

Toll Group submission on “*Vehicle standards and safety*”, National Transport Commission July 2019

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September 2019

Purpose

To articulate Toll’s perspective on the existing and potential legal framework for vehicle standards and vehicle safety in Australian road freight

Introduction

With over 125 years' experience, Toll Group, proudly part of Japan Post, operates an extensive global logistics network across 1,200 locations in more than 50 countries. Our 40,000 employees provide a diverse range of transport and logistics solutions covering road, air, sea and rail to help our customers best meet their global supply chain needs.

Toll Group welcomes the opportunity to provide feedback on the fifth paper released as part of the Review into the Heavy Vehicle National Law (HVNL). The *Issues Paper* produced by the National Transport Commission (NTC) is comprehensive and considered and Toll is in broad agreement with its observations.

Our response to the 7 questions posed by the NTC is laid out in this paper. The main points are:

- Toll supports the draft regulatory principles proposed by the NTC, and is particularly supportive of the first principle:

“The future HVNL should promote greater use of vehicles that perform to higher safety standards and deliver productivity benefits. It should support the use of safer vehicles from other markets and recognise and encourage the use of safe vehicle technology”

- In order to realise the principle, the Australian Design Rules (managed by the Commonwealth) and the access rules (managed by the National Heavy Vehicle Regulator) need to work in tandem. Current disparities mean many European-designed vehicles must be modified before they can be used on Australian roads, incurring time and expense.
- The perverse disincentive to purchase newer, safer vehicles and equipment must be remedied through changes to mass and dimension limits.
- The registration function must be returned to the Heavy Vehicle National Law under the administration of the National Heavy Vehicle Regulator (NHVR). This is necessary to:
 - Enable the NHVR to revoke, suspend or deny registration to unroadworthy vehicles
 - Drive consistency and efficiency of registration processes
 - Eliminate perverse outcomes such as garaging vehicles in states that do not mandate compulsory annual inspections, and enrolling in maintenance accreditation purely to avoid compulsory annual inspections
 - Speed up the communication between defect notice procedures (NHVR) and registration procedures (states and territories) which can delay a vehicle's safe return to the road
- The *Heavy Vehicle Inspection Manual* should be recognised in statute and drive/inform police and transport authorised officers' enforcement actions, thereby promoting consistency
- Consideration be given to developing Vehicle Repairs and Maintenance Regulations or, at the least, industry guidelines that encourage a safe systems approach to vehicle maintenance. The Regulations/Guidelines should rectify the current legal ambiguities and vagueness around when a vehicle becomes “unsafe” or ceases to conform to a standard.
- Original Equipment Manufacturers (OEMs) and repairers/maintainers be formally recognised as parties in the chain of responsibility.
- Maintenance modules in any form of accreditation should include physical inspection of a sample of the enrolled fleet by persons with mechanical expertise.
- Government must pull the policy levers that will encourage fleet modernisation such as stamp duty concessions, registration fee discounts, reductions in fuel excise, greater access to regulatory concessions, preference in government contracts, and the axle load limits reform mentioned above.
- Vehicle maintenance needs to be approached from a systems perspective. The responsible person for a vehicle needs to “ensure” the safety of that vehicle so far as is reasonably practicable. This could be made more explicit in the law rather than relying, as now, on an example of “transport activities” to make the point.
- Telematics can meet the assurance needs of road transport authorities to a greater extent than it currently does.
- A right of review is required where defect notices are issued.

- Greater use should be made of formal warnings (s.590 HVNL) where vehicle issues need to be rectified but don't pose an immediate safety risk (e.g. damaged or faded number plate)

Question 1: What risks to safe vehicles that are currently out of scope for the HVNL should be brought into scope? What is in scope that shouldn't be?

The NTC rightly notes the trend towards international harmonisation of vehicle standards, particularly with regards to the international regulations of the United Nations Economic Commission for Europe (UNECE).¹

Currently, a risk to the provision of safe vehicles exists due to regulatory disparity. For example, vehicles designed and manufactured in Europe and North America typically have heavier steer axle tare mass, and may be wider than is permissible in Australia. Some cannot be legally used on Australian roads without modification, which is a considerable disincentive that limits their uptake. Ultimately, the Australian market does not have access to the full range of vehicles available in other markets, and safety may suffer as a result.

