Submission to the National Transport Commission Issues Paper:

Effective fatigue management

SHUTTERSTOCK 376370554

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August 2019

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Contents

1. Introduction

1. I welcome the opportunity to comment on the Issues Paper Effective fatigue management released by the National Transport Commission (NTC) May 2019.

2. Fatigue management is one of the most contentious parts of the Heavy Vehicle National Law (HVNL) because it involves complex human behaviours. Many misconceptions and perceptions about the effects of work and rest on the human body persist because individuals respond differently to work and rest.

3. Other factors like physical and mental wellness also vary in their effect on fatigue. There is not a definitive test to measure fatigue, in particular prior to commencing work, making it difficult to develop effective risk management strategies applicable to sometimes complex and diverse driving tasks. Technology presents one aspect of the solution, the other is in addressing complex human factors (behaviours) around our propensity to take risks.

4. This submission responds to the questions posed in the paper, after responding to the problems put forward by the NTC with fatigue in the HVNL. I hope this will inform later Issues Papers and provides the impetus for the NTC to revisit its work to address significant shortfalls in the analysis presented in the current document.

5. The stated purpose of the NTC paper is to create an entirely new HVNL, is this not somewhat premature? Is this the most effective method to address the issues being experienced by the heavy vehicle industry? The Terms of Reference makes no reference to the creation of an entirely new law but the simplification of the current one.

6. In an any policy development task there must be a clear definition of the problem trying to be solved. This has not been articulated well in this case. Not only has the problem not been distilled to the level of serious injury and death it has not expressed what would be an acceptable reduction.

7. Very little effort has been dedicated to breaking down fatigue events into salient causal factors to enable an examination of their impact on serious injury and death. This would enable the reader to grasp the relevance and importance of the significant fatigue harms and their causes within the industry. Without adequately defining the problem, the risk is that framing an appropriate solution is difficult and we continue to perpetuate the current experiences of the HVNL.

8. Framing the problem appropriately would enable a more targeted and thorough discussion of fatigue policy approaches adopted (if at all) across other jurisdictions or transport modes. The examination is cursory and provides no evidence of improved industry performance or outcomes. A discussion of best practice is not evident to assist build a cohesive argument that the HVNL is inadequate. Nor does it facilitate assisting create ideas for approaches to improving fatigue policy options for the Australian context.

9. The NTC has been exceptionally cursory to the extent of even being deceptive in its examination of the Aviation and Rail fatigue management regimes. The NTC has an obligation to provide a thorough and objective analysis of the issues. The paper fails to achieve this.

10. There is no discussion of the complexity involved in addressing specific entities and activities that pose a higher risk and the stricter controls required to manage these risks. A lack of data is very evident. Inevitably risk profiles shift and it is not discussed how the adoption of a performance/ risk-based approach will cater for this shift. It is simply assumed that it will.

11. A specific issues paper is required to deal with the extensive problem of a lack of data not only in the current administration and enforcement of the law but any future approach to the HVNL. The lack of fatigue data and the inadequate analysis of the available data is evident in the papers inability to shed light on the extent of the problem and to assist understand root causes of fatigue crashes. The paper failed to highlight the impact the lack of good data currently poses industry, drivers and the NHVR.

12. The paper references the HVNL not stopping people impaired by fatigue from driving. There are many laws on our statutes, speeding, that do not prevent people from breaching those laws. The paper does not articulate how the proposed approach will address the issue of impaired drivers driving. This goes to the very heart of the reform agenda. There is no discussion of the targets or methods that will be used to determine the success of the approaches being proposed. If there is no evidence to support change and the outcomes it will deliver why proceed with a change for change sake?

13. The paper provides no evidence that performance or risk-based regimes are delivering better results than the HVNL in reducing serious injury and death. How will a performance or risk-based law compel drivers to comply any more than a prescriptive HVNL? This is of concern as performance/ risk-based law largely allows operators to determine what it means for them to comply. This brings its own risk and may result in perverse outcomes should it fail to be implemented and monitored effectively. This is not explored.

14. There is no discussion of willingness to pay or the impact of adopting a performance/ risk-based approach in terms of cost benefit to mitigate which risks? That is, what are the expected outcomes – not just broad statements about improving efficiency, productivity and safety.

15. The obvious question arises that if the HVNL is to target high-risk entities and activities why should the cost be shared across the entire industry? It is not reasonable to expect that entities that can demonstrate high levels of compliance seek additional benefits or pay less than those that represent the highest risk? The paper does not discuss what potential benefits might be on offer or how high-risk entities will be targeted.

