Hi IoT feedback on Regulation Impact Statement (RIS) by NTC regarding the role and regulation of different parties involved in the safe operation of automated vehicles on Australian roads ('in-service').

Automated Vehicle technology has progressed in leaps and bounds in this decade. The dream of having self driven cars in operation on our roads is not a dream anymore. But many challenges still lie ahead when it comes to the legislation regarding the safe operations of in service automated vehicles. The regulation impact statement published by NTC on In-service safety for automated vehicles in July 2019 highlights the fact the majority of liability to be owned by ADS providers and ADSE, along with aftermarket service providers. The OEM's are also held greatly accountable for the safe operations of the automated vehicles. Along with these parties, we at Hi IoT also believe that remote (Tele) monitoring / operations are also integral part of deploying the automated vehicles on Australian roads in the safest possible manner and hence shall also be made a party in ADS legislation. Remote operator will act as a humane interface between the ADS and the occupants of the vehicle. As we have mentioned in our earlier submission, the remote operator or tele-operator would be able to be make more humane decisions when confronted with scenarios like the trolley effect or the need to cross over the red signal to give way to an ambulance. Such scenarios could be countless and as human we make these decisions on spot to best suit the situation. Taking the human driver out of the car completely could jeopardise the ability of spontaneous decision making in such scenarios. Remote operators / monitors will complement the safe deployment of automated vehicles on our roads.

Remote Operating / Monitoring centres will also be responsible for data collection and analysis. This data can be used by OEMs, ADSE and NTC to regularly update their technology and policies.

The regulation applied to each party need to be more specific and detailed. The parties providing remote operations / monitoring and aftermarket service / modification also need to be included. The second hand market will eventually establish itself for the automated vehicles. The vehicle can be transferred to the new owner along with the ADS but who would have access to the past data, without infringing the privacy of the owner, calls for more detailed discussion and legislations. Our existing regulations for transfer of automated vehicle, ADS and data would require some overhauling to accommodate the transfer of automated vehicles.

Australia's current legal framework also need to accommodate the parties with influence on in service safety of automated vehicles. Our current legislation is only as good as running an automated vehicle in a fully controlled environment. Safety of occupant and the people on roads is the primary focus of all, NTC, OEM's, ADSE, Remote Operators and all other parties involved with the operations of automated vehicles. The legislation should make these parties accountable for the safety of

automated vehicles but at the same time cover them from any incidents which lie outside of their specified domains. A general safety duty to ensure the safe operation of the ADS 'so far as reasonably practicable' will not be appropriate to address the safety risks. Specific safety duties need to be introduced and relevantly applied on all the involved parties. Having specific safety duties would cover both, public and private land; however the duties on private land may differ from duties on public land.

This RIS by NTC has very broadly covered the scope of regulatory tasks but as the PWC's cost benefit analysis also highlighted that, at this point in time, there is too much uncertainty surrounding automated vehicles and the future world in which they will be regulated, hence the regulatory body need to be dynamic in their working and the regulations need to be constantly reviewed and updated.

The regulatory body need to be a National body covering all the states and territories. The cost efficiencies to have one centralised body are also heighted in PWC's cost benefit analysis. Apart from being cost effective, having one national regulatory body will also help in regulating, updating and implementing the rules uniformly across Australia. The national regulatory body needs to be government regulated to ensure uniform implementation of regulations. The regulatory body need to consist of members from both, existing legislative bodies and also from the industry. The regulator should be funded by the government so that they provide their unbiased opinions rather than being influenced by the party they are receiving grants from.

Australia may face some transitional issues when national regulatory body is in place, as during the transition phase, both ADS vehicles and non ADS vehicles will co-exist. The regulations applied to both will be different and also for non ADS vehicles, some regulations will differ in different states, hence we will face some transition challenges. A nationally recognised regulatory body will ensure that Australia is well prepared for the deployment of automated vehicles and will set an example to the world.

References:

1. *Regulation of automated vehicles when in-service Cost-benefit analysis by PWC July 2019.*