More broadly, the tension between safety and productivity created by the increased mass of newer vehicles and equipment needs to be addressed. For example, a trailer fitted with a rated gate system can add upward of 500kg to the tare mass, which equates directly to reduced payload. Bonneted trucks are often considered more conducive to driver wellbeing than cabover trucks because of the reduced vibration, easier ingress and egress from the cabin and greater space for sleeper berths. However, length restrictions in the regulations inhibit the take-up of bonneted vehicles. Vehicle standards need to be revisited to remove disincentives to utilize newer, heavier vehicles.

A mechanism is required to bring vehicle design rules (managed by the Commonwealth) and access rules (managed by the National Heavy Vehicle Regulator) closer together. Currently, the Australian Design Rules and the HVNL do not even share the same definition of a "truck".²

The NTC correctly notes that the main mechanism for managing roadworthiness is registration.³ A vehicle found to be unroadworthy can have its registration revoked, suspended or denied until a condition of roadworthiness is attained. Contrary to the original intent of the heavy vehicle reforms, registration remains a matter for the states. Consequently, processes for securing, renewing or transferring registration are inconsistent. These inconsistencies can lead to perverse outcomes such as choosing to garage vehicles in states that do not require compulsory annual inspections and enrolling in accreditation purely to secure exemption from compulsory inspection.

The *National Heavy Vehicle Inspection Manual* (HVIM) produced by the National Heavy Vehicle Regulator is a sound document and Toll supports its use to drive consistency and certainty. The HVIM's stated intent is to "introduce a single national approach to ensuring heavy vehicle roadworthiness". Yet the HVNL makes no mention of "roadworthiness" and has no power in this regard.⁴ The HVIM is not recognised in statute and the NHVR has no power to compel its use. This will only change if the registration function resides with the NHVR as intended. Vague government commitments to "harmonisation" and "mutual recognition" are insufficient.

Toll strongly believes that systems of compulsory annual inspection are misguided. They encourage a mindset that vehicle safety is a "once a year" event determined by a regulator rather than an ongoing process and mindset for which an operator is answerable. A robust approach to vehicle safety

¹ National Transport Commission, *Vehicle standards and safety*, July 2019, p.26

² The Australian Design Rules apply to vehicles 3.5 tonne GVM and above while the Heavy Vehicle National Law applies to vehicles 4.5 tonne and above.

³ "The main system for managing roadworthiness is linked to vehicle registration, managed by state and territory authorities. Meeting applicable roadworthiness requirements is a condition of registration". National Transport Commission, *Vehicle standards and safety*, July 2019, p.20

⁴ National Heavy Vehicle Regulator, *National Heavy Vehicle Inspection Manual*, v 2.3, 2018, p.4

requires pre-trip inspections, mechanisms for reporting faults, timely repairs, documented service and maintenance systems based on OEM specifications and replacement of old fleet.

Further, we are yet to see credible data that supports a link between compulsory annual inspections and road safety outcomes. We note the conclusion drawn by Austroads in 2010:

Given the limited influence of defects in crashes, it would be extremely difficult to mount an argument that any different standard to which vehicles are inspected in different jurisdictions has any influence on crash causation.⁵

The Victorian Parliament drew similar conclusions.⁶ The NSW Auditor General directed Roads and Maritime Services (then the RTA) to adopt a risk-managed approach to inspections for similar reasons.⁷ The Canadian and Norwegian studies generally used to support compulsory annual inspection lack statistically significant sample sizes, a fact acknowledged by the NTC.⁸ Finally, we note that the Centre for Internal Economics concluded that ‘an annual inspection would need to reduce the cost of road crashes involving each heavy vehicle by around 23 per cent for the benefits to match the costs’.⁹

Vehicle safety needs to be considered as part of a safety system, not an “event” that occurs at certain intervals. In leaving registration in the hands of the states, the NHVR has effectively relinquished a key vehicle safety lever.

