

2020 VISION

Low-entry cabs are growing in popularity, in part due to the implementation of Transport for London's Direct Vision scheme. John Challen examines the pros and cons of the new form of urban transport

Part of the appeal of driving a truck is a commanding view of the road and comfortable surroundings as you cruise along. But with city populations on the rise and more protection needed for vulnerable road users, the urban commercial vehicle fleet landscape is changing. A big step-change has been the emergence of the low-entry cab - a design that kick-started by Mercedes-Benz with the Econic. It is now being followed up by the likes of Scania and Volvo.

For Scania, the new sector has come at a great time; the Swedish manufacturer was already well on the development road with the L-series before Transport for London's (TfL) plans were announced; see box, p15, for an introduction and update. "The timing of the L-series certainly came favourably for us, but the TfL decision didn't really change much," says Phil Rootham, pre-sales technical manager at Scania. "We had a low-entry cab in the 4-series but it was a very complicated special order process to get hold of them, which made it quite cost-restrictive to build, and complex in design. But the TfL/Direct Vision scheme has accelerated what would've been more of a niche product into something that has more mainstream potential. We see operations now that are interested in L-series that wouldn't have been focused on them as a solution without the metric of the star rating system and without it being required for certain tenders."

Rootham states there are more than 100 L-series UK trucks out on the road in

a variety of wheel configurations, such as triple bogey eight-wheelers, 6x2 tag axle rear-steer and 4x2s. "We've got applications such as aerial platforms, fire vehicles, flatbeds with cranes and cargo vehicles - and we're starting to have conversations about box vans and curtainsiders," he says. "There are also refuse vehicles, tippers, vacuum tankers and a concrete mixer on the road."

Powertrain-wise, Scania recently added a 7-litre engine to the L-series, which joins the 9-litre model available from launch. "The smaller engine was quite new at the time, but the aspiration was always there to push it through to other applications," he says. "A lot of the operations are urban and looking for smaller-horsepower, lower-weight engines that are more agile than bigger-capacity units. It's part of the continuous improvement we look for with our products."

One element Scania was keen to carry across from its more mainstream trucks to the L-series (pictured below) was the cab. "We work to a modular structure, which doesn't mean we want standardised vehicles, but we



want to standardise the interfaces," says Rootham. "The cab fit and finish is the same in the L-series cab as in the S-series; the steering wheel relationship with the instrument cluster dash design is the same across the range too. One of the benefits we have is being able to maintain the same levels of quality across the range. There are challenges with the cab in terms of more overhang and weight in shunting the cab forward, which is a different characteristic, but there will always be pros and cons with the vehicle."

FUTURE-GAZING

Looking forward, Rootham says that 9-litre gas engines are the main consideration when the model is upgraded. "The developments will be around powertrain and alternative fuel developments in L-series, especially given the environments that the vehicles operate in," he confirms.

As well as manufacturers, operators have been keen to get involved with low-entry cabs. In the case of Explore Transport, concern for vulnerable road users (VRUs) was the game-changer. "VRUs are our biggest risk as a business. Because of the volume of work we do



"It's a working truck that pays its way, but it also spends some of its time on display and promoting what it can offer," says Thompson. "We've done deliveries into Thames Tideway and sometimes we'll purposefully make that trip in the truck so it will get noticed and talked about - we generally get positive feedback."

VOLVO'S LOW-ENTRY VENTURE

Like Scania, Volvo was keen to ensure its FE low-entry cab was a 'home from home' for drivers used to traditional trucks. "Our FE is primarily used in the refuse market, but we've also sold some into highway maintenance," explains John Comer, product manager at Volvo Trucks. "Ours is a bit different to others because it has a traditional truck cab, moved forward 300mm and lowered 200mm, and a traditional door, but it meets the same need. Some models that use bus technology - such as a bus windscreen - can be very expensive, but ours is the same as an FE. In fact, 80% of the parts of the low-entry cab would be catered for with the standard FE."

"The benefit you get by pushing the cab forward and down is the ability to walk through the cab, and also a more car-like position, so that you are lower to the ground, like a lot of the other city traffic," explains Comer. "One thing that has allowed the vehicles to sit that low is the way the refuse market moved away from landfill to bulk transfer stations, which changed the dynamic from an off-road chassis to one with full air suspension."

But Comer admits the cabs aren't without limitation. Because of the Euro VI emissions requirements, the vehicle has a DPF and an SCR and also EGR underneath, he says, and adds: "There's also the limitation in engine size, with low-entry cabs being powered by a 7-litre to 9-litre engine. So if you buy a low-entry vehicle, you're probably paying more for what, in general application, is a less-powerful vehicle." **TE**

in London and other cities in particular, it's an area of constant concern that we do a lot around FORS and other safety measures to mitigate that," says operations director Dan Thompson.

"Having seen the low entry elements on other types of vehicle, we were keen to understand if that was a concept that could work on an articulated unit, purely because the majority of our fleet are artics, so that is where we would have the greatest use for it," he recalled. "We spoke to a couple of manufacturers around the basics of the engineering and, in the end, Dennis Eagle was the only one who believed it could design a truck that could meet all of our compliance standards. Together, we were able to make something that could

pull a full-length trailer and a full payload because we needed to network it or use it to its full potential."

In contrast from the manufacturer's usual fare of rigid RCV bodies, the result was the Urban Tractor Unit, pictured above, which offers a 44-tonne capacity, low level seating and a full glass cab to better identify other road users. "We believe it's the only artic in the country that gets a Direct Vision five-star rating and pulls a full-length flat trailer at 44 tonnes," says Thompson.

"We run it out of a site in Aveley, near Thurrock, as a day vehicle - it's not the most comfortable vehicle for long journeys, but it's fit for purpose. Drivers were initially a little sceptical, but Thompson says they were soon won around. "Once they drive it, they realise it isn't too different from a standard truck," he says. "It's got all the same features and meets the FORS standards - it's just a different driving experience. We have a specialist driver going in and out of London who knows the roads and the routes; he has the right tool for the job."

Exposure at industry events such as Freight in the City and Tip-Ex has led to more interest in the Urban Tractor Unit - an essential part of the role of the truck.

