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# **FCAI Submission in response to ACMA Consultation – Proposed updates to the LIPD class Licence for 6 GHz RLANs**

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## INTRODUCTION

The Federal Chamber of Automotive Industries (FCAI) is the peak industry organisation representing the importers of passenger vehicles, light commercial vehicles, and motorcycles in Australia. The FCAI welcomes the opportunity to make this submission to the Australian Communications Media Authority (ACMA) concerning the Proposed updates to the LIPD class Licence for 6 GHz RLANs. FCAI's feedback will only concentrate on the issues relating to light vehicle transport and issues concerning the spectrum allocations in the lower 6 GHz range that have the potential to interfere with Cooperative Intelligent Transport Systems (C-ITS) communications.

FCAI member organisations are at the cutting edge of innovation, according to Boston Consulting Group 2021 Most Innovative Companies Report<sup>1</sup>, four (4) vehicle manufacturers are in the top fifty (50) most innovative companies. Vehicle manufacturers are continuing research and development of communication technologies that will bring quantum changes to the way in which new vehicles will interact with the environment providing innovative mobility solutions whilst enhancing safety for all.

Australia has many parallels with other international jurisdictions such as large populated cities and urban centres. However, we also have some unique characteristics such as vast inland areas that are sparsely populated by comparison, with considerable distances between population centres, and of course requiring appropriate transport connectivity solutions in line with technology availability.

Putting Australia in context, light vehicle sales in Australia represent 1.062 million sales out of an estimated global production volume of 92 million vehicles in 2019 (pre COVID) or around 1.1% and, in fact, the highest volume selling vehicle in the Australian market has annual sales of only 50,000 vehicles. To facilitate the introduction of C-ITS technologies, it is important to ensure spectrum harmonisation is maintained in the Australian market in line with ETSI EN 302 571 V2.1.1 and appropriate safeguards are in place to ensure that C-ITS road safety technologies can operate without interference.

The FCAI and member companies strongly support ACMA's continuing regulatory arrangements to promote the introduction of C-ITS in the 5.9 GHz band (5.855-5.925 GHz) in Australia and maintaining the Class License under section 132 of the Radiocommunications Act 1992, for C-ITS transceivers in vehicles, roadside infrastructure and carried by people. The class license will refer to the relevant European standard, ETSI Standard EN 302 571 V 2.1.1 and should continue to do so.

We note that ACMA have stated that "they note that ITS use in the US is more closely aligned with Australian than European arrangements" FCAI disagrees with this hypothesis, our vehicle regulations have been harmonised according to the United Nations World Forum for the harmonisation of vehicle regulations (Working Party 29). The following is a brief description or explanation of the UN regulatory system that automotive manufacturers operate within and the interaction with Australia's international obligations:

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<sup>1</sup> <https://www.bcg.com/en-au/publications/2021/most-innovative-companies-overview>

<sup>2</sup> FCAI - Vfacts

### **World Forum for the harmonization of vehicle regulations (Working Party 29)**

The UNECE World Forum for Harmonization of Vehicle Regulations (WP.29) is a unique worldwide regulatory forum within the institutional framework of the UNECE Inland Transport Committee. Three UN Agreements, adopted in 1958, 1997 and 1998, provide the legal framework allowing Contracting Parties (member countries) participating in the WP.29 sessions to establish regulatory instruments relating to motor vehicles and motor vehicle equipment:

1. UN Regulations, annexed to the 1958 Agreement;
2. United Nations Global Technical Regulations (UN GTRs), associated with the 1998 Agreement; and
3. UN Rules, annexed to the 1997 Agreement.

**UN Regulations** contain provisions (for vehicles, their systems, parts, and equipment) related to safety and environmental aspects. They include performance-oriented test requirements, as well as administrative procedures. The latter address the type approval (of vehicle systems, parts, and equipment), the conformity of production (i.e., the means to prove the ability, for manufacturers, to produce a series of products that exactly match the type approval specifications) and the mutual recognition of the type approvals granted by Contracting Parties.

**UN GTRs** contain globally harmonized performance-related requirements and test procedures. They provide a predictable regulatory framework for the global automotive industry, consumers, and their associations. They do not contain administrative provisions for type approvals and their mutual recognition.

**UN Rules** concern periodical technical inspections of vehicles in use. Contracting Parties reciprocally recognize (with certain conditions) the international inspection certificates granted according to the UN Rules.