16. If the focus is only on high-risk activities and entities there is no indication of the potential compliance task that might be faced by industry, the NHVR or other regulatory authorities. Nor any data provide as to the potential expected change in non-compliance rates. This is highly relevant given the papers heavy focus on technology providing extensive visibility of operator and driver fatigue performance. There is however no discussion of the difficulties of sharing, analysing and interpreting such data and then using it for compliance purposes.

17. The NTC has not provided an indication of the level of risk for near miss, serious injury and death related fatigue crashes. Based on current knowledge about the low number of fatigue crashes, will the cost of any proposed regulatory regime (increased [mandatory] use of technology) outweigh the benefits that might be derived? It is incongruous to implement a regulatory regime which penalise safe operators for what safety benefits?

18. There is a significant amount of focus (media, Ministerial and consequently community) given to rare events like fatigue related serious injury and death. Yes, they should be of concern but what about the millions of kilometers that don't result in harm? What is it about these activities that we should be examining and learning from to understand what it means to be safe. Why is there no time given to a discussion on this type of approach to managing fatigue risk?

19. It must be acknowledged that there is always opportunity to improve outcomes related to reducing serious injury and death. The paper fails to make the case that the HVNL is substantially not achieving this objective without being able to assess its performance against other jurisdictions or regimes. Nor preventing drivers driving whilst fatigued. What are the fundamental differences between these various regimes that they are producing substantially better outcomes than the HVNL?

2. Detailed response to paper

Problems with the current law

17. A stated problem with the HVNL is that it is not national. This is not inherent to the law itself but the Council of Australian Governments (COAG) Intergovernmental Agreement on Heavy Vehicle Regulatory Reform under which the law operates. The paper provides no guidance on how a performance/ risk-based approach to regulation will overcome this issue.

18. It is not clear in the paper how a performance/ risk-based approach to regulation will resolve the issue of non-participating jurisdictions adopting the HVNL. The issue is not discussed in the context of a performance/ risk-based approach to regulation. Nor how such an approach will address the issue of derogation from the law.

19. If it is proposed that a performance/ risk-based approach would improve the value proposition and the prospects that non-participating jurisdictions would quickly adopt the HVNL it is not articulated how or what would drive the adoption of the law.

20. This section of the paper fails to convincingly provide quantitative or qualitative evidence to support the position that the prescriptive nature of the HVNL contributes to the problems being discussed.

Managing driver fatigue across borders

21. There is no examination in this section regarding the outcomes of these regimes in terms of better performance in reducing fatigue related serious injuries or death. Nor in preventing drivers driving whilst fatigued.

22. The discussion of the variation in compliance with the different regimes is not explored in any detail. What are the actual consequences for driver's management of fatigue? How often are drivers penalised for breaches between jurisdiction schemes? What types of offences do they represent minor, major, severe or critical?

23. There is no discussion of the international experience in managing fatigued across borders. How is this dealt with in Europe or North America? What are the lessons that can be learned from these jurisdictions?

Managing fatigue in other Australian transport modes/ internationally

24. There are extensive studies internationally and in Australia on the effects of long hours of work, shift work and working at night. The United States Department of Labor Occupational Health and Safety Administration states:

> *Worker fatigue increases the risk for illnesses and injuries. Accident and injury rates are 18% greater during evening shifts and 30% greater during night shifts when compared to day shifts. Research indicates that working 12 hours per day is associated with a 37% increased risk of injury.*[1]

25. Further the Transport Accident Commission states:

> *Fatigue has a huge impact on your driving and can affect your ability to drive safely, similar to the effect of drink driving. Research shows that being awake for 17 hours has the same*

[1] https://www.osha.gov/SLTC/workerfatigue/hazards.html

affect on your driving ability as a BAC (blood alcohol concentration) of 0.05. Going without sleep for 24 hours has the same affect as a BAC of 0.1, double the legal limit.[2]

26. To ignore these facts and continue to believe that it is acceptable for heavy vehicle drivers to continue to driver more than 12 hours a day without significantly increasing the risk of a fatigue incident beggars belief.

27. A mature heavy vehicle industry must look at this unsafe behaviour and accept that for work more than 12 hours there must be a justifiable premise as to why drivers and other road users' lives would continue to put at risk. If it is not acceptable in other high-risk industries why does it continue to be acceptable in the heavy vehicle industry?

