

DUCC Workshop on Assessment of Alternative Substances in Mixtures

Pre-reading

DUCC is a platform of 11 European associations representing downstream users of chemicals, ranging from cosmetics and detergents to aerosols, paints, inks, toners, pressroom chemicals, adhesives and sealants, construction chemicals, fragrances, lubricants, crop protection and chemical distributors industries. The group's main objective is to contribute, with a common voice, to the successful implementation of the requirements of the REACH and CLP Regulations

The assessment of alternative substances in mixtures is a very complex process and DUCC considers it crucial to approach it through a series of exchanges among stakeholders. We also believe that downstream users have not been adequately involved in the current process, which contributes to the difficulties authorities face when trying to obtain all the required information. We thus wish to engage on this issue because, to avoid unintended impacts on EU society, a robust Assessment of Alternatives is key to making good decisions.

The objective of the DUCC workshop is to have a constructive technical discussion; to focus on the criteria and process and raise the awareness of the importance of AoA as a key building block for the success of the REACH process. DUCC invites the participation of different stakeholders in this workshop (member states, ECHA, Commission, Civil Society / NGOs, etc.) With the aim of having a balanced participation between stakeholder groups.

To this end DUCC has organized a virtual workshop / meeting on **the 9th March 9:30 – 11 CET.**

Workshop Agenda

Workshop Objective To have a constructive discussion on “We need to substitute hazardous substances in applications – what happens next?” <ul style="list-style-type: none">• Why is the substance used?• What are the alternatives? Will they be better than the current substance?• Is there an easy alternative?• Non-chemical alternatives (?)• Logical steps• Confidentiality		
Introduction <i>DUCC Welcome and intro</i>		5 minutes
PART 1	Kick-off panel discussion <ul style="list-style-type: none">• Aerospace Industry Experience - Steve George (REACHLaw)• DUCC member – Didier Leroy (CEPE)• Civil Society – Anna Lennquist (ChemSec)• Member State TBD	60 minutes
	<i>Brainstorming:</i> Criteria for suitable alternatives. Why does regrettable substitution happen? Experience of member states on assessment of alternatives	
PART 2	We believe that a body of experts will need to be created to support the discussion on AoAs. Who should be involved?	20 minutes
Conclusion and Next Steps		5 minutes

‘Regrettable substitution’ must be avoided; but as a concept this should be interpreted more broadly than just replacing one hazardous substance with another that subsequently turns out to be just as hazardous. For example, considering also the impact that substituting a substance could have on climate or resource use (e.g. as presented in the recent SSbD workshop). The [ECHA Assessment of Alternatives training](#) also considers the need to be holistic when assessing alternatives and shares the following examples of regrettable substitution.

- ***Diacetyl in microwave popcorn***

Traded consumer health with worker health. Diacetyl is safe to be ingested, but when used in industrial facilities becomes aerosolized and can cause severe lung disease – exposure to workers not considered in health assessment.

- ***N-hexane in aerosol brake cleaners***

Traded ecosystem health with worker health to replace CFCs in aerosol brake cleaners. Better for ozone layer, but worse for workers.

- ***Pyrethroid in insecticides replacing organophosphates***

Traded worker health with ecosystem health. Better for human health but persistent in aquatic environments.

DUCC considers that an effective process for assessment of alternatives is important to avoid regrettable substitution. There are key questions to discuss here in order to have a streamlined process that deals with the practicalities of product production.

If it is deemed that efforts should be made to substitute a substance in an application, the first question should be, are there any obvious alternatives?

- In the case where there are not, what are the barriers to substitution?
- What to do if there are only limited (patented) options? What are the options to solve this (licensing etc.)? One company may have put many resources into R&D of a new alternative and patented an ingredient. How can this alternative be introduced without creating a monopoly?
- If there are some uses where there are technical shortcomings, what do these shortcomings look like?
- What is considered a ‘less hazardous’ alternative?
- How to define ‘technical equivalence’ and to differentiate technical equivalence from technical sufficiency?
- What information should be shared so authorities have sufficient information to understand the complexities and reality of the situation without breaching company confidentiality?
- Supplier – customer communication about alternatives.
- What sort of body / who should be involved / lead the AoA discussion?

These are complex questions which require engagement of different stakeholders, and for this DUCC invites Member State Authorities to meet with us in a series of workshops to brainstorm and exchange ideas on possible solutions.

The first workshop is to introduce the topic and to share experiences of member states and stakeholders when assessing AoA and identifying criteria for what is considered a suitable alternative.

DUCC has proposed a list of criteria for assessment of alternatives (see [table on last page](#)). DUCC is also eager to learn from previous experience and engage with partners who have worked on the topic of Assessment of Alternatives in other contexts.

- Association for the Advancement of Alternatives Assessment: <https://saferalternatives.org/resources/alternatives-assessment-resources>
- OECD publications on Assessment of Alternatives: <https://www.oecd.org/chemicalsafety/risk-management/substitution-of-hazardous-chemicals/>
- OECD: Case studies for substitution: <https://www.oecd.org/chemicalsafety/risk-management/case-studies-of-substitution-and-methodology.htm>
- Frameworks and methodologies for substitution: <https://www.oecd.org/chemicalsafety/risk-management/chemical-substitution-frameworks-guides-toolkits-product-rating-systems.htm>

We have carried out a first exercise of comparing our criteria to those of the ECHA guidance on authorization and BPR, but wish to explore this topic in more depth and understand the perspectives of other stakeholders on:

- 1. What criteria may be missing?**
- 2. What should we prioritize when assessing if a substance is a suitable alternative?**
- 3. What is the experience of member states with assessment of alternatives? What information do you need? What information do you find useful?**
- 4. Who should take responsibility for bringing forth data, expertise and assessing alternatives? What sort of body / who should be involved in AoA discussion?**

We hope to have ample participation in the discussion to proceed towards co-creating a better system in future, where downstream users of chemicals can also bring their expertise.

To register to participate in the workshop, follow the link:

<https://survey.zohopublic.eu/zs/EIB8KN>

The workshop aims to have balanced participation between stakeholder groups.

Suitable alternatives – criteria

DUCC criteria	ECHA guidance (authorization)	ECHA BPR Guidance
		Is there is need for the functionality of the active substance? (consider non-chemical alternatives)
<ul style="list-style-type: none"> • Sufficient substance hazard data • Sufficient use exposure data • Technical equivalence • Availability of sufficient supply • No unacceptable barrier to market • Socio-economic impacts (job-losses, establishing monopolies by limiting alternatives) • Testing (including animal testing) requirements to identify alternatives • Presence of alternative in Europe 	<ul style="list-style-type: none"> • Hazard and risk assessment: the risks from alternatives • Performance assessment: does it meet your performance criteria? • Assessing economic viability: detailed cost assessment, cost-benefit analysis and market assessment. • The technical and economic feasibility of substitution, with a substitution plan 	<p>As suitable alternative must be safer, technically and economically feasible for EU users, available (and efficacious)</p> <ul style="list-style-type: none"> • Substance identity and properties • Technical feasibility • Economic feasibility – considering the current status but also how costs will evolve over time • Availability
Sustainability impact = -ve or +ve	Other impacts: such as greenhouse potential, resource use, waste generation or social impacts along the product lifecycle.	Impacts along LCA and end-of life: energy and raw material usage
<p>References:</p> <ul style="list-style-type: none"> • ECHA guide 'Substances of concern: Why and how to substitute?' • ECHA online training on analysis of alternatives • ECHA guidance on the preparation of an application for authorisation • ECHA guidance on biocides legislation • BPR AoA Guidance 		