Published by: The Society of Operations Engineers

President: Chris Grime IEng MSOE MIRTE FCILT

Chief Executive: Nick Jones FCA

The Society of Operations Engineers is a licensed member of the Engineering Council
Registered in England:
Company No. 3667147
Registered Charity: No.1081753
A Company Limited by Guarantee

Registered Office: 22 Greencoat Place, London SW1P 1PR
Tel: 020 7630 1111
Fax: 020 7630 6677
Email: soe@soe.org.uk
www.soe.org.uk

Editor: John Challen
Email: jchallen@findlay.co.uk

Editorial Director: Brian Tinham BSc CEng MInstMC FSOE FIPlantE FIRTE
Email: btinham@findlay.co.uk

Contributing Editors: John Fife, Dan Gilkes, John Kendall, Keith Read

Art Editors: Martin Cherry, Neil Young
Illustrations: Phil Holmes
Production Manager: Nicki McKenna
Email: nmckenna@findlay.co.uk

Advertisement Manager: Craig Molloy
Email: cmolloy@findlay.co.uk
Tel: 01322 221144

Publisher: Peter Knutton

Transport Engineer is the official journal of IRTE.
Produced on behalf of IRTE and The Society of Operations Engineers by Findlay Media Ltd, Hawley Mill, Hawley Road, Dartford, Kent DA2 7TJ
Tel: 01322 221144
Fax: 01322 221188
www.transportengineer.org.uk

Transport Engineer is distributed free of charge to SOE members, dependent on membership sector. For non-members, the annual subscription rate (12 issues) is £66 UK and EU, or £68 airmail outside EU. For other SOE members, the discounted rate is £26.

Printed by: Holbrooks Printers Ltd, Portsmouth ISSN: 0020-3122

IRTE
engineering success

More to CO_2 emissions than tailpipe averages

Fleet engineers who made it to the 63rd IAA (Internationale Automobil-Ausstellung) Commercial Vehicles Show in Hannover last month cannot fail to have been impressed. Not only by the scale of the event (12 burgeoning halls at this massive fairground), but also by the sheer variety of trucks, trailers, vans, specialist vehicles, buses and coaches – and the equally comprehensive range of supporting technologies from suppliers world-wide.

Was it variety for variety's sake? Or technology for technology's sake? Not a bit of it. If one point was crystal clear from Hannover, it was that the transport sector as a whole is on a mission to cut vehicle running costs – and therefore also carbon emissions – to the bone, while simultaneously improving efficiency and safety, using every available technique. We're talking about engines, transmissions, hybrids, braking systems, fuel systems, suspensions, tyres, aerodynamics, telematics, electronics, driver training… The list goes on. And it all counts.

Very much part of this mission is getting the legislative direction and framework to make sense for the industry. As Leif Johansson, chairman of the commercial vehicle board at ACEA (the European Automobile Manufacturers Association) and president and CEO of Volvo Group, put it: "It is important that legislators support our efforts [to reach Euro 6, US EPA 10 and beyond] with a policy approach that matches the reality of commercial goods and passenger transport."

Making the observation that climate change is a global phenomenon and that the transport industry, too, operates around the world, Johansson challenged governments to put more urgency into harmonising standards. But he also urged regulators to consider the fact that CO_2 emissions from commercial vehicles depend massively on their size, shape and the work they do – the load type and weight carried, distance travelled, speed, stop-start cycles etc. Hence, a 'one size fits all' approach, based simply on average tailpipe emissions, just doesn't work.

And thirdly, on light commercial vehicles, Johansson warned that failure to pull back from the legislative proposals for reducing CO_2 emissions, adopted by the European Commission last October, may not only damage western economies and employment, but even adversely affect the very environment they set out to improve. His – and the industry's – argument is not only that the targets are too much, too soon, to be feasible, but also that fuel efficiency is already one of all buyers' key purchasing criteria – so competition is driving developers as fast as they can go.

Additionally, as with trucks, LCVs' other purchasing priorities have to do with load, volume, interior refitting etc – all of which impact on emissions and limit the value of static targets.

Part of ACEA's solution is its carbon emissions evaluation tool, launched at IAA and aimed at helping operators find the most fuel-efficient trucks and buses for each job – taking into account engine-gearbox combinations, aerodynamics and tyre specs on simulated duty cycles. Another is its promotion of the notion of 'work done', reflecting emissions as grammes of CO_2 per tonne-km, per m^3-km or per passenger-kilometre.

These are critical to the direction and well-being of an industry that has already spent billions on the road to Euro 6, for particulates and NOx. It's time to make ourselves heard.

Brian Tinham BSc CEng MInstMC FSOE FIRTE