28. The NTC has been exceptionally cursory and deceptive in its examination of the Aviation and Rail fatigue management regimes. There are numerous derogations to the Rail Safety National Law including outer limits of service applying to train drivers in NSW and Queensland. These effectively impose prescribed hours. The NTC has an obligation to provide a thorough and objective analysis of the issues. The paper fails to achieve this.

25. This section could have provided far more value by using a comparative analysis on the fatigue performance of the different regimes, the compliance rates within the respective industry and the outcomes being achieved – reduced propensity for fatigue related crashes.

26. The tiered system utilised in aviation is not examined in any detail as to the performance between the prescriptive and the bespoke risk management system. Given that the NTC is proposing a similar approach for the NHVR it would have been useful to explore the outcomes achieved in aviation between the two approaches to fatigue management.

27. The NTC doesn't articulate how these regimes prevent operators from driving/ flying whilst fatigued.

28. It is not acknowledged that there are operators in these other industries that have the capability and capacity to comply and those that find it more difficult – regardless of whether the legislative approach is prescriptive or performance/ risk-based.

Drivers are still driving while impaired by fatigue

29. There is no comparative analysis of the HVNL performance against other regulatory regimes. What is the relative performance of the HVNL against other jurisdictions and regulatory regimes – prescriptive versus performance/ risk-based? What has been the performance of the NHVR in relation to fatigue since the introduction of the HVNL? What variations are there in the performance of participating on non-participating jurisdictions? Without an examination of these statistics there is very little substantiated evidence that the HVNL is not performing adequately.

30. The use of the NTI data has very little relevance in this instance. It only represents crashes investigated by NTI of insured operators in crashes where the value exceeded $50,000. It can only be taken as a representation sample of the propensity for harm of this cohort (NTI clients) of the heavy vehicle fleet. It is a poor substitute for a lack of an adequate analysis of available national/ international fatigue data. If the NTC believes it is representative, they have provided no rationale as to how.

[2] http://www.tac.vic.gov.au/road-safety/safe-driving/tips-and-tools/fighting-fatigue

31. The papers reference to the fatigue reforms not addressing all risks is curious as it implies that the objective was zero harm. Nowhere does the HVNL express an intention to eliminate fatigue harms. The relevance of this statement to advancing the NTC position that the HVNL is not addressing fatigue harms adequately is further exacerbated by providing no comparative analysis of fatigue performance with other jurisdictions/ regimes.

The HVNL does not manage fatigue risks well

32. There is no evidence provided by the NTC that the preventative controls are not achieving the intended objective of reducing fatigue harm. No alternative regimes are identified where the controls are delivering improved outcomes above and beyond those of the HVNL. There is no comparative analysis of the preventative controls and the outcomes they deliver of the various jurisdictions and regimes discussed in the paper.

33. Simply saying that the preventative controls are not working is not evidence that they are failing. There is no examination of the performance between standard, basic and advance fatigue management modules. This is exacerbated by not undertaking an analysis of the variation in approaches to fatigue management in the aviation and rail industry.

34. The NTC assertion that the controls only focus on long-haul interstate journeys would have had added weight if evidence was provided to validate the assertion. There is no analysis of fatigue related crashes of long-haul and short haul heavy vehicle journeys. Without this analysis this statement has no validity.

35. The example of undertaking work prior to commencing driving a heavy vehicle although realistic the assertion that the driver was compliant is incorrect. The HVNL clearly states a person must not drive a fatigue-regulated vehicle while impaired by fatigue. In the scenario provided there is no objective way of assessing the level of the persons fatigue. However, to assert they have taken all reasonable steps to ensure they do not drive a fatigue-regulated heavy vehicle while impaired by fatigue is spurious. To suggest they still comply with the HVNL and can legally drive is certainly not supported nor encouraged by the law.

36. The failure of jurisdictions to enforce fatigue requirements of drivers undertaking work within 100 kilometres of their base is not evidence that the HVNL does not manage fatigue risks.

37. The use of the Cooperative Research Centre for Alertness data, although interesting, the NTC fails to demonstrate that these fatigue events translate into fatigue crashes. They do have the potential to but if these events are not resulting in fatigue crashes what mitigation strategies are being adopted, if any? I raised previously concerns about the use of the NTI data. There is no analysis of other controls either between Australian jurisdictions or internationally where there are better controls in use, if they exist, the paper has not identified any.

38. The paper fails to provide any details about how other jurisdictions or regimes implement driver health and wellbeing initiatives that mitigate fatigue risks. Nor how driver training improves outcomes in relation to fatigue crashes. It is entirely useful to identify matters where improvement in the approach to fatigue management by industry and regulators can occur, but scarce evidence is provided as to the impact these issues have on propensity for fatigue risk.

