



Reference:

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Author affiliation:

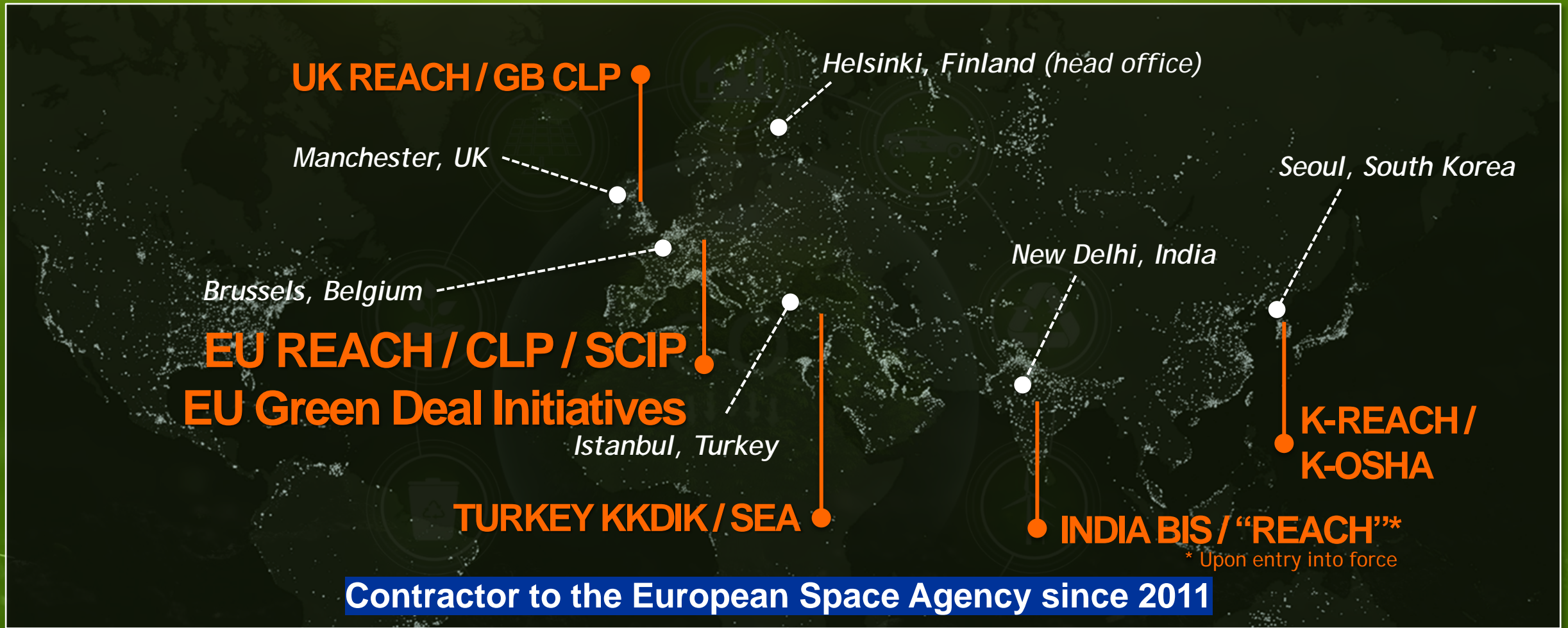
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Priority actions on EU REACH and issues of concern for the European Space Sector

