtures. The action may include a scoping workshop, potentially some piloting exercises (with companies and sector organisations) and drafting a conclusion document on the needs and potential solutions identified.</p> <p><i>Note: Good connection with 4.1 and 4.2 must be ensured.</i></p>	Establish whether the ENES tools (in current or further developed form) could sufficiently support the case, or whether an additional complementary method or tool would be needed.	TBD
4.4	Tools/ methods	Maintain and adapt available methods and tools to generate <i>safe-use information</i> for mixtures (based on learnings from practical application by formulators).	<p>Based on the experience gained, the applied methods can be updated in terms of content and presentation, and the need for IT tool support can be explored. This action will also feed into the use map package and the tools for the registrant so that adequate information is provided to formulators.</p> <p>Complete SUMI Selection Method regarding environment.</p> <p>Develop new pictograms for communication of engineering controls via the SUMI method (e.g. for ventilation)</p> <p><i>Note: The shape and content of safe use information for mixtures should correspond to end user needs, as identified in another action below (see action 6).</i></p>	Support formulator (large and SME) by well-defined methods for developing <i>safe-use-information</i> for their mixture (for workers and the environment); the methods aim to help formulators to transform the information on raw material received from their suppliers into meaningful information for their customers (again large and SME).	DUCC, Cefic, VCI (only LCID), ECHA in cooperation

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
4.5	Research	Explore methods for formulators to check the safety of their consumer products against exposure scenarios received.	DG-Environment/ECHA project: For consumer products, identify to which extent the available tools sufficiently support formulators in establishing (based on ES information) that their products are safe to use for consumers. Identification of gaps and needs. Project to be carried out with involvement of industry sector organisations and single formulators.	Better understanding of needs. Identify potential scope for a future work process defined to make ES for consumer uses of mixture work. <i>Note: The approach for consumer mixtures (also covering the service life of dried mixtures) will already help in defining approaches for articles and their service life (see action area below).</i>	ECHA

3.2.5 Information processing by end users.

The set of actions beneath serves to understand more clearly which advice on operational conditions and risk management measures the companies at the end of the supply chain need, in order to safely use the substance on-site and when introducing substances into articles for supply. Such companies are called end users. They use substances or mixtures but do not supply them further downstream; this includes producers of articles. Based on this understanding, the appropriate support will be defined e.g. in terms of adapting existing ENES tools or developing new ones, for the processing of the safety data sheet information received by end users. This covers the following: Safe use information for single substances annexed in form of exposure scenarios to the safety data sheet, the safe-use-information contained in Sections 7/8 of the SDS for a mixture, or the safe-use information annexed to the SDS for a mixture (SUMI). One aspect is how this incoming safe-use information can be (better) connected with risk assessment and existing risk management practices at single company level.

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
5.1	Monitoring state of play	<p>Set up monitoring system for progress at the bottom of supply chain (based on very simple indicator).</p> <p>⇒ See action 1.1</p>	<p>Set a baseline measure of the level of <i>safe use information</i> available in the European market place (interface with Strategy & promotion actions) for progress monitoring (in 2020 and 2023).</p> <ul style="list-style-type: none"> • Do DU end users receive <i>safe use information</i>? (See introductory paragraph to action area 4 for the ways safe-use information might be provided.) • What do they do with this information? • In what ways have the company safety management practices, site processes or product design changed following receipt of safe-use information? • To what extent and how did recipients give feed back to their suppliers regarding the form and content of the safe-use information received? 	<ul style="list-style-type: none"> • Better knowledge to which extent the REACH concept of the exposure scenario (<i>safe use information</i>) and their communication with the safety data sheet has (already) made changes at end use level. • Increased awareness on the fact that <i>safe-use</i> information generated through the registrants CSA (exposure scenario) is meant to arrive at end use level. 	ECHA

