

23 August, 2021

The Manager  
Infrastructure and Equipment Safeguards Section  
Australian Communications and Media Authority  
PO Box 13112 Law Courts  
Melbourne VIC 8010



Dear Sir/Madam

**Re: Response to ACMA call for submissions on “Incorporating a new ARPANSA protection standard into regulatory arrangements - consultation IFC 28/2021”**

The Australian Mobile Telecommunications Association (AMTA) welcomes the opportunity to participate in the Australian Communications and Media Authority (ACMA) consultation process for *Incorporating a new ARPANSA protection standard into regulatory arrangements - consultation IFC 28/2021*, which was issued for public comment on 21 July 2021.

AMTA, on behalf of its members, supports the intention of the proposed changes to the legislative instruments which is to update the ACMA regulatory arrangements for EME to reference the new ARPANSA RF safety standard, ‘*Radiation Protection Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz (2021)*’ (the new ARPANSA Standard).

AMTA notes that the update of regulatory instruments includes changes to the *Radiocommunications Equipment (General) Rules 2021* (the General Equipment Rules) to both adopt the provisions of the previous existing standards and labelling notices and to update them for the new ARPANSA standard, as well as amendments to the *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2015* (the Apparatus LCD) to update references to the new ARPANSA standard.

*Support for the Standard*

AMTA’s members strongly support the adoption of the most up to date standards for RF safety and compliance assessment practices as reflected in the new ARPANSA standard including the international best practice referenced in that standard for compliance assessment methods.

Notwithstanding our support for the adoption of the new ARPANSA standard into the ACMA’s EME regulatory arrangements, AMTA has some recommended amendments that could be made to the proposed Radiocommunications (Electromagnetic Energy) Amendment Instrument 2021 (No.1), pertaining to the Carriers’ licence conditions in Schedule 1. AMTA has three suggestions which are outlined in the following comments.

*Recommended amendments*

**1. Change to referencing of compliance assessment standards**

AMTA notes that the new ARPANSA standard now cites both Australian and international assessment standards in Section 4.1:

*“Compliance with the requirements in Sections 2 and 3 must be verified by direct measurements or by computation in accordance with AS/NZS 2772.2 or relevant International Electrotechnical Commission (IEC) or Institute of Electrical and Electronics Engineers (IEEE) standards.”*

Section 8 of Schedule 1 of the draft proposed Amendment Instrument amends Subsection 10 (3) of the Apparatus LCD. The amendment does not mention Section 4 of RPS S-1 in regard to compliance assessments, but rather refers to sections 2 and 3 of the ARPANSA standard. While these sections, the exposure limits and related requirements, do provide some direction in regard to averaging times and quantities, they do not address the issue of compliance assessment directly.

AMTA proposes an alternative drafting that references Section 4 of RPS S-1 explicitly, and therefore incorporates the provisions of the compliance assessment standards referenced in Section 4, which are those appropriate for determining compliance with the Apparatus LCD. AMTA notes that these compliance assessment standards provide direction for spatial averaging methods and therefore the provisions previously included at Subsection 10(3) of the Apparatus Licence are no longer required.

The following change to the Amendment Instrument is proposed (replacing 8 Subsection 10(3) in Schedule 1):

## **8 Section 10**

Repeal the section, substitute:

- (1) This section applies to a transmitter to which section 9 does not apply.
- (2) A licensee must:
  - (a) be able to show that the licensee complies with section 8 in relation to the transmitter by measuring or calculating RF fields in accordance with section 4 of the ARPANSA standard
  - (b) keep records in accordance with section 15.

## **2. Change to compliance based on field strength and power flux density**

Section 8 of the Apparatus LCD provides three options for quantities that may be measured or calculated to determine compliance with the general public reference levels at Subsection (2)(a)-(c) (electric field strength, magnetic field strength and power flux density respectively). AMTA notes that the new ARPANSA standard does not permit electric or magnetic field strength assessments for compliance with reference levels at frequencies above 2 GHz, and that power flux density is no longer a defined quantity, and does not appear in the reference level tables of the new ARPANSA standard.