Tim Becker, Senior Legal Advisor



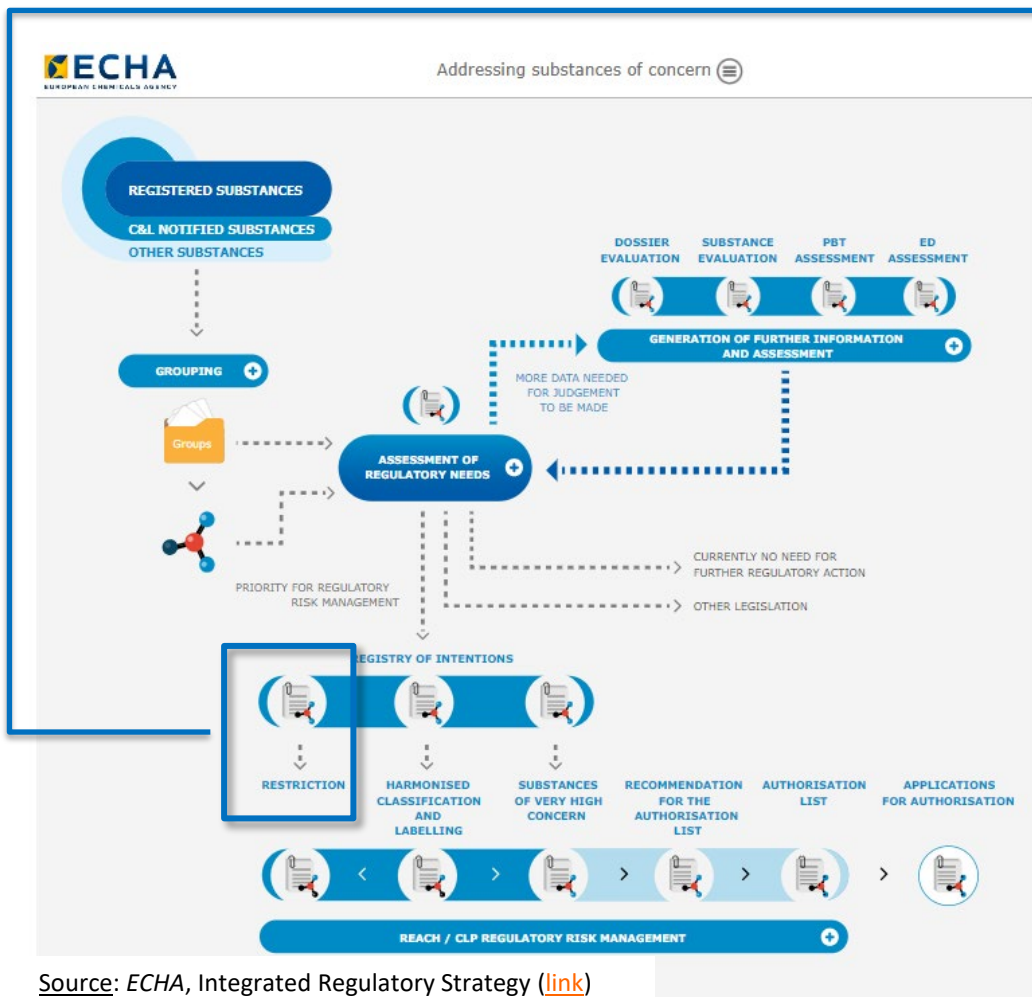
PRIORITY ACTIONS ON EU REACH AND ISSUES OF CONCERN FOR SPACE

Agenda:

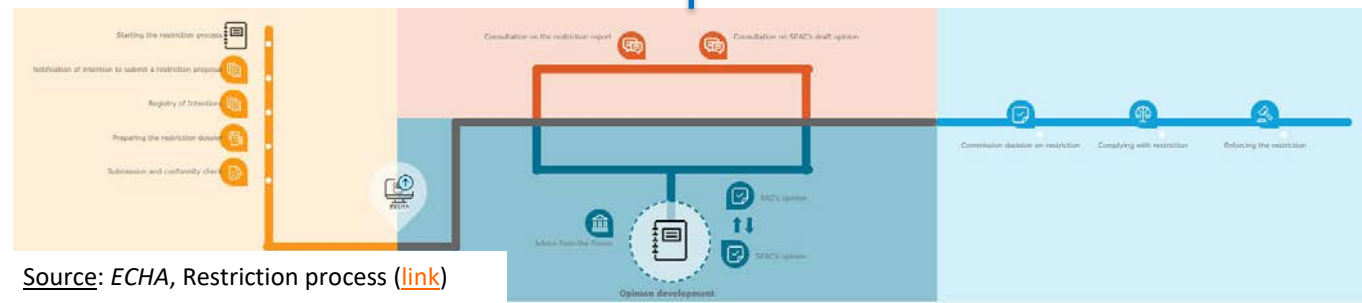
- ❖ Introduction: Navigating in a complex regulatory and political environment
- ❖ Group restrictions on PFAS and Chromates: Where are they heading?
- ❖ Essential Use Concept: Is it going to help Space?
- ❖ “Substances of Concern”: A new source of obsolescence?
- ❖ CSS REACH Revision: Is it still going to happen? - Eurospace Position (2022)
- ❖ Hydrazine and an impactful change agreed at UN level: Reversal possible?
- ❖ Conclusions

Introduction

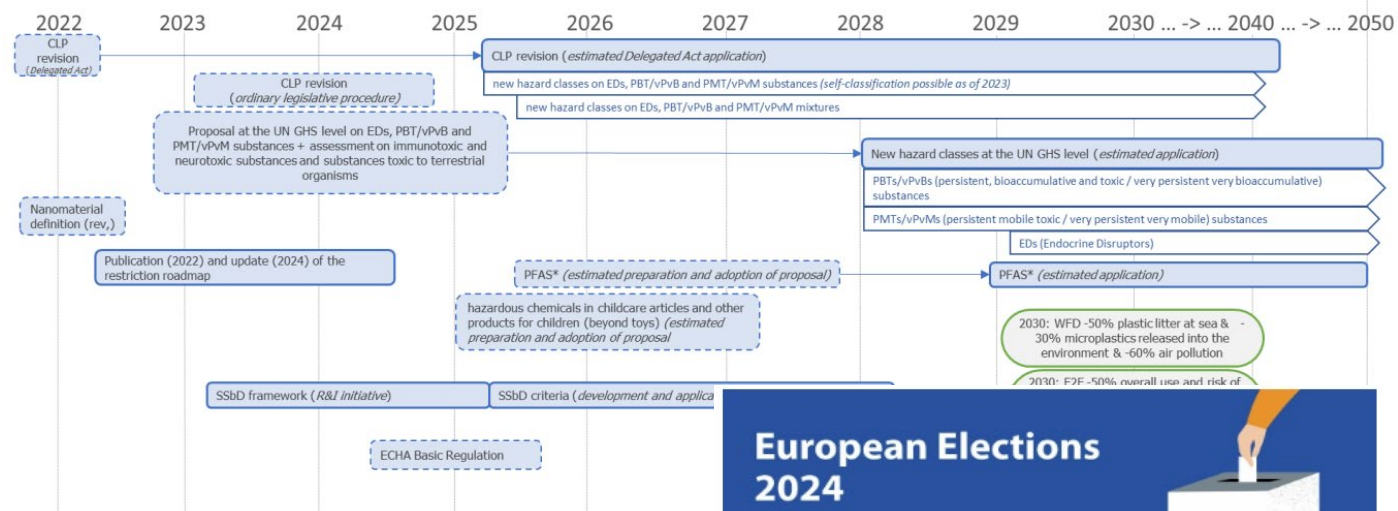
Navigating in a complex regulatory and political environment



