Proposal for corrigendum to Regulation No. 49

I. Proposal

Annex 4A, Appendix 4, amend paragraph 4.1.1 to read:

“4.1.1. Filter specification

Fluorocarbon coated glass fibre filters are required. All filter types shall have a 0.3 μm DOP (di-octylphthalate) or PAO (poly-alpha-olefin) CS 68649-12-7 or CS 68037-01-4 collection efficiency of at least 99 per cent, at a gas face velocity between 35 and 100 cm/s.”

Annex 4C, Appendix 1, replace Figure 15 with the following:

“Figure 15

Schematic of Recommended Particle Sampling System – Full Flow Sampling

PN measurement system

filtered air

Flow direction

from vehicle exhaust

II. Justification

During discussions in the WLTP DTP PM-PN subgroup it was identified that PM sample filter specifications in Regulation 49 Annex 4A and Regulation 83 were incorrect. A corrected and elaborated specification was drafted to reflect the specification of currently used PM sample filters based on information provided by the PM sample filter supplier. It is proposed to correct the filter face velocity used for determining filter efficiency referenced in Regulations 49 Annex 4A and 83 to reflect that actually used by the filter manufacturers. In addition the test aerosol material is supplemented by poly-alpha-olefin which is now commonly used for filter testing in preference to di-octylphthalate as the latter is a potential carcinogen.

WLTP DTP PM-PN subgroup discussions also identified an error in the particle number measurement diagram in Regulation 49, in that the sequence of dilution air filters was incorrect and at odds with the text of the Regulation. A corrected diagram was prepared for inclusion in the WLTP GTR. This informal document proposes to copy this corrected diagram into Regulation 49.