

# BACK TO THE FUTURE

With the headline event for 2015 now over, Brian Tinham looks back at some of the innovations that didn't get the pre-show treatment, yet are likely to deliver serious future performance improvements



## ● IVECO'S HEAD TURNERS

The futuristic Vision concept van wasn't the only vehicle catching eyes on Iveco's stand: a bling-packed, special-edition Stralis 6x2 twin steer tractor and a spark-ignition gas truck also turned heads. Vision is Iveco's view of technologies and configurations for next generation LCVs, with product director Martin Flach explaining that innovations go beyond the dual-energy, diesel-electric powertrain seen at last year's IAA Hanover show, and capable of delivering a 25% fuel reduction.

Other features include: glazed 'A'

pillars for 180 degree visibility; side and rear cameras with displays on a panoramic visor screen; a photovoltaic roof to drive auxiliaries; and a dual-device, multi-function driver interface, with a fully-functioning removable tablet linked to the van's cameras for security. Vision can also optimise the load on electronic skids, preventing movement with electronic airbags, and for safety there are only rear and nearside doors (full height).

As for the flagship Stralis, Flach said it's designed for owner-drivers or for fleet managers looking to reward loyal drivers. The truck shown was based on Iveco's top of the range 560bhp Euro 6 Cursor 13 engine. Dubbed Stralis Hi-Life, it adds five factory-fit options packs plus an array of accessories to create what Flach said is the safest and most luxurious Stralis on the road. Interestingly, it also had new rear auxiliary fuel tanks, bringing diesel capacity up to circa 700 litres.

## ● NOVEL AIRBAG AND LIFTING DECK TRAILER

Don-Bur wowed CV Show visitors with three stand highlights: an industry-first prototype cab-to-trailer gap airbag, dubbed Aeris; the latest version of its ground coupling system; and a 13.6m, full 52-pallet tri-axle lifting deck trailer.

Essentially, Aeris fits to the front bulkhead and extends forward when the combination reaches 49mph, virtually filling the cab gap and, according to its simulation studies, cutting drag by 13.5%. Don-Bur's Richard Owens conceded that it is not yet VCA approved, but argued that it has to be the way forward, explaining that below 49mph, Aeris retracts to a position within the 2,040mm swing radius.

As for the moving-deck trailer, it achieves its 52-pallet capacity through the use of Don-Bur's 7.5mm thick composite Blade panels, which provide



**“If a driver is involved in an accident with a cyclist and the inquest hears that the operator was using N3G trucks, not lower vehicles, because of their higher cost, how will that go down?”**

Nick Blake, Mercedes-Benz

the width on the lifting deck platform to accommodate two UK pallets side by side. Meanwhile, Don-Bur's LowGlide ground coupling system is a robust, slimline version of its earlier iteration that runs on low-friction slides, now making it virtually maintenance free.

● **TIME FOR CLOCS**

The CLOCS (Construction Logistics and Cycle Safety) standard got an airing at the CV Show, with three high-profile displays. Insurance firm Towergate, working with CLOCS and FORS (Fleet Operator Recognition Scheme), hosted



Mercedes-Benz's new Econic-based mixer vehicle. Then on the Mercedes-Benz stand, a new 4x2 skiploader, again based on the Econic with an innovative Boughton body, was catching eyes, while in the outdoor arena, visitors could see the Mercedes/Wilcox low-entry Econic 8x4 tipper.

Econic is not the only low-entry cab truck capable of improving safety for vulnerable road users, but its combination of features, including light weight, works well. It has: excellent glazing for driver vision; air suspension that can be raised and lowered for off- and on-road; the Arocs construction chassis; and a rear-steer lift axle plus double-drive option for manoeuvrability and

grunt. Granted it's limited to 330bhp, there's a circa £18,000 price hike and there's an Allison fully-automatic box. But a Powershift 3 option is already in development and increasing volumes could cut that price.

● **NEXT-GEN FROSTCRUISE**

Industrial gases giant BOC launched its much anticipated Frostcruise cryogenic trailer, which harnesses liquid nitrogen instead of diesel-powered refrigeration. Marks & Spencer is now trialling 13 of the units and benefits include zero carbon (at the point of use), zero particulates and NOx, and near silent operation (56dB).

Insulated tanks of liquid nitrogen indirectly chill the compartments via a heat exchanger and a bank of automatically controlled fans, delivering extremely fast cool-down. BOC claims that a typical trailer cools from ambient to 2°C within eight minutes, so the system easily maintains temperature on multi-drop delivery duties.