Question 2: Have we covered the issues relating to safe vehicles accurately and comprehensively? If not, what do we need to know?

Toll considers that the issues have largely been considered accurately and comprehensively. We make the following additional observations in relation to the primary obligation, and accreditation.

The introduction of s. 26C and the definition attaching to “transport activity” effectively brings repairs and maintenance within scope of the HVNL for the first time.

“Transport activities means activities, including business practices and making decisions, associated with the use of a heavy vehicle on a road, including for example –

- (a) Contracting, directing or employing a person –
 - (i) to drive the vehicle; or
 - (ii) to carry out another activity associated with the use of the vehicle (**such as maintaining or repairing the vehicle**) [author emphasis]

The parties in the chain therefore have an obligation to “ensure” the safety of the vehicle including (but not limited to) its maintenance and repair. Industry has many unanswered questions about how the benchmark of “ensured” can be met with regards to vehicle maintenance and repair. For example:

- is compliance with an accredited maintenance module sufficient to meet the obligation?
- does complying with OEM specifications meet the standard?
- what obligations, if any, does the law impose on OEMs, parts suppliers and mechanics?
- what constitutes due diligence where an operator outsources repairs and maintenance to a third party, especially in regions where services are limited?

⁵ Austroads, National recognition of roadworthiness procedures, IR-185/10, 2010, p. 24

⁶ Parliament of Victoria, *Inquiry into Victoria’s Vehicle Roadworthiness System*, 2001, p.5

⁷ Auditor-General’s Report, *Improving Road Safety – Heavy Vehicles*, Roads and Traffic Authority of NSW, 2009

⁸ NTC, *Heavy Vehicle National Law Regulation Impact Statement*, September 2011, p. 87

⁹ Centre for International Economics, *Benefit Cost Analysis*, September 2011, p. 56

- What qualifications/competencies are required for persons engaged in servicing and maintaining vehicles?¹⁰

The law needs to speak to the outcomes sought from repairs and maintenance in the same way that it speaks to management of fatigue, speed, mass, dimension and load restraint. Currently the HVNL lacks a structured, considered approach (either prescriptive, performance or principles-based) around the upkeep of the vehicle. What is included is piece-meal, focussing on specific components (odometers and speed limiters), conformance to vehicle standards (s.60, division 6) and undefined, relative terms such as “unsafe” (s.89). One of the few cases Toll is aware of regarding failures of heavy vehicle maintenance was prosecuted under criminal law.¹¹ This is appropriate in a case occasioning death or serious injury, but a failure to deploy a repairs and maintenance system should be an offence under the HVNL. Toll recommends that consideration be given to developing Vehicle Repairs and Maintenance Regulations or, at the least, industry guidelines. Toll further recommends that OEMs and repairers/maintainers be explicitly recognised as parties in the chain.

Toll will not pursue matters related to accreditation here, noting that a paper on assurance has been released for comment.¹² However, Toll believes that all accredited maintenance modules (including NHVAS) should include physical inspection of a sample of the enrolled fleet by persons with mechanical expertise.

Question 3: How can the future HVNL most effectively deliver safer vehicles to the road? Which aspects of the PBS scheme are working well, and which aren't? What barriers to the broad uptake of safer vehicles exist?

Toll strongly supports draft regulatory principle 1: The future HVNL should promote greater use of vehicles that perform to higher safety standards and deliver productivity benefits. It should support the use of safer vehicles from other markets and recognise and encourage the use of safe vehicle technology.

“Safer” is a relative term. A vehicle considered to be at the cutting edge of safety in one era will be considered comparatively “unsafe” in another. Draft regulatory principle 1 seeks to continuously increase the purchase and use of newer, safer vehicles and to facilitate the exit of older, less safe vehicles from the road network.

