

Retread Tyres – Tyre to road rolling sound emissions

Joint proposal submitted by BLIC and BIPAVÉR

The associations BLIC and BIPAVÉR represent many of the industries in Europe that are involved in the business of re-manufacturing tyres by applying new tread material to a casing that has previously been used. Companies that manufacture new first life, tyres, but that are also involved in remanufacturing by the process of retreading, are generally represented by BLIC, whilst retread manufacturer's that are independent of new tyre manufacturer's are represented by BIPAVÉR.

Both associations seek to maintain the status of retreaded tyres in the market place and part of the effort is to ensure that retreaded tyres are accepted as being equivalent to new tyres in terms of safety and overall performance. Approval in accordance with UNECE Regulations No. 108 (for passenger car tyres) and No.109 (for commercial vehicle tyres) ensures control of the dimensions of the retreaded tyre and of the load/speed performance, where the procedures and criteria are identical to those applicable to new tyres under UNECE Regulations No.30 (for passenger car tyres) and No.54 for commercial vehicle tyres).

The practice of retreading is of major ecological significance in dealing with economic re-use of materials and in reducing the problems associated with the disposal of previously used tyres. The use of retreaded tyres on vehicles in service is widespread, particularly by commercial vehicle operators, and retreaded tyres are specified as original equipment for some specialised motor vehicle applications and for trailer use.

Legislation that has been introduced by European Union, by amendments to the new tyre Directive 93/92/EEC, now requires tyres fitted to vehicles that are subject to the European Whole Vehicle Type Approval procedure, to be approved in accordance with requirements set out in Directive 2001/43/EC with regard to tyre to road rolling sound emissions. Requirements identical to those given in EC Directive 2001/43/EC are now reproduced in UNECE document TRANS/WP.29/1032 that was adopted for transmission to New York by WP.29 at its June 2004 session.

Proposals by European Union to extend the system of Whole Vehicle Type Approval to other categories of vehicle, including commercial vehicles and trailers, would have a significant effect on the retread tyre market as it is not currently possible to approve retreaded tyres with respect to tyre to road rolling sound emissions. The associations BLIC and BIPAVÉR are anxious to address this issue and to maintain the equivalence of retreaded tyres to new tyres through the development of provisions with respect to tyre to road rolling sound emissions applicable to retreaded tyres.

The industry recognises that it is logical that the noise limits set for new tyres will also be applicable to retreaded tyres and as the retreading process will be carried out on used tyre casings that previously have been approved for tyre to road rolling sound emissions, it does not foresee any problems in this regard. However, the size of the industry in terms of the volume of production, is much smaller than that of the new tyre industry and has companies that produce from as few as 2500 units per year for supply to a local market to ones producing up to 150,000

units and having supply contracts with major transport operators. In addition many of the retreading companies use tread patterns that are designed and used by the new tyre industry and there is widespread use of pre-cured tread that is produced by companies that than those actually carrying out the retreading process. The latter practice results in many companies using a common tread pattern. In view of these issues it is felt that procedures concerning the approval process may be able to be developed to avoid placing an excessive burden on relatively small businesses.

The industry also recognises that there are problems regarding the number of approval marks that, physically, can be applied to tyres and these problems will increase with the development of other tyre performance criteria such as wet grip and rolling resistance. Both associations would like to see a relationship between the existing retread tyre regulations No.108 and No. 109 and any new regulations applicable to retread tyres. We would suggest that new tyre to road rolling sound emissions regulations are numbered 108-S and 109-S and that future regulations have similar, but appropriate suffices. The new regulations could be developed as “stand alone” regulations where it would be possible to obtain approval solely to the noise or other requirements without also having to have approval to the base regulations No 108 and No 109. This situation exists with the present proposal for new tyres contained in document TRANS/WP.29/1032. In cases where tyres are approved to the base regulations they will bear an approval mark and identification of the authority that has granted the approval and we would suggest that when coincident or subsequent approval is granted for other performance criteria, that the base approval mark is extended by use of the relevant suffix to signify that the tyre is also approved to the additional requirements. In cases where approval to additional requirements is granted by an authority different from that granting the base approval (the base authority) the base authority, on receipt of the relevant documentation, could authorise extension of the base approval number to include the appropriate suffix. Conformity of Production would always be the responsibility of the authority granting approval for any particular performance criterion. Examples of tyre markings resulting from this suggestion are:

E4 109R 001234 – approval granted by the Netherlands to the base regulation No. 109.

E11 109-SR 005678 – approval granted by the United Kingdom solely for the tyre to road rolling sound emissions in accordance with Regulation No. 109-S.

E4 109R 001234 S – approval extended by the Netherlands on the basis of documentation received from the United Kingdom regarding approval to tyre to road rolling sound emissions in accordance with Regulation No. 109-S. The United Kingdom retains responsibility for Conformity of Production with regard to Regulation No. 109-S.

On the basis of the information and suggestions above, the associations BLIC and BIPAVÉR ask if WP.29 will consider allocating a work programme to one of the Groups of Experts to develop regulations concerning tyre to road rolling sound emissions for retreaded car and commercial vehicle tyres. It is expected that the normal group for this work would be the Group of Experts for Noise (GRB) but as the test procedures and noise limit values will be identical to those given in document TRANS/WP.29/1032, already established by GRB, it may be possible to allocate the work to the Group of Experts for Running Gear and Brakes (GRRF) which has the major responsibility for tyre regulations. The associations are happy to prepare a complete draft proposal for submission to either Group.
