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Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts  
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## RE: Draft Principles for a National Approach to C-ITS in Australia

RACQ welcomes the opportunity to provide a submission on the Draft Principles for a National Approach to Cooperative Intelligent Transport Systems (C-ITS) in Australia. On behalf of our nearly 1.8 million members, RACQ is seeking the implementation of C-ITS across Queensland to improve road safety and optimise the transport network.


The draft Principles consider the potential of C-ITS to deliver improved outcomes in road safety, road productivity, traffic congestion, journey times and environmental sustainability – including in the areas of public transport, shared mobility and freight – by enabling improved decision-making based on shared information. RACQ supports the proposed national framework because it is the most effective way to ensure there is consistency with the expectations and type of technology that will be delivered as part of the C-ITS ecosystem.

The expected benefits of C-ITS across urbanised centres and major centres has been well documented, however RACQ considers there are additional benefits to regional areas – particularly around road safety. The Queensland road toll has been increasing in recent years, including on a per capita basis, with regional Queensland being impacted the most<sup>1</sup>. The implementation of C-ITS ecosystem on Queensland's road network can play an important role in improving road safety benefits, but only if it can be implemented across the entire road network.

The previous and existing delivery of 3G and 4G across the State has been less than ideal with large swathes of Queensland not having reliable access to quality telecommunication services. By placing greater emphasis on the delivery of quality mobile and telecommunications in regional communities and across the regional road network, Queensland will not only realise the opportunity presented by C-ITS, in terms of road safety and network optimisation, but also help to address the social and economic digital divide.

RACQ would be pleased to discuss our submission in further detail. I can be contacted at [michael.kane@racq.com.au](mailto:michael.kane@racq.com.au) or 0419199684 to set up a discussion.

Yours sincerely,



Dr Michael Kane

<sup>1</sup> [https://cars.tmr.qld.gov.au/Static/documents/RoadCrashReport/Weekly/WeeklyReport\\_Latest.pdf](https://cars.tmr.qld.gov.au/Static/documents/RoadCrashReport/Weekly/WeeklyReport_Latest.pdf)



## Head of Public Policy

### Response to consultation questions

1. **Are principles for a national approach to C-ITS in Australia necessary? And if so, are the draft principles, as articulated, sufficient to inform investment by industry in C-ITS?**

Table 1: Draft Principles for a National Approach to Co-operative Intelligent Transport Systems (C-ITS) in Australia

1. Australian governments will work together, and with industry, towards a **nationally consistent C-ITS environment** with the aim of **supporting a seamless experience for road users** as they travel across states and territories.
  - a. Individual jurisdictions should continue to decide the pace and scale of their respective investments but should commit to national consistency.
2. **Maximising the benefits of C-ITS** requires an environment where:
  - a. all C-ITS enabled vehicles can communicate with each other, and with C-ITS enabled equipment (including devices used by pedestrians, cyclists, and other road users) and infrastructure, irrespective of make/model;
  - b. information is able to be transmitted to all C-ITS enabled vehicles, equipment and infrastructure from trusted sources; and
  - c. all road network agencies will be able to collect and share data with the objective of supporting C-ITS optimisation across Australian jurisdictions.
3. **Cooperation is key** and this work should be agreed by governments in consultation with industry, and include participation by community and research stakeholders.
4. **Harmonising with international approaches**, including in relation to spectrum for C-ITS use, helps maximise consumer choice and vehicle availability. As Australia currently bases vehicle safety regulations upon the United Nations Economic Commission for Europe (UNECE) World Forum for the Harmonisation of Vehicle Regulations (Working Party 29) model law<sup>2</sup>, it should **look to harmonise with European approaches** in C-ITS.
5. The focus on uptake of C-ITS in Australia should be on **improving road safety, transport productivity, sustainability and reducing emissions**, including to support the development of new transport technologies including connected and automated vehicles.

<sup>2</sup> As C-ITS moves from Day 1 driver advisory services, to Day 2+ where data will flow to the vehicle itself for action, it is likely that some C-ITS use cases will intersect with vehicle safety regulation as part of emerging connected and automated applications.



