

Commission Decision of 5 June 2009 on the adoption of a common safety method for assessment of achievement of safety targets, as referred to in Article 6 of Directive 2004/49/EC of the European Parliament and of the Council (notified under document number C(2009) 4246) (Text with EEA relevance) (2009/460/EC)

ANNEX

2. Methodology for calculating NRVs and for deriving CSTs**2.1. Methodology for calculating NRVs**

2.1.1. For each Member State and for each of the risk categories the NRV shall be calculated by applying in sequential order the following process:

- (a) calculation of the values returned by the corresponding measurement units listed in Appendix 1, by considering the data and provisions referred to in section 1.1;
- (b) analysis of the results of the process described in point (a), to check presence and recurrence of zero values for the FWSIs in the observed safety performances for the years concerned;
- (c) if the zero values referred to in point (b) are no more than two, the calculation is made of the weighted average of the values referred to in point (a), as described in section 2.3, and the returned value is taken as the NRV;
- (d) if the zero values referred to in point (b) are more than two, the Agency shall attribute to the NRV a discretionary value to be identified by consulting the Member State concerned.

2.2. Methodology for deriving CSTs from NRVs

2.2.1. For each of the risk categories, once the NRV has been calculated for each Member State according to the procedure laid down by section 2.1, the corresponding CST shall be assigned a value equal to the lower of:

- (a) the value of the NRV which is the highest amongst the Member States;
- (b) the value equal to 10 times the European average value of the risk to which the considered NRV refers.

2.2.2. The European average referred to in point 2.2.1(b) shall be calculated by cumulating the relevant data for all the Member States and by using the corresponding measurement units listed in Appendix 1, as well as the weighted average described in section 2.3.

2.3. Weighted averaging process for the calculation of NRVs

2.3.1. For each Member State and for each of the risk categories to which the weighted averaging can be applied according to point 2.1.1(c), the following steps shall be applied for calculating, during year Y (where Y = 2009 and 2011), the NRV_Y :

- (a) calculation of the annual observations OBS_i (where i is the considered year of observation) returned by the corresponding measurement units listed in Appendix 1, after providing as input the data for the most recent reported n years as referred to in point 2.1.1(a) [initially $n = 4$; from 2011 onwards $n = 6$];
- (b) calculation of the arithmetic n -year average (AV) of annual observations OBS_i ;
- (c) calculation of the absolute value of the difference $ABSDIFF_i$ between each annual observation OBS_i and the AV . If $ABSDIFF_i < 0,01 * AV$, to $ABSDIFF_i$ is attributed a constant value equal to $0,01 * AV$;

- (d) calculation of the weight (W_i) for each single year i , by taking the inverse of $ABSDIFF_i$;
- (e) calculation of the NRV_Y in the form of weighted average, as follows:

$$NRV_Y = \frac{\sum_{i=x}^N W_i \times OBS_i}{\sum_{i=x}^N W_i}$$

;

where i is a natural number and

<p>if $Y = 2009$: $x = Y - 5$; $N = Y - 2$ if $Y = 2011$: $x = Y - 7$; $N = Y - 2$</p>