Source: ECHA, Integrated Regulatory Strategy ([link](#))



Source: ECHA, Restriction process ([link](#))



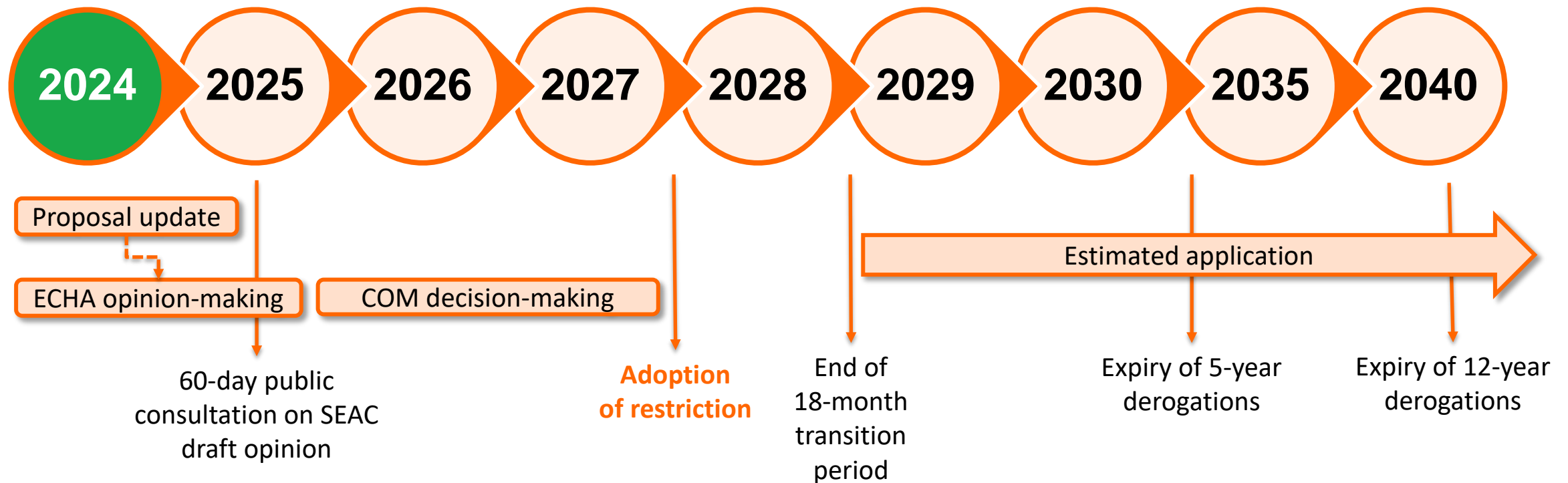
Source: European Commission, Transition Pathway for the Chemical Industry, Updated Regulatory Roadmap 2024 ([link](#))



Group restrictions: Where are they heading?

Universal PFAS: Estimated timeline (updated)

REACHLaw estimate based on European Commission Updated Regulatory Roadmap (available [here](#)) and initial restriction proposal.
Constant monitoring and adjustment required!



Group restrictions: Where are they heading?

Universal PFAS: Sector by Sector approach for opinion-making

Sector/use breakdown according to U-PFAS Restriction Proposal (based on Table A.1.)

PFAS manufacture	Textiles, upholstery, leather, apparel and carpets (TULAC) – <i>September meeting</i>	Food contact materials and packaging – <i>September meeting</i>	Metal plating and manufacture of metal products – <i>Provisional conclusions</i>
Consumer mixtures <i>Provisional conclusions</i>	Cosmetics <i>Provisional conclusions</i>	Ski wax <i>Provisional conclusions</i>	Applications of fluorinated gases – <i>next after September</i>
Medical devices	Transport – <i>next after September</i>	Electronics and semiconductors	Energy sector
Construction products – <i>next after September</i>	Lubricants	Petroleum and mining – <i>September meeting</i>	Waste stage PFAS applications
Lab equipment & filtration	Plant protection products and biocides	Chemical industry	Firefighting foam – <i>separate restriction proposal</i>
Medicinal products	Plastics (other than packaging) and rubber/elastomer production (incl. flame retardants)	Pyrotechnics	Personal care products other than cosmetics
Fracking (currently hardly applicable in EEA)	Immersion cooling (currently hardly applicable in EEA)	Defence industry	Printing inks
Cement industry	Professional cleaning and polishing	Other niche applications	Uses (yet) unknown

ECHA Committee (RAC, SEAC) work on-going or planned

of key interest for space/related applications

Group restrictions: Where are they heading?

