



THREE INTO TWO WILL GO

The perennial question resurfaced in February, following reports in the freight transport press, claiming an LHV trial was an imminent intent of the Department for Transport.

In 2004 hauliers Dick Denby and the late Stan Robinson applied unsuccessfully for Department for Transport permission to trial their respective prototype longer heavier trucks on the public road. Denby's 25.25m B-Double (pictured, p36) was largely based on a variant of the 25.25m European Modular System (EMS) vehicles popular at that time in Scandinavian countries. Stan Robinson's LHV was based on the showman's road train.

In Europe, the EMS concept has gained traction since 1997, when the EU granted Sweden and Finland an exemption to operate 25.25m 60-tonne freight carrying vehicles (pictured above). In 2011 Holland commenced an LHV trial. It was followed by Denmark in 2012, and by 2015 a German trial was well underway. Spain joined the party in 2016. From 1 January 2017, 25.25m trucks, limited to a gross combination weight (GCW) of 44 tonnes were permitted to be operated across the entire German major road network.

Unlike the LST, which extends a

Following the end of the consultation to end the longer semi-trailer (LST) trial (see www.is.gd/afohuj), will the UK government now permit a trial of longer heavier vehicles (LHV) on British roads, asks Peter Shakespeare

standard semi-trailer by 2m – a 15% load volume increase – the 25.25m LHV has the capacity to increase load volume by 45%, meaning two can carry the same volume as three standard artics. If operated at their 60-tonne maximum GCW, they are a game changer for timber, aggregate and bulk liquids hauliers.

In the UK, the 2019 white paper Decarbonising Road Freight (www.is.gd/ajadiw) sets out trials of LHVs in its 2020 to 2025 road map and calculates a CO₂ saving of up to 17% for a single-deck vehicle. While a growing number of European states have realised



LHV is a no-brainer, DfT has resisted a trial, favouring the LST.

In retirement, Dick Denby (85) has attracted new allies within the road transport industry to join his LHV trial crusade. Following recent press reports that his 'Eco-link' 25.25m B-Double will be approved by DfT for use on the public road for awareness purposes, Denby provides some context.

He says: "I have continued to lobby the DfT along with some industry colleagues. I suggested to the DfT sometime ago they should run a trial of 3,000 25.25m 60-tonners on motorways and trunk roads. For minor roads, they should follow the same practice as approval for STGO 1, but follow the Dutch model: once a route is approved for one haulier, it is open to all. In October 2020, we met over Zoom with some DfT officials including the under-secretary of State, Baroness Vere. She said she was minded to move forward with a trial, but needed to be convinced whether there was an appetite for them within the freight transport and logistics industry.

"During the meeting, Baroness Vere also made the point that few people are

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Dick Denby

aware of LHVs in the UK, and suggested we applied for clearance under Section 44 for our B-Double to be allowed on the road, so it could be used to raise awareness [this has not been granted].

“I have also lobbied my MP who took it up with the Secretary of State for Transport, Grant Shapps. Shapps told my MP in the lobby that he is in favour of pushing a trial forward, but echoed Baroness Vere’s sentiments about uptake. I suspect if they do progress it, they will attach certain incremental restrictions, in the same way as they did before the move from 38- to 44-tonne operation.”

Following their Zoom meeting, the DfT gave Dick Denby a list of LST trial participants. LHV supporter and MD of Essex-based HazComp, Kevin Buck, has written to them all asking if they would support an LHV trial, and a majority of respondents said they would.

However, in response to a request for clarification about an LHV trial, DfT said: “No final decisions have been made about a possible trial of 25m vehicles or how such a trial might operate.”

If the DfT is keeping an open mind about a UK LHV trial, what a difference a successful UK LST trial, a growing acceptance of the EMS in Europe and 16 years make. In 2005, transport minister, Dr Kim Howells MP, was reported as saying: as far as he was concerned, LHVs would never be seen on the UK’s roads.

HOW MIGHT IT WORK?

If a trial goes ahead, what are the options and what are the practical implications? Championed by the Swedish truck manufacturers, the most popular EMS vehicle configuration in Europe is the 25.25m 6x2 drawbar fitted rigid, two-axle fifth wheel-fitted dolly (pictured, bottom of p35) and 13.6m semi-trailer. The Dick Denby-style B-Double is a three-axle tractor unit, modified 13.6m semi-trailer with fifth wheel above the bogie and 13.6m semi-trailer.



Volvo Trucks has been heavily involved with the EMS project from the outset. Head of media and demo fleet manager Martin Tomlinson’s first question is, what would be the operating weight? At 44t, standard vehicles could be adapted, but at the cost of payload. If they are over 44t, then tractor units and rigid prime movers will need sufficient power, an uprated drive axle, diff ratio and gearbox cooling.

And what about traction, he wonders. Which would be more appropriate: a 6x4 tractor unit or a tandem lift axle, and what about overdrive and crawler gears?

He adds: “All of these considerations could mean significant modifications to existing fleet, or new purchases at the correct spec. LHVs over 44 tonnes GCW cannot be operated under STGO regulations because speed limitations would make them impractical.”

Tomlinson adds that in the UK the vast majority of regional and national distribution is by articulated vehicle, with drawbars are in the minority. He continues that he believes any trial should include the main EMS configuration. Doing so would involve a suitably-specified 6x2 rigid – costing some £90,000 – plus the 2-axle dolly, for another £8,000. The prime mover would also require a 56mm coupling,

plus air and electrics to the rear. Finally, he asks about infrastructure for parking and access: can DCs and truck stops accommodate these extra-long vehicles?

COUPLING

The B-Double couples to its second 13.6m semi-trailer by a fifth wheel mounted on the front semi-trailer. Trailer manufacturer Don-Bur worked with Dick Denby on the Eco-Link B-Double. In contemplating a specification, marketing manager Richard Owens says: “There would be a need to build a bespoke front trailer, as the rear part of the chassis would have to be strengthened to fit the fifth wheel, and it would need a steered axle, similar to a LST, to meet the turning circle requirements.

He continues: “Also, it has a shortened load-carrying compartment and would require air and electrics to the rear. We estimate the cost would be between £25-£30,000 for a trailer of this type, depending on the full specification. While there are type approvals in Europe for the EMS, this would have to be a consideration for the UK. And, like most OEMs currently, our order books are full; so drawing board-to-ready-to-roll trailer is not something we envisage possible in 2021.” 