Things that should change

There is a mix of items in the trucking industry that should change to promote new technologies and reduce risks for operators. Each of these is on ARTSA's change hit list.

The 'transition mass' levels for retractable axles should be increased

Retractable (or lift) axles lift up when the load is low. This saves the tyres, reduces drag and improves brake balance. Retractable axles are now available for trucks that are positioned forward of the drive axle so there is no overhang increase when the axle is lifted. All of this is positive. Weight on the axle group at which the retractable axle must be down is stipulated in the design rules (ADR 43/04), but the values are too low so we are wasting the benefit and the ADR should be revised.

National recognition for professional truck modifiers

Many trucks get modified. Trays, van bodies and concrete pump bodies may be attached. Wheelbases may get stretched, seating altered and fuel dispensing equipment installed. All the states and territories have agreed that modifications should comply with the Heavy Vehicle Modification Code.

Many of these modifications are organised by dealers who contract professional modifiers to do the work. The problem is modifiers have no status in the certification system and modifications done in one state may be unacceptable in another state.

A new level is needed in the Road Vehicle Certification System (RVCS). Professional modifiers should be accredited to affix a National HV Modification Plate to a modified vehicle that is recognised and accepted across borders. To get this status, modifiers should be able to demonstrate that they have expertise and quality assurance practices that are adequate for specific modification codes in VSB6.

The Feds are responsible for regulating vehicles when first used on Australian roads. The States control on-road matters. A lot of modifications that are organised by dealers fall through the cracks.

Modular electrical systems should be allowed on dangerous goods vehicles

Modular electrical systems have electrical connectors that allow the electrical looms to be installed in sections. Lamp assemblies can also have integrated connectors that the loom plugs into. Connections at the lamps can be well engineered. Modular electrical systems cost less and are easier to install than fully conduited electrical looms and sections can be replaced if there is a fault. Dangerous-goods trucks and trailers must comply with Australian Standard AS 2809. This requires a fully conduited electrical system, although the seven-pin trailer connector is being conveniently ignored. Europe allows modular electrical systems on DG vehicles and so should we. ARTSA will attempt to have AS 2809 changed.

Certification status for replacement brake parts is needed

Replacement brake parts such as linings, brake drums, brake rotors and air actuators have no formal status. If you replace the brake linings with after-market parts then you are at risk of making an unapproved modification. The Europeans have wrestled this problem into submission. ECE Regulation 90 provides a framework that allows replacement brake parts to be approved based upon comparative tests between original and after-market parts. For heavy vehicles, lining comparison tests can be done on a brake dynamometer.

Long tipping trailers should have level-ground interlocks

Tipping dog trailers are getting longer. The Performance-Based Standards scheme has helped to get many of these accepted. Long tipping trailers are vulnerable to roll over if the load sticks and there is a cross-slope. A gust of wind might be all that is needed to make the trailer topple.

The latest trailer Electronic Brake Systems for dog-trailers can be connected to interlock the lifting gear if the trailer is not level. To do this, the EBS senses the air pressure in one air-suspension bag on each side. An interlock of this sort should be standard on dog trailers with four axles.

Vehicles with lifting metal parts that can be elevated above 6m should have power-line proximity warning devices.

Technology now exists to warn that a power line is close. These should be mandatory for vulnerable vehicles.

Registration fee relief for B-double trucks with advanced safety technologies

Registration fees for B-double trucks and trailers with advanced safety technologies should be reduced. Incentives are needed to promote the uptake of electronic braking and stability control systems. There is potentially a substantial community safety benefit from trucks with Electronic Stability Control (ESC). There is also an obvious productivity benefit.

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