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AMTA
Australian Mobile Telecommunications Association

3 June 2026

RE: Coordination requirements between 1.9 GHz RMR and 2 GHz base station receivers in RALI MS 51

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We have discussed your proposed coordination requirements between 1.9 GHz RMR and 2 GHz SL/PTS base station (BS) receivers within the AMTA Spectrum Committee. We continue to support the use of 1.9 GHz FRMCS TDD band by RMR services and want to help facilitate that outcome.

Part of the outcome is managing interference into the MNO 2 GHz base station receivers efficiently, thereby streamlining efforts by both MNO and RMR design and planning teams. We have reservations that the techniques currently proposed by the ACMA do not achieve that goal in a balanced manner (as per point #3 below). We are keen to make possible the entry of RMR services in to 1900 MHz, but the ACMA's proposed approach places more burden of interference risk and assessment work on the incumbent MNOs, and assumes a default, single solution of deploying Enhanced Selectivity (ES), when other mitigation measures could be mutually explored. The rail industry, as the new entrant, will benefit from leading the planning exercise. By working through detailed coordination and identifying issues, RMR operators can optimise their network (ahead of deployment) and simultaneously engage with incumbent licensees who could be affected by harmful interference, so we can work together to lower costs for both parties.

To this end, we have some thoughts on how to improve RALI MS 51, to everyone's mutual benefit—these are detailed in the Annex below. Specific to the ACMA's current proposal for RALI MS 51, we have direct concerns on the following elements, which we are not able to agree to:

1. It is well understood that the ACMA's proposal is not to require or mandate the adoption of Enhanced Selectivity (ES) on any 2 GHz SL/PTS BS receivers, rather to specify that the protection that will be afforded to those stations only to -30 dBm (as opposed to lower/more stringent limits consistent with the 2 GHz Rx RAG, in turn based on 3GPP). However, given the heightened focus on mobile performance particularly with respect to triple zero calls, the MNOs are unable to agree to any licensing changes which could introduce harmful interference into their network or re-direct significant investment away from other initiatives. The identification of any BS receivers against which coordination fails effectively amounts to an obligation for the MNO to upgrade that base station.

2. Similarly, we cannot agree to the ACMA's proposal for imposition of timeframes by which less protection for 2 GHz SL/PTS BS receivers can be assumed without the licensee's confirmation. We oppose the introduction of this fallback mechanism in RALI MS 51 and recommend a collaborative approach, facilitated by the flagging of ES-compliant BS receivers in the RRL (as suggested in the Annex).

3. We wish to highlight and express our strong opposition to the extremely unbalanced burden on existing licensees in the ACMA's proposal as drafted. In the ACMA's proposal as drafted, the rail industry simply needs to identify sites within 70 km of a proposed RMR service, and all the burden of: (a) detailed coordination and assessment of risk, (b) remedial upgrade/replacement to equipment, and (c) the effective removal of interference protection for the 2GHz spectrum licences is borne by existing licensees. Existing licensees should not be bearing the burden of the interference risk and assessment work; the rail industry is the new entrant that will benefit from this re-planning exercise, and they need to do the work (or procure the services if required). This work includes planning their network, carrying out the detailed coordination, identifying any issues, and provide targeted notification to licensees which do have potential to genuinely be affected.

It is important to note that existing licensees include both large MNOs and smaller PTS licensees in the regional areas.

In support of maintaining a collaborative approach for managing potential interference across the 1920 MHz boundary, we wish to restate that we will gladly work with the rail industry to facilitate the entry of RMR into the 1.9 GHz spectrum band. Regrettably however, we simply cannot agree to risks and costs associated with the ACMA's proposed fallback mechanism.

To move forward, we suggest that the ACMA pause finalising RALI MS 51, and instead facilitate a preliminary desktop study between MNOs and the relevant RMR operator(s) to gauge the volume of potentially-affected MNO base stations. In the 6 May meeting, the rail industry mentioned that early planning had commenced for deployment in the Sunshine Coast area, as well as in Melbourne (railyards and the suburban rail loop). We recommend that the coordination of this deployment commence ASAP so we can use this as a trial exercise that can then inform the ACMA's finalisation of RALI MS 51.

We look forward to working with the ACMA and one or more RMRs on some pilot deployment exercise(s), which in turn can facilitate the completion of a mutually agreed RALI MS 51.

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Annex—RMR network design guidance

The approach outlined below will likely result in <10% of MNO sites needing some form of remediation. The nature and implementation of which can then be discussed directly between the MNO and the RMR operators.

At a high-level, we propose the following:

1. MNOs are to provide information on whether individual cellular BS sites have ES or not. One way to streamline this process might be to provide this information as a notation in the RRL data, which could be facilitated through the ACMA.
2. RMR operators are to use best engineering practice to develop their network plans guided by the principle that they should seek to minimise impact on MNOs. If some impact becomes unavoidable(with or without ES) it will require dialogue between the RMR and the affected MNO(s) to find an appropriate solution.
3. Best engineering practice can be achieved through simple guidance from the ACMA that could be introduced into the proposed RALI MS51, including:
    a. Developing network plans with full awareness of the performance parameters of existing mobile network assets;
    b. Selecting antennas and antenna configurations (tilts etc) that minimise coverage outside of the target rail corridors;
    c. Selecting sites that maximise the distance to existing MNO assets where feasible; and
    d. Considering using the lowest transmitter powers at base stations that are needed to provide the required coverage.

Simple design considerations along these lines would lower impact to mobile networks, and would avoid the risk of causing potentially unnecessary upgrades to mobile networks resulting from inadvertent/poor design choices.