BOC also showed a mobile LNG (liquefied natural gas) refueller capable of supplying up to 30 vehicles from a packaged plant. It incorporates BOC's zero-loss technology, which includes a liquid nitrogen-based temperature conditioning system that also recovers 'warm' vent gases from the vehicle.



● **RE-ENGINEERED BODIES**

Cartwright revealed four innovations under the tutelage of technical director Lionel Curtis (ex Gray & Adams). Moving into the 3.5-tonne sector, the bodybuilder majored on a refrigerated home delivery concept vehicle and a site welfare vehicle. Then, for the trailers market, the firm introduced a new refrigerated range and its Acclaro fleet specification curtainsider.

The home delivery concept is based



on a Mercedes Sprinter with lowered Al-Ko Kober chassis plus an aerodynamic lightweight body, using ultra-thin insulated panels. Curtis explained that the vehicle is highly configurable, pointing to a bus-style articulating side door, externally accessed shutter racking and a rear ramp door for impressive loading bay compatibility.

The welfare vehicle, built on a Ford Transit chassis cab, is designed for construction sites and is capable of carrying six or seven crew plus the driver. It has a built-in toilet cubicle and field kitchen, with full wash-down capability. It is currently going through type approval.

As for the trailers, the Acclaro single-deck is a complete re-engineer job, featuring an EN1264XL rated body, aerodynamic front aerofoil and sloping roof, as well as an ISO 1469-1 certified floor, versatile load strapping and ZMA

***“The previous government was committed to deregulation and the IRTE’s irtec and Workshop Accreditation are great examples of that working, with the industry successfully regulating itself”***

*Beverley Bell, senior traffic commissioner*

corrosion-resistant pre-finish. Meanwhile, Cartwright’s refrigerated semi-trailer is its lightest ever, at 8,400kg, and will be available in single/multi-temp and single/double-deck configurations, maxing out at 44-pallets.

### ● TYRE PRESSURES AND WEIGHT

Thousands of drivers tested WheelRight’s road-mounted tyre pressure monitoring system (TPMS) as they entered the NEC car park and found themselves driving over it and being clocked by an ANPR (automatic

### ● CLARITY ON BLIND SPOTS

Visitors to Brigade Electronics’ stand witnessed this interesting company’s vision of the several blind spots around a vehicle. The firm used its floor space to draw a 2D graphic of a generic truck, revealing the position of all its blind spots, and marketing manager Emily Hardy made it clear that, while collisions on the nearside – involving cyclists and pedestrians – grab media attention, they account for just 18% of accidents, with 32% on the offside, according to police data.

Brigade demonstrated its Backeye 360 system, which gives the driver a real-time, 360-degree view of the vehicle in one composite image. And for those that needed convincing, the firm streamed live footage on a TV screen from a vehicle fitted with the device. While most agree direct driver vision is best, this innovative approach may change your perception.

### ● EURO 6 GAS AND DUAL-FUEL

Two firsts – a DAF Euro 6 dual-fuel tractor unit and a Scania Euro 6 gas-powered truck – were tucked away in a corner on L/CNG (liquefied/compressed natural gas) supplier Gasrec’s stand, which it shared with Dieselgas (formerly Prins Autogas). The DAF was an XF 12.8-litre 460bhp tractor with small midlift, converted by Dieselgas to run on dual-fuel (CNG and diesel), while the Scania (plated at 40 tonnes gtw and having recently entered

service with Argos), was equipped with the Swedish giant’s OC09 102, 9-litre 340bhp Euro 6 dedicated gas engine.

Gasrec is Europe’s largest supplier of LNG in Europe, fuelling over 60% of gas-powered HGVs on UK roads from 10 strategically located filling stations. “This comes at a time when we have a host of vehicle manufacturers moving forward with R&D programmes on gas vehicles,” enthused director Chris Thornycroft-Smith. Argos will initially be running five of these gas trucks on daily return to base operations from its Magna Park, West Midlands hub.

### ● DISTRIBUTION TRACTOR

Another CV Show launch was a specialist off-highway distribution centre tractor from Terberg Special Vehicles, with a new, highly glazed, low-entry cab.



number plate recognition) camera. And many were surprised to find their inflation pressures far from correct when they collected the free data from WheelRight’s stand.

They shouldn’t have been: a similar system for HGVs and cars installed at Keele Services on the M6, in conjunction with Highways England and Welcome Break, has been delivering similar results. The system measures tyre pressure, as well as vehicle weight and load distribution, and is accredited to the Weigh-in Motion (WIM) standard OIML R134.

