



# Amendments to UN Regulation No. 24

(Compression Ignition Engines - Emission of Visible Pollutants - Power Measurement)



## **Correction factor**

### Suggested Amendments

Add following paragraph to UN Regulation No. 24, Annex 4

*“3.3.3 When a turbo-charged engine is fitted with a system which allows compensating the ambient conditions temperature and altitude, at the request of the manufacturer, the correction factor  $\alpha_a$  or  $\alpha_d$  shall be set to the value of 1.”*

Add following paragraph to UN Regulation No. 24, Annex 10

*“6.4.3 When a turbo-charged engine is fitted with a system which allows compensating the ambient conditions temperature and altitude, at the request of the manufacturer, the correction factor  $\alpha_a$  or  $\alpha_d$  shall be set to the value of 1.”*



## Correction factor

### Suggested Amendments

- In UN Regulation No. 85 in 2016 there was a Supplement No. 7 which added Paragraph:
- *“5.4.3. When a turbo-charged engine is fitted with a system which allows compensating the ambient conditions temperature and altitude, at the request of the manufacturer, the correction factor  $\alpha_a$  or  $\alpha_d$  shall be set to the value of 1.”*
- Annex 4 of UN Regulation No. 24 describes the opacity test over the full load curve of an CI engine. For the determination of the engine power the same correction factors are applied as in Reg. No. 85. However, the paragraph mentioned above is missing in Reg. No. 24. Therefore it is not possible to use this paragraph for CI engines, because for the opacity test at full load it can not be applied. So Reg. No. 24 should be adjusted to harmonize both regulations.



## Fuel

### Suggested Amendments

- Paragraph 3.2. to UN Reg. No. 24, Annex 4 currently reads:
  - “3.2 Fuel
  - *The fuel shall be the reference fuel whose specifications are given in Annex 6 to this Regulation.*“
  
- Amend to read
  - “3.2 Fuel
  - ***The fuel used shall be the one available on the market. In any case of dispute, the fuel shall be the reference fuel whose specifications are given in Annex 6 to this Regulation.***”
  
- Justification:
  - *Consistency with UN Regulation No. 85*