



17 November 2020

National Transport Commission

HVNL Review Consultation RIS

INTRODUCTION

1. Thank you for the opportunity to comment. EROAD is a technology company specialising in regulatory vehicle telematics, providing services in Australia, New Zealand, and North America. We appreciate the opportunity to provide this submission. Representatives of EROAD are available to speak on the submission at your convenience.
2. EROAD believes every community deserves safer and more productive roads that are sustainably funded. This is why EROAD develops technology solutions that enable the better management of vehicle fleets, support regulatory compliance, improve driver safety, and reduce the costs associated with driving. EROAD (ERD) is listed on the NZX and ASX, and employs almost 300 staff located across Australia, New Zealand, and North America. If you would like to know more about EROAD, you can visit <https://www.eroad.com.au/>

GENERAL COMMENTS

3. Overall, the RIS is light on evidence. This is understandable as, in some respects, the policy options relate to moving into virgin territory, where there is little transferable international experience, while earlier policy decisions were not implemented with subsequent evaluation in mind. A significant risk for the RIS, therefore, is that it over-estimates the benefits and under-estimates costs. This risk is, of course, hard to avoid. But it gains its particular significance here because many of the true options are premised on ploughing gains back into additional technology and equipment costs.
4. A policy risk that compounds the measurement risk is the prospect of diminishing marginal returns from regulatory controls. How much of an improvement is really possible and at what cost? OECD data suggested that, around 2005, in Australia, heavy vehicles were involved in road deaths at about the same rate as heavy vehicles in Western Europe collectively¹. To the extent that Western European nations have improved safety more than Australia in the last 15 years, how much of that gain is simply from faster take-up generally better vehicles? If the difference attributable to better vehicles is significant, what is the social cost to Australia of raising the bar to accessing such vehicles by consuming the productivity gains with additional regulated cost items? Perhaps the better aim is to lift vehicle quality in the middle of the fleet, not just on the margin?
5. The evidence that does exist shows that the heavy vehicle sector, by and large, is delivering better safety outcomes than the less regulated light vehicle sector. The RIS should consider quantifying the social benefit of past changes so that it can be compared to the productivity gains also generated – which by most accounts largely have not been realised. The question that really needs to be asked is whether these reforms should, therefore, be putting greater emphasis on giving something back to industry for the costs it has already internalised.

¹ Australia had 1.7 fatalities per 100 million truck km travelled, as compared to Denmark at 3, France at 2.0, Germany at 1.5, and Switzerland at 0.8. OECD Publishing, 2011. *Moving Freight with Better Trucks: Improving Safety, Productivity and Sustainability*. International Transport Forum.



RESPONSES TO CONSULTATION QUESTIONS

Context

Q3.1 Are you aware of any other problems with the effectiveness of the HVNL that are not discussed here or in the problem statements in each of the Chapters that follow relating to the key provisions of the HVNL? If so, please explain and detail any related policy options which you think should be considered as part of the RIS.

6. No.

Q3.2 Do you have any comments, concerns or additional information relating to the impacts of the policy options outlined in section 3.9.3 which have not been assessed in detail in the Consultation RIS?

7. No.

Primary duties and responsibility

Q4.1. Are there other costs or benefits that we should consider in the impact assessment?

8. Care should be given to the risk of inadvertently enabling vexatious or poorly evidenced class actions, where putative parties to a chain of responsibility are brought into a court procedure 'just in case' rather than because any investigation has shown a meaningful role. In addition to wasted time and legal fees, this might lead to greater insurance costs being embedded within logistics and supply chains.

Q4.2. Are you aware of any data that may assist us in quantifying the magnitude of any of the costs or benefits associated with the options presented in this chapter?

9. No.

Q4.3. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

10. No.

Q4.4. What are the advantages and disadvantages of establishing a WHS-style worker duty for drivers in the HVNL? What evidence can be shown to suggest this may incentivise safer driver behaviour?

11. The benefit or otherwise is entirely conditional on the surrounding provisions and practices.

12. A benefit for drivers is if such a duty provides a basis for them to encourage recalcitrant operators to invest in lifting the standards of equipment or practices. However, as a rule, drivers tend to have the lowest bargaining power in the system – hence the need for chain or responsibility laws. This raises the question of whether equity will be preserved with matching increases in expectations and scrutiny of operators?



Q4.5. Do you consider there are any benefits that would arise from the NHVR having the ability to prosecute against a separate driver duty that substantially replicates the duty of workers under s 18 of the model WHS Laws in lieu of the relevant jurisdictional WHS authorities?

13. Having the NHVR is a position to undertake a 'complete' prosecution in lieu of relevant jurisdictional WHS authorities may provide the opportunity for all relevant matters to be considered together and in a single process. This would provide administrative, procedural and timeliness benefits. The driver would need to be protected against double-jeopardy to gain a share of these benefits, especially if subsequently deemed to be not at fault.
14. Noting the concern that the mix of provisions and responsibilities across the various pieces of transport and WHS legislation may create gaps in practice, as a matter of principle it seems more efficient to create a deliberate overlap in law and then manage this (e.g. a WHS authority may not initiate a prosecution for a matter substantively currently or previously prosecuted by the NHVR) to preserve justice.

Q4.6. What are the advantages and disadvantages of specifying that the primary duty covers driver competency and fitness for work? Do you consider this will be sufficient to clarify obligations under the primary duty?

15. The benefit or otherwise is entirely conditional on the surrounding provisions and practices. However, in reality many operators resent the idea that they might have some responsibility for 'mothering' their drivers, despite the position of control over those drivers that they occupy. As such, an explicit will greatly improve clarity.

