



The Manager
Technical Regulation & Carrier Infrastructure Section
Australian Communications and Media Authority
PO Box 13112 Law Courts
Melbourne VIC 8010

Document reference AST 2021-002
Date: 9 April 2021

Subject: Radiocommunications equipment rules - consultation 07/2021

My working career prior to leaving the ACMA in 2006 involved licensing, equipment testing and developing radio communications standards. Since then, through my part time consultancy and voluntary work for ARCIA and WIA, I have maintained an active interest in radio communications and regulation as a representative on Standards Australia committee RC004 and as chair of RC006. The recent failure of the RC006 project to revise the AS/NZS4268 short range devices standard to mirror changed ACMA mandated regulatory arrangements which reference the LIPD class licence requirements directly, was a disappointment to me, making me question that process. The failure was due to changed Standards Australia standards development policy. That new policy even precludes the use of the word compliance even though the ACMA has compliance regimes which include compliance levels. The new term to be used in voluntary standards development is conformance.

As part of the large and diverse ACMA Standards team some twenty years ago, I witnessed the development of regulation for all the various regimes which are still in place today. They are complicated and out of date for some of the technologies now regulated. For example, the ACMA chose not to extend mandating arrangements to include, amongst others, land mobile equipment as it developed beyond just analogue FM voice modulation to digital forms of modulation incorporating data. This had, and continues to have, allowed the potential supply and even dumping of equipment which may not meet standards in overseas markets. However, at the same time, the New Zealand regulator MBIE has followed a different path by requiring equipment that operates on suitable spectrum to comply with recognised overseas digital standards or AS/NZS 4768.3 which was developed by RC006 committee to encompass multiple overseas standards and adapt them to our local requirements such as device power levels for services and including the UHF frequency band arrangements which extend up to 520MHz.

The introduction of equipment rules presents the ACMA an ideal opportunity to facilitate streamlined supply regulation arrangements, that mitigate risk and which would be technology neutral. I am therefore disappointed to see that the proposed rules are not simple to understand or technology neutral. I understand the need to make transitional arrangements, but this just adds another layer of complexity to understanding what the supply requirements for Australia actually are. Given that there is very little local manufacturing of radiocommunications equipment, the ACMA should consider that in many instances, the person reading this document will almost certainly come from a non-English speaking background. If the radiocommunications equipment rules stay in their current form, a simpler plain English summary is needed.

The development of the rules in this manner seems at odds with government policy to simplify arrangements.

Some specific comments on the draft equipment rules are as follows:-

Page 8 section 11, Prohibition – possession and general standards.

I understand why the regulatory arrangements are moving to target individuals who may possess non-compliant equipment. However as a licensed amateur, I regularly experiment with construction of equipment and I sometimes choose to modify or repurpose commercial equipment for use within amateur frequency bands in accordance with the applicable amateur licensing arrangements, because it is cost effective. I am concerned that the rules taken literally would restrict such options to me in undertaking my part time interest. Until I actually undertake the modifications, I may be in possession of a device that does not comply with a general standard. (With surplus equipment I might not know until I power it up.) For example, some radio microphone equipment has been made non-standard through frequency band resumption following the digital dividend when the TV band changes were implemented. However I don't believe amateurs should need to apply for permits to possess such equipment. From a technical perspective, the conditions stated for determining operation seem quite dated. There is no mention of modulation through interconnection by wireless means to other devices than a microphone such as a camera or other sensor or programming. With the proliferation of multi-role devices using software defined technology, the device could change from being compliant to non-compliant in an instant. Modern equipment can even be reconfigured remotely.

In addition, if I sell or even pass on a device to another amateur for them to modify, I may then be breaching section 12 for supply. The amateur radio club gatherings known as “white elephant sales” are a good example of such activities.

I therefore propose that an additional exemption be created specifically for amateurs in Part 8 to permit them to possess and supply potentially non-standard equipment for the purposes of pursuing their hobby because as experimenters, they use their technical knowledge to abide by the conditions of their licence, avoid interference and address any issues that arise.

Page 8 section 15, Prohibition – causing emissions and the EMC standard.

Under international standards arrangements EMC standards are developed to manage the emissions of non-intentional radiators. Transmitters, intentional radiators, have product specific standards which have clauses to cover unwanted emissions and case radiation.

I believe the word “transmitter” has been used here in error and should be replaced by “device”, because the requirement for transmitter/s/s to comply with the ACMA's EMC arrangements is generally not required (ref Section 2.6 of the EMC Labelling Notice) unless said transmitter is/are incorporated into a device that has some functionality when the transmitter's is/are not operating such as a mobile telephone in “flight mode”. In any event, the word device is all encompassing for such functionality.

Repetitive text

The following text is repeated at sections 12 (3b), 15 (3b), 15 (3c) 16 (6b), 16 (6c), 17 (3b), 22 (3b), 26 (3b), 28 (1b) and 29 (2b) and just makes the document harder to read.

- (i) trade or commerce between Australia and places outside Australia; or
- (ii) trade or commerce among the States;
- (iii) trade or commerce within a Territory, between a State and a Territory, or between two Territories;
- (iv) the supply of goods or services to the Commonwealth, to a Territory or to an authority or instrumentality of the Commonwealth or of a Territory;
- (v) the provision or use of a postal, telegraphic, telephonic or other like service;
- (vi) the defence of Australia;
- (vii) the operation of lighthouses, lightships, beacons or buoys; or
- (viii) astronomical or meteorological observations; or
- (ix) an activity of a constitutional corporation; or
- (x) banking, other than State banking; or
- (xi) insurance, other than State insurance; or
- (xii) weighing or measuring.

Surely those items could be stated up front in a “specified activities” section and referenced each time to simplify these rules.

Due to the number of consultations released at the same time by the ACMA, I have been unable to spare more time on this one, but I do hope that the rules eventually lead to the ACMA standards arrangements becoming less complicated and confusing so that the considerable expense to individuals and industry of rectifying inadvertent product non-compliance is averted. I even hope for a return to more closely aligned equipment supply regulation between Australia and New Zealand, as it was in earlier times under the Trans-Tasman Mutual Recognition Arrangement. (TTMRA)

Yours Sincerely

Noel Higgins (VK3NH)

Director – Analyse Solve & Test Pty Ltd.