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**President**  
Michael Sweetmore EngTech MSOE MIRTE LGI

**Chief Executive**

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**Registered Office**

22 Greencoat Place, London SW1P 1PR  
Tel: 020 7630 1111  
Fax: 020 7630 6677  
Email: [soe@soe.org.uk](mailto:soe@soe.org.uk)  
[www.soe.org.uk](http://www.soe.org.uk)

**Editor**  
Will Dalrymple  
Email: [will.dalrymple@markallengroup.com](mailto:will.dalrymple@markallengroup.com)

**Contributing Editors**

Steve Banner, John Challen,  
Toby Clark, Laura Cork, Dan Gilkes,  
Peter Shakespeare, Richard Simpson,  
Chris Tindall, Lucy Radley, Brian Wall

**Art Editor**  
Chris Charles

**Production Manager**

Nicki McKenna  
Email: [nicki.mckenna@markallengroup.com](mailto:nicki.mckenna@markallengroup.com)

**Advertisement Manager**

Craig Molloy  
Email: [craig.molloy@markallengroup.com](mailto:craig.molloy@markallengroup.com)  
Tel: 01322 221144

**Publisher**  
Jon Benson

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## Trial makes perfect

There's a tradition of 'seeing it for yourself' in this industry, which is why it remains common for fleets to give vehicles a trial run to measure, for example, fuel economy, when operating on real journeys and on real roads.

This is particularly important in cases of a major driveline technology change, such as a switch to battery-electric. So 2020 electric vehicle launches reviewed at last month's Freight in the City exhibition (including the Mitsubishi Fuso eCanter and Tevva electric hybrid; see p11) were more about single-unit testing than bulk buys.

Last month's history of the IRTE best practice guides noted how some of them, such as tipper stability, relied on data from real tests ([www.is.gd/pasavu](http://www.is.gd/pasavu)). Another guide, on fuel efficiency, offers advice to help fleet owners set up valid and meaningful measurements.

This issue, we ask how fleet engineers might try to determine the total cost of ownership to the fleet of a particular product (pp23-24). One of the article's conclusions is that acquiring good data is neither easy nor cheap, and that making significant changes to a truck could risk invalidating the vehicle's warranty.

Has the golden age for testing one's own vehicles now passed, gone the same way as Saturday afternoons spent underneath a car with a spanner in one hand and a Haynes manual in the other?

Quite the opposite, provided today's toolkit consists of an OBD port reader and a copy of Microsoft Excel. That's because engine components speak volumes, in data. What engineers now need is statistical sophistication, to understand what all of the numbers spewing from the vehicle actually mean.

• By the way, testing of new technologies comprises an essential part of the Stagecoach Forth Road Bridge bus automation project, profiled briefly this month in sister publication *Operations Engineer*. It is scheduled to arrive here next month, in an extended form.

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Will Dalrymple

**Editor**