Q4.7. Do you have any evidence or examples of the additional parties that would be captured under the CoR under Option 4.1 currently acting in ways that are impacting on the safety of heavy vehicle transport activities?

16. No.

Q4.8. Would there be any advantages or disadvantages to expanding the defined list of parties in the CoR (as per Option 4.1b) relative to expanding the application of the primary duty to parties who influence the safety transport activities (as per Option 4.1)?

17. A non-exhaustive list would provide a good balance of certainty – the named parties would know that they are clearly covered – and flexibility against evolutions in the wider market, as well as the theoretical ability to reach further along the effective chain of *influence*. Two further questions that this discussion raise are:
 - a. Even if other laws already provide the duties of some 'new' parties under the proposed non-exhaustive approach to the CoR, how effectively have those laws been engaged in the past if supplier input had been deemed a material contributor to a negative transport event? Would the proposed change, therefore, increase the likelihood of prosecution?
 - b. To what extent can the NHVR be deemed competent, or be resourced to become competent, to investigate, assess and prosecute material lapses by parties outside the 'core' transport roles already named? Does this create a risk of mission creep?
18. See also the response to question 4.1, above. The RIS notes that "influence is a relatively low threshold to establish", which is a worrying stance as it tends to encourage a blanket approach. Parties may have influence, but if there is a controlling party between them and the



adverse event, and that party is deemed to be sufficiently independent and informed as to have been able to make a different decision that would have materially reduced the risk of the adverse event, then responsibility should sit with them. The lower cost of establishing *influence* doesn't justify not doing the work to establish *responsibility*.

Regulatory tools

Q5.1. Are there other costs or benefits that we should consider in the impact assessment?

19. No.

Q5.2. Are you aware of any information or data that may assist us in quantifying the nature and scope of any potential costs or quantifying the magnitude of any of the costs or benefits associated with the options presented in this chapter? Please note we are particularly interested in receiving submissions on the impacts shaded in grey in the impact tables.

20. No.

Q5.3. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

21. No.

Q5.4. What would be the implications of changing the process associated with industry developed codes of practice in line with sub-option 5.1b as outlined in this chapter? Would this be beneficial relative to maintaining the current arrangements?

22. It is unclear quite what is being sought from the approach to codes of practice and, therefore, what any change to the process associated with industry codes of practice might add.

23. On the one hand, throughout the discussion, codes of practice are defined as non-binding, yet on page 53 of the RIS it says that a code 'sets out a minimum safe standard' which, by virtue of it describing a minimum, must of necessity be binding on participants.

24. If non-binding, then the proposed government oversight seems excessive. If government promulgated codes are in fact meant to express minimum standards, then it begs the question why the standards-setting mechanism isn't to be used instead?

25. Against this backdrop, there is the further question of the role of industry codes of practice and the nature of the risk industry codes might pose to the attainment of the government's goals. There seem to be two such risks:

- a. That an industry code has been captured by an incumbent group and is designed to raise the bar to entry or drive out smaller participants; or
- b. That the industry code is not being maintained and is no longer fit for purpose.

26. In each case, requiring the industry code to be, in effect, adopted by the NHVR and governed by the Transport and Infrastructure Council doesn't materially change the ability to respond to the risk. Indeed, it may slow down any effective response to either problem.



27. In having government take ownership of the code from industry, the approach may raise expectations that the NHVR will take over stewardship and maintenance of each such code. Government could compel industry segments to update their codes by declining to do so, but under the proposed approach that exposes government to accusations of neglect. There is a consequent risk that multiple industry codes end up imposing a significant review burden on the NHVR.
28. Leaving a code in the hands of the industry it relates to, and merely registering it, provides the NHVR with the ability to revoke registration where an industry fails to maintain its code. Industry is free to adapt and evolve more quickly, generating a body of lessons learned that the NHVR can then draw on in reviewing any (presumably generic) code of its own.

Q5.5. Are there any other implications or unintended consequences that may arise from the NHVR becoming a law enforcement agency under the HVNL?

29. In general, recognising the NHVR as a law enforcement agency makes sense.
30. Thought may need to be given to the precedent effect of making the NHVR a law enforcement agency. In particular, what is the next increment of change that starts to look reasonable once this change has occurred? What pressure might the NHVR come under to adopt a more expansive law enforcement role, either as an entity or through the duties of its personnel? To what extent might this co-opt resources away from its intended core functions as currently understood?

Q5.6. Do you consider that establishing codes of practice or safety standard mechanisms in the HVNL is likely to enable a move toward a risk-based approach to compliance and enforcement? If so why or why not?

31. Codes and standards are a necessary first step. Risk-based regulation requires transparency around risks, which in turn depends on complete and reliable records of the right things.
32. Codes and standards set out the metrics and processes through which the data for such records are able to be generated. However, compiling, reviewing and making sense of these records is a big task. Codes and standards need to be supported by a requirement to make records, but also by investment in the means to make sense of those records.
33. In each case, there needs to be care not to drown businesses and enforcement officers in paperwork. Digital technologies are well-placed to help manage these burdens, but this requires both regulators and regulatees to have a clear view of what data is needed and in what format so that it can be used.

Q5.7. How effective is preventative compliance action by the regulator in improving risk management practices of operators beyond what is possible through the regulator running education campaigns?

