

6 May 2024

RE: Draft Five-year spectrum outlook 2024–29

The Manager  
Spectrum Licensing Policy Section  
Australian Communications and Media Authority

To whom it may concern,

Mission Systems would like to thank the ACMA for the opportunity to comment on the current and proposed changes to the Five Year Spectrum Outlook (FYSO). Mission Systems appreciates the volume of work ACMA has and seeks to inform the ACMA of work that is being undertaken by Mission Systems in an emerging and rapidly growing technological field. Having read this document in detail, we note multiple references to increased drone operations and subsequent spectral requirements, including monitoring the development of the command and non-payload communications (CNPC) band from 5030 to 5901MHz.

However, in the next five years a proliferation of larger, highly automated passenger-carrying aircraft can be expected, typically classified as advanced air mobility (AAM) systems, but more commonly known as air-taxis. These aircraft will have requirements for advanced collision avoidance systems, in much the same way as automotive radars have developed over the past 20+ years.

Mission Systems is a sovereign Australian developer of such a detect and avoid (DAA) radar system for AAM aircraft, funded under contract by the Australian government for the benefit and safety of this future growth industry.

Whilst multiple bands have been identified by the International Telecommunications Union for Aeronautical Radio-Navigation Systems (ARNS), through previous communications with ACMA and Defence Spectrum Office (DSO), we have selected the spectral region between 15.4 and 15.7GHz as most appropriate to this task, in accordance with RTCA DO-366 - Minimum Operational Performance Standard (MOPS) for Air-to-Air Radar (ATAR) for Traffic Surveillance.

We are aware of significant growth in AAM aircraft numbers, and collision avoidance systems will be an integral element to enabling them within the aviation domain. Given these systems will be proliferate and itinerant by nature, Mission Systems feels that a light touch, area based regulatory framework should be developed, enabling Australia Wide operation of these safety devices for the detection of 'non-cooperative targets', as automotive radars are granted today. We therefore request consideration and monitoring of this band be included in the five-year spectrum-outlook.

Mission Systems welcomes the opportunity to participate in future relevant ACMA regulatory activities as they come along.

**Mission Systems Pty Ltd**



**David Johnson**

Director



**David Battle**

Director