

# Information on particulate matter PM<sub>2,5</sub>

## 1 Target and limit values

Table 1

Averaging period		Value	Date by which limit value is to be met	Margin of tolerance
Target value for the protection of human health	Calendar year	25 µg/m <sup>3</sup>	Should be met on 1 January 2010	None
Limit value for the protection of human health	Calendar year	25 µg/m <sup>3</sup>	1 January 2015	5 µg/m <sup>3</sup> , from 1 January 2009 decreasing every 12 month by 1/7

The sampling volume refers to ambient conditions in terms of temperature and atmospheric pressure at the date of measurements.

## 2 Upper and lower assessment thresholds

Table 2

Annual average	
Upper assessment threshold	17 µg/m <sup>3</sup>
Lower assessment threshold	12 µg/m <sup>3</sup>

## 3 Average exposure indicator

The Average Exposure Indicator is assessed as a three-calendar year running annual mean concentration. The AEI for the reference year 2010 is the mean concentration of the years 2008, 2009 and 2010. The AEI 2020 (averaged over years 2018, 2019 and 2020) is used for the examination whether the national exposure reduction target is met.

Table 3

Initial concentration in $\mu\text{g}/\text{m}^3$ in 2010	Reduction target in percent, to be met in 2020
< 8,5 = 8,5	0 %
> 8,5 – < 13	10 %
= 13 – < 18	15 %
= 18 – < 22	20 %
$\geq 22$	All appropriate measures to achieve $18 \mu\text{g}/\text{m}^3$

Table 4

Exposure concentration obligation	Year by which the obligation value is to be met
AEI – $20 \mu\text{g}/\text{m}^3$	2015

## 4 Data quality objectives

Table 5

Data collection	Data quality objective
Continuous measurement	
Uncertainty	25 %
Minimum data capture	90 %
Indicative measurement	
Uncertainty	50 %
Minimum data capture	90 %
Minimum time coverage	14 % (One day's measurement a week at random, evenly distributed over the year, or eight weeks evenly distributed over the year.)
Modelling	
Uncertainty	
Annual averages	50 %
Objective estimation	
Uncertainty	100 %

## **5 Reference method for the measurement of the concentration**

The reference method for the sampling and measurement of PM<sub>2,5</sub> is that described in EN12341:2014 “Ambient Air – standard gravimetric measurement method for the determination of the PM10 or PM<sub>2,5</sub> mass concentration of suspended particulate matter” 29.8.2015 L 226/10 Official Journal of the European Union EN.

## **6 Legal basis**

- Directive 2008/50/EC of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ EC. L 152/1)
- COMMISSION DIRECTIVE (EU) 2015/1480 of 28 August 2015 amending several annexes to Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council laying down the rules concerning reference methods, data validation and location of sampling points for the assessment of ambient air quality
- 39th Ordinance Implementing the Federal Immission Control Act (Ordinance on Air Quality Standards and Emission Ceilings - 39. BImSchV)