Chief executive John Catling made the point that, installed at a depot gate, it simultaneously deals with these two major issues for truck operators. He also said that tyre tread depth measurement will be next.



Managing director Alisdair Couper explained that the firm’s DT183 has been two years in development and was designed to meet evolving distribution centre requirements – particularly all-round driver visibility and ease of access/egress.

Under the hood, this tractor’s powertrain is based on the new Cummins Tier 4 Final (Euro 6 off-road equivalent) diesel engine, matched to an Allison gearbox – although further options are due later this year, he said. “The DT183 focuses on the way customers now operate in this working environment,” stated Couper. “We

**“If the government is serious about reducing emissions, it should instigate a scrappage scheme that encourages operators to dispose of their old vehicles and buy new, clean alternatives”**

*Jack Semple, director of policy, RHA*

believe it is the shape of things to come for distribution.” And he added that airports are among other interested parties.

● **CHINA TOWN**

With Japanese heavy-duty Hino trucks no longer available from Ireland-based Harris Group, the importer has turned its attention to Chinese Sinotruck, launching the chunky A7 eight-wheeler at the CV Show. Initially available as a mixer, but with a tipper waiting in the wings and a promise of more to come, this may be a challenger for the UK and European markets. However, initial impressions are that it's a bit basic, and reminiscent of outgoing European



particularly interesting. There are three models – a mobile unit, shown on the stand with a Volvo FM tractor unit (above), a compact version and its big brother Twin 18.

The former is bound to attract attention from workshops wanting to branch into brake testing services, but not yet able to commit to ground works for a permanent installation. The system is VOSA ATF approved, and it can be operated and even moved by one man. Gemco is offering free software updates during calibration and this is no lightweight: it has heavy-duty 11kW ECO motors and tough planetary drive gearboxes. It's clear that it will serve workshops well in ATF lanes.

● **FORD/TELOGIS TELEMATICS**

Making its debut on the massive Ford stand, amid its impressive range of re-engineered and revitalised LCVs, was Ford Telematics, available to fleet customers from this month through the network of Transit Centres. The new system is powered and operated by Telogis, in an extension of the relationship that has already seen the

latter driving Ford's telematics in the US.

Ford Telematics uses real-time data to give fleet managers information on vehicle location, fuel consumption and driver behaviour, as well as safety and maintenance alerts. It also provides direct access to vehicle diagnostics and will, says Ford, enable fleet managers to plan maintenance schedules that correspond to vehicle health status, so minimising downtime and reducing repair costs.

Vehicle data is transmitted securely to a dedicated Telogis website via an embedded cellular connection. The system's ability to access proprietary Ford metrics means it can see everything from oil change warnings to water contamination in diesel, tyre pressures, safety belt usage and airbag status. Interestingly, Telogis says it is actively pursuing other LCV makers, as well as HGV OEMs and operators.

● **EURO 6 AND READY TO RUN**

Citroën unveiled Euro 6 versions of its bestselling Berlingo – its first LCV to be powered by BlueHDi diesel engines, which use SCR (selective catalytic reduction) technology and are equipped with a 17-litre AdBlue tank, offering a 14,000 mile range. The rest of its LCV line-up will now follow suit under a rolling programme, starting this July and completing in September 2016.

Meanwhile, Citroën's Relay Ready to Run range saw two extensions to the original four vehicles – the 35 L3 HDi 130 Enterprise Crew Cab Dropside and 35 Heavy L4 HDi 130 Enterprise Dropside, each with a six-speed manual box. Jeremy Smith, Citroën's head of commercial vehicles, said that the Relay Ready to Run programme is one of Citroën's major LCV success stories, with sales having increased 10-fold in the last two years. Prices start from £24,375 plus VAT for the Relay 35 L2 HDi 130 Enterprise Dropside. [TE](#)

models of a few years ago.

It's also Euro 5 (10-litre, six-cylinder engine, delivering 380bhp with 1,560Nm torque), so only available in limited numbers under National Small Series type approval. But Harris group president Liam O'Neill suggested that Euro 6 will be with us by 2017. And with the might and capacity of CNHTC (China National Heavy-Duty Truck Corp) behind it, watch this space.

● **BRAKE TESTER**

Gemco is going from strength to strength in workshop equipment, design and construction, but it was the firm's new commercial brake testers, from sister company Sherpa, that were