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The Manager
Spectrum Licensing Policy Section
Australian Communications and Media Authority
PO Box 13112
Law Courts
Melbourne, VIC 8010

28 March 2021

Re: Proposed changes to amateur licensing arrangements

Dear Mr Brody,

I would like to make the following submissions on issues 1 (licencing arrangements), 2 (class licence draft) and 7 (overseas qualified amateurs). My submissions are made from a personal perspective and are not representative of any organisation.

Issue 1 - Licencing arrangements

I generally support the aims of Option C, with a class licence authorising operation of non-assigned stations, provided a number of significant and material changes are made to preserve operating privileges and protections of the extant Apparatus Licence. **If these changes are not adopted, then I recommend that Option A (Apparatus Licencing) is retained.**

I currently hold an Australian (VK) advanced amateur radio licence as well as a New Zealand (ZL) licence. New Zealand's General User Radio Licence (GURL) for Amateur Radio Operators¹ approach works well. The administrative overhead of maintaining my ZL licence is close to zero, and any changes I need to make are self-service through the Radio Spectrum Management (RSM) website. RSM have managed to cover licencing and spectrum allocations into a five and a half page GURL, and I think that sets the benchmark for regulatory efficiency.

I do not support having call signs managed, including operation of a registry, by a third party.

- Call signs are a fundamental part of amateur communications, more so than for land mobile. There is no backing registry (i.e. aircraft or vessel) and so the radio licence register is of prime importance for the operation of the Amateur Service.

¹Replacement Notice—Radiocommunications Regulations (General User Radio Licence for Amateur Radio Operators) Notice 2017

- The New Zealand approach² of having Approved Radio Examiners (ARX) issue call signs that are then administered by RSM is an approach I support. This allows for more than one ARX-equivalent to do the task as delegates of an internationally-recognised government-operated registry.
- In the Australian context the ARX function could be performed by multiple organisations such as the Australian Maritime College or the Wireless Institute of Australia, or by accredited persons (just as is the case for frequency assignment).
- The public call sign registry should continue to be operated by the ACMA, as “ownership” of the registry by the radiocommunication regulator is the accepted norm world-wide. Registries in Canada, New Zealand, the United Kingdom and the United States are all operated by government entities, even where call sign allocations are performed by agents of the radiocommunication regulator.

Issue 2 - Class licence draft

I support in general the content of the draft Class licence, with the exception of the deeply flawed “no interference, no protection” basis that is proposed.

Call sign management and definitions of terms

- I suggest that the definition of “call sign” in the draft class licence be removed and replaced by the definition in the *Radiocommunications Licence Conditions (Amateur Licence) Determination 2015* (the “Amateur LCD”). Reference to specific service providers or delegates in a class licence is not consistent with reduced legislative burden—why set the document up to require re-issue upon a change of contractor?
- I think that there needs to be a compelling reason not to carry definitions over from the Amateur LCD to the draft class licence. Maintaining consistency with established terms will smooth any transitions that take place, and where possible terms from Article 1 of the RR should be used.
- I propose that footnote (3) to Section 4 *Definitions* is updated to reflect current Australian geographic references (GDA94), along with any latitude and longitude references. The August 2020 update of *Australian spectrum map grid 2012* points out that the ACMA updated the datum in its GIS from AGD66 to GDA94 in September 2015. There is no need to retain reference to ADG66—hopefully this was a copy/paste from the Amateur LCD. In any case, a discrepancy of 200 m between ADG66 and GDA94 is not particularly significant on a radius of 2000 km.

Spectrum protection

An amateur operator should be free to use spectrum that is not occupied by another amateur operator when using a primary allocation, or by a primary user or amateur operator when using a secondary allocation (the principle of Articles 4 and 5 of the RR). I recommend that Section 10 is redrafted to limit the scope of what is considered harmful interference.

²Radio Operator Certificate and Callsign Rules [NZ RSM]

The proposal, in the Consultation Paper, that states:

Amateur stations authorised under the proposed class licensing arrangements would allow amateur users to operate on a 'no interference, no protection' basis that is typical of class-licence arrangements. This means that a person is authorised to operate an amateur station under the class licence on the condition that it does not cause interference to other devices and services, and will generally not be afforded any protection, should it experience interference.

significantly degrades the spectrum protection currently afforded amateur operators in Australia.

- The Amateur Service is primary in Region 3 and Australia for eight MF/HF bands, two VHF bands, and five microwave bands. The *Australian Radiofrequency Spectrum Plan 2017* and Article 5 of the *ITU Radio Regulations* (RR) provide specific mention of the Amateur Service, and this needs to be retained if a class licence is adopted for the Amateur Service.
- The purpose of primary and secondary allocation is to provide protection from interference, and these are provided for the aforementioned services that are both licenced through class licences and have specific treatment in the RR. The wording of the proposed Amateur class licence is not consistent with Sections 5.28 through 5.31 of Article 5 of the RR:

3) *Stations of a secondary service:*

- a) *shall not cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date;*
 - b) *cannot claim protection from harmful interference from stations of a primary service to which frequencies are already assigned or may be assigned at a later date;*
 - c) *can claim protection, however, from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date.*
- Amateur radio operators need the protection afforded by primary and secondary licences to resolve interference. Interference regularly occurs from unintentional radiators (e.g. broadband over power-line³, faulty high voltage insulation on power lines⁴, EMC failures⁵) and by intentional transmitters operating outside of licence conditions in Australia and overseas⁶.