34. An effective intervention hierarchy has options at every level of intrusiveness. By their nature, each more intrusive level is individually less cost effective. However, by providing a means to respond appropriately and proportionally to differing levels of accidental or deliberate non-compliance, the effectiveness of the whole system is improved.
35. Events in New Zealand over the last two years illustrate the weakness of over-depending on an education and informing approach in land transport regulation, especially in the absence of proactive, random auditing or risk screening.



36. While preventative compliance action has a logical place in the system, in the absence of good and consistent screening data it is unlikely to occur at a scale that poses a significant risk of detection for lower-middling performing operations. You could reasonably expect that those operations that are known as poor operators – either as an entity or because of key people involved in the ownership or direction of the operation – will tend to soak up a lot of resource that might otherwise be used to encourage others to lift their game.
37. So, while following violations is a legitimate risk-based means of targeting, it is only narrowly preventative.
38. Thought could be given to ensuring accreditation information – whatever the accreditation regime – is gathered and kept in a way that enables it to be automatically analysed to enable the operator and their vehicles to be screened out of contention for (more frequent) audits. This would allow a higher density of sampling to be applied to the body of operators in between the historically non-compliant and the demonstrably compliant. In this example, setting the systems up to capture and process the necessary data represents the new, broadly one-off, cost. But the initial data-gathering is something that should be happening already, i.e. an existing cost, while the improved targeting should lead to higher proportion of true positives and greater downstream incentive effects, so long-run operational savings and social cost reductions.

Technology and data

Q6.1. Is there value in an over-arching data framework and, if so, to what levels of data assurance requirements should it apply?

39. There is significant value in any framework that supports standardisation. Thought should be given to doing so in a way that aligns with relevant international standards. The greater the harmonisation, the lower the downstream costs of accessing and applying technologies and business good practices, both for government and regulated parties.

Q6.2. In relation to option 6.1, is TCA, the NHVR or another entity, best placed to take on the technology and data assurance role?

40. Transport Certification Australia (TCA) is the logical home for the technology and data assurance role. There should be considerable benefit in ensuring a unified approach across the range of transport technology and data standards and requirements, as well as in ensuring a single, well-resourced centre of excellence.
- a. Experience in Australia, North America, New Zealand and elsewhere shows time and again that regulatory telematics demand higher cost services than many operators would choose in order to meet their own commercial requirements.
 - i. To say that these companies would learn to extract benefit from the greater capabilities forced on them by a specific regulatory equipment or service requirement is to ignore the demonstrated realities, where many do not.
 - ii. There is still a lot of market education to occur before telematics technologies could be considered ubiquitous and industry use of them could be considered mature.
 - b. The NHVR has a fundamentally narrow role that would logically colour its perspective.



- i. While this narrow perspective is understandable, telematics serve a wide range of purposes and the sub-set of regulatory telematics only makes commercial sense to the degree it can leverage off the market uptake created through fleet telematics.
 - ii. The NHVR's EWD specification is an illustrative example. It is a logical response to the challenges of having some kind of electronic logbook when you have contract drivers shifting frequently between employers or contracts, vehicles, and supporting technology service providers. However, while it is designed to meet the regulator's needs, it represents at least a two generation jump when most drivers are still working with paper and most technology-minded operators (who are a minority) just want something to help manage payroll.
 - c. TCA is better placed for and more experienced in working within these realities. Since being moved under Austroads, TCA has also shown a greater agility and responsiveness to operator, technology provider and road manager needs.
41. Thought could be given to how the NHVR relates to TCA and whether it might be better positioned/have protection of its interests strengthened, for example as one of the owners of TCA.
42. The role of collecting, storing and disseminating data (the 'data role') from certified technology providers is not a core function of the certifying body:
 - a. TCA's position in the IAP is an historical accident and not in-and-of-itself a sound justification for establishing the data role as an effective monopoly over other regulatory service lines.
 - b. The data role could be provided by any appropriately skilled entity and through a commercial market. Indeed, such a market already exists in Australia and in like-minded jurisdictions internationally.
 - c. The legal frameworks also largely exist, allowing that the whole area of managing privacy and security in a digital world is in constant flux. However, there is no reason to believe that a public or pseudo-public entity is necessarily better placed than a private one to manage these issues or be held accountable for lapses.
 - d. If the data role is allowed to be operated as a statutory monopoly, it is likely that the absence of competitive pressure will inevitably see a loss of innovation, efficiency and effectiveness over time. In particular, TCA would act as a choke point, with the ability to access and analyse data limited to the products TCA has the resource to support or bring to market. As a pseudo-public entity, TCA would be subject to whatever financial constraints its owners might put it under from time-to-time, replicating the responsiveness challenges pure public entities suffer under.
 - e. The TCA can't be expected to have the resource to operate the role at truly cost neutral level (and nor could the NHVR). There will inevitably be some degree of commercial interest applied to managing the role, positioning the certifying body as both 'fox' and 'hound', with the risk of its certification decisions being conflicted by the interest in directing data and future revenue flows through the data role.



Q6.3. In relation to option 6.1, do the chapter 7 data handling privacy provisions provide enough clarity? Should they be expanded to cover more, wound back or be removed from the law?

43. Data handling and privacy provisions need to be sufficiently generic to cover any regulatory application and any entity handling such data. However, because these applications relate to a specific regulatory regime, it makes sense that objectives, procedures, roles, powers and duties be set out such that potentially circuitous generic provisions need not be relied on by regulators. Questions that need to be clearly addressed are:
- a. The relationship with wider privacy laws
 - b. How an application gets recognised as being 'regulatory' in nature and, therefore, within scope of the HVNL's data handling provisions
 - c. Whether it is one rule for all entities, or different rules apply, whether by being a public or a private sector entity, or because of the role performed within the system (e.g. certifier, data manager, technology provider, regulator, regulatee).

