

CLOCS ticking

Since its inception in 2012, the Construction Logistics and Cyclist Safety standard has grown in stature, scope and spread. Brian Tinham reviews CLOCS vehicles from the fifth CLOCS Progress event, in London

CLOCS' time has come. Construction Logistics and Cyclist Safety is no longer simply about TfL (Transport for London) working with big-name contractors to transform truck safety for vulnerable road users in and around the capital. Whether it's due to collaboration or coercion, the all-important CLOCS standard is spreading fast and being taken seriously way beyond London and way beyond construction. And, although CLOCS is not just about the vehicles, all the truck manufacturers are falling over themselves to get in line.

That was evident at the fifth CLOCS Progress seminar (staged late in March at ExCel, London), which hosted no fewer than 28 vehicles re-engineered for urban safety - up nearly 60% on last year's showing. What's more, while a few were prototypes (and some more

radical than others), most were heading for operator trials or already liveried up and in full-duty service. Indeed, I'm told that many of the exhibited trucks - skiploaders, tippers, concrete mixers, builders' merchants vehicles, tipper-grabs, gully emptiers, etc - are now available to order via the OEMs' dealerships and/or bodybuilders.

NEW VEHICLES

So, let's look at some of the highlights. For sheer numbers, Mercedes-Benz stole the show, with its low-entry Econic chassis cab fronting some 40% of the trucks exhibited. It's no great surprise: the Econic's signature panoramic windscreen, fully glazed floor-to-ceiling passenger door and lowered driving position all hail from its RCV (refuse collection vehicle) origins, where excellent driver vision is among prerequisites. Furthermore, this is an

industry-proven vehicle, with 6,000 operating in the UK and multiple chassis and driveline variants available. It also has full air suspension, meaning the ride height can be raised 160mm for off-road operation, albeit not to N3G standards.

The only caveats: list price (Econic production volumes and the scale of hand finishing make this truck expensive); and its considerable front overhang, which may take some getting used to. There may also be performance limits, due to the power and transmission constraints - currently 300-354bhp OM936 7.7-litre six-cylinder engines driving through Allison fully-automatics, designed for stop-start operations.

That said, Econic trucks were everywhere - including as low-height tippers, flatbeds with and without truck-mounted cranes and a concrete mixer

The recent CLOCS Progress event played host to 28 vehicles re-engineered for urban safety - a few were prototypes but most are already in operation





Cover photography: Charlie Milligan

in Tarmac livery. Most prominent were the recently launched 'ground breaking' City of London 32-tonne tipper-grab (liveried for Bow-based contractor JB Riney), and high-profile CLOCS champion O'Donovan Waste Disposal's 18-tonne 4x2 skiploader, which was unveiled at the event.

The former is based on an Eonic 3235 ENA, specified with the 354bhp unit. It has a single front steer, plus double-drive bogie and rear-steer, arranged as a tridem, and was fitted with a Charlton steel tipping body and Palfinger Epsilon M135L remote-controlled truck-mounted crane. Meanwhile, O'Donovan's new

Most prominent at the CLOCS Progress event was the recently launched, 'ground breaking' City of London 32-tonne tipper-grab - with its Eonic low entry cab and tridem rear bogies - liveried for Bow-based construction contractor JB Riney

skiploader is built on the 1830L variant, and was specified with active safety features, including a side scan system, side underrun protection, left hand turn audible alarm and additional conspicuity markings.

But going low doesn't automatically mean going Eonic. Eight-wheel tippers stalwart Scania revealed its new low-height, high-vision 8x2*6 Urban Tipper - claiming it as "a new standard for tippers operating within our city centres". Interestingly, this truck is based on a near standard P-cabbed N3 chassis, with additional nearside door glazing plus air suspension all round. The show model also had a single drive axle, with up to three steering axles and a rear lifting tag.

Not only does this truck afford its driver significantly better visibility than Scania's conventional N3G version, but also the driveline delivers very



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impressive manoeuvrability.

Additionally, ride height flexibility is part of the package, while stripping out the double drive saves enough weight to yield a full 20 tonnes payload when mounted with a lightweight Wilcox body. And there's the underrun protection that comes as standard on N3 chassis, plus a camera system by Brigade Electronics.

It certainly looks the part for fleets operating primarily on-road, and delivering mostly to made-up sites and transfer stations. And since the show example was equipped with Scania's 410bhp engine (selective catalytic reduction only) driving through a 12-speed, two-pedal Scania Opticruise AMT (automated manual transmission), it should make a solid all-rounder.

EAGLE LANDED

Back on low-entry cabs, Dennis Eagle used the CLOCS event to launch what it describes as an "urban skiploader, bristling with features designed to boost safety for vulnerable road users". This vehicle - in the service of FORS gold waste operator Powerday - is based on the company's low-entry Elite 6 4x2 chassis, which is already popular in the RCV market and traces its ancestry back to 1992 - predating the Econic by six years.

Drivers' vision is improved thanks to long panoramic windows, designed to improve over-the-shoulder visibility at junctions, as well as narrow A and B pillars. And there is the cab's lower position - comparable to the Econic, but not as far forward. Other safety technology fitted included: Dawes Highway Safety's DawesGuard underrun protection and a four-way Cycledar CCTV system, from Innovative Safety Systems. The latter alerts drivers to the presence of nearside cyclists when the left indicator is activated.