### **Objectives**

Overall, the regulatory framework developed by the World Forum WP.29 allows the market introduction of innovative vehicle technologies, while continuously improving global vehicle safety. The framework enables decreasing environmental pollution and energy consumption, as well as the improvement of anti-theft capabilities.

The same regulatory framework is also instrumental for fostering and facilitating cross-border trade, since provisions established under the 1958 Agreement include the obligation for reciprocal acceptance of approvals of vehicle systems, parts and equipment issued by other Contracting Parties (the reciprocal recognition of the entire vehicle is not yet possible under the 1958 Agreement, even if procedures for the whole vehicle type approval of vehicles have been established in EU Member States. In order to address this issue, WP.29 launched the International Whole Vehicle Type Approval (IWVTA) project in March 2010).

Australia is a signatory to both the UN [1958 Agreement](#) and the [1998 Agreement](#). The Australian Government's policy is to harmonise its national vehicle safety standards, the Australian Design Rules (ADRs) with international regulations where possible and first consideration is given to the adoption of

the international United Nations (UN) regulations. The policy to harmonise is also important in fulfilling Australia's World Trade Organisation and Asia Pacific Economic Cooperation commitments.

Under this environment it is expected that C-ITS technologies being introduced to the Australian environment are typically going to be introduced aligning to the UN standards which are heavily influenced by the European Union which is arguably in the forefront of developing C-ITS technologies. Any alignment away from the European standards (and by default UN Standards) will more than likely result in misalignment between vehicle standards development and wireless technology standards development. Therefore, RLAN equipment sourced from Europe should be considered the more appropriate and likely given the protections afforded in aligning with European specifications and interoperability with vehicles designed to operate in Australia.

## GENERAL FCAI COMMENT

FCAI would like to thank ACMA for maintaining their ongoing support for C-ITS technologies within the consultation.

Cooperative Intelligent Transport Systems (C-ITS) have been well proven overseas to reduce traffic fatalities and increase traffic efficiency. Automated driving functions will initially be supported by C-ITS and for level 3 and 3 + automated driving; C-ITS technologies will be a pre-condition.

FCAI members advise that Co-operative Intelligent Transport Systems (C-ITS) are expected to be deployed into the Australian environment and will play a pivotal role in enhancing road safety as well as providing the opportunity to manage the traffic more effectively subject to the necessary infrastructure development being undertaken by road traffic authorities.

Within the Australian environment numerous trials have been undertaken to demonstrate and trial these technologies, these projects are instrumental in ensuring that the technology can and will be adapted to the Australian Environment such as the following projects:

- <https://www.qld.gov.au/transport/projects/cavi/cavi-project>
- <https://www.qld.gov.au/transport/projects/cavi/cooperative-and-highly-automated-driving-pilot>
- <https://www.qld.gov.au/transport/projects/cavi/ipswich-connected-vehicle-pilot>
- <http://www.ames.com.au/>
- <https://roadsafety.transport.nsw.gov.au/research/roadsafetytechnology/cits/citi/index.html>

The above list is not exhaustive; it does however provide a snapshot of the work being undertaken by jurisdictions across Australia to facilitate the introduction of C-ITS technologies.

The automotive industry strongly supports ambitious policy goals towards achieving an Australian environment for Cooperative, Connected and Automated Mobility (CCAM), which can significantly contribute to "Towards Zero" safety goals as well as enabling more convenient and sustainable mobility ecosystem.

Considering that many of the messages conveyed by C-ITS systems regardless of the technology used are safety critical it is imperative that this 5.9GHz spectrum frequency band be maintained, any potential for interference from RLAN devices should be carefully considered and rigorously tested to confirm that there is no compromise to the efficaciousness of road safety applications.

We are very supportive of the decision not to allow changes to the power levels in the lower 6GHz band and as per our previous comments regarding UN regulations agree that harmonisation with Europe is the preferred outcome. Whilst we recognise the proposal to add OOB limits, given the propensity for interference with road safety technologies we recommend the adoption of the guard band above 5925 MHz.

We also would highlight that there have been several studies and analysis on harmful interference undertaken by automotive OEMs during previous US FCC consultations. While the power levels differ to the ACMA proposal, several use cases are relevant – including the use of devices with 6GHz RLAN capability in vehicles that should be considered in the overall types of use cases that require assessment.

FCAI would be more than happy to provide additional information and will continue to monitor international developments. We welcome the opportunity to engage directly with ACMA in conjunction with several automotive brands to ensure a thorough understanding of developments as well as the differing approaches being taken by various manufacturers.

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Director – Emerging Technologies