



Economic and Social Council

Distr.: General
7 August 2013

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Seventieth session

Geneva, 21-23 October 2013

Item 10 of the provisional agenda

Regulation No. 27 (Advanced warning triangles)

Proposal for Supplement 3 to the 03 series of amendments to Regulation No. 27 (Advanced warning triangles)

Submitted by the expert from Germany*

The text reproduced below was prepared by the expert from Germany in order to make the Conformity of Production (CoP) of the Regulations more precise. The modifications to the existing text of the Regulation are marked in bold characters.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Paragraph 10.1., amend to read:

"10.1. Advance-warning triangles shall be so manufactured as to conform to the type approved **under this Regulation.**

The compliance with the requirements set forth in paragraphs 6., 7. and 8. above **shall be verified as follows:**"

Paragraphs 10.2. to 10.4.(former), renumber as paras. 10.1.1. to 10.1.3. and amend to read:

"10.1.1. In addition, the stability in time of the optical properties and colour of retro-reflecting optical units of advance-warning triangles conforming to an approved type and in use shall be verified. In the event of a systematic deficiency of the retro-reflecting optical units of advance-warning triangles in use and conforming to an approved type, approval may be withdrawn. A "systematic deficiency" shall be deemed to exist where an approved type of advance-warning triangle fails to meet the requirements of paragraph 6.2. of this Regulation.

10.1.2. The minimum requirements for Conformity of Production (CoP) control procedures set forth in **Annex 7** to this Regulation shall be complied with.

10.1.3. The minimum requirements for sampling by an inspector set forth in **Annex 8** to this Regulation shall be complied with."

Paragraph 10.5. (former), renumber as paragraph 10.2., to read:

"10.2. The authority which has granted type approval may at any time verify the conformity control methods applied in each production facility.

The normal frequency of these verifications shall be once every two years."

Annex 8,

Paragraphs 2. to 4. shall be deleted.

Figure 1 shall be deleted.

Insert new paragraphs 2. to 6., to read:

"2. **First sampling**

In the first sampling four advance-warning triangles are selected at random. The first sample of two is marked A, the second sample of two is marked B.

2.1. **The conformity of mass-produced advance-warning triangles shall not be contested if the deviation of any specimen of samples A and B (all four advance-warning triangles) is not more than 20 per cent.**

In the case that the deviation of both advance-warning triangles of sample A is not more than 0 per cent, the measurement can be closed.

2.2. **The conformity of mass-produced advance-warning triangles shall be contested if the deviation of at least one specimen of samples A or B is more than 20 per cent.**

The manufacturer shall be requested to bring his production in line with the requirements (alignment) and a repeated sampling according to paragraph 3. below shall be carried out within two months' time after

the notification. The samples A and B shall be retained by the Technical Service until the entire CoP process is finished.

3. First repeated sampling

A sample of four advance-warning triangles is selected at random from stock manufactured after alignment,

The first sample of two is marked C, the second sample of two is marked D.

3.1. The conformity of mass-produced advance-warning triangles shall not be contested if the deviation of any specimen of samples C and D (all four advance-warning triangles) is not more than 20 per cent.

In the case that the deviation of both advance-warning triangles of sample C is not more than 0 per cent, the measurement can be closed.

3.2. The conformity of mass-produced advance-warning triangles shall be contested if the deviation of at least:

3.2.1. One specimen of samples C or D is more than 20 per cent but the deviation of all specimens of these samples is not more than 30 per cent.

The manufacturer shall be requested again to bring their production in line with the requirements (alignment).

A second repeated sampling according to paragraph 4. below shall be carried out within two months' time after the notification. The samples C and D shall be retained by the Technical Service until the entire CoP process is finished.

3.2.2. One specimen of samples C and D is more than 30 per cent.

In this case the approval shall be withdrawn and paragraph 5. below shall be applied.

4. Second repeated sampling

A sample of four advance-warning triangles, is selected at random from stock manufactured after alignment.

The first sample of two is marked E, the second sample of two is marked F.

4.1. The conformity of mass-produced advance-warning triangles shall not be contested if the deviation of any specimen of samples E and F (all four advance-warning triangles) is not more than 20 per cent

In the case that the deviation of both advance-warning triangles of sample E is not more than 0 per cent, the measurement can be closed.

4.2. The conformity of mass-produced advance-warning triangles shall be contested if the deviation of at least one specimen of samples E or F is more than 20 per cent.

In this case the approval shall be withdrawn and paragraph 5. below shall be applied.

5. Approval withdrawn

Approval shall be withdrawn according to paragraph 9. of this Regulation.