Interestingly, while the show truck

Back to the future

CLOCS (Construction Logistics and Cyclist Safety) is on a roll. The standard - initially a response to the over-representation of HGVs associated with cyclist fatalities and galvanised by four tragic deaths within two weeks during 2011 - now has more than 240 signatory organisations, including 35 with a combined annual turnover of more than £23 billion.

CLOCS has also been implemented at over 50 major construction and 2,500 utility sites across the UK. Some 20,000 HGVs have now been fitted with CLOCS enhanced safety equipment. And over 21,000 HGV drivers have already attended CLOCS-specified WRRR (work-related road risk) safe urban driving courses.

Why such large numbers? Bear in mind that 22% of current UK construction projects - representing some £31 billion worth - are centred on the capital. And the vast majority of those (in terms of value) are controlled, directly or indirectly, by London. Quite simply, contractors either get on board or they don't get the business.

Equally, who wants to be seen to fly in the face of a movement geared to improving the safety of urban logistics? That's no doubt why Build UK - created in 2015 by the merger of the National Specialist Contractor Council and the UK Contractors Group - has signed up to CLOCS. And its membership includes 27 of the industry's largest main contractors, 42 trade associations and 11,500 specialist contractors.

This isn't going away. Speaking at the fifth CLOCS Progress event, TfL commissioner Mike Brown said he wants the number of deaths and serious injuries involving vulnerable road users on London's streets reduced by 50% against current numbers by 2020. He also stated that the organisation will commit "whatever resource is required to meet or exceed that objective". That's in addition to the £8 million pa funding already pledged to deliver freight programmes designed to make London's roads less congested, less polluted and safer.

TfL now wants to see CLOCS continue its spread beyond London and the construction sector - eventually being embedded nationwide in contracts involving logistics. It's not about imposing CLOCS on the regions, but instead recognising the value of a single, industry-developed, evidence-based standard - as opposed to the chaos of multiple competing local diktats that reinvent the wheel.

For Brown, CLOCS is clearly non-negotiable. "TfL, under my leadership, will absolutely remain committed to the values and aims of CLOCS. As a client of some of the largest infrastructure projects in the UK, I am determined that we will lead good practice, based on CLOCS, through the contracts we let via our supply chain."



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Glen Davies

was mounted with skiploading equipment – and is soon to start trials with operators – Dennis Eagle says other body options are planned. And, with its 320bhp (280bhp also available) Volvo D8K engine driving through an Allison 3000P auto transmission, this too could be a winner.

Talking of Volvo, while there were several of the Swedish manufacturer's trucks on show, the company's own highlight was its FE LEC (low-entry cab), in this case configured as a 3,900mm wheelbase 6x2 rear-steer tipper with grab. As with the others, Volvo makes the point that this truck's forward-mounted cab, low seating position and additional nearside door and rear glazing panels together improve direct driver vision. For the record, that driving position is 200mm lower than a standard FE.

LOW-ENTRY VOLVO

This truck also sports all-round air suspension and a 'kneeling' function, which Volvo believes makes it ideal for urban applications, including light-duty construction and distribution. That's about right, given its driveline, which comprises Volvo's six-cylinder 7.2-litre engine, delivering 300 or 340bhp (1,160 and 1,300Nm torque) and driving through a standard road-going 12-speed I-Shift AMT and single reduction drive axle.

The show FE LEC was mounted with Thompson's 11m³ Loadmaster tipper body in heavy-duty steel to muckaway specification. It was also fitted with an Epsilon M125LC68 crane with a KM602-500 bucket. Underfloor tipping gear was Binotto 269.

For meatier applications, Volvo also brought its N3 on-road spec FM 8x4 32-tonne tipper, again with additional lower glazing in the passenger door. It's not new: the truck was in the high-vis livery of the Metropolitan Police, and is

regularly used for cycle awareness and Exchanging Places road safety events. Just as with Scania's low height P3, this could become a popular mainstay.

And so might Renault Trucks' relatively conventional 32-tonne Range C460 8x4, shown with the Night & Day cab and PPG insulated tipping body to Tarmac specification. Renault describes it as "ideal for both on- and off-road use", noting that this eight-wheeler is available with the low N3 or standard N3G chassis – both of which can be specified with front underrun protection.

Safety features include extra lower nearside door glass, a cycle monitoring system (camera, side sensor, turning left speaker and warning decals) and side guards. The show truck also had a Jimmy Beam downlight system, providing a footprint of lights along the sides of the vehicle as a suggested 'keep clear' area for cyclists and pedestrians.

Finally, DAF's main contribution to the CLOCS event was a CF 440 FAD low-height 8x4 tipper in Cemex UK's livery – one of six now in operation with its fleet. Based on DAF's N3 'Haulage'

chassis (150mm lower than its conventional N3G construction variant), this 32-tonner also has additional low glazing to the passenger door, and was fitted with side underrun bars, nearside caution boards, side scan technology from Brigade and a six-camera VUE system for all-round monitoring and digital incident recording.

FUTURE VISION

The so-called Vision Doors were designed by Cheshire-based Astra Vehicle Technologies, and allow for a retractable main window. Bodywork for the show tipper comprised a Weightlifter PPG tipping body with Hyva front-end tipping-gear and Dawbarn Hydroclear sheeting system.

It may be a while before such vehicles become mainstream. However, as TFL freight and fleet programme manager Glen Davies puts it: "We look forward to the time when enhanced vision trucks are the predominant vehicles purchased by the freight industry." As the transport industry accepts these new vehicles, volumes increase and prices come down, that vision will come to pass. **TE**