6. Given the cybersecurity and privacy issues in sharing road and vehicle data, Australia must ensure it has effective and timely solutions to managing the **security of systems and messaging and privacy of data** in C-ITS.

RACQ supports the development of national approach to C-ITS in Australia and consider the set of principles as a necessary step to enabling a C-ITS ecosystem. It is important to note however, that current suite of principles should be amended to clearly incorporate regional areas – current drafting implies rather than being implicit.

A suite of comprehensive principles is required because it will signal to industry of how Australia will manage the incorporation of a C-ITS ecosystem. However, principles alone are not enough to drive industry investment, other than what is already planned within the OEM vehicle manufacturers (i.e., improved vehicle fleet technology). To fully realise the potential of C-ITS and receive proper investment all levels of government need to lead the initial stages. Leading early adoption and roll-out of necessary C-ITS and supporting communications infrastructure will achieve far greater success in long term industry investment.

Draft principles are sufficient to put industry on notice regarding the need for investment. Likely that industry investment will follow Government lead – greater benefit in initial government leadership, public expenditure/infrastructure and harmonisation followed by greater industry investment

The automotive industry is already well advanced in implementing 5G capability in vehicle fleets over the next 10 years<sup>3</sup>. This progress by the automotive industry already signals a clear intent in regard to one of the key vehicle technology communication systems and demonstrates industry agreement and capability.

## **2. Over the next 5 years, to what extent does your organisation anticipate moving into a C-ITS role or increasing its involvement in C-ITS?**

As Queensland's largest club and peak motoring body, RACQ has a keen interest in the policy development and delivery of C-ITS. Of particular concern is the increasing road toll in Queensland, notably in regional Queensland, and the opportunities to help address the regional road toll with the implementation of a C-ITS ecosystem across Queensland.

Over the next five years, RACQ is looking to take a proactive policy advocacy role supporting the development of regional C-ITS ecosystem. This will be accompanied with ongoing advocacy and engagement with government, industry and our members to ensure the C-ITS opportunity is realised.

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<sup>3</sup> <https://www.globenewswire.com/en/news-release/2022/03/30/2413004/0/en/5G-in-Automotive-and-Smart-Transportation-Market-to-Be-Worth-US-9-77-Billion-By-The-Year-2030-Comprehensive-Research-Report-By-FMI.html>



**3. How might C-ITS impact other vehicle connectivity systems in Australia, including vehicle/OEM connectivity, vehicle/cloud connectivity, heavy vehicle telematics systems, mapping systems, etc?**

The roll out of dedicated infrastructure and a clear commitment towards harmonisation for in-vehicle technology would appear to have a positive impact on vehicle connectivity with other systems, road safety of vehicles and VRUs also stands to benefit from the implementation of advanced technology.

Greater clarity as to whether there is an expectation that existing vehicles or fleet owners will be required to install after-market products that C-ITS compatible, as a short to medium term measure.

The roll out of C-ITS across the State has the potential to address digital inequity in regional and rural areas. In addition to improving road safety via connected vehicles and infrastructure, a significant benefit will be reducing emergency service response times (through telecommunication coverage) in remote and regional areas.

**4. The draft Principles include a focus on cooperation across industry, government, the research sector, and the community: what structures would be necessary to support the development of an Australian C-ITS system?**

Adoption of a National Framework giving guidance to the technical specifications of required infrastructure (harmonisation) also needs to coincide with the allocation of roles and responsibility of government agencies and the key industry stakeholders. This could be achieved via a government taskforce that is established to accelerate the delivery of C-ITS ecosystem.

Across the country, digital infrastructure is owned and operated by private and public organisations. It is therefore essential that cross industry engagement and collaboration is included in the development of C-ITS.

**5. After the Principles, what next steps do you think would be most productive?**

RACQ supports the development of a National Framework for C-ITS (outlined in the WSP Advice on Strategies to Support C-ITS Deployment) and consider this approach to be most sensible way to progress.

The development of a National Framework and supporting detailed implementation plan, including action prioritisation and timeframes would ensure government, agencies and industry have the necessary information and certainty about how C-ITS will be delivered in Australia.

In addition to these guiding documents, it would be expected that sufficient budget allocation is provided so that C-ITS concepts can move beyond the trial and initiative stages.