

Labelling road surfaces

An initiative from the Netherlands presented at the February and September 2017 sessions of the UNECE Working Party on Noise (GRB)*:

<http://www.unece.org/fileadmin/DAM/trans/doc/2017/wp29grb/GRB-66-05e.pdf>

<http://www.unece.org/fileadmin/DAM/trans/doc/2017/wp29grb/GRB-66-05e-Add.1.pdf>

*GRB is a subsidiary body of the World Forum for Harmonization of Vehicle Regulations (WP.29)

Objectives and criteria

Labelling is a method to encourage progress in and to stimulate optimisation of road surfaces based on the following criteria:

- Skid resistance – for road safety;
- Noise reduction – for public health;
- Rolling resistance – for sustainability and economics (of road users);
- Lifespan – for availability, durability and economics (of road owners).

Envisaged benefits (as reported by the Netherlands based on a pilot project)

- Skid resistance – risk of accidents 3x smaller at a proper skid resistance;
- Noise – 9 dB(A) noise reduction seems possible by optimum tyre-road combination (EU-project ‘Safe and Silent Road Traffic’);
- Rolling resistance – 10-30% reduction rolling resistance → 2-6% fuel savings → saving 488 mln. litres and 1000 kton CO₂ (NL)
- Lifespan – from 9 years to 10-12 years (i.e. for porous asphalt)

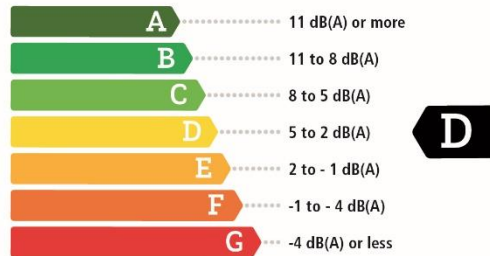
Road surface label



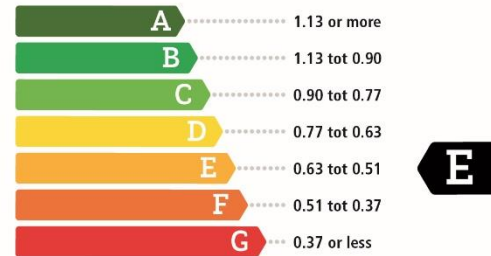
ZOAB (PA16): DEEE



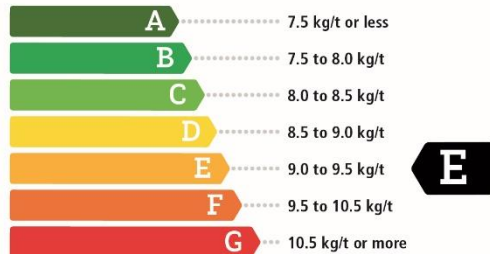
Noise reduction
in dB(A)



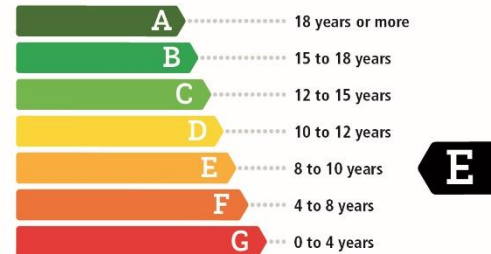
Wet skid resistance
in Side Way Force



Rolling resistance
coefficient in kg/t



Lifespan
in years



GRB considerations

- Welcomed the presentation and reiterated the importance of a holistic approach to sound emissions in the system 'tyre-road surface';
- Noted that the scope of the 1958 and the 1998 Agreements (wheeled vehicles, equipment and parts thereof) does not cover road surfaces and, therefore, only non-legally binding document, like a Recommendation or Resolution, might address the issue;
- Noted that other Working Parties under ITC, like GRRF, GRSG and SC.1, might be better placed to pursue the project and should be consulted;
- Question to SC.1 representatives:

Do you agree that the Dutch initiative would fall within the scope of SC.1 and could be considered further?