

Low-entry revolution

With TfL launching a new 'direct vision' standard for trucks travelling in and through London, Steve Banner and Brian Tingham look at the shape of tippers to come

Transport for London's proposal to introduce a 'direct vision standard' for trucks - announced on 30 September by mayor Sadiq Khan - will, in effect, oblige tipper operators wanting to enter the capital's streets to opt for low-entry cabs. Due to come into force in January 2020, if successful, it will use a zero- to five-star rating scheme to assess vehicles according to how easily drivers can see cyclists and other vulnerable road users directly through their cab windows.

Those with zero stars - and TfL estimates that around 35,000 are currently in service across London - will be banned from January 2020. By 2024, only trucks with a rating of three stars or more will be allowed in. And note, TfL's earlier proposal that additional lower windows should be fitted in passenger doors of conventionally-designed tippers appears to have been quietly shelved. Note also that the mayor's office suggests that zero-rated construction trucks were involved in 70% of cyclist fatalities involving HGVs over the last three years.

Low-entry 8x4 tippers are already in service in the capital, notably with operators such as S Walsh and Sons and JB Riney. Back in April, S Walsh acquired a 32-tonne Mercedes-Benz Eonic 3235 ENA with a single front-steer axle, a double-drive bogie and a rear-steer axle. Aside from the Eonic's exceptional direct driver vision, this tridem chassis gives the truck a tighter turning circle and makes it

considerably more manoeuvrable than a standard 32-tonne eight-wheeler.

"The fact that you sit that much lower at the wheel means you can make direct eye contact with cyclists and pedestrians," comments senior transport manager, Nathan Hopgood. "So a shift in this vehicle would certainly be less stressful than one in a conventional eight-wheeler."

GROWING POPULARITY

Fitted with a steel Fruehauf body offering a 19-tonne payload, this Eonic collects spoil, much of it clay from construction sites, and tips it at locations in Essex. S Walsh is a CLOCS (Construction Logistics and Cyclist Safety) Champion and accredited to FORS Gold standard (Freight Operator Recognition Scheme). Its new tipper is a glimpse of the future.

Slightly further afield, Mick George is also about to put five new Eonic-based low-entry cab tippers into service - in its case, in cycling-happy Cambridge. Supplied by dealer Orwell Truck & Van, these are also 32-tonne 3235 ENAs, although mounted with Wilcox alloy tipping bodies. Mick George has also

gone for five 18-tonne Eonic 1830s with Hyva skiploader bodies.

Looking at the eight-wheelers, Mick George transport manager Joe Gossage

confirms that the configuration is again tridem, with single front-steer axles, double-drive bogies and rear-steers, delivering a payload of 20,450 kg. Like all of Mick George's trucks, the new Eonics are being fitted with additional safety features, including five cameras, nearside proximity scan systems, left and right turn audible alarms, and extra warning markings.

"The Eonic is one of only two bona fide low-entry urban safety vehicles currently available, and by far the more industry proven," comments Gossage. "The enhanced field of vision that this vehicle offers will be a real advantage to our drivers when navigating through cities or in complex situations, while its two-step, low entry minimises the possibility of injury when accessing the cab... That said, the procurement decision also came down to which manufacturer and dealer we believe can offer us the best service and breakdown provision."





But while low-entry chassis undoubtedly have their advantages, especially in terms of visibility, their specifications may not be ideal for tipper work, says Phil Moon, marketing manager at DAF – although conceding that his firm does not offer a low-entry truck. Aside from the price premium, he points to their original design primarily for stop-start refuse collection work, and hence the fully-automatic Allison gearbox fitted as standard in Eonic's case. Some tipper operators may also worry about the power: Eonic offers a maximum 354bhp.

Nevertheless, Moon does not believe ground clearance need be an issue, even if they are driven on to construction sites.

These days, he points out, sites put in basic, unsurfaced roads at an early stage, meaning tippers are not left to wallow in the mud. "Low-entry chassis are also fitted with front air suspension so they can be raised if needs be," he observes.

LOW-ENTRY COMBOS

Given that on-site traction is less of an issue than it used to be, however, how about artic tippers with rear-steer axles? They might make more sense than 8x4 rigids in many situations, he argues. That raises the intriguing possibility of low-entry tractor units appearing in London. "With that sort of combination you can get 30 tonnes on board," he continues.

His suggestion: 44-tonne artics require

8 metres between the king pin and rearmost axle. "So we're talking about 5.5 tonnes a metre," he says. "I would like to see this increased to 6.5 tonnes, which would enable a reduction to 6.75 metres. That would enable vehicles that are shorter, more manoeuvrable and more stable." Even better for city streets.

An alternative, depending on operators' operational requirements, might be 8x2 rigids with two front-steer axles, a drive axle and a rear-steer. These offer a tonne better payload than a conventional 8x4 and, again, far greater manoeuvrability. For Moon, these are likely to be more mainstream than tridems. "Weight distribution can be a challenge [on tridems] and they are less tolerant of uneven loading," he reasons.

Where tridems can be useful, he agrees, is when operators are using 6x4s for access and manoeuvrability reasons, but would like the extra four-tonne payload capacity of 8x4s. "They can be considered as very flexible, uprated 6x4s," he comments.

Either way, no matter how alert a tipper driver is, or how many mirrors, cameras, sensors, warning lights, etc, have been fitted, there is always the risk that a cyclist will end up under the truck's wheels. That's why Keltbray is trialling DawesGuard, a shield that goes between the front and rear bogies to prevent a



Payback improvers

One rigid tipper bodybuilder that recently recognised the growing potential of tipper trailers is Thompsons, which launched its first earlier this year under the Paymaster banner. It comes with a single-skinned all-steel body, made from Hardox 450, and a steel chassis that tapers towards the front, built by Fliegl, in Germany.

"Even making just two trips a day, Paymaster is carrying an extra 20 tonnes of product compared with an eight-wheeler," explains Ian Chaplin, sales manager at Thompsons' Blackburn operation. "That's at least 100 tonnes more a week, or an extra 5,000 tonnes a year... In the right operating environment, it's an enormous productivity bonus."

That said, given industry demand, Chaplin concedes that rigid bodies will continue to account for the bulk of the company's output for the foreseeable future.

"The Econic is one of only two bona fide low-entry urban safety vehicles currently available..."

Joe Gossage

bike rider disappearing beneath the chassis and suffering fatal injuries.

The driver can press a button in the cab to retract it, if the truck needs to cross uneven ground, and then re-deploy it once back on the highway. James Dawes, a former motorcycle officer with the Metropolitan Police, is its inventor.

Keltbray has also fitted its trial truck with Dawes' PeoplePanel. Made from shatterproof plastic, this fits over the existing side underrun bars to reduce the risk of entanglement with passing riders' clothing. And Keltbray's tippers are already equipped with everything from CCTV on the front, offside and nearside, to reversing cameras, as well as front and rear strobe lighting. **TE**



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