Better fatigue management is not recognised or encouraged

39. What is meant by ‘better’ fatigue management? What is being put forward as an example of better fatigue management? There is no evidence provided of where ‘sophisticated fatigue

management systems' are producing vastly improved reductions in fatigue crashes either in Australia or internationally.

40. The fact that the HVNL does not recognise the role of technology to observe fatigue is lost on the reader as it does not prevent its use either. Is the NTC suggesting that the HVNL prescribe the use of fatigue observation technology?

41. It is not explained how heavy vehicle operators are being constrained by the HVNL. Simply stating it does not make it fact. When the NTC speaks about constraints what are they referring to, that there are no regulatory incentives or concessions on offer to operators with sophisticated fatigue management systems? If so, how do they propose to reconcile the safety performance of operators that don't have sophisticated fatigue management systems but can demonstrate superior safety performance none-the-less? How will the NHVR assess the performance of these individual operators and at what cost to both parties? What benefits are expected to be derived?

42. The case studies would have carried far more weight if they indicated the success achieved by the implementation of the systems. There is no scale describing the safety outcomes either in terms of a reduction in fatigues events or crashes, or a comparative analysis against national fatigue statistics – are they above or below the average?

43. It is not explicitly stated that fatigue events are being reduced. How many driver rosters have been adjusted as a fatigue mitigation strategy? How many rest breaks have been taken? How many shifts have been ended? What unsafe behaviours have been changed? Without providing data to quantify the reduction in fatigue risk being achieved the case studies are not a validation that these systems are achieving their objectives.

44. It is not clear how these systems assist drivers make decisions about when they rest, particularly given the example refers to it being based on how they feel, not an assessment of their fatigue by the system. The system detects fatigue events, it does not predict them. Nowhere does it indicate how the system assists drivers assess their level of fatigue, they must experience an event for the system to trigger.

45. The fact that neither operator discussed in the case studies has not registered their fatigue management system with the NHVR to take full advantage of technology is not explored. If these operators have not put a proposition to the NHVR to trial an alternative fatigue management system based on these sophisticated systems, it is extremely unfair to the NHVR and the HVNL to suggest they do not accommodate recognition of such systems.

46. The case studies do not explore at all what is being sought with respect to flexibility for drivers? Is it being proposed drivers be permitted to drive until a system registers a fatigue event? It's not clear what is being sought nor the fatigue safety management system being proposed nor the assurance methodology that would be required to ensure operators continued to be safe.

47. From a very purist perspective watching drivers microsleep is not a risk mitigation control but an observation system – it may form part of a safety management system. A mitigation control system is one which prevents the fatigue event from occurring not one that observes the event occurring. These systems may be effective in preventing harm but do not address the hazard as a risk control.

Work and rest requirement are not always matched to the task

48. The HVNL has three very distinct modules that cater for the different operations undertaken in the heavy vehicle industry – standard, basic and advanced fatigue management. The paper seeks to make comparisons with other jurisdictions, regulatory and transport modes when it is convenient but there is no comparative analysis of alternative models here to describe how they deal with regulating the diverse operations of these different sectors.

49. What other jurisdictions or regimes cater for diversity in the transport task? These are not unique challenges to the Australian context. What are the benefits/ costs derived from the Canadian experience?

50. The practices within the aviation industry are an example of where the NTC fails to examine the performance outcomes of operators utilising the prescribed aspects of the laws and those utilising performance-based aspects.

51. The assertion that there is conflict with other legislation points more to operators needing to be aware of their responsibilities and obligations under both. The underlying problem appears to be an inability of operators to plan and schedule journeys appropriately not an inherent failing of the HVNL to not cater for different transport tasks. There is no alternative fatigue management system proposed to deal with these apparent conflicts. There is no examination of the costs associated with trying to comply with conflicting regulations.

Rural and remote driving is different to city and inter-city driving

52. The NTC fails to expand on how the HVNL would go about acknowledging the unique characteristics of the heavy vehicle transport sector? There are three different fatigue modules to assist operators adapt to the various transport tasks faced by industry.

53. The significance of the risks and challenges is not explored in the paper as to consequences that it has on fatigue management. There is no examination of the outcomes of the industry not being able to mitigate these risks and associated challenges. Are there increased fatigue crashes from these risks and challenges – what are they? What are these risks and challenges and how does each contribute to adverse fatigue outcomes?

