



**AUSTRALASIAN RAILWAY ASSOCIATION INC**

Association Number A03958 ABN 64 217 302 489

9 October 2009

Mr Andrew Kerans  
Executive Manager Spectrum Planning Branch  
Australian Communications and Media Authority  
PO Box 78  
BELCONNEN ACT 2616

Dear Sir,

### **400MHz Band Management**

I refer to ACMA's proposals with respect to improving management of the 400MHz band, and the recent discussion between representatives of ACMA and the rail industry.

As you are aware, secure and adequate radio communications are a critical component for railways to operate safely and efficiently.

The rail industry has taken the opportunity to consider its needs with respect to the 400MHz band. The industry's position is that:

- Railways are unique in their requirement for radio spectrum because of their function of rapidly transporting passengers, freight and bulk materials along "rail corridors". Thus the safety requirements, the nature of their operations, the geographic area of coverage, topography and operation in tunnels makes railway radio needs unique.
- There is a continuing need for a dedicated railways spectrum band the proposed dedicated railway band should be located in the 403 MHz to 420 MHz range of frequencies.
- Railways will continue to require channels outside the 'Railways of Australia' 400MHz Band previously recognised. A minimum of a 7-year, and preferably a 10-year transition period is provided for the rail industry to transfer existing frequency allocations to any new spectrum band allocated.
- The railway industry is prepared and willing to manage a spectrum allocation for railways use if appropriate.

The attached report provides background and information about management of a dedicated 400MHz band for railway use, for ACMA's consideration.

The reason for rail industry radio needs in the 400MHz band to be managed in this way are:

1. *Railways transport passengers and high value cargo at high speed. Railways are different from other utilities in terms of the required coverage and the depth of that coverage, because mobile radio is essential for railway safety and critical operational functions.*
2. *Railway assets have long lives and require large capital expenditure. Railways are different in that mobile radio systems are the only practical alternative for railways for communications with moving trains and a mobile workforce. These systems need to be planned and operated for the long term and are subject to stringent cost benefit analysis and whole of life cost assessment.*

*Hence, security of tenure of sufficient spectrum has, in the past, been assured through the availability of a special band previously provided and is essential to optimise the planning, operation and economics of these systems.*

3. *Railways have a requirement for interoperability. The railway industry consists of Government owned organisations as well as private track owners and operators, with operations in urban, regional and remote areas, for freight and passenger transport use.*

*Interoperability for safety and operational functions is essential. For simplicity of operation it is preferable for a common set of frequencies to be utilised for key functions throughout Australia facilitated by a dedicated railways band. Across Australia, railways already use a common channel for safety functions.*

4. *Railways already have a successful industry specific spectrum band. Railways throughout Australia have consistently used channel allocations in the 'Railways of Australia' band and demonstrates the ability of the industry to use a national industry based spectrum band.*
5. *Railways have high growth. Railways will have increasing requirements for radio spectrum and require certainty that the spectrum will be available to cater for increased traffic.*

It must be noted that due to the limited time available to develop this issue, it has not been possible to arrange for formal agreement by railways. However all major railways are supportive of the proposal at technical level. The ARA will progress the whole of industry position as a matter of urgency.

The rail industry looks forward to continuing positive discussion with ACMA on this issue. Please contact Brett Hughes, Director Policy on 02 6270 4508 or [bhughes@ara.net.au](mailto:bhughes@ara.net.au) at any time.

Yours sincerely



Bryan Nye  
**Chief Executive Officer**