

Lengths of transitional periods and assessment periods

1. Lengths of transitional periods

Length type of transitional period (related to substitution and emission potential) ¹	Sector / type of use	Range proposed by STO ¹ and other sources	DS proposed sensitivity analysis	DS possible specific suggestion (if needed)
Long	(a). Facilities with large (atmospheric) tanks of flammable liquids with a total bunded area over 400m ² and installation needing to comply with SEVESO Directive ²	8y (Equinor – offshore oil platforms) 10y (Lastfire) 12y (~PFHxA restriction)	8y 10y 12y	Scenario 1: 8y Scenario 2: 10y
Medium	(b). Any other type of use not already covered by the other categories (e.g. chemical, petrochemical, offshore oil and gas installations and other industries, civil aviation, aerospace, defence)	8y (Equinor – offshore oil platforms) 5y: PFHxA restriction 4y (US Defense law)	5y 8y 10y	Sc1: 5y Sc2: 8y
Short	(c). Municipal fire services, ready-to-use applications (e.g. fire extinguishers), marine sector	Across sectors: 3-6y 5y: PFHxA restriction	18 months 36 months 5y	Sc1: 18 months Sc2: 3 years
Very short	(d). Training and testing, irrespective of the sector of use	Immediate. 18 months (PFHxA restriction proposal)	18 months 36 months 5y	Sc1: 18 months Sc2: 18 months

¹ Based on EC/ECHA report from stakeholders' consultation (see summary in section E.8.1 and E.8.2 pp. 177-179 of the pre-Annex XV report) and additional information sources such as contributions to the consultation to the PFHxA restriction proposal.

² Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances - <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012L0018>

Sectors of use and usage rates as identified in the EC/COM study:

Table B.1 Industry splits and usage rates based on data from Eurofeu and Brooke et al (2004)*

Sector	Percentage share of total	Annual usage rates (of total quantity sold annually)	Live incidents (as a percentage of total use)	Training (as a percentage of total use)	Efficacy of bunding/control measures for training
Military	6%	17.5%	7%	93%	90%
Civil Aviation	9%	17.5%	7%	93%	97%
Municipal Fire Services	13%	60%	93%	7%	90%
Chemical / petrochemical	59%	17.5%	7%	93%	97%
Marine Applications	12%	17.5%	7%	93%	0%
Ready to use applications	1%	17.5%	100%	0%	N/A

*For live incidents a 100% release is assumed split evenly between releases to surface water and soil. In the case of marine applications this is a 100% release to sea.

Possible Excel sheet design:

Length type of transitional period	Type of use	Sectors categories covered, as described in EC/ECHA report (Table B.1 page 97 of pre-Annex XV report)	Lengths of TP	Several columns with other input parameters
Long	LAST and Seveso	A percentage to be determined of “Chemical / petrochemical” (minus training and testing)	8y 10y 12y	
Medium	Other industries, aviation and defence	Remaining percentage of “Chemical / petrochemical”	5y 8y 10y	
		“Civil aviation” (minus training and testing)		
		“Military” (minus training and testing)		
Short	Municipal fire services, ready to use applications and marine applications	“Municipal Fire Services” (minus training and testing)	18 m 36 m 5y	
		“Ready-to-use applications”		
		“Marine applications” (minus training and testing)		
Very short	Training and testing	Training part of the above sectors	18 m 36 m 5y	

Note:

Training and testing are claimed by industry to have been largely substituted with fluorine-free foams or simulants. Therefore, the Excel spreadsheet should allow an easy modification of the input parameters for proportion of PFAS foam considered for training and testing.

Output:

For the two restriction scenarios (1: ban on placing on the market only; 2: ban on placing on the market and use):

Length type of transitional period	Type of use	Emissions year 1	Costs year 1	Emissions year 2	Costs year 2	...	Total emissions (y1-30)	Total costs (y1-30)
Long	LAST and Seveso							
Medium	Other industries, aviation and defence							
Short	Municipal fire services, ready to use applications and marine applications							
Very short	Training and testing							

2. Assessment period

- Scenario 1: ban on the placing on the market, with use-specific transitional periods (use continues to be allowed)
- Scenario 2: ban on the placing on the market and use, with use-specific transitional periods

Considerations for scenario 1:

Taking the sector with the possibly longest transitional period of 12 years, this would mean that purchase of PFAS foams will be allowed 12 years after the restriction entry into force (EIF) and its use legally allowed permanently, in practice used until the foam reaches expiry date (considered 15 years in our assessment).

For simplicity one can consider a steady-state level of use (considering that no alternative become available and usable until the end of the transitional period), followed by a linear decrease after 12 years until 27 years after EIF (12 transitional period + 15y foam expiry date).

Considerations for scenario 2:

The difference with scenario 1 is that, for a given type of use, after a steady-state or slightly decreasing level of placing on the market and use, the emissions will stop immediately after the end of the transitional period.

Taking the possibly longest transitional period of 12 years, this would mean a maximum assessment period of 12 years.

For simplicity, we suggest considering for both scenarios a 30 years assessment period.