Universal PFAS: European Space Sector response to ECHA

PFAS use mapping (extract)

Dossier information
Possible derogation generally addressing the use case (incl. par. and proposed duration in years)
Textiles in filtration/separation media (par. 5e, 5 years)
NO
NO
Fire suppressing agents (par. 5m / 12 years)
NO
NO
Industrial precision cleaning fluids (par. 5k / 12 years)
NO
Refrigerants in laboratory (par. 5g / 12 years)
Transport refrigeration (par. 5q / 5 years)
Hydraulic fluids for aerospace (par. 5o, 12 years)
NO
NO
NO
NO
NO
NO
NO
NO
NO
NO
NO
NO
NO
NO
Etc.

Comments to ECHA (22.9.2023)



Paris, 22 September 2023

**EUROPEAN SPACE SECTOR
COMMENTS ON THE ANNEX XV
RESTRICTION REPORT FOR
PER- AND POLYFLUOROALKYL
SUBSTANCES (PFAS)**

ECHA Public Consultation of 22 March 2023 on the proposed restriction on the manufacture, placing on the market and use of PFASs



Requests submitted to ECHA:

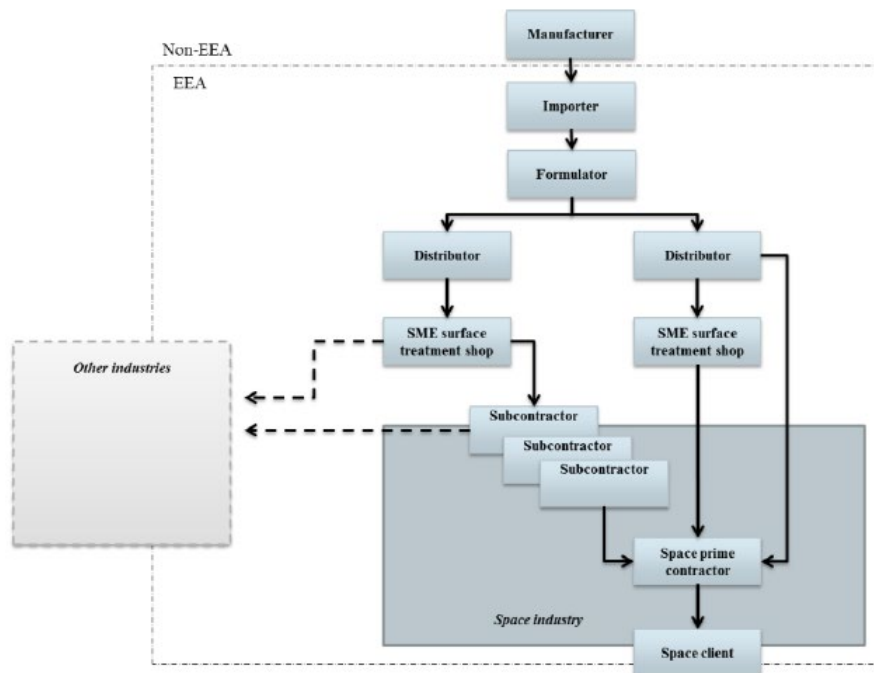
- **Fluoropolymers**, including fluoroelastomers, should be **entirely excluded from the scope** of the universal PFAS restriction, at least for industrial applications
- **Derogation** for all remaining PFAS uses in **equipment designed to be sent into space**, as long as no successful transition to space qualified alternatives can be achieved → in line with other EU legislation (e.g. RoHS, Batteries Regulation)
- **Further derogations** are necessary to enable our chemicals and component suppliers to maintain a **business viable market in the EU for aerospace and defence, electronics and related sectors**

Group restrictions: Where are they heading?

Cr(VI) substances: Transitioning from Authorisation to Restrictions

- ❖ Use in the Space Sector has decreased, but is still relevant
- ❖ Regulatory situation remains **very complex**, various factors:

Complex supply chains



**PERMIT
REQUIRED**



- Substance, use and applicant-specific
- Dependence on upstream authorisations
- Annulment of Commission upstream authorisation decision CTACSub (CrO3) **effective since 21 April 2024**
- On-going re-application activities (ADCR, CTACSub2)
- Separate authorisation systems in UK and Switzerland
- On-going restriction initiative by ECHA (on COM request)

Essential Use Concept: Is it going to help Space?

The "Theory": Essence of the Commission Communication*

*Communication from the Commission "Guiding criteria and principles for the essential use concept in EU legislation dealing with chemicals, C(2024) 1995 final, 22 April 2024

A use of a most harmful substance is essential for society¹⁶ if the following two criteria are met:

- 1) that use is **necessary for health or safety** or is **critical for the functioning of society**, **and**
- 2) there are no acceptable alternatives.