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
5.2	Market research	<p>Carry out market research to identify exposure scenario information (content) useful for different groups of end users).</p> <p>⇒ See also action 6.1 (point 6 below)</p>	<p>Identify which kind of <i>safe-use information</i> in (or attached to) a safety data sheet may be useful for industrial/professional end users. Information would be considered "useful" if (i) the layout supports good understanding and (ii) the content helps to use a chemical safely and/or iii) helps to fulfil assessment requirements under other legislation.</p> <p>Address the issue in a staggered manner: (a) first focus on workplace risk assessments, then (b) on environmental release control from sites, and then (c) on product safety (i.e. composition and design of product prevents exposure to hazardous substances)</p> <p>The following methods⁸ may be used:</p> <ul style="list-style-type: none"> • Survey(s)/interviews with downstream end user companies (of differing sectors and sizes) in Member States. • Interview authorities regarding their expectations/requirements on scope and methods for workplace risk assessment. • Test examples of <i>safe-use</i> information in (or attached to) the SDS with end users, and collect feedback. • Analyse tools (and required inputs) in use for local risk assessment and describe the interface to the <i>safe-use</i> information received from the supplier with the safety data sheet. • Analyse tools already in use for processing <i>safe use information</i> received via SDS (or other channels) at end use level into documentation, assessment and communication processes. 	<p>Improve knowledge on what kind of information end users need from suppliers, taking into account the different legislative frameworks (including) national requirements.</p> <p>Better understand the:</p> <ul style="list-style-type: none"> • Expectation of companies and national authorities for the workplace risk assessment, what risk assessment tools are utilised and how <i>safe use</i> information in (or annexed to) SDS may efficiently interact with these tools. • Expectation of national authorities regarding substance-specific environmental emission controls. • Article-related requirements from other legislation (e.g. construction products, electronic equipment, toys etc.) <p>(ENES) tools adapted or new ones defined.</p>	ECHA ⁹

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
5.3	Tools/ methods	Define methods and tools to process the contents received at end use level.	Based on the experience gained, identify which methods and tools would be needed (new or updated) to: (i) Support the efficient transport of information from suppliers to end users. (ii) Support the further processing of that information at end use level (and the extent to which end users need <i>safe-use information</i> in a harmonised format to aid those processes) ¹⁰ . <i>Note: potential exchange of learnings with action 3.3.</i> (iii) Support integration of REACH safe-use information into end user business (IT) systems on chemicals' management.	Long-term: End users receive <i>safe-use</i> information (via extended SDS) that they can apply straightforwardly on-site and generate site-specific information (e.g. for controlling risks at work place or risks to the environment for industrial emissions, or improve product safety of articles (such as constructional materials, textiles, toys).	

⁸ At present, this set of methods is tried out in a small-scale project with companies and authorities in Finland.

⁹ In cooperation with national authorities and industry associations.

¹⁰ "Format" in this context means a data structure (or content) that enables transfer between companies; it does not mean the layout or presentation of the information.

3.2.6 Coherence between REACH CSA, SDS information and local workplace risk assessment

	Action type	Action	Description of actions	Expected impact from action	Responsible lead organisation
6.1	Research	<p>Analyse current communication practice on risk and risk management through the supply chain (Research project REACH2SDS).</p> <p>Furthermore, the project REACH2SDS will investigate the suitability of the data given in extended SDSs to perform a reliable workplace risk assessment.</p>	<p>Overview on strengths and weaknesses of current registration dossiers to serve as a source document for communicating risk management measures (RMM).</p> <p>Analyse the quality and completeness of information and its transfer between the CSR and the corresponding extended SDS. If differences between the documents are observed the potential root causes will be investigated and discussed.</p> <p>Test the usability of extended SDS from a downstream user (DU)'s perspective to perform a workplace risk assessment based on the EMKG. Identify potential challenges at the REACH-OSH interface.</p> <p>If differences are observed between the RMM of the CSR/extended SDS and the EMKG control strategy, the potential reasons will be investigated. In this case, the consequences of mismatching information between the exposure scenarios and the EMKG analysis on the DU will be discussed.</p> <p><i>Note: Potential exchange of learnings with actions 1.4 and 5.</i></p>	<p>Receive a robust overview on the availability of exposure and risk management information in the 100-1000 tonnes per year band.</p> <p>Understand the information transfer between CSR and extended SDS and identify potential pitfalls which will be further addressed. Thereby, the interface between REACH and OSH should be improved.</p>	BAuA (DE)

4. Governance

The ENES Work programme is a collaborative effort between industry, Member States and ECHA. Together, these make up the Coordination Group; see Appendix 1 for a list of the representatives. Their interests represent the many interests of REACH including substance manufacturers, the formulating industries, producers of articles, Member States and ECHA. In addition to its contribution under the various actions, ECHA provides a secretariat function for the whole programme, which includes agenda setting and invitation to participate in coordination meetings.

