



# How **LOW** can you go?

**W**hile the techniques and equipment used to recover vehicles remain largely unchanged, the

industry knows it has to respond to design trends. One of those is the focus on aerodynamics that has led to bodywork having minimal ground clearance.

That makes recovering vehicles difficult because the ramp angle on trucks fitted with tilting and sliding beds is too great. Now, however, new company AIS Innovations, working with Powertec, has developed a system, named So-Low.

AIS director Andy Spencer describes his patented So-Low bodywork as a "sliding pivotal alignment" system. In some respects, it operates much like a tilt and slide body, but articulating the frame provides additional flexibility. Other designs are available for vehicles with low ground clearance, but these are mostly more complex and heavy, he says.

So-Low uses a novel hydraulic cylinder arrangement. Spencer states coyly that the design incorporates "additional geometry" to deliver an approach angle less than four degrees. It also eliminates the need for cables, chains, a heavy rack and pinion, or hydraulic drive motors.

The body - which will be available with four load capacities (4,000kg, 6,000kg, 8,000kg and 10,000kg) - can be fitted to a range of vehicles. AIS says it will eliminate

**Low ground clearance poses problems for vehicle recovery operators, particularly those serving the automotive sector. But a new design could provide the answer, says John Kendall**

damage to recovered vehicles, as well as minimising time on site. Around six So-Low equipped vehicles have been sold to date, and the firm is expecting customers from Europe and North America, not just the domestic market.

Moving on to the heavier end of recovery, several issues are giving vehicle manufacturers and operators cause for concern. Among the most recent are proposals from TfL (Transport for London) to bring forward and extend the capital's ultra-low emissions zone (ULEZ).

## **SPECIALIST ASSETS**

Heavy recovery vehicles are inevitably specialist assets so they're not cheap. Also, unlike haulage vehicles they don't cover many thousands of miles per year. So the purchase price is amortised over a much longer working life.

Mandating early replacements in the London area would thus prove costly. It would also need careful planning by OEMs and converters to ensure delivery in time. AVRO (the Association of Recovery Vehicle Operators) hopes that an exemption might be granted from the proposed Euro 6 emissions requirements planned for vehicles entering the ULEZ.

"The recovery industry keeps the roads clear of broken down vehicles and works alongside the emergency services, clearing accidents. Both are major causes of congestion," states AVRO president Steve Shinnick. Even Euro 6 emissions equipment cannot function efficiently when vehicles are stuck in traffic.

AVRO is also campaigning for recovery operators to be permitted use of bus lanes in London, in order to speed up operations - and hence to reduce congestion and, again, emissions. Shinnick also calls for overhead signs - similar to those on smart motorways - to warn road users of congestion caused by breakdowns or accidents.

Talking of which, recovery operators are concerned about the spread of smart motorways that periodically invalidate the hard shoulder. Back in June last year, the Transport Select Committee warned the government not to press ahead with 'all lane running' schemes while safety concerns remain.

The issue: Shinnick worries about the vulnerability of recovery operators at the roadside. He also wants to see more 'crash cushion' vehicles - particularly, but not only, for smart motorways. [TE](#)