FCAI Submission in response to ACMA Consultation – Draft 5 Year Spectrum Outlook



Federal Chamber of Automotive Industries Level 1, 59 Wentworth Avenue KINGSTON ACT 2604

Phone: +61 2 6229 8220 Facsimile: +61 2 6248 7673

Contacts:

Mr. Rob Langridge, Director - Emerging Technologies

Mr. Tony Weber, Chief Executive

June 2020

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 Draft five-year spectrum outlook 2020-24. FCAI's feedback will only concentrate on the issues relating to light vehicle transport and issues concerning the spectrum plans relating to Cooperative Intelligent Transport Systems (C-ITS). FCAI's comments will address the following question in the ACMA consultation:

"Are there other technology developments or sources of spectrum demand that the ACMA should be aware of in considering spectrum management over the next five years?"

FCAI member organisations are at the cutting edge of innovation, according to Boston Consulting Group 2019 Most Innovative Companies Report¹, six (6) 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 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.

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.

FCAI has previously engaged with ACMA regarding C-ITS³ and we refer to our previous submission.

¹ https://www.bcg.com/en-au/publications/2019/most-innovative-companies-innovation.aspx

² FCAI - Vfacts

³ http://fcai.com.au/news/publication/view/publication/83

QUESTION 3: ARE THERE OTHER TECHNOLOGY DEVELOPMENTS OR SOURCES OF SPECTRUM DEMAND THAT THE ACMA SHOULD BE AWARE OF IN CONSIDERING SPECTRUM MANAGEMENT OVER THE NEXT FIVE YEARS?

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.

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 5 automated driving C-ITS will be a pre-condition.

However, for this to become a reality with new functionalities currently being developed to fully achieve their potential, additional spectrum may well be needed in the future, refer to the European Automotive Manufacturers (ACEA) submission⁴ to the European Union, in addition to the currently harmonised ITS spectrum in Australia.

FCAI members advise that Co-operative Intelligent Transport Systems (C-ITS) are expected to be deployed into the Australian environment and will no doubt 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.

C-ITS is well developed with differing manufacturers choosing solutions that involve two types of technology ITS G5 / Dedicated Short Range Technology (DSRC) and LTE-V2X (C-V2X). FCAI supports a technology neutral approach at this stage. There are numerous attributes to each of the systems that make some C-ITS applications more appropriate. However, it is clear to FCAI that the C-ITS spectrum referred to in the Radiocommunications (Intelligent Transport Systems) Standard 2018 must be maintained whilst monitoring international developments, informing Australia's future spectrum requirements.

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 between the technologies needs investigation and actions undertaken to eliminate.

FCAI will continue to monitor international developments and welcomes 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.

Rob Langridge
Director – Emerging Technologies

⁴ https://www.acea.be/publications/article/acea-clepa-paper-future-c-its-spectrum-needs