54. The assertion that the non-participating jurisdictions did not adopt the HVNL largely because of the inability to cater for remote travel is entirely unsupported by any evidence and a very simplistic assessment of an extremely complex issue. The NTC does not discussed how the revision of the fatigue regulations will convince non-participating jurisdictions to adopt the HVNL.

Operators have different compliance capacity

55. This is a perennial problem of any regulator and regulatory regime, it is not intrinsic to the HVNL. There are operators that comply to varying levels, those that do not understand how to comply and those that wilfully choose not to comply.

56. The use of the NHVAS accreditation data could as easily be interpreted as a demonstration of the homogeneity of the heavy vehicle industry.

57. The NTC does not explore in any depth the reasons why there is such a disparity in the use of the different fatigue modules. It would have been useful to examine the types, tasks and locations of operators and which modules they utilise. This would have informed a more thorough analysis of the risks and challenges faced.

Fatigue requirements are complex and prescriptive

58. Compared to what? There is no objective analysis of the difficulty operators face in complying. The NTC hasn't described the difference in the complexity between the alternative jurisdictions and regimes identified in the paper.

59. I find it difficult believe that a driver is unable to understand that the total driving time in any 24 hours is 12 hours. There has been no examination of the total number of breaches for this offence compared to the number of journeys undertaken. What is the non-conformance rate? What is the extent of this misunderstanding, how prevalent is it within industry? Is the misunderstanding contributing to increased fatigue crashes?

60. The cursory discussion of the different requirements between jurisdictions could have been expanded on by a comparative analysis of the fatigue incident performance between these jurisdictions.

61. There is no examination of the compliance difficulty faced by other transport modes. No alternative is proposed.

62. It is incongruous to state that sophisticated fatigue management systems provide better fatigue management outcomes then state they may not be suitable for many operators and not provide an alternative option or an analysis of available data to other industry sectors.

63. Why is there no comparative analysis of how inflexible the work and rest hours are against other regulatory regimes? It would be useful to describe alternative work and rest methods which are more easily understood or provide improved fatigue outcomes? Despite the reference to the research there is no data provided as to the potential numbers of drivers that have issues with complying or find the work and rest requirements inflexible.

64. The lack of rest areas is not a consequence of the HVNL. The paper provides no discussion of how to overcome the problem through an amendment to the law. If it isn't reasonable to make operators comply with work and rest requirements what does the NTC propose as an alternative?

Enforcement options are limited, and sanction can be punitive

65. It is poor research and analysis to assume the same patterns remain true across all jurisdictions regarding offence rates and that of prosecution rates. Despite the low offence rate, it is not an indication of the number of breaches detected where an alternative compliance option may have been taken.

66. It is not clear if the offences described are only an indication of outcomes not the number of cases brought forward to Court. This may be an indication of poor knowledge of the Heavy Vehicle National Law by compliance officers or poor briefs taken to Court.

67. The reference to industry not taking up EWD's is not supported by any evidence that concerns relate to operators being exposed to trivial breaches. It is an extremely simplistic assessment of a very complex issue.

68. The example of flagrant offending is not evidence that this type of behaviour is prevalent within the industry. It might be a naive position to think that this is not common place within the

industry. The NTC does not propose what performance-based or safety assurance approaches will address this type of non-compliant behaviour.

69. There is no examination of how other jurisdictions or regulatory regimes deal with the recording of work and rest.

70. To suggest that roadside enforcement is a mitigation control misrepresents this part of a safety management system. At best roadside enforcement may contribute as an assurance function of a safety management system if utilised to assess the effectiveness of an operator's mitigation controls – roadside enforcement is not a mitigation control in and of-itself.

71. An effective safety management system should address patterns of non-conformance in driver and operator behaviour. Are the NTC suggesting that it is the NHVR's responsibility to check all non-conformance? This is unfeasible and would place an exceptional and unreasonable burden on both industry and the NHVR. The intended outcome is also not discussed.

72. The NTC has not provided evidence as to the systematic breaching of the fatigue management requirements. They have not proposed how a performance-based or safety assurance approach will address the issue of systematic breaching of fatigue management requirements either present or future.

73. The reference to the confidential reporting line does not categorise what these reports are about, it is also not evidence of systematic non-conformance. What evidence does the NTC have that these reported safety issues lead to targeted enforcement and if so what have been the results? Is it resulting in the discovery of systematic fatigue offending by drivers or operators?