Broadly speaking, there are four “gateway” mechanisms policing the entry and exit of heavy vehicles onto Australian roads:¹³

1. Market entry though conformance to Australian design rules (ADRs) and vehicle standards (AVSRs) which stipulate acceptable vehicle designs for entry into the Australian market.
2. Vehicle registration which identifies vehicles, attaches them to an operator and garaging address, and formally permits access to the road network following some form of inspection.
3. Permits for vehicles which do not conform to general mass and dimension rules and require specific permission to access the road network.

¹⁰ We note that the NHVR’s website notes that “The HVNL does not specify qualifications for mechanics undertaking service or repair of heavy vehicles, but sets the standards that heavy vehicles must meet. The qualifications of service providers who service or repair of heavy vehicles are currently the responsibility of the various state-based legislative authorities that administer the vehicle service and repair industry, including specific licensing arrangements” (<https://www.nhvr.gov.au/safety-accreditation-compliance/vehicle-standards-and-modifications/approved-vehicle-examiners>). Outside of Western Australia there doesn’t appear to be a licensing regime for mechanics/vehicle repairers (see Federal Register of Legislative Instruments F2007L02692)

¹¹ RvColbert [2017] SASCFC 29. The case involved faulty brakes.

¹² National Transport Commission, *Assurance Models Issues Paper*, August 2019

¹³ We recognise that vehicle recall also exists but is outside of transport law.

4. In-service vehicle inspection either at roadside or as directed by an enforcement officer.

The problem for the HVNL is that it controls, at most, two of these gateways. Market entry (point 1 above) is managed by the Commonwealth under the *Motor Vehicle Standards Act* (soon to be replaced by the *Road Vehicle Standards Act 2018*). Contrary to the original intent of the heavy vehicle reform, vehicle registration (point 2 above) remains a matter for the states so the HVNL has little power in this regard. The HVNL does govern the issuance of permits (point 3) and can attach vehicle conditions to the permit as per s.162 of the HVNL. However, this is limited in its capacity to impact vehicle safety because it doesn't capture general access vehicles.

This leaves vehicle inspection for the purposes of compliance (point 4) as the only mechanism for promoting vehicle safety. Chapter 3 of the HVNL (Vehicle operations – standards and safety) has as its purpose “to ensure heavy vehicles used on roads are of a standard and in a condition that prevents or minimises safety risk”. The “standards” and “conditions” that manage safety risk are left vague and unsubstantiated.

Section 60 requires that:

“A person must not use, or permit to be used, on a road a heavy vehicle that contravenes a heavy vehicle standard applying to the vehicle”

Section 89 requires that:

“A person must not use, or permit to be used, on a road a heavy vehicle that is unsafe”

The vagueness of concepts like “unsafe” and “roadworthy” (which is not defined in the HVNL but is noted in the *Heavy Vehicle Inspection Manual - HVIM*) leaves them open to interpretation and inconsistency of enforcement. Further, there is sometimes a gap between the point at which a component diverges from a standard and the point at which it becomes unsafe. The role of sub-optimal roads and infrastructure in this degradation must also be recognized. It is likely that the shift from a part (or vehicle) being “safe” to “unsafe” will occur on a road, regardless of how stringent repairs and maintenance processes are. Enforcement needs to take account of this and be proportionate in its response.

The lack of precision around when “unsafe” is reached and how it is to be judged is a source of ongoing frustration for operators and for enforcement bodies alike. Speed limiter calibration and brake testing are two examples where standards would be improved by greater specificity.

In the interest of greater certainty and consistency we support:

- statutory recognition of the *HVIM* subject to ambiguities being addressed (e.g. different brake testing methodologies and the question of which is considered definitive)
- standardised and robust training for enforcement officers (both transport authorised officers and police) in the use and application of the *HVIM* in determining roadworthiness, and
- industry participation in the development and further refinement of the *HVIM*, possibly facilitated through extending membership of the existing vehicle standards reference group to industry
- guidance on the qualifications/competencies required to conduct repairs, maintenance and inspection of heavy vehicles.

The *HVIM* could conceivably replace part of the NHVAS Maintenance Management Accreditation Guide and Business Rules and set the baseline expectation for *all* heavy vehicles in Australia.