Q6.4. In relation to option 6.1, what specific technologies would industry be expected to bring forward under this option and what would the implications be for safety and productivity?

44. This will be market driven. The legislation should recognise that novel technologies will emerge and provide a framework for coping with this inevitability.

Q6.5. In relation to option 6.2a, what documents would operators and drivers prefer to carry electronically? What is the current cost of carrying these documents in paper form? What do you estimate the cost to be to carry them electronically?

45. According to feedback from our customers in multiple jurisdictions, given the option and the means, operators and drivers would prefer to carry all mandatory documents electronically.
46. The marginal cost could be negligible, but it depends on whether and for what purpose the driver, operator or enforcement agent has taken up a suitable digital and connected system that can also carry and/or display and/or share authentic representations of the document or their data content.
47. Feedback we have received indicates that enforcement officers tend to prefer to be able to remotely access authenticated versions of such documents as this reduces the risk to officers when undertaking roadside inspections. For example, with less need to move on or around the vehicle, and/or less need to turn their backs to or take their eyes off of the vehicle occupants.

Q6.6. In relation to option 6.2a, what do NHVR authorised officers and police require in order to access electronic information at the roadside?

48. An internet-connected/connectable mobile device capable of reading a bar code or similar, and/or of sending and receiving a response to a query of some official data base based on the bar code, driver's license, or vehicle registration number.

Q6.7. In relation to option 6.2a, to what extent do industry already have the necessary equipment and systems to be able to produce electronic documentation?

49. All that is required is a smart phone or internet capable mobile device.



50. However, for people working regularly in remote areas, satellite connectivity might be a requirement. So, the extent to which it is true that the sector is largely already equipped depends on what number, nature and degree of assurance features the regulator might wish to attach to any system for storing and displaying such documentation.
51. The New Zealand electronic logbook standard provides for a high level of assurance with a downloadable app-based system, so the principle of not needing specialist hardware for dependable documentation is proven as sound.

Q6.8. In relation to option 6.2b, would operators and drivers exercise the ability to produce documents after a roadside inspection, or would this impose an additional burden?

52. Any delay from the point at which documentation is asked for and that at which the documentation is then delivered creates a space that a minority of operators or drivers will use to attempt to redress some deficiency in their documentation. From a cost-benefit point of view this is a positive effect, not a cost or burden, for these operators.
53. There is significantly less doubt for all parties concerned if there is a consistent requirement to have all relevant documents onboard or reasonably, immediately accessible, including via the enforcement officer using their own technology to query a remote database.
54. If electronic carriage is enabled, then allowing people to stay with paper and produce any documents at a later point in time will retard uptake and delay the arrival of the system and enforcement efficiency gains that could reasonably otherwise be expected.

Q6.9. In relation to option 6.2b, which documents would be appropriate to be produced in a specified period and which are required at the roadside for safety reasons?

55. Documents do not assure safety. In general, they are a statement of the condition of things at the time they were created and issued.
56. If operating a motor vehicle is considered a privilege and undertaking a higher risk operation is deemed a greater privilege, then the onus of proof should be on the driver/operator and should be able to be met at the place and time of the operation (i.e. in real time).
57. New Zealand experience with road user charges showed that anything that makes record keeping optional or that provides times for records to be generated after the fact will result in avoidance behaviours designed to support deliberate non-compliance.

Q6.10. Are there other costs or benefits that we should consider in the impact assessment?

58. A number of technology benefits only fully accrue if the whole of the surrounding transaction is also moved onto a digital platform. There is considerably less value to operators if they need to bridge the digital and manual stages of a process. While this may, as a transitional arrangement, still be easier than any fully manual process used before, this becomes a weaker and weaker defence of failing to upgrade public systems as time goes on.

Q6.11. Are you aware of any data that may assist us in quantifying the magnitude of any of the costs or benefits associated the options presented in this chapter?

59. No. However, transport agencies across Australia and New Zealand have modernised various parts of their businesses and may be able to produce and share indicative case studies.



Q6.12. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

60. No.

Assurance and accreditation

Q7.1. Are you aware of any data that may assist us in quantifying the magnitude of any of the costs or benefits associated the options presented in this chapter?

61. No. However, the paper does not present a clearly articulated intervention logic or hierarchy of benefits. Such a logic is needed to clearly reveal the associated data requirements.
62. Recent reviews of operator and motor carrier controls in New Zealand and the United States both seem strongly predicated on qualitative data and the belief of regulators and enforcement agencies that operator licensing is beneficial. In the US, the FMCSA commissions benefit cost reviews of different components of their activities, but these tend to illustrate that the high social cost of on-road trauma can off-set quite a high level of expenditure to achieve a unit of reduction in that trauma. This kind of data is unhelpful for the purposes of this RIS as:
- a. The RIS does not state the extent to which social cost is considered more or less important than cost to business
 - b. The imperfect nature of the transport and logistics markets mean that costs to business can't be scaled up as high as regulators might like, because those costs will not pass cleanly or completely through to consumers, except over the longer-term. In the interim they will have to be absorbed by operators and drivers, likely causing hardship and perhaps even perverse safety and compliance consequences.
63. Noting that the options require a certain minimum overhead cost regardless of uptake, what minimum level of uptake is needed:
- a. For an efficient system
 - b. For a level of positive impact that can be seen 'above' the general noise/is greater than the margin of error for estimating outcomes?
64. A further, related question can be derived from public health thinking, which is what level of uptake (if any) is associated with compounding benefits (e.g. due to their being sufficient proportion of safely operated vehicles to change the character of wider road use)?
65. The assumption presented in Box 20 is not sustainable. It assumes perfect information and objectively rational decision making. If these both were true then no regulation would be needed at all. In fact, the highly prescriptive nature of the HVNL prima facie evidence of the considerable market failure around the delivery of safety outcomes.