Response to Draft Regulatory Principles

Draft regulatory principle 1

74. It goes without saying that any death is tragic, every effort should be made to prevent such events. The paper provides little evidence that single heavy vehicle crashes as a harm requires addressing above other harms such as serious injury. There is no examination of the likelihood of propensity of harm between serious injury and death. A fatigue death is a rare event, and, in many instances, cause is very difficult to determine. There are multiple factors that contribute to heavy vehicle crashes and even in single vehicle crashes it is difficult to assess a single causal factor.

Draft regulatory principle 2

75. There is not a regulatory regime where regulated entities do not breach legislation in some form. The NTC fails to articulate clearly the consequences of the failures in the HVNL in preventing such breaches. The focus of the HVNL should be on reducing the prevalence and severity of the harms that may result from those breaches. It is not demonstrated by the NTC how the HVNL has failed to achieve this.

76. There is no analysis of the contributing factors that known risks have on fatigue outcomes. It is a naïve statement and unsupported by any evidence in this paper as to how the HVNL does not prohibit adverse practices. It is a particularly stark omission in this paper that there has been no comparative analysis with other jurisdictions or transport modes as to their performance in prohibiting unsafe practices.

77. The paper fails to examine the depth and breadth of other jurisdiction and transport modes legislative scope to assist the reader understand other (better) methods and controls. Is this not the point of bringing these to the reader's attention?

78. The NTC has proposed that the HVNL should address specific risks. This moves away from the performance and risk-based approach proposed by *A risk-based approach to regulating heavy vehicles, March 2019*. The inclusion of other safety activities e.g. health and wellness as inclusion to the law would be moving to a more prescriptive model.

Draft regulatory principle 3

79. It is interesting that this is the first time the NTC discusses safety culture in relation to fatigue management. The paper previously discussed the difficulty that many operators have in not only understanding what it means to comply but also in taking up safety management systems and investing in safety technology. There is no discussion how the NTC proposes to assist operators overcome issues related to addressing such capability and capacity issues. Either through the HVNL or in utilising other policy mechanisms.

80. Safety culture must be a lived practice not words (slogans) in a corporate plan believing that will suffice. Safety culture is the improvement and management of the entire organisations focus on what it means to be safe. There is no need for it to be complex or burdensome. It does require a focused dedication to safety which is within the capability of all operators. The NTC has not discussed how this is to be achieved in the rewriting of the HVNL.

81. Are the NTC proposing that the HVNL become more prescriptive to compel operators adopt improvements in risk controls? The NTC position would have been enhanced substantially had it provided a more thorough analysis of how other transport modes successfully built safety culture in operators. It has not.

82. The proposition that technology will be a panacea to fatigue crashes has not been explored. The NTC fails to examine how technology will make rest and work hours obsolete and by when. There is no discussion of the transition between a work and rest hours regime and the advent of this game-changing technology and how all of industry will be transitioned to it.

Draft regulatory principle 4

83. There has been no discussion of the best aspects of current fatigue regimes or other transport modes or how they are vastly superior to the HVNL. It is interesting that the NTC posit that operators are in the best position to identify and manage their specific fatigue risks when they provided an explicit example of a drivers deliberate non-compliance.

84. This also goes to the ability of operators to manage their broader risk profile with regards to capability and capacity.

Draft regulatory principle 5

85. There have been no examples of simple and flexible compliance options discussed in this paper. What is the NTC referring to when it makes this statement. It is not explored in any detail. Will non-compliance be made more difficult if requirements are spread across multiple legislation? It will increase complexity for regulators in developing effective assurance models when implementing compliance and enforcement regimes across multiple agencies.

86. The aim of any law should be to make it easy for entities to comply. As has been pointed out by the NTC demonstrating compliance doesn't necessarily equate to being safe.

87. The discussion about performance-based regulation in this section of the paper is the first time the NTC has proposed a potential solution. The difficulty with the discussion is that the NTC has previously been critical of the AFM module and the lack of uptake by industry. There is no discussion of propensity to pay or the expected improvement in safety outcomes adopting a performance-based approach will deliver.

88. The discussion on safety assurance also fails to acknowledge the cost or benefits that will be derived by industry or the NHVR. The lack of detail about the types of reporting mechanisms and tools that might be deployed makes it difficult to assess the potential burden on either party.

Draft regulatory principle 6

89. The paper does not explore the significant threats and consequences in any detail – other than that single heavy vehicle fatigue crashes need to be addressed. There is no discussion of the extent or cost of these events.

90. Enforcement officers currently have powers to intervene when an imminent harm is present. The paper fails to acknowledge these options and jurisdictions already utilise data to target systematic fatigue behaviours.

