

**This paper provides additional information and justification regarding
document GRE/2026/11**

**I. Proposal for a Supplement to the 01 series of amendments to
UN Regulation No. 149**

Paragraph 4.13.1., amend to read:

- “4.13.1. In case a specific function, which is realised with more than one element for visible radiation (see definition of “light source” in UN Regulation No. 48) wired so that a failure of any one of them does not cause all of them to stop emitting light, a signal indicating the failure of that specific function shall be provided, according to the applicant’s selection of one or more of the following options:
- (a) One or more element(s) for visible radiation stops emitting light;
 - (b) As a consequence of one or more element(s) for visible radiation stops emitting light, the resulting luminous intensity value in any of the photometric requirements is less than ~~80% of the minimum luminous intensity value required for the type approval~~ **the required minimum CoP limits (20%)**;
 - (c) As a consequence of one or more element(s) for visible radiation stops emitting light, the resulting luminous flux value has changed by more than 5% compared to the luminous flux value when no failure occurs;
 - (d) More than 5% of the elements for visible radiation stop emitting light. In case more than one light source is used, this provision applies to the sum of all elements and to the elements of each light source separately;
 - (e) If fitted, one or more UN approved light source(s) stops emitting light.
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II. Justification

1. The intention of the 80% failure criterion is connected to the allowed minimum requirements for Conformity of Production (CoP), which is the criterion for production whether a headlamp can be brought to the market or not.
 2. A large number of measurement points and segments are checked during type approval. To simplify the CoP checks, tables focussing on the most significant points and segments have been created. These are a subset of the full Class C type-approval table.
 3. In particular, the overhead requirements (items S50 and S100 in Tables 6 for passing-beam and Table 7 for AFS) may be fulfilled with the help of position lamps, they thus shall not be a criterion for failure detection of the passing beam.
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