Q7.2. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

66. No.



Q7.3. Is there additional information that the NHVR could obtain through mandatory operator enrolment or operator licensing that would enable it to better target compliance and enforcement efforts? Please outline the data that could be obtained and how it would assist with targeting compliance and enforcement activities.

67. The purpose of operator licensing is to create a formal intervention point upon which the regulator can place its regulatory levers. This reflects the fact that the operator has considerable power over its driver(s) and vehicles. It is about more than just getting information that can be used for targeting – although it also supports that.
68. Where having a license is a prerequisite to operating, the license then becomes something the regulator can attach conditions to (assuming the law provides for this) in response to non-compliance.
69. Operator licensing and re-licensing creates an opportunity to have the operator attest to having current policies, systems and processes in place to manage its operational risks.
 - a. While auditing is needed (e.g. all first-time licensees, some randomly, and some through risk-based screening) to ensure the statements are true, the general requirement then creates positive pressure towards accreditation schemes and other sources of good practice guidance.
 - b. Where accreditation is attached to a digital platform it opens the possibility for automated screening for operator currency.
70. Operator licensing creates the possibility of a feedback loop, where data gathered for licensing purposes can be checked against feedback from roadside enforcement, the two being compared for any discrepancies (i.e. typically where the incidence of roadside events is out of step with what the operator's statements of policies and practices etc suggests should be happening).

Q7.4. Are there any preventative risk management actions, or safety related obligations that the NHVR could mandate to improve operator risk management (beyond NHVR education campaigns)? Could these be applied to all operators, irrespective of the context in which they operate?

71. While there is a cost associated with accreditation, the content of TruckSafe and the NHVAS core modules nonetheless capture things that any operator should be paying some attention to. Given this, requiring operators to create and maintain the relevant records should not, in theory, be more than a marginal change to common business practices. It would, however, draw attention to the need to be doing such things, and may incentivise some operators who might not otherwise have done so, to pay more attention and move towards actual accreditation.

Q7.5. Would operator licensing, with an associated ability to withdraw or cancel a licence be an effective regulatory instrument for driving compliance? Would it be more effective than relying solely on current penalties in the HVNL?

72. Experience outside Australia suggests that these tools are effective.
73. There is a significant gap between education and the application of penalties that should be bridged by a graduated array of more intrusive or stringent measures. It is the ability of the system to respond in an appropriate and proportionate manner that gives it both credibility and effectiveness by being demonstrably 'firm but fair'.



Q7.6. Would flexibility around the method for compliance through the introduction of performance-based standards which replace some prescriptive requirements within the HVNL (see section 7.2.3), be of value to industry? Would this increased flexibility introduce uncertainty about compliance for operators, the regulator or other enforcement agencies? What measures could be taken to lessen any uncertainty about compliance?

74. Performance-based standards still demand *minimum* standards. The flexibility should be around the means of achieving the outcome, not the minimum quality of the outcome. It is important, then, that a prerequisite for a performance-based standard is the ability to express the minimum outcome in objective and measurable terms.
75. If a performance-based standard replaces a prescriptive requirement, it is likely that there would still need to be a reference standard of practice for operators who are unable to tailor a bespoke process to fall back on (and for assessors to use to determine what the relative risks and benefits are of the proposed novel approach).

Q7.7. Under option 7.2 it is likely that the NHVAS AFM module would be discontinued. What costs or operational inefficiencies might result from this change?

76. No comment.

Q7.8. Under option 7.3 the NHVAS would be enhanced so that it better links to obligations under the primary duty and is explicitly framed around risk management roles. This is likely to require additional or revamped modules to be developed. What additional matters should be covered in the modules?

77. No comment on the question as asked.
78. However, this question is secondary to question 7.10 and whether or not other accreditation schemes should be recognised and given similar status to the NVHAS. If those other schemes are given equal weight and status, the logical follow on question is whether to retain the NHVAS at all and, if so, in what way that doesn't skew the 'market' in its favour?

Q7.9. Options 7.3 and 7.4 remove the need for duplicative customer audits of suppliers. How significant is this problem?

79. No comment.

Q7.10. Option 7.4 would allow multiple certification schemes to be accredited by the NHVR. What, if any, benefits do you think there would be from allowing multiple schemes to be recognised?

80. As option 7.3 recognises, the NHVAS is not an agile mechanism. The greatest strength and weakness of the NHVAS is its statutory underpinning and privileged position. It gets its relevance from its privileged position, but loses relevance because of the difficulties of keeping it current and its separation from the industry-led processes that are helping actual business practices keep up with change.
81. Multiple schemes would allow the wider task to be segmented, spreading the load and creating a higher probability of standards etc evolving in step with relevant changes.



Fatigue

Q8.1. Are you aware of any evidence on the significance of driver health and fitness for duty as a contributing factor to the risk of heavy vehicle crashes?

82. No.

Q8.2. Do you consider this chapter accurately describes the key risks and problems associated with the management of fatigue under the HVNL?

