



FUTURE PROOF SUPPLY CHAIN COMMUNICATION BASED ON TRACEABILITY OF CHEMICALS

Martin Führ, Julian Schenten, Leonie Lennartz

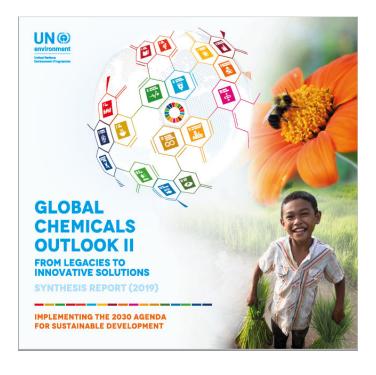
Sonderforschungsgruppe Institutionenanalyse (sofia), Hochschule Darmstadt

No. LIFE16 GIE/DE/000738





Global policy developments



UNEP GCO-II (2019): Key Finding 8

"Frontrunner companies – from chemical producers to retailers – are introducing

- sustainable supply chain management,
- full material disclosure,
- risk reduction beyond compliance, and
- human rights-based policies.

However, widespread implementation of these initiatives has not yet been achieved."

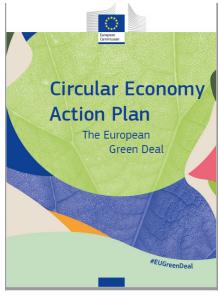






EU Policy context – Green Deal





Sustainable Products Initiative:

- Eco-Design Framework
- → Design phase is gaining importance
- → End of Life (EoL) has to be integrated





Green Deal: ..."For instance, an **electronic product passport** could provide information on a product's origin, composition, repair and dismantling possibilities, and end of life handling."

Enhancing circularity in a toxic-free environment, avoid toxic cycles



EU Policy context – SCIP

Substances of Concern In articles as such or in complex objects (Products)

 Revised Waste Framework Directive (WFD) entered into force in July 2018



• ECHA database, suppliers are obliged to submit information about all the articles they supply containing an SVHC (>0.1%)



- data had to be submitted as from the 5th of January 2021
- 5 million notifications received for harmful chemicals in products (January 2021)

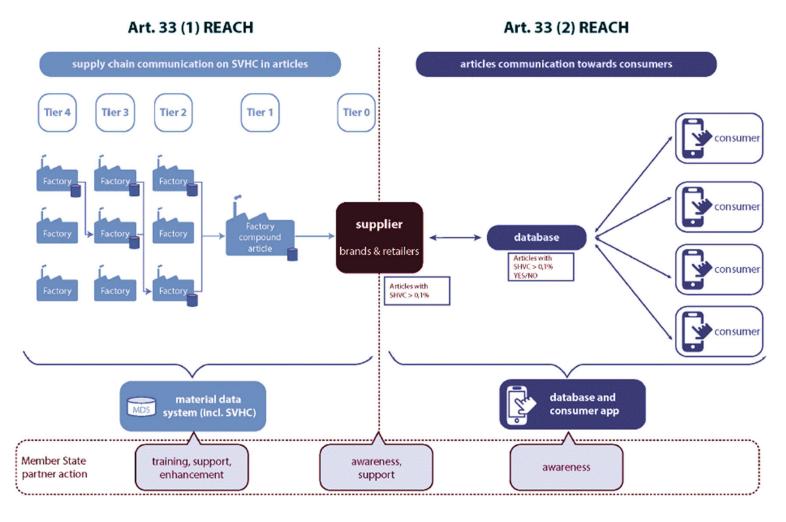








Challenge







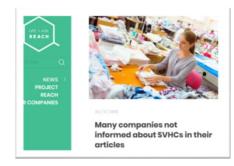
Source: AskREACH Project Proposal in 2016



Challenge



Brussels, 14.10.2020 SWD(2020) 247 final



COMMISSION STAFF WORKING DOCUMENT

Review of certain provisions of Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restrictions of Chemicals (REACH), as laid down in its Article 138

The reports and reviews summarised in the previous section can help explain why there has been little improvement in the implementation during the last decade. These include lack of awareness of duty holders, absence of adequate information management systems in certain companies, technical difficulties derived from the complexity of articles and their chemical content and scarce information on imported articles. (S. 34)





Substances in articles lack of transparency ... in a dynamic regulatory Environment



Supply Chain Communication status quo

- Restricted Substance List (RSL) and Manufacturing Restricted Substance Lists (MRSL) most common practice
- Suppliers provide general statements of conformity against the (M)RSL rather than information on actual substances

Problem:

- Data quality and reliability, information provided in compliance declarations is too scarce to check even plausibility
- Declarations report to product properties upon the date of delivery, refer to the substances listed on (M)RSL/SVHC list by this date







Supplier impediments

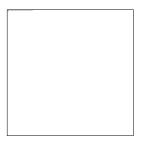
- lack the data they should supply themselves
- are not aware of (all) legal obligations on SiA
- lack resources to collect data and provide it
- Request overload: Apart from few available sector standards, companies tend to create their own (M)RSLs, thus contributing to the proliferation of SiA requests to suppliers
- hesitate to provide information because they perceive it confidential







AskREACH goals



- Support proactive communication on SVHCs in articles
- Practical test of "state-of-the-art" IT-tool by iPoint (free of charge access for pilot companies and suppliers for testing)
- Feasibility studies in different supply chain contexts









Material Data System (MDS)

- Database: Suppliers report (<u>all</u>) substances in materials and (part-) articles
- Bill of Materials (BOM) (Structure tree)

"Full" Material Declaration (FMD)

- Full declaration → "beyond compliance"
- Restricted Substance List (RSL; REACH, RoHS...)