6. Additional Tests

With respect to the verification of the normal use the following procedures shall be applied:

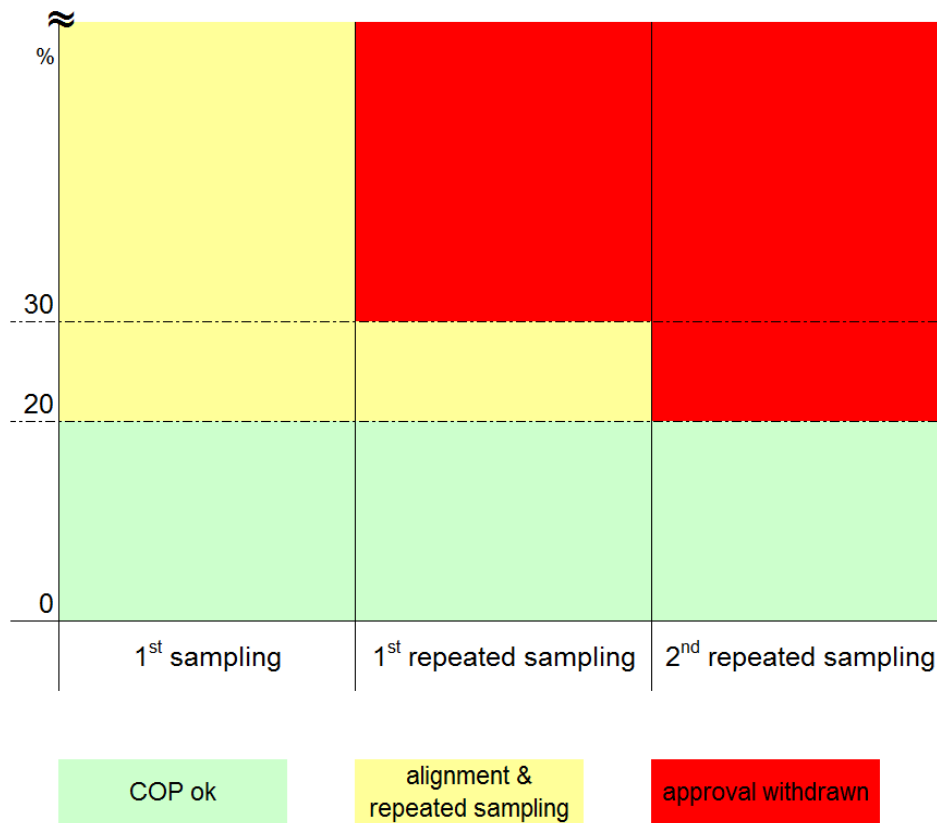
One additional advance-warning triangle shall be tested according to the procedures described in paragraph 1.5.3. to 1.8.3. of Annex 5.

The advance-warning triangles shall be considered as acceptable if the tests have been passed.

However, if the test on this sample is not complied with, the two other additional advance-warning triangles shall be subjected to the same procedure and both shall pass the test."

II. Justification

1. The present set of proposals for amendments to the CoP provisions in a number of Regulations on lighting and light-signalling is based on documents ECE/TRANS/WP.29/GRE/2013/21 to ECE/TRANS/WP.29/GRE/2013/37, which were adopted at the sixty-ninth GRE session.
2. By the fact, that GTB has finalized the amendments for the UN Regulations Nos. 27 and 65, the expert from Germany has prepared revised proposals for the relevant parts for CoP also for these Regulations, to have the chance, if accepted, to prepare a final consolidated version in one document for each of these two Regulations for WP.29.
3. The proposals clarify in the relevant paragraphs of the above-mentioned Regulations, that the specimens taken at random may deviate unfavourably by not more than 20 per cent from the prescribed (required) values.
4. In the relevant annexes on "Minimum requirements for conformity of production control procedures" of the light-signalling Regulations, tables equivalent to the lighting Regulations were incorporated, which show the equivalent deviation in candela for small values (e.g. geometric visibility).
5. The relevant annexes on "Minimum requirements for sampling by an inspector" were completely restructured and simplified. All former examples which caused confusion were deleted.
6. CoP is now described in a clear stepwise process (with limited steps), which gives the manufacturer the chance at the first step - in the case of deviations of more than 20 per cent - to align his production process. Also, the CoP process may be completed earlier, when the first two samples meet the full specifications.
7. With the additional requirements up to the third step, the withdrawal of approval is clearly required, when after the second repetition of this process the manufacturer was not in the position to align his production process in the correct way.
8. The attached drawing shows this stepwise process.



9. The Figure 1 may therefore be deleted, because this Figure has brought more confusion than clarification - and with the new simply description it is no longer necessary.