83. The chapter provides useful descriptions of some elements of the problems. Areas where more information would have been helpful might include:
- a. A comparison of the incidence of fatigue factors in accidents between heavy vehicles subject to fatigue management provisions, and heavy vehicle not covered by those provisions. The question this supports is, what shares of the remaining 'fatigue problem' sit in what parts of the population?
 - b. A comparison with the evidence for light vehicle accidents. The model presented in figure 11 raises the possibility of fatigue management intruding significantly into the outside-of-work life of drivers. Knowing how much of a problem or risk these factors are relative to the unmanaged risk of other private individuals is important for assessing the contextual reasonableness of any such proposal.
84. The chapter seems to build off the same compromises embedded within current fatigue laws, where fatigue management provisions are set out, but then they are curtailed by task rather than with reference to the science of fatigue. Specifically, there are times in the day when people are more likely to be fatigued or inattentive, and *all* work makes someone tired, not just time behind the wheel. We see these facts reflected in light vehicle accidents, which display notable clustering at the beginning and end of the working day.
85. The description also potentially misses some of the benefits of the current laws, specifically the prescription of minimum short and night rest breaks.
- a. Experience shows that these breaks will not be taken or will be eaten into in favour of maximising worktime within a 24-hour period if not prescribed.
 - b. Given the very long working day and week standard hours allow (compared to most other Western jurisdictions), a fatigue-management focus would privilege rest over work time.
 - c. Australia's geography obviously creates some very long drives compared to that experienced in other jurisdictions – but for a tiny minority of drivers. Given that hard cases make bad law, should the standard system be designed around these cases; wouldn't it be better to push them into a more bespoke system?

Q8.3. Do you consider it would be beneficial to widen the scope of drivers/vehicles that are subject to the fatigue provisions?

86. Fatigue is a significant risk factor for all motor vehicles types, uses and users. There would inevitably be benefit from everyone better managing fatigue.



87. In practical terms, however, it is not obvious that additional classes of driver could be made subject to the kinds of fatigue management mechanisms that are currently applied. This could change if GPS-supported distance-based charging is introduced to replace fuel taxes, because then there will be some mechanism or system in place to capture vehicle time-location distance information, which could then be used to cross-check against driver logbook records. However, this possibility is dependent on major system change well outside the scope of this review.

Q8.4. Do you think that a driver self-assessment and declaration of fitness to work would be effective in encouraging drivers to self-identify when they are not fit for work?

88. This depends entirely on the nature and intensity of the supporting enforcement effort relative to the economic pressures the driver is facing. Done poorly, this sort of requirement could just educate drivers in not taking compliance seriously; it would likely then generate a push for steeper penalties and ultimately come across as ineffectual and heavy-handed. There is also the risk that any such declaration might be used to sever the chain of responsibility when the driver was, in fact, acting under economic compulsion.

Q8.5. Are there other costs or benefits that we should consider in the impact assessment relating to the options presented?

89. While politically sensitive to acknowledge them, there are financial and net economic benefits to non-compliance. In many respects these derive from the fundamentally unhealthy nature of the 'bottom-end' of the transport and logistics sector, and the downward pull this has on possible haulage rates. Nonetheless, these will be lost as regulatory reforms tighten 'access' to them. Questions to consider, then, are: what period of instability and churn will result before haulage rates can rise to force consumers to internalise the true cost of compliant transport; how long will it take for safety gains to overhaul the productivity loss?

Q8.6. Are you aware of or do you have any data that may assist us in quantifying the magnitude of any of the costs or benefits associated the options presented in this chapter?

90. No.

Q8.7. Are there any unintended consequences that have not been identified with any of the policy options considered? If so, please explain.

91. Option 8.4 will likely increase confusion if it includes removal of the prescription of how to record work and rest time. Logically, the integrity of the system will be dependent on certain key kinds of information being captured. Similarly, the efficiency and effectiveness of enforcement will be enhanced if officers need only understand one view of that data. Where bespoke records become common the risk for confusion, misunderstanding, and false-positive and false-negative enforcement actions all increase.

Q8.8. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

Electronic logbooks

92. Serious consideration needs to be given to allowing electronic logbooks, either as an optional alternative to, or as a mandatory replacement for the paper logbook. These would be in addition to maintaining and/or even mandating the EWD for higher risk tasks/situations.



93. Paper logbooks are not just a dated technology, but an inherently flawed one. As just one example, anecdotal evidence remains rife in support of the view that the use of duplicate paper logbooks to falsify running times is not impeded by the 'controls' in place at purchase.
94. Electronic logbooks have significant advantages over paper logbooks and complement the EWD:
- a. They are a proven technology
 - b. They are easier for drivers to use than paper logbooks
 - c. They can provide prompts and reminders e.g. to help drivers understand and comply with the implications of over-lapping 24-hour periods
 - d. They create a clear, secure, unalterable, essentially permanent record that can't be 'lost'
 - e. Their content is easy to integrate with payroll, vehicle telemetry and enforcement databases, supporting easier business administration and compliance cross-checking
 - f. They can be deployed to any internet enabled mobile device, so create essentially no new or special equipment cost
 - g. Being of low cost and offering greater transactional simplicity, electronic logbooks would be ideal for softening the impact on any groups made newly subject to worktime
 - h. They educate the market in using an electronic platform, making it a shorter leap to an EWD and/or easier to recognise the wider benefits of adopting a higher specification system like an EWD.
95. There would be an off-setting cost in terms of lost business for vendors of paper logbooks. However, noting the inefficiency of that medium, the economic impact would likely be net positive.