Necessary for health or safety

- Prevent, monitor or treat illness and similar health conditions
- Sustain basic conditions for human or animal life and health
- Manage health crises and emergencies
- Ensure personal safety
- Ensure public safety

Critical for the functioning of society

- Provide resources or services that must remain in service for society to function (e.g. ensure the supply of energy and critical raw materials or resilience to supply disruption)
- Manage societal risks and impacts from natural crises and disasters
- Protect and restore the natural environment
- Perform scientific research and development
- Protect cultural heritage

Requires introduction into specific legislation to have legal effect!

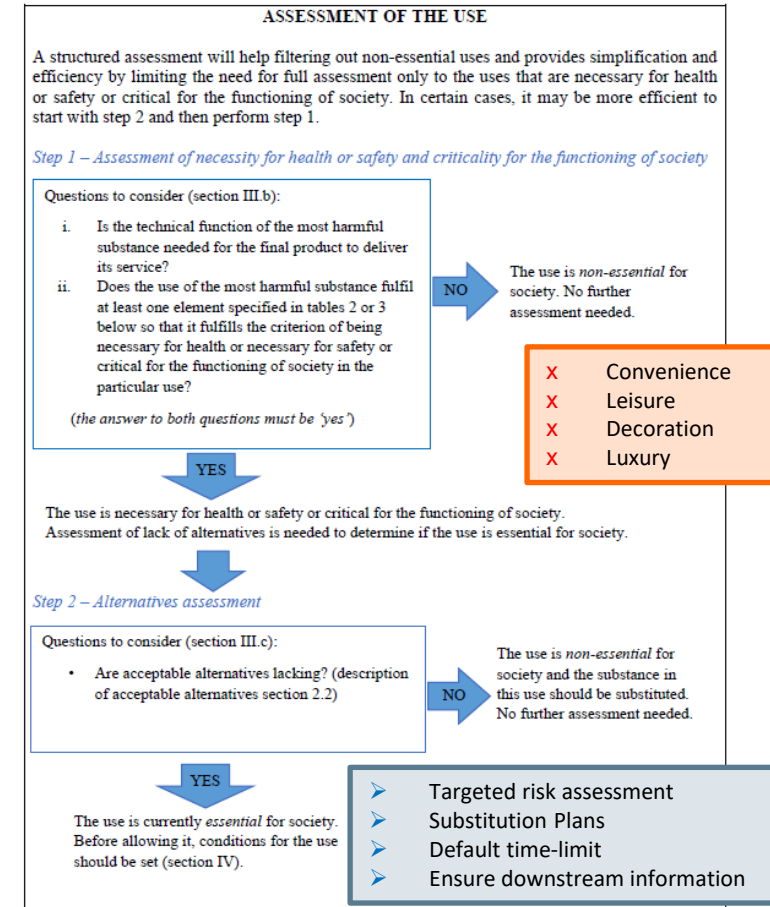


Figure 1: Assessing if a use of a substance is essential for society.

Essential Use Concept: Is it going to help Space?

Questions in Practice yet to be answered, such as...

How and when will the EUC be implemented in REACH?

How will the EUC effectively change decision making?

How to assess alternatives "from a societal point of view"?

How will EUC's "feasibility" for REACH etc. be assessed?

Do we need to accept lower performing alternatives in Space in the future?

Is EUC going to replace quantitative SEA?

Procedures ? Actors? Bodies?

What constitutes a "direct link" of the substance in Tables 2 and 3?

What "conditions" for essential uses?

Fast-track process for upfront exclusions?

Where is the overall sustainability of an alternative addressed in the process?

Simplification for the granting of derogations for clear-cut Essential uses?

