Court in the act

Mock trials at Derby University provided a clever backdrop to the thorny issues of wheel security, longer heavier vehicles and fuel-saving interventions. John Challen reports

nnovation plays a key part in transport engineering, and the rather different environment of a mock court room at the University of Derby for June's technical conference shed new and welcome light on some of its key issues. The day covered four hot industry topics: corporate manslaughter and its potential impact on wheel and load security, longer and heavier commercial vehicles (LHVs), meaningful methods of measuring fuel consumption and challenging fuel-saving interventions.

Like a real courtroom, the proposer for each subject was interrogated by two 'barristers', calling on witnesses for and against the motion – including fleet operators and suppliers – and was adjudicated by the judge before being considered by a mock jury.

In the first case, the Corporate Manslaughter and Corporate Homicide Act 2007 was explained, with disasters, such as the 2000 Hatfield rail crash and the 2005 Buncefield oil terminal fire, cited as examples. Following this, Geoff Mumford, managing director of Burton Bridge Brewery, ended up in the dock for a fictitious wheel security case whereby a trailer wheel had allegedly detached from the vehicle and killed a person. All of Mumford's answers were actual, and an expert witness from Bridgestone Tyres, Paul Turner, was called in to advise the court on the recommended practice, under British Standard AU150, to be used to ensure wheel security.

Mumford was eventually found guilty for not having the correct written procedures and practices in place to minimise the likelihood of wheel security failures. The fine was 7–10% of annual turnover, as well as additional costs to be paid to the

family of the unfortunate victim. This mock case highlighted the real need to ensure adequate working procedures

throughout operators' workshop and driving operations, backed by reporting procedures, that provide evidence that they are being

adhered to, and

supported by ongoing oversight and training.

The next case saw Dick Denby, charismatic owner of Denby Transport, and Stan Robinson of 33.5 metre road train fame, in the dock supporting their case for LHVs (longer heavier vehicles), currently used in continental Europe, but not legal in the UK. They provided evidence concerning the vehicles' braking effectiveness and fuel (and therefore environmental) efficiency. They also contested that such vehicles would consume less space on the UK's busy roads.

Denby and Robinson were required to handle challenging questions, particularly concerning issues such as effective turning circles on double articulated vehicles and potential problems for other road users – and, in particular, cyclists. Although many felt they provided adequate answers, in this case the court was, rather disappointingly, undecided, and the verdict was no better than a 'perhaps'.

The afternoon saw Dr Michael Coyle of Modex International and John Eastman of the IRTE discuss a range of fuel-saving interventions. Several presentations were made, starting with Martin Parrat of BTAC (British Transport Advisory Consortium) explaining savings to be had by reducing the gap between the cab and the trailer, and covering some of the science behind curved trailers.

Further presentations came from Terry Rose, training manager from Denby Transport, and the renowned Dr Michael Coyle, founder of transport consultancy and training firm IMISE, discussing alternative fuel-saving methods, and providing useful analysis.

Despite apparent confidence in results from independent trials of all sorts of fuel-saving devices in

recent years, such as magnets that boast savings in some cases of greater than 10%, it is fair to say that the jury remains out. And, given the scepticism of the transport industry, that's likely to be the case for many years to come.

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