Access

Q9.1. Is it reasonable to increase mass and dimension limits for general access? Under option 9.1, which sub-option would be the preferred way to increase mass and dimension limits?

96. Increases in mass limits, while desirable, need to be made in close coordination with supply-side reforms and funding decisions. It is, however, reasonable to enable mass increases to be more easily given effect once other policies are also ready.
97. Increases in mass limits may also need to be dependent on dimension increases; however, dimension increases can be achieved in advance or independently of any mass limit changes.
98. On the face-of-it, increasing GML to CML represents a known movement, since current practice reveals the existing level of demand. This assumption, however, carries some flaws that get enhanced as CML get opened to more operators:



- a. Accreditation via the NHVAS has probably been a barrier to uptake, so there would be a degree of induced demand, especially under option 9.1a, that would, in effect, be invisible. However, that is a natural consequence of adjusting general access limits, and option 9.1a is the only mass option that genuinely does that.
 - b. Allowing for what is implied by the generalised fourth power law for road wear, a 5% increase in gross operating weight represents a significant increase in effective road wear for an individual vehicle.
 - i. Since it also represents, roughly, a 10% increase in payload, it would be attractive if made generally available, more so since there is no mass rating for road user charges.² Consequently, one could expect road wear to accelerate unless there is already a saturated level of overloading in the system.
 - ii. Table 10 does not seem to appreciate the implications of exponential increases in road wear from increased axle weights. A 10% increase in payload equates to a 9% reduction in trips for the same task. However, each new truck trip could, allowing for a range of variables, cause a 20% increase in road wear per truck per 'outward' leg, resulting in a 9% increase in net damage/costs from the same task.
 - c. Recognising that options 9.1a to 9.1c imply steady state for general access dimensions, these options also propose concentrating greater mass within an existing envelop, with a consequent increase in risk to structures.
99. New Zealand builds roads to similar standards as Australia does. When the 2016 vehicle dimension and mass reforms shifted 1,000kg out of the enforcement weighing tolerance and applied it to the general access mass limits – a mere 2% increase in allowable mass, but arguably no real change based on prior loading behaviours – it was still deemed prudent to mandate increased minimum lengths by configuration and mass (achieved through a new drawbar length requirement), and to provide a one year delay before bringing the new limits into force to allow road managers to assess network assets and post restrictions if necessary (for which specific funding also had to be secured).
100. Requiring on-board mass seems excessive for the levels of increase concerned. Both options 9.1b and 9.1c already require mass data to be captured at loading because of the requirements of the NHVAS mass module's standards.
- a. The appeal and utility for road managers of knowing where the heavier weights are being carried are obvious, but there are many ways of getting this information without mandating a specific, currently high-cost solution.
 - b. The risk is replicating some of the flaws of IAP as originally implemented rather than taking advantage of the lessons learned and building on the improvements TCA has made in this area by introducing the TMA and RIM applications.
 - c. The observable costs for 9.1c only seem to reflect equipment (and maybe installation) costs: ongoing calibration and servicing, account and data management

² Fuel consumption increases, but the marginal increase in fuel used per tonne decreases due to aerodynamic and other efficiencies. In effect, each additional payload tonne generates marginally less road user charges even as it adds exponentially more cost.



costs also need to be factored in, recognising that these subtract further from the commercial benefits of the CML access.

- d. There is a risk that the benefit of 'real-time' mass data is being over-estimated. OBM systems don't provide a single constant value from the last loading/unloading. The measured value reflects downward forces, which become exaggerated when moving over rough or uneven surfaces, which could lead to false-positive alerts for being over-mass and add significantly to wasted investigation time and effort. Further to which,

101. Option 9.1d seems reasonable but is difficult to assess because the RIS is missing a discussion of Australia's road geometries and network conditions and what constraints they impose on reasonably achievable dimensions. (Note that this applies to allowable widths as well as allowable lengths.) Noting the information on current practices, sub-option 1 seems to pose limited risk. Sub-option 2 risks consuming any potential productivity gains, while sub-option 3 implies that longer vehicles are not deemed safe to have in large numbers or (implicitly) on urban networks, which contradicts what is being signalled by the NHVR and some road managers.

Q9.2. Under sub-options 9.1a to 9.1c, how much would an increase to CML reduce the need to apply for permits?

102. No comment.

Q9.3. Under sub-option 9.1c, would the benefits of CML outweigh the costs of OBM for operators? Would the data provided by OBM systems provide regulators and road managers with the right information to make investment and planning decisions?

103. See our response to question 9.1.

Q9.4. Under sub-option 9.2a, what would be the costs and benefits of a precedent approach for operators and road managers?

104. Sub-option 9.2a looks pragmatic and should generate efficiencies. It may need a mechanism to recognise asset age and condition, however, as it could result in permissions being given independent of the necessary maintenance of the route/asset, leading to a failure and/or injury.

Q9.5. Would road managers exercise the delegation power proposed in option 9.2b? Why or why not?

105. No comment.

Q9.6. Would operators benefit and use a geospatial map as proposed in option 9.2c? What would be the costs for road managers to input the data and keep it updated?

106. In our experience, accurate maps that give timely, accurate and intelligible information on the status of roads, routes and assets has high value to operators.

107. The principal value is in having a single source of truth and the law should not be drafted in a way that presupposes and limits the map's use to specific services. For example, if distance-based charging is introduced, a single source of truth relating to the public road network would eliminate a significant amount of doubt and rework associated with accounting for off-of-public road travel.