The principle of promoting greater use of safer vehicles cannot be realised until a perverse disincentive in the current system is removed. Newer, safer vehicles tend to be heavier than older models making them less productive. Operators therefore have an economic incentive to hold onto older vehicles for longer. Table 1 demonstrates a live example from the Toll fleet. The new Quon is a 6x2 rigid vehicle manufactured by UD. It has significantly greater safety features than the ‘Condor’ model it replaces, also manufactured by UD. Those features include EBS, stability control and cruise control. However, it is 517 kg heavier and thus reduces the payload.

Table 1: Specifications of UD Condor 6x2 versus UD Quon 6x2

Key specifications	UD Condor 6x2 (current)	UD Quon 6x2 (new)
Model	PD24280	CD25360
Engine	7 Litre	8 Litre
Hp	280	360
Torque (Nm)	883	1,428
GVM (kg)	24,000	26,000
GCM (kg)	28,000	
Tare Weight (kg)	6,675	7,192
Emission standard	Euro 5	Ppnlt (Higher standard than Euro 6)
Transmission	Allison	Escot VI (Group transmission)
Rear suspension	Hendrickson	Group 8 Airbag
Brakes	Drum	Disc
ABS	Yes	Yes
EBS	No	Yes
Economy Mode From Start Up	No	Yes
UD Stability control (UDSC)	No	Yes
Traffic Eye Brake (TEB)	No	Yes
Lane Departure system (UDWS)	No	Yes
Driver Alert System (DAS)	No	Optional
Traffic Eye Cruise	No	Yes
Exhaust Brake	Yes	Yes
Engine Brake	No	Yes
Brake Blending	No	Yes
LED Headlamps	No	Yes
Day Time Running Lights	No	Yes
Nenpi (Economy) coach	No	Yes
ESCOT Roll (coast function)	No	Yes
Accelerator Limiter	No	Yes
Cruise control	Yes	Yes
Soft Cruise Control	No	Yes
ECO Mode	No	Yes
Steering Wheel Controls	No	Yes
Low maintenance components	No	Yes
Factory Low Drag Aero Kit	No	Yes
Immobiliser	No	Yes

Similarly, a trailer fitted with a rated gate system can add upward of 500kg to the tare mass, which equates directly to reduced payload. The solution is for Australia's regulated axle load limits to be revised to enable new safer vehicles to operate without suffering a reduction in payload.

This tension between safety and productivity also extends to dimensions as established in the Vehicle Standards. For example, bonneted trucks are often considered more conducive to driver wellbeing than cabover trucks because of the reduced vibration, easier ingress and egress from the cabin and

greater space for sleeper berths. However, length restrictions in the regulations inhibit the take-up of bonneted vehicles.

That Australia's heavy vehicle fleet is old by international standards is well known. While the average age of vehicles 3.5 tonne and above in Australia is 13.8 years old, in Germany it is 6.7, in Sweden 7.07, Hungary 12.6 and Japan 11.8.¹⁴ The relationship between vehicle age and safety outcomes is also well known.¹⁵ Government needs to be prepared to pull the policy levers that encourage the purchase of newer fleets. These include stamp duty concessions, registration fee discounts, reductions in fuel excise, greater access to regulatory concessions, preference in government contracts, in addition to the axle load limits reform mentioned above. Somewhat radically, Australia could even consider a "hard stop" on vehicle age as happens in Singapore.¹⁶

Toll has commented on the limitations of the Performance Based Standards scheme in its submission on *Easy Access to Suitable Routes* and will not repeat them here. In brief, the biggest barrier to PBS uptake is (and always has been) provision of prompt road access decisions by road owners at state and local levels, and the relative lack of access provided for unique PBS combinations.

Question 4: How can the future HVNL encourage suitable maintenance programs? How can it most effectively identify and remove dangerous vehicles from the road?

As noted in our response to question 2, vehicle maintenance needs to be approached from a systems perspective. The responsible person for a vehicle needs to "ensure" the safety of that vehicle so far as is reasonably practicable. This could be made more explicit in the primary duties rather than relying, as now, on a definition of "transport activities" to make the point.