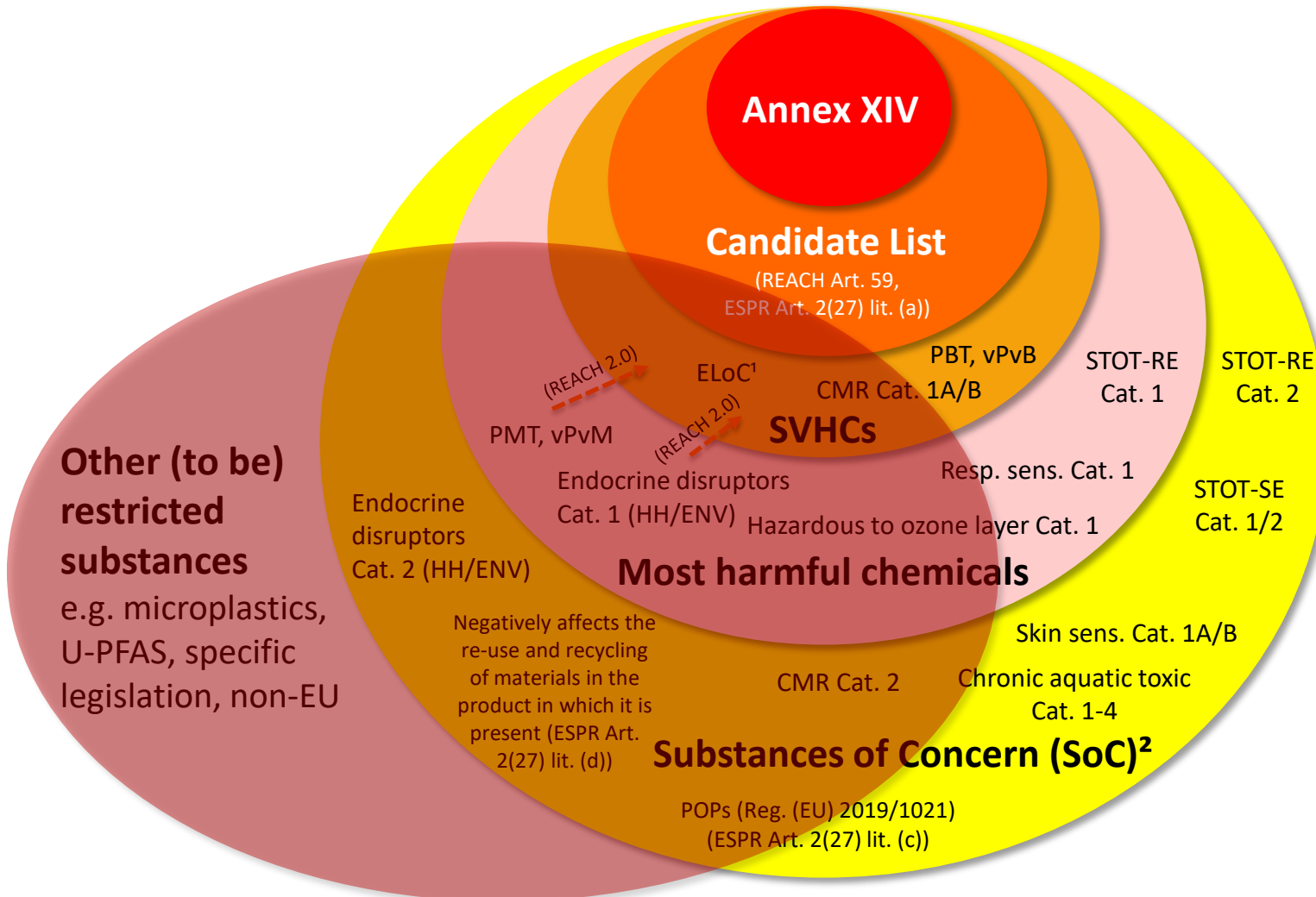
Scope of essential use assessment to "encompass broader product categories"?

Content of "targeted risk assessment" for essential uses?

Is the definition of "most harmful substance" also covering self-classified substances?

Etc.

"Substances of Concern": A new source of obsolescence? Looking beyond Annex XIV and Candidate List



Increase of magnitude and obsolescence risks

Category	Substance nr. tracked*	Material hits (%)*
Annex XIV	59	38 hits (4%)
Cand. List	240 entries (491 SCIP IDs)	133 hits (15%)
SVHCs	1,229 (CLH** CMR 1A/B)	192 hits (20%)
SoCs	3,916 (CLH**)	413 hits (48%)
Annex XVII	73 entries in total (>2,100 substances) 42 space relevant	181 hits (21%) 93 hits (11%)
U-PFAS proposal	10,595 (OECD CAS nr.)	48 hits (5%)* + ???

Numbers provided by Oliver Reiff-Musgrove, REACHLaw Ltd.

*in **ESA REACH Tool**: An automatical tool to analyse the impact ("hits") of REACH/related substance lists on space materials based on Material Safety Data Sheet information.

**CLH = Harmonised Classification & Labelling (CLP Annex VI)

*****Note**: Many PFAS/group entries cannot be found from SDS and affected materials have not previously been tracked, therefore the number of "hits" is not representative of the possible impact!

Notes: This diagram is simplified and does not replace a careful reading of the legal provisions (REACH, CLP, ESPR, CSRD/ESRS, POP, future ESPR delegated acts) and Commission communications (SSbD, EUC, etc.).

¹ELoC = Equivalent Level of Concern determined case by case (REACH Art. 57 lit. f)) by inclusion in the Candidate List.

²See Draft ESPR Art. 2(27) [EP agreed text](#): Definition restricted to substances with the corresponding harmonized classifications in CLP Annex VI (ESPR Art. 2(27) lit. (b)), except for ESPR Art. 2(27) lit. (a), (c) and (d)

CSS REACH Revision: Is it still going to happen?

