

Position of the Netherlands on the report of the ad-hoc group on trolley buses
(TRANS/WP.29/GRSG/2000/11)

(the paragraph numbers refer to the numbering of document TRANS/WP.29/GRSG/2000/11)

Annex 8

§2.2 The purpose of this requirement is to assure a sufficient insulation of the poles. To prevent that the requirement becomes design restrictive the Dutch delegation proposed to use a general wording, related to insulating performance. This general wording would permit the use of all insulating materials for the poles and the use of other (conducting) materials (metal included), provided that it is covered with insulation.

In TRANS/WP.29/GRSG/2000/11 however it is not permitted to use metal poles that are covered by insulating materials. As the use of metal is common practice we prefer the following requirement:

"2.2 Poles shall be made of **insulating material(s) or be covered with** insulating material resistant to metal shocks."

or as alternative the original text as proposed by the Russian Federation as proposed in TRANS/WP.29/GRSG/1999/25:

"2.2 Poles shall be made of **plastic or metal covered with** insulating material resistant to metal shocks.

§2.4 In case a pole dewires the pole should not become a danger for other road users and for this reason we believe that a permitted height of 2.2 meter above the road is to low. For that safety reason the permitted height should not be less than 0.5 meter above the roof of the trolley bus as proposed by the Netherlands as follows:

"2.4 In case the pole dewires, the trolley electric current collector shall not reach higher than 7.2 meter above the roadway or decline lower than 0.5 meter above the roof of the trolley-bus."

§3.4 The wording of this requirement is not clear; as we understand the purpose of this paragraph such that the interruption is only permitted on the positive side and not on the negative side, we propose the next rewording:

"3.4 For any circuit ~~only~~ a protective apparatus shall interrupt the positive side of the circuit only."

§3.12.3 The Netherlands is of the opinion that the wiring should be mounted in such a way that the wires are not under stress. The wording "tightened" could be interpreted in such a way that it is not permitted to fix the wires firmly at all. For that reason we still prefer the wording "shall not be stressed mechanically".

Furthermore we believe that the last sentence concerning the replacement of the end terminals is necessary for type approval and should be deleted.

§4.1 To our opinion the maximum value of 0.2 mA for the leakage current will correspond with a resistance of 3000 MΩ at a voltage of 600 V. We believe that the value of 0.25 mA would be better.

We also believe that it is the voltage that is important and not the current. In the case that there is an infinite resistance between the body and the ground, there can be a difference in voltage of 600V without any current. In such a case the contact between somebody outside the vehicle and the body of the vehicle will be extremely dangerous.

This means that we still prefer the principle of a warning system based on the difference in voltage as follows:

"4.1 There shall be a warning system that gives an audible or visible signal to the driver when during operation a difference in voltage of more than 15 V occurs between the chassis and the road surface and that shall additionally disconnect the high voltage circuits in case of a difference of more than 50V."