



Mercedes-Benz

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National Transport Commission
Level 3/600 Bourke Street
MELBOURNE VIC 3000

Re: Safety assurance for automated driving systems consultation regulation impact statement (RIS)

Mercedes-Benz Australia/Pacific Pty Ltd (**MBAuP**) welcomes the opportunity to make this submission on the National Transport Commission's Consultation Regulation Impact Statement on a Safety Assurance System for Automated Driving Systems.

MBAuP notes that it has contributed to, and supports the Federal Chamber of Automotive Industries' (**FCAI**) submission on this topic. In particular, MBAuP supports the FCAI's proposal for a **revised Option 2**. Please refer to the FCAI's submission for a detailed description of the proposed revised Option 2 approach. MBAuP has the following additional comments to the FCAI's submission.

It is important to note that Australia is seeking to regulate the use of new automation technologies, some of which are not available on the market yet. As it will be difficult to regulate each and every topic in detail from the early beginning we welcome the high level approach of defining safety criteria for the application during self-certification. As the technology for Automated/Autonomous Driving Systems (**ADSs**) will continue to evolve rapidly over the next years, there is a need for flexible regulatory structures that can be applied to the different kinds of automated driving systems. The challenge is to find a pragmatic way that on the one hand leaves certain flexibility for industry and governments/authorities and on the other hand defines reasonable requirements/principles to ensure a safe evolution of the new technology over the next years.

Aside from assessing the automated/autonomous driving systems, as mentioned under 8.5 of the RIS "Next Steps", we also see a need to evaluate the impact of existing Australian Design Rules (**ADRs**) on automated/autonomous vehicle concepts. In general, ADR and also referred United Nations Economic Commission for Europe (**UNECE**) requirements designed to enhance or incentivise safer driving by humans are not appropriate to apply to AD-operated vehicles and should, instead, be waived for such vehicles. In regards to ADRs, it makes sense, for example, to expect an ADS-operated vehicle to deliver ADR 31-/UNECE-R 13-H-compliant braking performance in the same manner as a human-operated vehicle. However, the process for verifying compliance will have to be modified for an ADS-operated vehicle. By contrast, it does not make sense to apply, for example, ADR 14/02/UNECE-R 46 rearward visibility criteria to an ADS, because, unlike a human driver, an ADS isn't expected to (merely) visually scan for objects in the rearward path and try to avoid them if possible. Instead, an ADS is specifically designed to detect and avoid any and all objects in the rearward path, and its failure to do so reliably would constitute a defect. Moreover, an ADS does not detect objects in its rearward pathway by using mirrors and/or observing an in-vehicle camera image, but rather uses different sensors and techniques for this purpose. As such, attempting to maintain existing ADR/UNECE requirements for an ADS-operated vehicle makes neither policy nor practical sense.



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With the current focus of the Department of Infrastructure, Regional Development and Cities on harmonisation of ADRs with United Nations regulatory approvals, it would make sense for exemptions from UNECE regulations for ADS vehicles to be automatically accepted by Australian regulators. This would provide legal certainty as a basis for product development, and not exclude Australia from global developments in ADS vehicles.

With regard to international harmonisation of vehicle regulations/standards, we would also like to encourage the NTC to align with the activities at UNECE Inland Transport Committee's World Forum for Harmonization of Vehicle Regulations (WP.29). It has just been decided to create a dedicated GR working group (**GRVA**) for automated/autonomous vehicles under WP.29. The existing Informal Working Group ITS/AD and its Automated Vehicle Assessment Task Force (**AutoVeh**) will be integrated into the GRVA. The objective of the Task Force AutoVeh is to develop a regulatory testing regime that assesses a vehicle's automated systems for different use-cases whereby the task force initially works on developing proposals for motorway/highway traffic and for urban traffic. It is well established that different regulatory authorities might apply such new provisions in ways that are consistent with their domestic or regional frameworks, and so the Task-Force will investigate and propose ways to ensure the widest approach to the regulatory solutions and outcomes.

We look forward to future opportunities to provide input on this important topic as we continue to gain knowledge and experience with driving automation technology.

We hope NTC will find this input helpful as it develops the regulatory framework for ADS.

Yours sincerely,



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