AMTA is not clear on the purpose of these specific provisions in the Apparatus LCD but does note that these matters are more rightly the purview of the same compliance assessment standards that AMTA has suggested ACMA adopt for Section 10 of the Apparatus LCD above. If ACMA were to adopt this suggestion, then Subsection 8(2) of the current Apparatus LCD could be removed.

Further, AMTA notes that Subsection 8(3) of the Apparatus LCD, regarding the treatment of multiple frequency sources, is addressed both in the above assessment standards and also in Section 3 of the ARPANSA standard which is already nominated in the proposed Amendment Instrument at 3 Subsection 4(1) (definition of *reference levels*). Consequently, it would appear Subsection 8(3) could also be removed from the Apparatus LCD leaving only the provisions of 8(1), mandating compliance with reference levels for general public exposure at a place accessible to a member of the general public.

### **3. Change to definitions of types of RF Worker**

Section 4 of the Apparatus LCD includes a definition of an *RF Worker* which reflects that in the previous version of the ARPANSA standard (RPS3). The defined term RF Worker only appears in the Apparatus LCD to provide a further definition of the term *member of the general public* (i.e. not an RF Worker).

In the new ARPANSA standard, there is now another type of RF worker defined as a *Controlled Area Worker*, which no longer fits the definition of an RF Worker but is also not a member of the general public. The new ARPANSA standard also defines a *Supervised Visitor* who may be exposed to levels above the General Public limits in certain circumstances. Under the current definitions in the Apparatus LCD, both *Controlled Area Workers* and *Supervised Visitors* are *members of the general public* (as defined) because they do not fit the definition of *RF Workers* in the current Apparatus LCD.

Currently, the Apparatus LCD stipulates at Subsection 8(1):

*The RF field produced by a transmitter operated under the licence must not exceed the reference levels for general public exposure at a place accessible to a member of the general public.*

In AMTA's interpretation of the current Apparatus LCD, *Controlled Area Workers* and *Supervised Visitors*, as *members of the general public*, would therefore be required to be restricted from access to areas above general public reference levels, which is not the intention of the new ARPANSA standard for those types of exposed persons.

To retain the current intention of these definitions for the Apparatus LCD (to limit the application of its provisions on Carriers to members of the general public) and to remain consistent with the intention of the new ARPANSA standard for *Controlled Area Workers* and *Supervised Visitors* it is necessary to amend the definitions for the new worker and visitor types and amend the definition of *member of the general public*.

AMTA proposes the following changes to the definitions proposed in Schedule 1 of the Amendment Instrument to effect these changes:

#### **4 Subsection 4(1) (definition of *RF worker*)**

Repeal the definition, substitute:

**RF worker** has the meaning given by Section 5.1.1 of the ARPANSA standard

#### **5 Subsection 4(1)**

Insert the definition:

**controlled area worker** has the meaning given by Section 5.1.1 of the ARPANSA standard

## 6 Subsection 4(1)

Insert the definition:

**supervised visitor** has the meaning given by Section 5.1.1 of the ARPANSA standard

## 7 Subsection 4(1) (definition of *member of the general public*)

Repeal the definition, substitute:

**member of the general public** means a person who is not either an RF worker, a controlled area worker or a supervised visitor.

Re-number subsequent sections (4-8) of Schedule 1 of the Amendment Instrument accordingly.

AMTA makes no comment on the other schedules included in the Amendment Instrument nor does AMTA make any comment on the *Draft Radiocommunications Equipment (General) Amendment Rules 2021 (No. 1)* also issued for comment under ACMA's consultation 28/2021.

Again, AMTA welcomes this opportunity to comment on the adoption of the new ARPANSA standard into ACMA's regulations which AMTA strongly supports to give all stakeholders confidence that mobile telecommunications in Australia continue to be supplied and operated in accordance with the latest science-based standards. AMTA trusts that the ACMA finds these comments helpful and would be very happy to discuss any of the matters raised above with ACMA's representatives at your convenience.

Yours sincerely,



Louise Hyland  
Chief Executive Officer  
Australian Mobile Telecommunications Association Ltd ([AMTA](http://www.amta.org.au))