



A letter to the state and territory transport ministers

depends upon regular uptake of technical progress. Truck and Trailer Electronic Stability Control with a roll-stability feature (which is called RSP) is now a proven system. It slows a vehicle when a side-slide or roll-over is likely to occur. This technology has been mandated on new trucks and trailers in Europe. The US NHTSA has published a notice of proposed rulemaking, which will mandate ESC on new motive trucks soon. Europe mandated the precursor technology ABS, on heavy trucks and trailers in 1991 and the US and Canada did so in 1997. Various Australian jurisdictions have mandated ESC in high-risk situations. VicRoads requires B-double log jinkers that operate on the Black Spur highway to have trailer ESC. This requirement have been a complete success. After a coronial inquiry into the deaths of four people, NSW coroner Forbes has recommended that a stability control system be required on all vehicles carrying DG. The NSW EPA has developed a proposal for this and is working through the Competent Authorities Panel. ESC is now a mature technology for both trucks and trailers. It can be retrofitted on trailers but not on motive vehicles. ESC incorporates a roll-stability function that has proven effectiveness for preventing truck and trailer roll-overs. As a guide, when tested at 60 km/h, an additional 10 km/h safety margin is gained if prime-movers have ESC with RSP. If the technology is used on trailers only, the added safety margin is about 5 km/h. If ESC with RSP is on both the truck and trailer, the safety margin increase to about 12 km/h. Australia lags well behind the rest of

the world because the National Road Safety Strategy is not forcing change to the Australian Design Rules. Actual crash performance does not inform the ADR development process. The relevant brakes rules (ADR's 35 on truck braking, and 38 on trailer braking) are currently under review. Rule 35 was recently amended to mandate ABS on motive vehicles from 1 July 2014. Amendments to rule 38 (trailers) have been delayed because of special pleading by the livestock haulage sector. This sector argues that ABS will be unreliable and/ or inconvenient. The arguments being used are the same ones that were used to kill ABS on B-double trailers back in the early 1990s. Sadly, the livestock haulage industry has an appalling roll-over safety record. Many of its crashes are roll-overs that occur on sealed main roads and highways. ESC with RSP could help this sector. The trucks most vulnerable to roll-over are those that carry shifting loads with a high centre of mass. Examples are fuel-haul and milk-haul tankers, concrete agitators and livestock carrying crates. ESC with roll-stability is a proven technology in the fuel-haul and milk-haul sectors. Whilst adoption in these sectors is not universal, it is common. In 2011 the National Bulk Tanker Association showed admirable leadership by calling upon government to mandate ESC with roll-stability protection. The fuel-haul industry has a long experience of ABS on trucks and trailers because it is mandated on new and in-service B-double DG tankers. This sector has progressed to ESC with RSP. Originally ABS was required on all B-double trailers however, the requirement was later dropped because

The 2011 NTI report states that seven out of 10 major payouts involve a single heavy vehicle. The truck driver will usually be blamed for these crashes however, the inherent safety of the truck is rarely questioned.

of conservative opposition. Consequently Australia lost a pathway to advanced stability control technology. Australia now lags behind other developed countries with uptake of the next generation technology – ESC with RSP. In 2007 the National Transport Commission released the National Heavy Vehicle Brake Strategy. This proposed that Antilock brakes be mandated on new trucks and trailers by 2011 and Electronic Stability Control by 2015. Whilst this strategy was agreed to be Federal and State authorities, the Federal Department of Infrastructure and Transport has not got around to implementing the strategy. Virtually

nothing has been achieved. This is a failure of leadership. Without intervention by state and territory governments, Australia will continue to lag twenty years behind other developed countries. Even China mandated ABS on new heavy vehicles about five years ago. The ADR revision process is not being driven by road-safety considerations. I call upon state and territory transport ministers to announce that Electronic Stability Control with a roll-stability function, will be required in their jurisdictions on new trucks, buses and trailers from 1 January 2016. Australia badly needs an introduction date to work towards. This will drive change

on new heavy vehicles in the intervening time. There is a precedent for states forcing change to the Australian Design Rules. In 2008, Victorian premier Brumby announced that ESC and side-curtain airbags would be required on new passenger cars. Design rule change followed soon after - ADRs 31/02 and 73/00 were developed. A similar action by state and territory transport ministers in the truck and bus sectors has the potential to reduce heavy-vehicle road trauma by 30 per cent. Truck driving is the most dangerous occupation in Australia. We can do much better.

Yours Sincerely,
Dr Peter Hart

Correction

My last Chairman's Technical Column article 'Rules for modification of new and used heavy vehicles' referenced a Table 1, which was left off. Please see artsa.com.au for the full article. The start date for the National Heavy Vehicle Law has now been delayed beyond 1 October 2013. The information in the article will be applicable after the start date, which will be announced on the NHVR website.