Currently the HVNL does not have a mechanism to permanently remove dangerous vehicles from the road. The power to remove a vehicle's right to legally operate on the road network derives from vehicle registration. Toll supports the powers associated with registration returning to the HVNL.

Enforcement needs to take a risk-based approach to target unsafe operators, including those utilising unroadworthy or otherwise unsafe vehicles. As we have repeatedly argued, developing a credible risk profile requires a close knowledge of regulated parties and their practices. It is difficult to build such a profile in the absence of an operator licensing system or mandatory system of accreditation.

Question 5: How can the future HVNL meet the assurance needs of all Australian state and territory road transport authorities in a way that does not unreasonably impose on operators?

Toll Group supports the use of telematics for regulatory purposes. To date, telematics has generally been used to monitor and modify driver behaviour (speed, fatigue and braking) and provide assurance around access (IAP). However, as vehicles become more advanced they can potentially self-report defects. Operator systems should also report when vehicles are overdue for service and maintenance. This information can be made available to regulators.

Question 6: Do we need assurances regarding repairs and replacement parts? If so, could these be achieved using standards? Should third-party repairers be explicitly included in

¹⁴ Truck Industry Council, *Modernising the Australian Truck Fleet*, Budget submission 19/20 Appendix A

¹⁵ National Heavy Vehicle Regulator, "Age of heavy vehicle fleet and non-conformity", May 2017, <https://www.nhvr.gov.au/files/201701-0459-factsheet-nrbs-report-2.pdf>. We note that kilometres travelled is an alternative measure of risk.

¹⁶ <https://www.aas.com.sg/resources/coe/coe-prices.html>

the Chain of Responsibility? How can defect clearance processes be reasonably expedited?

The issue of performance and quality assurance for replacement parts has long concerned the road freight industry. Toll notes the work of industry groups such as ARTSA in advocating for and proposing regulatory improvements to address these issues.¹⁷ Operators need confidence that the parts and repairers they use are not compromising the general safety duty.

We note that Australian Consumer Laws exist that should protect operators in the event that mechanical services or parts are substandard. We do not seek to replicate these provisions in the HVNL. However, as noted in our response to question 2 there are unanswered questions related to vehicle safety, standards and the role of OEMs, parts suppliers and repairers in the HVNL.

Toll supports greater clarity and consistency in the defect notice process. There are situations in which operators 'clear' defect notices having taken no action because their own testing does not find the 'fault' indicated in the defect notice. This is costly and frustrating for an operator, but it has a deeper implication. If, as Toll recommends, a risk-based approach to vehicle compliance and enforcement is used, then defect notice data will presumably inform the operator's profile. Currently there is no formal mechanism for an operator to challenge a defect notice and no obvious incentive to do so since there is no fine associated. When defect notices are used to infer a level of risk about an operator, it is imperative that the operator have a right of review in instances where they dispute the existence of a fault.

Formal warnings could potentially be very useful in the roadworthiness and defect space because – as per s. 526(1) – a defect notice can **only** be issued where 'the vehicle is a defective heavy vehicle **and** the use of the vehicle on a road poses a safety risk' [author's emphasis]. The formal warning mechanism (s. 590 HVNL) would be useful where there might be a defect, but not necessarily a safety risk (e.g. the VIN number is erased or obscured).

The stumbling block with formal warnings (as with improvement notices) is that the police have to be specifically approved to use them by the police commissioner's written authority. This raises (again) the issue of certainty and consistency in enforcement.

Question 7: Should the future HVNL apply a risk-to-safety threshold for vehicle standards and loading matters?

Toll reserves its judgement on this pending further information and exploration. Our preliminary view is that such a system would be difficult to implement. Relatively 'minor' issues can also be causal factors in crashes, e.g. a cracked side mirror, which may prevent a heavy vehicle driver from noticing a motorcycle when merging. It is also unclear how a risk-to-safety approach would apply to loading, and how some risks to loading and load restraint could be considered low risk.

¹⁷ ARTSA, "A roadmap for truck replacement parts recognition", February 2017, http://www.artsa.com.au/assets/articles/2017_02.pdf