The focus of the Coordination Group is the direction of the programme and the accompanying communication strategy. In addition, the Group ensures that sufficient coordination and exchange takes place between the working groups, which take forward the various actions. This includes (technical) coordination to maintain and improve the compatibility across the various ENES tools.

Lead responsibilities for actions are shared among the stakeholders. All stakeholders are involved in supporting actions so that implementation of the programme is a shared responsibility. Each action is taken forward by a working group, which is responsible for the planning and organising of the task, meetings, progress monitoring and delivering the output foreseen.

The Coordination Group meets twice a year (face to face) to monitor the progress of the programme and to set its direction for the future. Action leads prepare a short update on progress and planning for these meetings, and leads may participate when relevant. This is to ensure the coherence and common understanding across actions and tools, as tool development in one area may impact on other tools. Particular emphasis is placed on an effective technical exchange between those working on the various use map elements i.e. use description, SPERC, SCED, SWED, SUMI, Chesar and the ESCom group.

The Coordination Group is also responsible for organising meetings of the Exchange Network on Exposure Scenarios (ENES). Once the topics/themes and the objectives are decided, a (smaller) subgroup takes care of the ENES event programme and organisation.

For transparency, a list of contributors to the ENES Work programme and the various actions will be maintained and published on ECHA's website.

The Coordination Group prepares an annual report on progress.

The principal functions and responsibilities for the ENES Work programme are summarised in the Table beneath.

Table 1. Governance arrangements for the ENES Work programme

Group name	Task	Who
Coordination Group	Agrees the (annual) work plan. Follows up / updates the work plan. Agrees on ENES event agenda/setting. Technical coordination among ENES tools.	Industry: Cefic, Concawe, DUCC, Eurometaux, Fecc, Representatives from end user sectors. Members States: Austria, Finland, Germany, Italy, Norway. ECHA.
Action Working group	Carry out the action as described in the programme and adapt the action work plan based on programme coordination decisions. Report to ENES work programme coordination. Ensure consistency with other actions.	Action Lead with Working Group. All stakeholders are, as far as possible, represented in all actions.
Coordination Group	Organise and coordinate communication on the programme. Targeted "promotion" of the programme and tools to widen the community of stakeholders and sectors.	Stakeholders taking the lead for promotion projects.

5. Further information

Information on the ENES Work programme is available on a dedicated page at ECHA website under "Communication in the supply chain".

Note: The ECHA CSR/ES Roadmap and ENES web pages will be revised in 2018 to reflect the needs for implementing the Roadmap/ENES tools and support the ENES Work programme to 2020.

Appendix 1. Composition of the ENES Coordination Group

Representatives from industry

Cefic	Erwin Annys / Alejandro Garabatos / Erika Kunz
Concawe	Estefania Boix / Marilena Trantallidi / Jan Urbanus (Concawe Exposure Task force member, Shell) Tatsiana Dudzina (Concawe Exposure Task force member, Exxon Mobil)
DUCC	Janice Robinson / Laura Portugal
Eurometaux	Violaine Verougstraete
Fecc	Irantzu Garmendia Aguirre

A number of downstream user sector organisations support the ENES work and contribute to the Coordination Group's tasks:

ACEA (Jens Warsen)	CheMI (Laia Perez Simbor)	FIEC (Marianne Hedberg)
ORGALIME (Stéphanie Mittelham)		UEAPME (Marko Susnik)

Representatives from Member State authorities

AT	Eugen Anwander	Federal State Service Vorarlberg
DE	Eva Lechtenberg-Auffarth	
	Nicoletta Godas	Federal Institute for Occupational Safety and Health (BAuA)
FI	Jouni Räsänen	Finnish Safety and Chemicals Agency (TUKES)
IT	Roberto Carletti	National Agency for New Technologies, Energy and Sustainable Development (ENEA)
	Nadia Cerioli	Ministry of the Environment and the Protection of the Territory and the Sea
	Domenico Spagnolo	National Institute of Health (ISS)
NO	Eva Haug	Norwegian Environment Agency

Representatives from ECHA

Andreas Ahrens
 Andrew Murray
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