*=*Transurban

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Dear Automated Vehicle Team

RE: Regulatory Impact Statement – Safety Assurance for Automated Vehicles

Transurban is pleased to respond to the NTC's consultation process for Safety Assurance for Automated Vehicles. This is a critical component of establishing a trusted environment in Australia for the introduction of automated vehicles and encouraging a future transport operating regime that delivers the safety and efficiency benefits promised by current directions of technology and process.

Our perspective is derived from our recent and continuing experience in the delivery of market research and practical testing programs; evaluating the factors that will influence the introduction of Connected and Automated Vehicles to Australian transport networks. We have been working closely with a number of international developers of automated vehicle (AV) technology and systems. We have developed a keen sense of the factors that will influence the degree to which new solutions will be able to be brought to the Australian market. This includes an understanding of the conditions that will encourage new AV developers and operators to establish a presence in Australia and include our market in the evolution of emerging solutions.

The overall theme of our response to the Regulatory Impact Statement (RIS) is one of *balance*. In our view, it is imperative that:

- the rate of establishment of a framework for safety assurance of automated vehicles be balanced against the rapidly changing suite of AV use-case examples that are emerging in the industry,
- the extent to which Australia establishes a unique regulatory regime be considered against its potential impact on the attractiveness of the Australian market to international developers, and
- the establishment of specific requirements such as data-retention also be considered against a backdrop of the emergence of similar requirements in other countries.

Establishing the correct balance in these and other similar aspects of the safety assurance regime will support a realistic evolution of the automated vehicle industry in Australia. There will be little point in creating the best assurance framework in the world, if it in turn stifles the entry of new participants and the adoption of safer technology.

Overall, we believe that the multi-factor analysis in the RIS is sound in terms of benefits and outcomes within the Australian context, although we do have one concern about the extent to which industry options have been fully explored. We expand on that point under Item 5 below. However, our main concern is that moving too quickly to a separate agency, creates a risk that the aspects of balance outlined above will not be achieved.

We believe that it may be better to move iteratively through the Options, allowing adaptation to accommodate, the use-cases and industry dynamics that are bound to emerge over the next few years. We agree that the achievement of a very high standard of safety assurance must be the underlying principle at all times, but that this can be achieved without necessarily creating premature barriers to innovation and market development. Again, our response to Item 5 will expand on this point.

Specific responses to the consultation questions in the RIS are provided below.

1. To what extent has the consultation RIS fully and accurately described the problem to be addressed? Please provide detailed reasoning for your answer.

The problem statement includes a reference to the fact that ADSEs may face an inconsistent and/or uncertain regulatory environment. However, the analysis is wholly within the internal Australian context. Our experience working with potential providers is that they are just as concerned about inconsistencies across international boundaries. The relatively small size of the Australian market runs the risk that we become an unattractive location if the regulatory environment is too far out of line with international directions.

2. What other factors should be considered in the problem statement?

Covered in 1.

3. Has the consultation RIS provided sufficient evidence to support the case for government intervention? What else should be considered and why?

The overall case for intervention is well made. However, we believe the introduction of government intervention should be a carefully-managed, iterative approach.

4. To what extent have the community and industry expectations of a regulatory response been accurately covered?

Community expectations are well covered. Industry expectations include the points made (in our response) under Item 1, above.

5. Are the four options clearly described? If not, please elaborate.

The four options are clearly described in their own right, but we believe the underlying construction of the options may preclude a complete analysis of potential approaches. In particular, the application of the principle of Primary Safety Duty as only the final overlay may be excluding its potential application in earlier stages of the evolution of the regulatory regime. If a measured, iterative approach to development of the regulatory framework were to be adopted, the application of Primary Duty of Care to an expanded version of Option 2 may well provide a superior near-term option, with the flexibility to respond to changes in technology and process as they emerge.

6. Are the proposed safety criteria and obligations on ADSEs (detailed in chapter 4 and Appendix C) sufficient, appropriate and proportionate to manage the safety risk?

They are relatively complete, given the state of development of the industry. However, this is another area in which international alignment will be important and we urge the NTC to retain the flexibility to adapt the criteria and obligations as global approaches develop. In particular data retention requirements outlined in 4.4.1 should be considered in light of international regulatory responses. Overly prescriptive requirements that are more onerous than those in other markets may well become a barrier to entry.



7. Are there any additional criteria or other obligations that should be included?

None identified.

Questions 8 to 19

These concern detail of the multi-criteria analysis and we have no concerns about the internal logic and consistency of the analysis per se. As outlined above, our concerns relate to the extent to which all available options have been considered and the rate of introduction of change.

20. On balance, do you agree that the preferred option best addresses the identified problem? If not, which option do you support?

We agree that the preferred Option 4 will best address the needs of the industry over the longer term. Our preferred option for the near term would be Option 2, potentially with an overlay of elements of the Primary Safety Duty of Care, as outlined in Item 5, above.

21. How does your choice of option better address the problem than the preferred option?'

As outlined above, other options, such as a combination of Option 2 with a Primary Safety Duty of Care, could provide the flexibility and responsiveness required in the near term whilst use cases and technologies being developed by industry are changing rapidly. This would enable a safe evolution to a regulatory framework that is optimised in both its Australian operation and international alignment. '

If the NTC would like to discuss any aspect of Transurban's response, please contact me by email at jnassau@transurban.com or phone (03) 8656 8046.

Yours sincerely

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