Inquest into the deaths of Daniel Scott Grace and Raymond John Heffler

Messrs Grace and Heffler died at the scene of the single vehicle truck crash on the Bruce Highway on 4 April 2007 when Mr Grace failed to safely negotiate a sweeping right hand bend.

Coroner Hennessy handed down findings on 14 December 2009.

The Queensland Government responds to recommendations directed to government agencies at inquests by informing the community if a recommendation will be implemented or the reason why a recommendation is not supported. The departments named in this response will provide implementation updates until the recommendation is delivered. Further information relating the implementation of recommendations can be obtained from the responsible minister named in the response.

Recommendation 1

The Department of Transport and road transport industry continue to support the development of an early warning tip device for trailers being hauled by prime movers to alert drivers to potential rollover due to movement of the trailer.

Response and action: the recommendation is implemented.

Responsible agency: Department of Transport and Main Roads.

On 22 September 2015, the Deputy Premier, Minister for Transport, Minister for Infrastructure, Local Government and Planning and Minister for Trade and the Minister for Main Roads, Road Safety and Ports and Minister for Energy and Water Supply responded:

Nationally, no action is currently being considered to introduce a rollover warning device for trailers being hauled by prime movers, however the implementation of electronic stability control and roll stability control on these vehicles will reduce the likelihood of rollover incidents without driver intervention.

Early warning tip devices are devices that are able to sense that a trailer rollover is imminent and warn the driver, expecting that some preventive action can be taken by the driver to avoid the rollover.

Roll stability control (also called rollover stability support by some manufacturers) acts in the same manner as the early warning tip devices to the extent it warns the drivers of the imminent rollover; but it also automatically initiates mitigating actions to avoid the imminent rollover. This compensates for driver response time and also relieves the driver to focus on other driving manoeuvres needing attention under critical conditions.

Roll stability control (or rollover stability support) is an advanced feature of the heavy vehicle braking system. It monitors the trailer wheel speed and suspension pressure or spring deflection to determine if a trailer rollover threshold has been reached and if a trailer rollover is imminent. When the roll stability control system detects that a trailer rollover is imminent, it warns the driver, but more importantly it automatically initiates mitigating actions by:

- reducing engine torque
- engaging the engine retarder
- applying the drive axle brakes

applying the trailer brakes.

The overall effect of these mitigating actions is to reduce the trailer speed and hence its lateral acceleration and move it away from the rollover threshold. After potential rollover conditions disappear, normal vehicle operation resumes. Roll stability control is often integrated into the antilock braking system and electronic stability control system of the vehicle. *National Heavy Vehicle Braking Strategy Phase II* is seeking to mandate roll stability control system on heavy vehicles, particularly trailers, by suitable provisions in the Australian Design Rules 35 and 38.

The Department of Transport and Main Roads is a participating member of the Australian Motor Vehicle Certification Board and the Technical Liaison Group which are involved in the development and implementation of mandatory electronic stability control on heavy vehicles. Through these bodies, the department continues to be actively involved in seeing that these important safety technologies are mandated nationally in an expeditious way.

The department will continue to participate in the Australian Motor Vehicle Certification Board and the Technical Liaison Group work programs.

The current timeline for progressive but mandatory fitting of these safety features on new model and current model new vehicles is 2015-17.

On 11 February 2016 the Minister for Main Roads, Road Safety and Ports and Minister for Energy, Biofuels and Water Supply and the Minister for Transport and the Commonwealth Games responded:

The mandatory fitting of roll stability control devices commenced in 2015 and is expected to be complete by 2017.