



Boeing Australia Holdings

**RESPONSE TO ACMA CONSULTATION  
ON REVIEW OF ELECTROMAGNETIC  
COMPATIBILITY (EMC) REGULATORY  
ARRANGEMENTS**

# Introduction

Boeing Australia Holdings (Boeing Australia) appreciates the opportunity to respond to the Australian Communications and Media Authority's (ACMA) consultation on the 'Review of electromagnetic compatibility (EMC) regulatory arrangements'.

Boeing is one of the world's largest global aerospace manufacturers. We develop, manufacture and service commercial aeroplanes, defence products and space systems for customers in more than 150 countries. Our Australian portfolio supports a broad range of Boeing's world leading range of services and products. It includes Australia's only designer and manufacturer of high-end composite aerostructure components for commercial and defence aircraft, defence systems design, maintenance support, research and development, modelling, simulation, training, as well as conceiving, designing and building uncrewed systems – notably Australia's own MQ-28 *Ghost Bat*.

With Boeing Australia's operations in the areas of civil aerospace and defence systems' EMC is of particular concern for safety of flight with the use of Portable Electronic Devices (PEDs). EMC is an important consideration for the safe and effective integration of complex systems for use by civil aviation and defence, both in deployed mission systems and ground support systems.

It is understood the aim of the consultation will allow for Repeal of the *Radiocommunications (Electromagnetic Compatibility) Standard 2017*<sup>1</sup> and the *Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017*<sup>2</sup> and introduce EMC regulation into *Radiocommunications Equipment (General) Rules 2021*<sup>3</sup>.

Accordingly, Boeing Australia provides the following views on the specific aspects of the consultation.

## Harmonising list of recognised standards

### Question 1

Do you have any comments on our proposal to reference all the EMC harmonised standards for emission under Directive 2014/30/EU in the ACMA's EMC regulatory arrangements as indicated in Appendix A?

Boeing Australia is of the view that including all of the standards contained in Directive 2014/30/EU will simplify demonstration of compliance. There is unlikely to be any downside to this, and the process required to have a standard updated and harmonised is thorough.

It is suggested the ACMA maintain a list of additional standards that are still acceptable in Australia, such as older standards that have been obsoleted by the EU.

<sup>1</sup> <https://www.legislation.gov.au/Details/F2018L00024>

<sup>2</sup> <https://www.legislation.gov.au/Details/F2021C01287>

<sup>3</sup> <https://www.legislation.gov.au/Details/F2023C00236>

## Electric vehicle EMC

### Question 2

Do you have any comments on whether the ACMA's current EMC regulatory arrangements for managing EMC risks for vehicles, including electric vehicles, are effective?

Boeing Australia does not have a view on this.

## Risk levels

### Question 3

Do you have any comments on the options to exclude specified low-powered inductive power transfer devices such as wireless chargers for phones, electronic wearables and electric toothbrushes from the definition of a high-risk device?

There are many factors required for an accurate and effective EMC test, and that is where an accredited testing facility is important.

Boeing Australia is of the view that regulatory changes should increase the number of devices that require an accredited test report, not decrease the number of classes.

For the purposes of aviation safety inductive power transfer devices could pose a risk to aviation if phones or power banks are used to recharge earbuds or other small devices used in aircraft.

The power transfer required for charging is orders of magnitude higher than that required for Wi-Fi or Bluetooth communication. Independent verification of product conformity will provide confidence that they can be used in an aircraft passenger cabin without adverse impact to safety-critical systems.

### Question 4

Do you have any comments on our proposal to lower the compliance level of certain household devices from medium-risk to low-risk? Are there any other devices that we have not identified, where we should consider lowering the compliance level due to their low risk of causing interference? If so, please specify the types of devices and why their compliance level should be changed, including any common characteristics that cause these devices to pose a low risk of interference.

Boeing Australia does not have a view on this.

### Question 5

Do you have any comments on the categorisation of battery-powered devices as low-risk devices?

Battery-powered devices that use lithium-ion battery packs are capable of extended operation and high peak power consumption.

Boeing Australia is of the view that any exemptions for battery-powered devices should be capped at a maximum peak power draw. There is a risk that lithium-ion powered devices with motors or digital electronics (e.g. handheld games) could generate electromagnetic interference (EMI).

EMI on board an aircraft is problematic and requires careful management.

## Other matters

### Exemptions

Defence exemptions for EMC are of particular interest to Boeing Defence Australia. These are currently detailed in Schedule 2 of *Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017*. The exemption is notably broad, being:

- *A device used in military equipment or weapons systems of the Defence Force or by the defence force of another country operating in cooperation with the Defence Force.*

The *Radiocommunications Act 1992*<sup>4</sup> (the Act) states that the Act does not apply to Defence research & development and intelligence (§24). More limited exemptions (to Parts 3.1, 4.1 and 4.2 of the Act) apply to other Defence functions (§26) performed by Defence or 'authorised defence suppliers', but regulations may provide for the provision of those parts. Part 4.1 is most likely where EMC regulation would sit (under §156 Equipment rules).

The *Radiocommunications Equipment (General) Rules 2021* has exemptions against Part 4 (EME standards) in §53(d) and §53(e) for ADF and visiting forces' equipment or weapons systems. It is noted that an equivalent exemption for EMC standards for transmitters (Part 3 of the Equipment Rules) is not in the Rules.

The need for Defence exemptions in the Rules and Notices is unclear when there is the exemption in the Act, as the Act's exemptions would take precedence. If EMC standards for non-intentional transmitters is rolled into the Equipment Rules then an exemption similar to §53 should be incorporated for clarity.

Boeing Australia Recommendation:

The exemptions currently provided in Schedule 2 of the Labelling Notice should be incorporated into the Equipment Rules in a manner consistent with the exemptions that are currently in Part 8 of the Act.

### General approach

Deleting the 'two-step removed' approach of regulating EMC through a labelling notice and moving to direct equipment regulation is a commendably progressive move, and more in line with EMC regulation in the United States<sup>5</sup>, United Kingdom<sup>6</sup> and New Zealand<sup>7</sup>.

### Evidence of compliance

The current Labelling Notice does not require declarations to be made available (§4.3A), and it is not clear whether devices are suitable for domestic and commercial use (Class B) or only for commercial/industrial use (Class A).

The single EU declaration of conformity required by 2014/30/EU is an exemplar of this approach:

<sup>4</sup> <https://www.legislation.gov.au/Details/C2023C00370>

<sup>5</sup> 47 CFR 15 Subpart B

<sup>6</sup> *Electromagnetic Compatibility Regulations 2016*

<sup>7</sup> *Radiocommunications (EMC Standards) Notice 2015*

- (33) *Manufacturers should draw up an EU declaration of conformity to provide information required under this Directive on the conformity of an apparatus with this Directive and with other relevant Union harmonisation legislation.*
- (34) *To ensure effective access to information for market surveillance purposes, the information required to identify all applicable Union acts should be available in a single EU declaration of conformity. In order to reduce the administrative burden on economic operators, that single EU declaration of conformity may be a dossier made up of relevant individual declarations of conformity.*

Boeing Australia is of the view that the ACMA Declaration of Conformance for EMC was required to be made available by suppliers it would be of advantage to purchasers of equipment.

Boeing Australia thanks the ACMA for undertaking this consultation and our point of contact for this submission is -

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