Space Sector Position of 13 April 2022



ASD-EUROSPACE
The space group in ASD

Paris, 13 April 2022

EUROPEAN SPACE SECTOR FEEDBACK ON THE CSS REACH REVISION – POSITION PAPER

Reference: European Commission open public consultation on the targeted revision of the REACH Regulation ((EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

This is the joint feedback of the European Space Industry, represented by ASD-EUROSPACE – with the support of the European Space Agency (ESA) and national space agencies – to the European Commission's (COM) open public consultation on the targeted revision of the REACH Regulation launched on 20.1.2022. It has been prepared with the support of the CSS Space Focus Group (SFG), a splinter group of the Materials and Processes Technology Board of the European Space Components Coordination (ESCC MPTB).¹ The SFG was established in April 2021 in response to the COM's Chemicals Strategy for Sustainability (CSS) of 14.10.2020, considering the magnitude of envisaged amendments to REACH and their possible impacts to the European Space Sector.

The present contribution follows on our feedback to the REACH Revision Roadmap of 1.6.2021² and the comprehensive contribution of 27.1.2017³ to the previous COM REACH Review. It complements our response to the COM questionnaire for the present consultation as well as the contribution to the same consultation submitted by the AeroSpace and Defence Industries Association of Europe (ASD).

The major impacts for our sector from the REACH implementation to date and the planned CSS REACH Revision arise from the REACH Candidate List and the authorisation and restriction processes. In this regard, we also make reference to the ASD response dated 24.2.2022 to the questions included in COM paper CA/03/2022 on potential options for amendments of the REACH Regulation in order to reform REACH authorisation and restriction processes; this response was supported by the CSS SFG.

¹ See the list of CSS Space Focus Group participants at the end of this document. For further information about the CSS Space Focus Group, please see Eurospace News Alert of 26 April 2021 ([link](#)).

² <https://eurospace.org/eurospace-calls-on-the-european-commission-to-reflect-special-features-and-essential-role-of-space-products-in-the-planned-revision-of-the-reach-regulation>

³ Position Paper 2017, Questionnaire response 2017.

MPTB-ES-PO-0098

❖ **Stability** of the REACH regulatory system

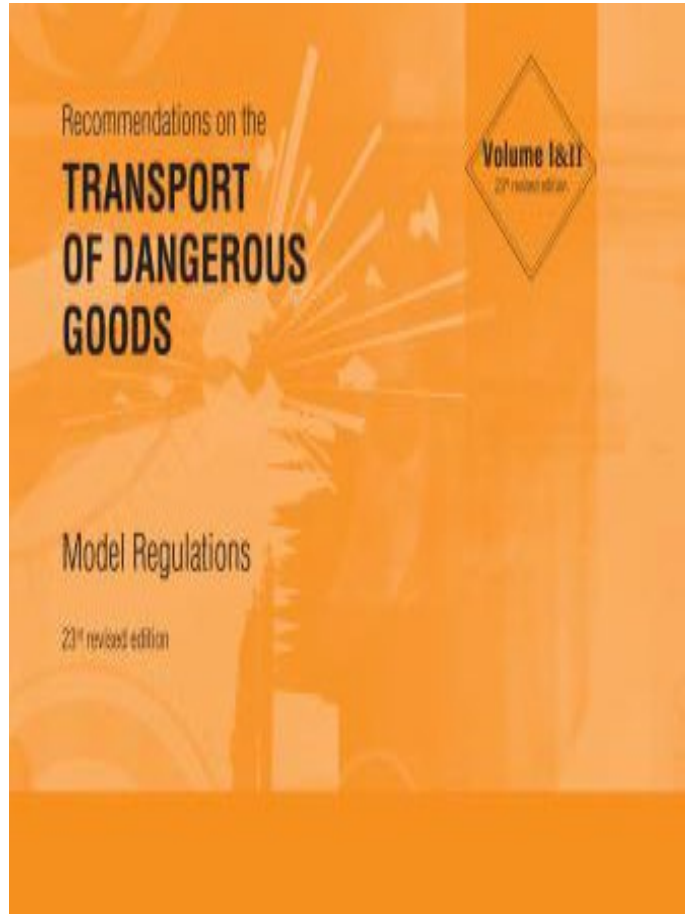
❖ **Targeted changes** to achieve the following:

- Deliver on the ambitions of **burden reduction, simplification** and more **legal certainty** for our **industry**, especially as part of the **Authorisation and Restriction Reform**
- **Fast-track process, upfront exclusions and derogations for essential uses, recognising that uses of chemicals without viable alternatives for the manufacturing of Space products in EU are essential**
- **Clearer signals and more long-term planning security** to companies are given for the management of most harmful chemicals / Substances of Very High Concern
- Any **new duties for downstream users** in relation to these substances (e.g. reporting to ECHA) are manageable, proportionate and fit for purpose
- **Obsolescence risks** for materials and processes in the space industry are **minimised**, especially from broad-scope regulatory actions.