Interoperability & Security

- FMD 10% "Joker"
- Interoperability (e.g. IPC 175x, IEC 62474)
- Access control
- Data protection and integrity

Governance

- "Steering Committee"
- Contractual obligations
- Trust

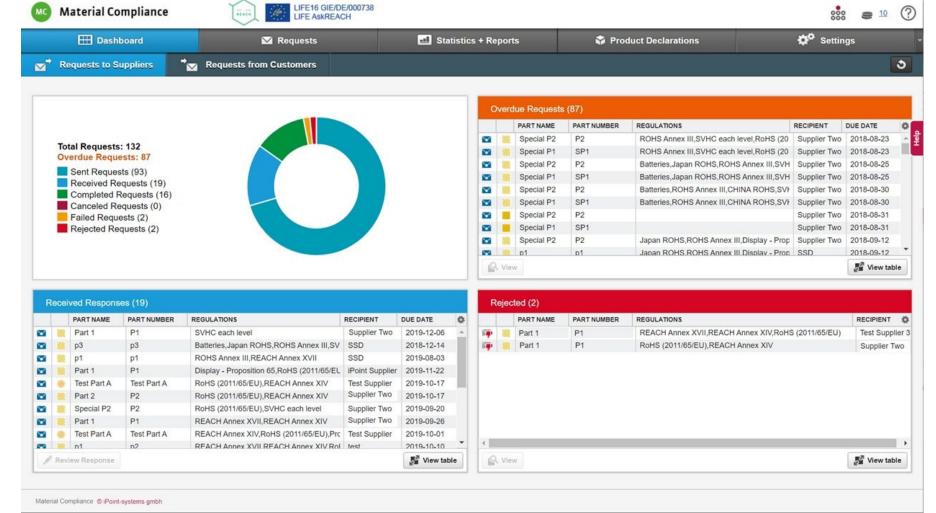




From reporting of SVHCs to ... traceability of substances in articles









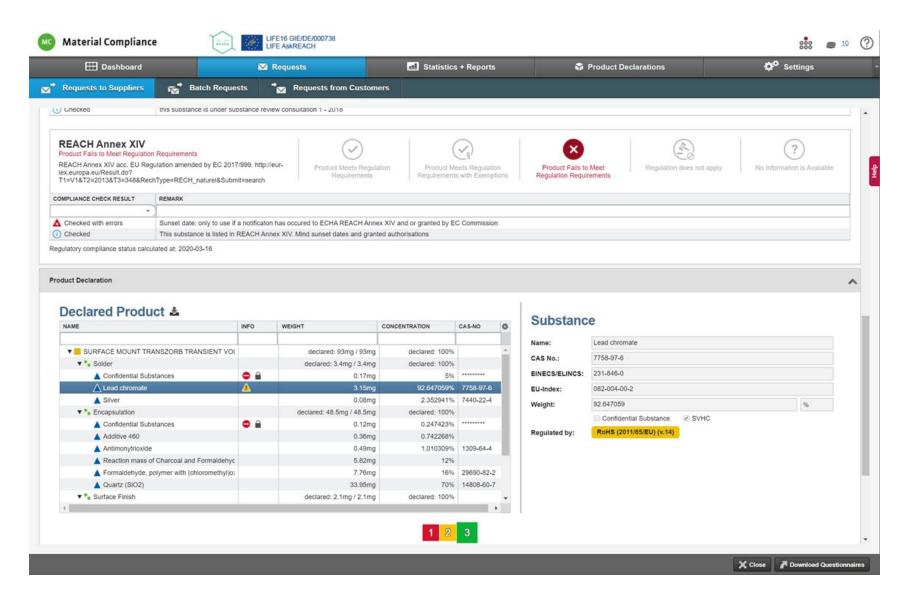














Pilot Feedback

- "Very helpful communication tool for Substances in Articles"
- "The benefit of the tool lies in the full declaration. This saves time for me when reviewing new regulated substances and I do not need to request existing articles again, unless there are fundamental changes (e.g. change to other plastics)"
- Tool is less complex and easier to work with than expected
- Time invest for pilot participation in Supply Chain Action is less than expected (approx. 15 hours) simple case study
- Pilot considers to work with the tool beyond AskREACH







Why Traceability of SiA?

- Support Compliance today and tomorrow
 ...also with a view to circular economy (avoid "toxic material cycles")
- More effective and efficient (risk) management: Suppliers and processes
- Data source for product design
- Foundation for credible transparency for consumer
- ...all can contribute to: New business models







Interested "pilots" are welcome



- Information, Flyer, Supply Chain Communication Tool Video-Tutorials (English): https://www.askreach.eu/supply-chain-tool/
- Email: <u>askreach@sofia-research.com</u>



