



# UK ROAD TRAIN?

**T**he key element in trailer manufacturer Dennison's road train design is a two-axle link trailer that sits between the tractor and a standard 13.6m-long semi-trailer. It has manufactured more than 800 of them since it launched the design in 2008, according to Stuart Wardlaw, a transport consultant at Logistics Fleet Management Support, which is representing the firm. He says that 25.25s are operated in Scandinavia and continental Europe.

The link trailer connects to the tractor with a kingpin, and to the trailer with a rear-positioned Jost fifth wheel; both are mounted at standard 1.25m heights. In operation, the distance between kingpin and fifth wheel centre is 8.5m. Its sliding bogie design features telescoping sliding rails, reducing its 10.8m extended length to 8m when retracted. Wheels are 265/70R 19.5in twins, fitted with 10t-capacity BPW air-suspended axles, Knorr-Bremse TEBS 2 EBS braking system actuating drum brakes with a TRM CAN repeater to the rear trailer, along with a second set of Suzie cables at the rear to connect to the rear semi-trailer.

However, as built, the link trailer is not currently road-legal in the UK.

**After the successful conclusion of the longer semi-trailer trial earlier this year, thoughts have turned to the possibility of running even longer road train configurations**

It poses two regulatory challenges. The first issue is steering. In the UK, articulated lorries are required to meet a maximum turning circle with 12.5m outer and 5.3m inner radius. Even with one of its two axles set in follow-steer mode, the Dennison combination cannot achieve that, states Wardlaw. However, a configuration and pulling a 13.6m trailer with 7.45m wheelbase can meet a more liberal outer turning circle of 14.5m and inner turning circle of 6.5m, which is allowed by the Dutch road authorities.

Alternatively, he adds, at a cost of perhaps £18,000-£20,000, additional steering systems could be installed to meet the tighter circles, which are required for 25.25m combinations to operate in Germany. That country also requires a physical inspection of each of the specific vehicles making up the combination by an approval body such as TÜV. Closer to home, Wardlaw reports that there are five Dennison 25.25m combinations running in the

Republic of Ireland under an annual permit from the national police service. (None of them feature steering axles.)

Wardlaw, who holds an HGV licence, describes reversing the rig as strange to start with. He compares its reactions as somewhat similar to an A-frame drawbar trailer combination, because of its two points of articulation. Although he admits it is definitely more difficult to reverse than a 13.6m trailer, Wardlaw judges that experienced drivers would be able to manage, particularly with the extra training that would be expected if the rigs were brought in to the UK.

The second issue is total combination weight: the heaviest load currently permitted in the UK is 44t (and that requires a three-axle tractor and three-axle semi-trailer). In terms of deadweight, that breaks down as 8.5t for the tractor, 6.8t for the 13.6m trailer and 6.9t for the link trailer, totalling 22.2t, leaving 21.8t for cargo. For a full 40-pallet load, 14 of which go on the link trailer, that capacity only offers a relatively low 545kg/pallet average. That is why, says Wardlaw, many 25.25m combinations run at gcw of 60t; with a maximum payload of 37.8t, the rig offers a capacity approaching 1t/pallet. However, with the two extra axles, a loaded 25.25m 60t gcw rig would still run within UK permitted weights. **TE**