Response to Questions

Question 1

91. Is there a problem with fatigue in the heavy vehicle industry? It would be useful to understand the extent of the problem. The NTC has provided no evidence or demonstration of the extent of the problem. There has been no comparative analysis between other jurisdictions or other transport modes to assess the performance of the HVNL. The NTC fails to indicate how other jurisdictions and transport modes have better fatigue management regulation. What would be a better target? What would the baseline be? The paper has failed to articulate that the HVNL has not been effective in managing fatigue crashes.

92. Adam Gibson has undertaken a piece of work that indicates that without doing a thing death in the heavy vehicle industry will be reduced to zero by 2030.[3] This is specific to at fault death by a heavy vehicle. Should the focus turn then to serious injury? The majority (exceeding 80%) of accidents involving heavy vehicles are found to be the fault of the other involved vehicle. Larger benefits might be derived by focusing on light vehicle operator behaviour. It is very difficult to determine the approach based on the poor analysis in the paper.

93. A significant failure of the paper is not to have discussed the implications of data on both industry and the regulator. There is a clear dearth of fatigue data. This is evidenced by the NTC resorting to utilising NTI data. Not only has this made it difficult to define the problem appropriately it will make it difficult to monitor, assess and measure the success of any reform to the HVNL.

94. This is particularly pertinent when discussing the use of technology by industry being accessible to the regulator to assist determine compliance and potentially discovery of non-compliance. There is no discussion of the collection, analysis, sharing and evidentiary nature of data associated with the use of technology.

[3] https://www.linkedin.com/pulse/trucks-involved-more-people-dying-i-want-know-why-adam-gibson/

95. Given the broad use and variety of technology installed on heavy vehicles it raises questions about how to access this data. How does the NHVR interact with these systems? Consideration will need to be given to setting parameters around formats for accessing such data for example at roadside inspections. What other mechanisms such as self-reporting by industry might be considered and will these be in the HVNL? The supposed reluctance of the industry to take up fatigue technology related due to concerns around how the data might be utilised for compliance and enforcement purposes is another hurdle that the NTC has not discussed how it will be overcome.

96. The consideration of appropriate governance arrangements that provides guidance (policies) on the collection, storage, analysis and use of data. This will need to include reporting and transparency requirements around access to the data by industry, researchers and other interested parties such as insurance companies.

Question 2

97. The paper provides very little analysis on the aspects of the non-participating jurisdiction approaches or comparable regulation from other sectors that would improve the HVNL – other than a broad statement that a risk-based approach is better. The paper relies on a belief that a risk-based approach will address perceived issues in the law without providing quantitative or qualitative evidence or demonstrating how better outcomes will be achieved.

98. What aspects of these other regulatory regimes clearly improve fatigue outcomes, if at all? If it is because they are risk-based what are they delivering that the HVNL is not? What is the extent of the scope of these regimes which vary significantly from the HVNL and are believed to be improving fatigue outcomes in these regimes.

99. Nothing should be ruled in or out of scope without the provision of data that demonstrates there is a risk and that any policy or regulatory intervention will improve fatigue outcomes based on evidence.

Question 3

100. The lack of discussion about other regulatory approaches and how they deal with risk factors makes it difficult to support a single approach to testing the current policy approaches (which has not been clearly identified or expressed). Why is the NTC not testing multiple regulatory approaches? How have other regimes reconciled the dilemma of addressing risk whilst ensuring complexity is managed? It has not been explored in this paper and the reader is required to undertake significant research to discover this information.

101. The NTC has failed to discuss adequately what is insufficient about HVNL at present in addressing these risk factors. They have not been discussed their contribution to fatigue risk. The NTC has not expressed how moving to a risk-based approach would enable out of scope risks to be incorporated into the HVNL.

Question 4

102. Is has not been established in this paper the extent that health and lifestyle factors contribute to fatigue risk. It is not quantified what the outcome would be if they were to address these factors in an updated fatigue regulatory regime? There is no discussion of how these risk factors contribute to the success, or otherwise, of other regulatory regimes mentioned in this paper.

Question 5/ Question 6

103. This is difficult to comment on given there is no discussion in the paper on the training or tools utilised in other performance/ risk-based regulatory regimes either locally or internationally and the benefits/costs. This could have been explored by a discussion on methods used to:

- be responsive and flexible to new technology and business practices
- have access to enforceable Standards, codes of practice, business rules and guidelines
- have visibility of duty holders and their risk management arrangements
- treat and manage data collection, use (including as evidence) and sharing
- monitor industry continuous improvement in fatigue management and outcomes at the operator level
- possess appropriate powers to undertake regulatory functions i.e. inspection, investigation and prosecution
- review regulatory decisions.