The Eurospace Position Paper is available at https://eurospace.org/wp-content/uploads/2022/04/eurospace_sfg_position-paper_reach-rev_opc_13042022.pdf

Energetic materials and an impactful change agreed at UN level

Planned amendment of UN 2029 for hydrazine anhydrous



- ❖ Preparation of the **24th Revision of the UN Model Regulations for the Transport of Dangerous Goods (TDG)** – due to come into force in January 2027
- ❖ The *UN Sub-Committee of Experts on the Transport of Dangerous Goods (SCETDG)* agreed in December 2023 to add a **special packing provision “PP5”** to the existing entry **UN number 2029 for hydrazine anhydrous** in the Dangerous Goods List, on (revised) proposal by China
- ❖ **Impact assessment** by *Space Energetic Materials Working Group (EMWG)* identified a concern: **could no longer use current pressure vessels & lack of alternatives, not able to comply with future PP5**
- ❖ **Eurospace paper prepared by EMWG** (MPTB-ES-PO-0150), and supported by the *Aerospace, Security and Defence Industries Association of Europe (ASD)*, *Defense Logistics Agency Aerospace Energy of US* and the *Aerospace Industries Association of America (AIA)*
- ❖ **On-going: Approaching Member States/experts** in the UN SCETDG (DE, FR, NL, ...) to seek their support to ensure continued compliance with UN number 2029.

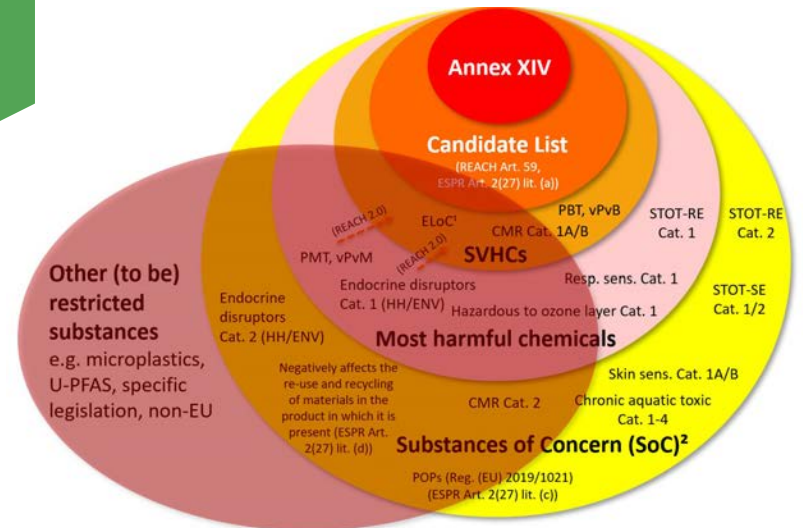
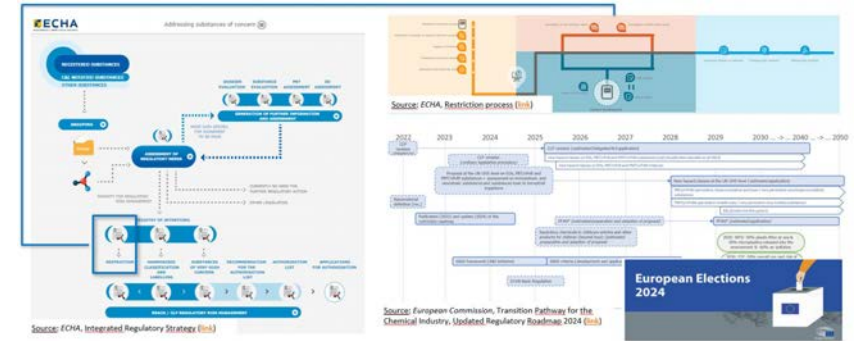
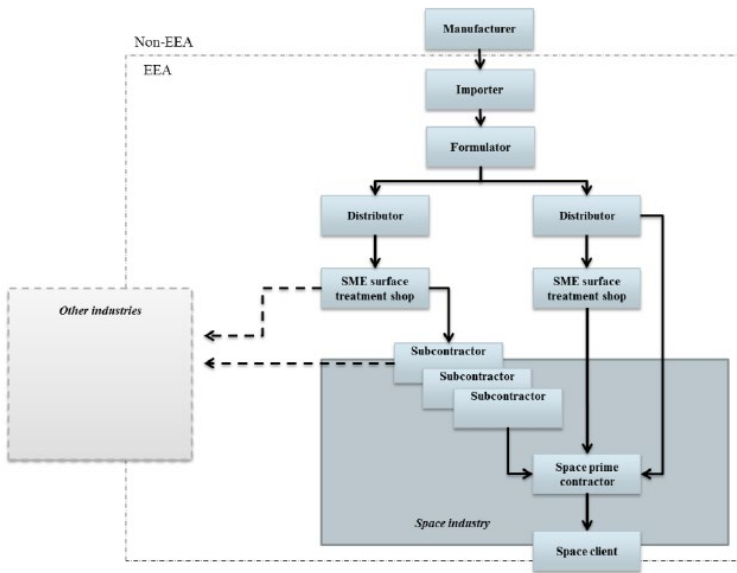


Priority actions on EU REACH and issues of concern for Space

Conclusions: Moving target, hybrid challenge

Universal PFAS: Estimated timeline (updated)

REACH Law estimate based on European Commission Updated Regulatory Roadmap (available [here](#)) and initial restriction proposal. Constant monitoring and adjustment required!



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COMPLIANCE. ADVOCACY. SUSTAINABILITY.



Questions & Answers

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END OF PRESENTATION