108. If there is a geospatial map, it needs to be made available to telematics and software-as-a-service providers, not just to operators, otherwise the benefits will not be fully realisable.
109. Noting that there are already private geo-spatial map providers, is the intent an actual single 'map' as traditionally understood, or a single repository of geospatial information that private map providers could access and on-supply as a layer of information within their own products?
110. Noting that creating the information comes at a cost, but also provides a public benefit that extends beyond the club of heavy vehicle operators, what would be the nature of the funding model?

Q9.7. Under option 9.2d, which option would make it easier to adopt a risk-based approach to vehicle classification?

111. Arguably, the goal is not to simplify everything but to simplify enough of it that more resource can be put towards processing the more unique cases more quickly. A comparison of the numbers of vehicles and permits involved and how the options split these would be helpful for understanding the relative impact in these terms.

Q9.8. Under option 9.3a, which option would provide more transparent, quick and cost-effective decisions?

112. No comment.

Q9.9. Under option 9.3b, which option would provide the right level of review? Would operators and road managers spend time and money seeking an external review?

113. No comment.

Q9.10. Would the structure proposed in option 9.4 be responsive to future changes?

114. No comment.

Q9.11. Would a single or dual-tiered pilot approach be preferred under option 9.5?

115. No comment.

Q9.12. Are there other costs or benefits that we should consider in the impact assessment?

116. No.

Q9.13. Are you aware of any data that may assist us in quantifying the magnitude of any of the costs or benefits associated the options presented in this chapter?

117. No further comment.

Q9.14. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

118. We present and discuss the option of allowing greater general access widths in our responses to the next chapter.



Safer vehicle design

Q10.1. Are there any other costs or benefits that we should consider in the impact assessment?

119. No.

Q10.2. Are you aware of any data that may assist us in quantifying the magnitude of any of the costs or benefits associated the options presented in this chapter?

120. No.

Q10.3. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

121. One view of the PBS scheme is that it exists as a pressure-release valve to defer seriously looking at general access provisions. A similar view is that, by focussing on 'the right vehicle for the right task' the scheme also provides an opportunity to defer discussions about how to lift the quality and productivity of the whole Australian truck fleet. These are obviously sensitive topics that need to be addressed with care. But they aren't actually being addressed and Australia is at greater risk of being left behind or forced to pay a lot more for safety and productivity enhancing technologies and equipment.

122. As such, a further policy option is to consider how the PBS scheme can be turned into mechanism for managing the introduction of new technologies into the wider fleet, not just into those specific fleets with the advantages of sizeable, stable, specialised tasks that mediate the risks of buying specialised designs.

- a. In particular, where the performance of a design lends itself to fitting within general access limits, the ability to issue a general access type approval could see more rapid pick up of the design – and its associated performance and safety benefits – across the wider task.
- b. As an interesting comparison, New Zealand has, to-date, foregone adopting PBS-type scheme in favour of supplementing its High Productivity Motor Vehicle (HPMV) scheme with a set of 'pro-forma' 50MAX designs – a 9 axle combination of about 20m length capable of operating under permit but on the general access network at up to 50 tonnes gross weight. Introduced in 2013, there were nearly 2,000 prime movers in 4,800 combinations by July 2015. Independent evaluation showed that the HPMV policy in general was successful in delivering the expected productivity gains, originally towards the lower bound but moving more firmly into the expected range due to the advent of 50MAX.

Q10.4. In relation to option 10.1, do you have any comments on specific sub-elements of the option or the optimal composition of this option?

123. No.



Q10.5. In relation to option 10.3, do you have any comments on how and whether the increased vehicle width option could be linked to meeting newer safety standards (e.g. side-underrun, blind spot sensors, electronic stability control and anti-lock brake systems)?

124. There are public benefits to allowing vehicles of up to 2.55m in width (or 2.60m for refrigerated trucks and trailers). A marginal increase in width seems to be essentially irrelevant to the likelihood of an accident. However, it can materially increase the effective payload (e.g. of palletised goods) and improve the distribution of mass (e.g. lower-sitting tanks for liquids), meaning fewer truck trips per task and greater stability resulting in fewer roll-overs.
125. This begs the question of whether it is OK to also consume the productivity gains by imposing additional cost requirements that might be irrelevant for the task at hand and that aren't being applied equally to similar operators sticking with older, intrinsically less safe vehicles.
126. Given the age of the Australian truck fleet, it makes sense that any new access opportunity be linked to requirements that help modernise the fleet, but why isn't it sufficient that the linkage merely be that wider vehicles must be new from the manufacturer and otherwise compliant with the ADRs?

Roadworthiness

Q11.1. Are there any other costs or benefits that we should consider in the impact assessment?

127. Standardised assessments will make it easier to align operators' own regular and periodic inspection and maintenance activities with the things the NHVR and base jurisdictions are interested in. This will open opportunities downstream to establish data-sharing or meta-analyses of record-keeping to support risk-rating.

Q11.2. Are you aware of any data that may assist us in quantifying the magnitude of any of the costs or benefits associated the options presented in this chapter?

128. No.

Q11.3. Are there any other policy options or refinements to these policy options which you think should be considered? If so, please explain what they are, and the advantages and disadvantages compared to the options set out in this chapter.

129. See the response to question 11.1, above.

Q11.4. Do you have any new evidence on the effectiveness or otherwise of existing jurisdictional approaches to random and periodic vehicle inspections?

130. No comment.

Q11.5. Are there any unintended consequences associated with any of the options identified?

131. No.



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