104. It is conceivable that technology may supersede work and rest hours however the timing is indeterminant as to whether it will be fatigue monitoring technology or autonomous vehicles. The NTC fails to explore in any depth the complexities of not only the accreditation of such technology and the associated maintenance and auditing through to the regulatory uses of the technology. It also does not explore whether a new law would mandate use of fatigue monitoring technology.

Question 7

105. COAG's expectation is that the HVNL be nationally consistent. The question should be what hurdles need to be overcome to ensure national consistency with amendment to the HVNL as risk-based regulation? What needs to occur to ensure that any future update avoids derogations, delegation of powers and fatigue management approaches?

106. No strategy has been proposed as to how to onboard non-participating jurisdictions, deal with derogations or to develop consistent approaches to the HVNL's application, particularly by police.

107. Yes, moving obligations to as low as possible in the regulatory hierarchy would improve flexibility in the HVNL. However, the paper does not discuss the known inherent issue with a risk-based approach in relation to ensuring that when regulation is moved down the hierarchy that it is enforceable. If the law provides the NHVR with the ability to create Standards, Codes of Practice, business rules and guidelines they must be enforceable. Regulatory rule making powers will require scrutiny and oversight mechanisms to safeguard against potential regulatory abuse. These are not discussed in the paper.

108. The paper does not discuss who or how technology will be deemed as safe and/ or provide benefits to operators or regulators, it is assumed it will result. What assessment or evidence will need to be offered up? What priority will be given to safety over efficiency? At what cost to industry, regulators and the community? No evidence is offered up as to how other jurisdictions or industries utilise technology to produce improved fatigue outcomes.

Question 8

109. The NTC has provided very cursory guidance as to which aspects of the HVNL present an issue on this front. Even less evidence has been provided on the impacts of process or administrative focused regulation on industry, the regulator or the community. The papers purpose was to summarise the current state of the law it fails to do that adequately.

110. A specific issues paper is required to deal with the extensive problem of data not only in the current administration and enforcement of the law but any future approach to the HVNL. The paper failed to highlight the impact the lack of good data currently poses to the NHVR and industry.

Question 9/ Question 10

111. The paper failed to adequately identify and explore the impacts the current HVNL has on the diverse range of operators. Previous papers propose the adoption of several regulatory approaches in the development of a future law and doesn't address how this will improve consistency, harmonisation or understanding, it simply assumes it will.

112. It is acknowledged that the transport task is a diverse one and this extends to the supply chain. What was not discussed in any detail was the ability or appetite of entities to manage risk in an outcomes or performance-based regulatory environment. It does not discuss the capacity of sectors within industry to invest in managing fatigue risk. Although the paper discusses that the amended HVNL may have several regulatory approaches including prescribed sections to cater for entities that may find it difficult to develop fatigue management systems there is no discussion about the cost benefit related to this approach nor timing around its introduction and industry transitioning to the new approach.

113. The paper also fails to deal with the significant issue of how the NHVR will manage moving between these two regulatory approaches in relation to compliance and enforcement.

Question 11

114. There is no discussion of the types of improvement that are being sought. No targets have been put forward. No guidance is provided about the current state of the measures or the progress of the NHVR in meeting them – other than a statement that it is not. The measures in the National Road Safety Strategy could have been used as a baseline.

115. The most pressing issue is access to good data to understand the problem fatigue presents, where, when and to which sectors of the industry. Without access to good data compliance and enforcement will continue to be generic and unfocused.

116. It is not acceptable to assume that technology will address the issue of a lack of poor data nor the issue of driving whilst fatigued. As it fails to contemplate those that may not choose to take up technology and the transition to an electronic monitoring regime either mandatory or voluntary.

Question 12

117. The heavy vehicle industry must examine its operating model in the context of fatigue management. Research is clear on the effects of long hours and night work and the risks associated with such work. Why do these practices continue to be acceptable in the heavy vehicle industry but have long been acknowledged in other high-risk industries as not acceptable?

118. I am not advocating that 12 hours be an outer limit for heavy vehicle drivers. In moving to an assurance model of regulation that utilises risk and evidence-based approaches requires a mature industry to acknowledge and accept its obligations and responsibilities under a safety management system. As part of being accountable for the safe operation of its business heavy vehicle operators must do everything that is reasonably practicable to ensure workers are not at

risk of harm. Strengthening this requirement is commendable, if it can be achieved without increased complexity.