

ASD Position Paper on the proposed EU restriction for PFAS – November 2023

The Aerospace, Security and Defence Industries Association of Europe (ASD) is the voice of European Aeronautics, Space, Security and Defence Industries, representing directly and indirectly around 3,000 companies. It has 20 major European companies as direct members and 22 National Associations active in 18 European countries.

ASD submitted its response to the public consultation on the proposed EU restriction dossier for PFAS in September 2023 (Comment #8661), to bring attention to our sector's dependence on PFAS substances, including many fluoropolymers, that are within scope of this restriction proposal and for which there are no alternatives available today or in the foreseeable future. **The restriction as proposed would have a catastrophic impact since it would bring aviation, space, security and defence to a standstill** (no production, no imports, no maintenance) by 18 months after the entry into force.

PFAS uses in A&D sector:

Our sector is reliant on PFAS in a wide range of applications due to their **unrivalled performance properties, making them the only choice currently available to meet the reliability demands** required across the sector, especially for products operating **for extended periods in harsh and extreme conditions of use**. They are proven in A&D applications to be durable, stable and mechanically strong in harsh conditions, stable in air, water, sunlight, deep space vacuum, chemicals and microbes, chemically inert, non-wetting, non-stick, and highly resistant to temperature, fire, corrosive chemicals and weather. Impacted applications include metal plating, lubricants, fire suppression, hydrogen fuel cells, energy, electronics, electrical components and wires, coatings and paints, seals, sealants and adhesives, bearings and bushings, fuel and hydraulics systems and components in which PFAS can be present in manufacturing processes or purchased parts. PFAS are essential for the continued operability of products currently in service which may have a service life lasting more than 40 years as well as for the manufacture of new products, spare parts and future technology programmes.

Additional critical uses are found in Halon replacements for fire suppression, already implemented in some applications (cabin & cockpit portable and lavatory fire extinguisher systems) and in final stages of development for other (Cargo).

PFAS Alternatives in A&D sector:

In the vast majority of cases, **there are no suitable alternatives available**. Use of any non-certified possible PFAS free solution in an A&D application is not possible since it could result in a loss of performance and compromise product safety and reliability.

The **substitution process within the sector is highly complex** and subject to strict certification (airworthiness, space launch sites or defence) requirements which must be met to ensure performance and safety across components, final products and processes (including maintenance, repair and overhaul).

Given that new chemicals/materials/formulations need to be developed and deployed for both new and existing products, **a 12-year derogation period is not adequate** to ensure the continued functioning of our sector in the long term, and will need to be extended in line with alternatives maturity status. This is due to the fact that the process of developing and deploying new alternatives is extremely complex. For comparison, industry has been working on hexavalent chromium replacement for over thirty years and the work is still ongoing.

Fluoropolymers concerns in A&D sector:

Approximately 80% of PFAS uses in the A&D sectors have been identified as fluoropolymers, with the most notable applications including Hydraulic Hoses; Seals (including O-rings and gaskets); Sleeves; Sealants; Adhesives; Coatings; Cables and connectors for which there is no intentional release during use.

Fluoropolymers are persistent but also non-mobile, non-bioaccumulative and non-toxic*, and as such a blanket ban is perceived as a disproportionate risk management option. Alternative regulatory measures focusing on the end-of-life (for non-space applications) and manufacture phases, such as specific obligations under the Industrial Emissions Directive, could be considered as a more appropriate means to manage concerns.

Even if A&D sector derogations for fluoropolymers were provided for, there are still concerns for the impact on our sector in case of obsolescence of materials and processes and unpredictable side effects within related industrial supply chains as a result of PFAS restriction. The A&D sector will be dependent on related sectors also being granted any necessary derogations for continued delivery of products and services, where there are no alternatives for fluoropolymers, to A&D.

A&D sector request:

In line with the above, ASD is urging the dossier submitters to amend their restriction proposal to explicitly integrate the specificities of our sector in their assessment and minimise disruptions and risks by considering the following requests:

- **Exclude fluoropolymers (and the precursor PFAS chemicals necessary for their manufacture) from the scope of the restriction given their ubiquity in A&D products and the absence of alternatives that fulfil the performance requirements for reliability and safety.**
- **Include a sector derogation for the use of non-polymeric PFAS chemicals necessary for the production and operation of A&D products with a review clause to allow for an extension/renewal of the derogation if needed due to the lack of suitable alternatives.**
- **Exclude the use of PFAS chemicals on their own, in formulations and in articles that are necessary for the Maintenance Repair Overhaul of existing products to avoid any premature obsolescence.**
- **Include a time-unlimited derogation for specific PFAS chemicals used in fire suppression systems as PFAS are currently the only suitable Halon alternative and the regrettable substitution scenario must be avoided.**

In addition, ASD is also very concerned that the reporting requirement for uses relying on derogations would result in a very heavy administrative burden associated with the collection of an enormous volume of information on all PFAS chemicals in complex A&D products (e.g. naval vessels, aircraft, armoured vehicles). It would be unmanageable and impractical to impose this after the 18 months transition time and it is therefore strongly recommended that enough time is allocated to perform this exercise (5 to 10 years).

[Signed by] Jan Pie, ASD Secretary General
Brussels, 28 November 2023

*see position paper from Fluoropolymers Product Group (FPG) available at https://fluoropolymers.plasticseurope.org/application/files/8716/7991/0281/21_March_FPG_Statement_on_the_PFAS_REACH_restriction_report.pdf and submission #6148 in the public consultation