



3 February 2023

Department of Infrastructure, Transport, Regional Development,
Communications and Arts
Australian Government

Submission via email

Subject: Draft Principles for National Approach to Cooperative Intelligent Transport Systems

Ford Motor Company of Australia Pty. Limited (Ford Australia) notes the invitation from the Department of Infrastructure, Transport, Regional Development, Communications and Arts (DITRDCA) to provide comment on its consultation in relation to the Draft Principles for National Approach to Cooperative Intelligent Transport Systems (C-ITS).

Ford Australia is Australia's largest direct automotive employer, with a team of more than 2,000 engineers, designers, technical, automotive, and other specialists working at five locations across Victoria. Australia-based engineers and designers lead the development of vehicles sold in more than 170 markets globally, such as the Ford Ranger pickup and Ford Everest SUV.

Ford Australia, supported through colleagues in Europe, North America and China, continues to monitor international forums and sees C-ITS playing a role in the future of automotive safety and traffic efficiency in Australia. Ford Australia places the consumer value as the central focus for effective introduction and adoption of the technology.

By its very nature, C-ITS requires collaboration among all the stakeholders and Ford Australia welcomes the development of the Draft Principles for Australia. In addition to preparing this submission, as a member of the Federal Chamber of Automotive Industries (FCAI), Ford Australia has contributed to and supports the FCAI's input to this consultation.

**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?**

Ford Australia views the development of the Draft Principles by the DITRDCA as an encouraging step in the right direction. A national approach is essential, and the principles are necessary to elicit discussion and align the stakeholders at a high level.

In Ford Australia's view, an important factor of informing the vehicle investment is clarity around the technology standards. Taking the 5.9 GHz C-ITS short-range technology as an example, two mature and commercially ready technologies exist; LTE-V2X [3GPP Release 14] (C-V2X) and ITS-G5 / Dedicated Short Range Communication [IEEE802.11p] (DSRC). Equally important as the clarity in a single technology adoption, is the harmonisation with international standards. Ford Australia recognises that DITRDCA has included this as a key principle, with acknowledgement that global consensus on the technology standards doesn't currently exist.

The current European approach facilitates operation of both short-range technologies. Consequently, Ford Australia would not view adoption of ITS-G5 (DSRC) as the natural conclusion in Australia as highlighted in the DITRDCA *Advice on Strategies to Support C-ITS Deployment*. The uncertainty around the European approach would be prohibitive for vehicle investment in Australia, and dual-mode units are not viewed as an effective solution from a vehicle perspective.

With the current uncertainty in the international approach, Australia has an opportunity to focus on the systems and areas that are potentially agnostic to the underlying technology. In addition, new vehicles sold in Australia are increasingly being offered with an embedded cellular modem as standard fitment. Selected C-ITS use cases can be achieved over the cellular network, and there has been deployments of this approach in Europe and China.

The consumer value is also at the centre of informing investment in this space. As vehicles become increasingly connected, it's important to recognise that the control of this data is with the consumer. Ford Australia would recommend alignment with the principles developed as part of the National Transport Commission's Working Group on *Government access to vehicle-generated data*.

Future investment in the development of new and advanced transport technologies also requires ongoing spectrum in the 5.9 GHz C-ITS band. Securing a 70 MHz bandwidth with sufficient guard bands will be a key enabler for these future use cases.

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?

Ford Australia plans to maintain a role as an industry stakeholder, with ongoing engagement and contribution.

How might C-ITS impact other vehicle connectivity systems in Australia, including vehicle/original equipment manufacturer (OEM) connectivity, vehicle/cloud connectivity, heavy vehicle telematics systems, mapping systems, etc?

At a high level, modern vehicles may typically include a common architecture, including connectivity systems, that is applied across a manufacturer's range of models and markets. Therefore, international standards harmonisation plays an important role in enabling the benefits for the Australian consumer.

C-ITS includes complementary services via cellular and short-range communications. While new vehicles are increasingly being fitted with cellular based vehicle connectivity systems as standard, significant investment and development is required for the incremental content associated to short-range technologies. While prototype trials and demonstration of short-range technology are tremendously valuable, the level of complexity required for deployment on production vehicles is typically not reflected.

Advanced Driver Assist Systems (ADAS) capability plays an important role in the vehicles available today and in the future. C-ITS will complement ADAS, with the notable enhancement of providing non line of sight applications.

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?

Ford Australia agrees that co-operation across the key stakeholders is essential. Ford Australia sees an opportunity to leverage lessons learned, both domestically and internationally, from similar work programs.

From a community perspective, it's of particular importance to involve the consumers and road users in this journey. For C-ITS to be effective in achieving its goals, consumer engagement, awareness and trust are critical for successful deployment at scale.



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

Ford Australia defers to the response provided by the FCAI to this question.

Ford Australia welcomes the opportunity for further consultation on this topic. Ford Australia appreciates the opportunity to provide its views to the DITRDCA. Please contact the undersigned should further information be required (email address provided separately).

Yours sincerely

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