





# Communication on safe use in REACH can be improved



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





# TEAM









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#### Content

- Background
- Study design
- Results
- Conclusions and Recommendations







#### Information flows up- and downstream







# **Background project**

- REACH aims at 'high level of protection'
- Dossiers, SDS, Exposure Scenarios are tools
- Up + down stream communication (safe) use conditions vital
- Real improvements are the goal
- Cefic Long-range Research Initiative (LRI) project
  - "Optimizing the benefit of REACH worker exposure assessments: ensuring meaningful health risk communication" – LRI-B23
- Objective: substantial contribution optimization communication safe use information



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# Analysis of existing information (literature) - tools

- 'Tools' = any instrument with aspects communication safe use
  - Legal tools (Chemical Safety Report), SDS, Exposure Scenarios
  - Guidances from ECHA, authorities, sector groups, etc.
  - Standard phrases catalogue
  - Generic Exposure Scenarios, Use Maps, Specific Worker Exposure Descriptions (SWEDs)
  - Safe Use of Mixtures Information (SUMI)
  - Workplace Instruction Cards (WICs)
- Limited visible contribution of real end-users in developments (except WICs)

Mainly on downstream communication By sector gro Mainly on upstream communication By sector gro

On mixtures / products

By sector groups, mainly formulators

By sector groups or companies

16 tools described





# Analysis of existing information (literature) - studies

- Studies = scientific publications, workshop presentations, stakeholder documents, etc.
- Results
  - Studies mainly from begin years of REACH
  - Implementation REACH = work in progress
  - REACH has potential to improve safe use
  - Usability (e)SDS often questionable
  - Terminology is an issue
  - Knowledge and understanding less at SMEs
  - No study on effect of newer tools (e.g. SUMI) or end-user tools (Workplace Instruction Cards)
  - Tendency to harmonisation not everyone sees only advantages







## In-depth survey – Case studies

- Variability in cases companies (and sector)
  - downstream communication
    - # workers
    - technical sophistication
    - Sector
    - Organisation level of sector
    - Knowledge hazardous substances
    - Types of chemicals
- Study documents (on one substance)
- Interviews
  - Various persons, if possible
- McGuire's Persuasion-Communication Matrix

	Message Source	Message Design	Delivery Channel	Receiver	Context
Orientation to the message					
Exposure					
Attention					
Interest/Liking					
Comprehension					
Acceptance and Use					
Acquisition					
Agreeing					
Memorising					
Retrieving					
Deciding					
Acting					
Sustained use					
Reinforcement					
Consolidation					





#### In-depth survey – Case studies - messages

- Qualitative results no statistics
- Many interviewees do not distinguish between REACH, CLP, OSH (context)
  - One stream of safety information
- Message design important topic of discussion (design)
  - Lengthy, complex, not everything useful; may hinder safe working (confusion)
- Updates not always occur; feedback seldom (delivery channel)
- Size (of companies) matters (receiver)
  - Large companies have or hire expertise; smaller do not
- Well-organised sectors provide support (receiver)
- Responsibility appears to be diffused between various stakeholders (source, receiver)
- Digital preferred, but who tests for validity and usability"? (delivery channel)
- Attitude also important: hearing ≠ knowing ≠ integrating ≠ acting (receiver)
  - Social norms important





# Workshops – set-up

- Workshop 1: International view results (NL) case studies
  - 17 participants from 7 countries / international organisations
- Workshop 2: Improvement 'exposure tools'
  - 16 participants authorities, consultants, industry
  - 'exposure tools' = tools that (also) communicate
    exposure/safe use conditions
- Workshop 3: Integration of results, recommendations for future improvements
  - 24 participants partially the same as for Workshops 1 and 2

Plenary session Mentimeter® questions Based on Work Packages 1 and 2

#### Breakout rooms Couple of specific discussion points

Variation in background participants

Plenary feedback from breakouts Discussions, conclusions, recommendations





# Workshops – concerns and improvements

Insufficient feedback	<ul><li>Provide support</li><li>Focus, harmonise, digitise</li></ul>
SDS and ES too complex	<ul><li>Simplify</li><li>Improve knowledge/expertise</li></ul>
Results exposure tools not useful	<ul><li>Clarify and specify</li><li>Bring in OSH-expertise</li></ul>
REACH – OSH not connected	<ul><li>Involve more sector-experts</li><li>Stimulate use external experts</li></ul>
SMEs lack expertise	<ul><li>Increase internal expertise (training, etc.)</li><li>Obtain external expertise</li></ul>



**TNO** innovation for life

# Conclusions

- Awareness / understanding of REACH decreases down supply chain / large to small / technologically advanced to less advanced
- End users see various Regulations all as 'chemicals legislation'
  - Improvements should account for this
- REACH is EU-wide, surrounding legal, organisational and cultural area is more national
  - This influences perception and parts of implementation (e.g. enforcement, support)
- Exposure scenarios rather unknown to end users; partly because most use mixtures
- Exposure scenarios considered too long and too complex
  - One document for many users; experts, large companies, SMEs, etc.
  - Same substance, different supplier  $\rightarrow$  different exposure scenarios
- Updated SDS not consistently forwarded down supply chain / in companies
- No regular structured feedback on safe use information upstream







# Conclusions 2

- Several improvement activities ongoing tools created to assist communication
  - Not (all) well implemented
- Actual end users not extensively represented in activities for improvement
- Various sector organisations not very involved
  - Others are very active
- Actors blame each other
  - Upstream registrant: "Downstream should be better trained"
  - Downstream user: "Registrants should produce understandable documents"
  - Industry: "Authorities created complex (unnecessary) legislation"
  - Authority: "Industry should communicate better"



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# Recommendations

- Clarify intended target group for exposure scenarios
  - And ensure understandable information tailored to target group
  - Obligation is on <u>companies</u>
  - Guidance should stress need for sufficient expertise (also downstream)
- Limit length and complexity of exposure scenarios
  - Tailor to receiver and provide practically useful information
  - Educate responsible persons on interpretation of the information
- Digital documentation transfer (e.g. via xml-files) can facilitate tailoring and easy updating
  - Actors in supply chains should cooperate in development
- Better implement existing (additional) tools, such as GES, SUMI
  - Downstream user of chemicals coordination group (DUCC) could take the lead



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# **Recommendations 2**

- Arrange for more (structured) feedback
  - Make relevance feedback more clear and stimulate and facilitate (e.g. digital tools)
- Involve end-user representatives actively
  - Ensure their participation in relevant meetings and developments
- Not very active sector organisations should take a larger role
  - Legal role for sector organisations?
  - Financial support (subsidies, tax-cuts)
- Improved harmonisation REACH and OSH
  - All levels: authorities, experts in companies; legal aspects (e.g. STOP), developments
- Use insight from social sciences to improve communication and implementation of safe use
  - Knowledge on promotors of behavioural change, nudging techniques, etc.











Communication on safe use far from perfect

(Potentially) useful tools not well implemented



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Education, Participation & Cooperation needed









Better cooperation needed









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