³Aurora breach during internet trials [ABC News]

⁴MMI005 Control and prevention of television and radio interference in 11kV-132kV overhead power lines [Endeavour Energy]

⁵Radio Frequency Interference (RFI) [ARRL]

⁶Monitoring System R3 [IARU]

- It appears to me that the drafters of this proposed class licences have used the CBRS and LIPD class licences as a template, and not the *Radiocommunications (Aircraft and Aeronautical Mobile Stations) Class Licence 2016* and *Radiocommunications (Maritime Ship Station — 27 MHz and VHF) Class Licence 2015* that would have been more appropriate.
- The Amateur Service (Article 25 of the RR) should be treated the same as the Aeronautical Service (Chapter VIII of the RR) and Maritime Service (Chapter IX of the RR). I note that the word “interference” does not appear in the maritime ship or aeronautical class licences, as presumably sections 192, 194 and 197 of the *Radiocommunications Act 1992* are sufficient.

The current wording of Section 10(1) in the draft class licence would prevent operation in the 433 MHz and 2.4 GHz bands if there was any interference with Low interference potential devices—is this really the intent? Similarly, if there is interference from an unlicensed third party or from faulty equipment transmitting out of band then why should amateur operators “not be afforded any protection” when other users⁷⁸ with primary and secondary allocations in Australia do?

Radio procedure proposals

I propose the following changes to align with international practice and the ITU Radio Regulations:

- The interval for repeating call signs specified in Section 8(2)(c) is too short. I suggest that the ten-minute period be extended to fifteen minutes, which is consistent with the NZ GURL, and the RR sections 19.17 (“as frequently as practicable” and “at least hourly”) and 29.5 (“at short intervals”).
- The adoption of the class licence is an opportunity to remove the restrictive requirements to transmit a call sign at the start and end of a transmission (or series of transmissions). Other jurisdictions have relaxed this to a minimum period, or to the end of a transmission. This does not preclude amateur operators using call signs more frequently by convention.
- Some digital modes of operation, such as Digital Mobile Radio (DMR, an ETSI standard for Land Mobile radio that has been adopted for Amateur use), do not support alpha numeric call signs. Amateur radio operators around the world have adopted a numerical identifier system⁹ that maps call signs to numerical identifiers. I suggest that the call sign wording in the proposed class licence have a new section (3) that allows for alternative identifiers, provided these uniquely identify the station transmitting in a way that anybody can verify.
- The type of licences that Tables A through C referred to are stated in section 12, but it would aid readability if the captions for these tables also reflected the licence type. This would be consistent with the Schedule titles in the extant Amateur LCD.

⁷Tracking down that interference [Critical Comms]

⁸ACMA tracks down interference [Critical Comms]

⁹<https://www.radioid.net/>

Issue 7 - Overseas qualified amateur operators

I do not support the current *policy* where amateur operators that have an overseas qualification are required to obtain an Australian AOCPP after twelve months. This is contrary to CEPT Recommendation T/R 61-02 and the *Harmonised Amateur Radio Examination Certificate* (HAREC) principles. Australia is listed in Table 2 of T/R 61-02 as having AOCPP(A) equivalent to HAREC.

It is difficult for me to see how the change to require further testing is consistent with reduction in regulations.

The consultation document states that Australian amateur radio qualifications comply with Section 25.6 of the RR and the minimum qualifications specified in Rec. ITU-R M. 1554-1.

- If overseas qualifications that are recognised through CEPT or bilateral mutual recognition are acceptable for up to one year, why is there the need to obtain an AOCPP from AMC?
- The T/R 61-02 Examination Syllabus detailed in Annex 6 of the recommendation is much more extensive than the very brief list of topics in Section 6 of M. 1554-1, and so the concerns expressed in the final paragraph of the "Verification of qualifications" section in the consultation document is unfounded—HAREC provides that means of verification.
- My New Zealand Radio Operator's Certificate of Competency states:

The competency requirements to which this certificate relates accord with the International Telecommunications Union Recommendation ITU-R M. 1544, and are further prescribed in Schedule 4 to the Radiocommunications Regulations 2001. The passed examination corresponds to the examination described in CEPT Recommendation T/R 61-02 (HAREC).

As I do not hold an AOCPP I cannot verify the wording that the ACMA uses for the AOCPP. My ZL and VK licences both state that the licences meet the requirements of CEPT Recommendation T/R 61-01, so I presume that the wording is similar.

- I sought a copy of the agreement between CEPT and ACMA giving effect to T/R 61-01 and T/R 61-02 and was provided a copy of the agreements themselves and advised that this is all that is needed to implement the agreement. Has the ACMA consulted with CEPT about the proposed changes to licencing and qualification recognition of amateur operators from overseas?
- Does this mean that CEPT, at their discretion, could remove Australia from Table 2 of both agreements in response to the position taken "as policy" by the ACMA?
- Such action would be detrimental to the interests of Australian amateur radio operators operating overseas on a temporary or permanent basis.

I propose the following changes to policy:

- Overseas operators that have a qualification referred to in T/R 61-02 or that is explicitly recognised by mutual agreement shall be deemed to hold an AOC(P)(A). The tables hosted on the ACMA website¹⁰ provide this cross reference. This deeming would hold even if the operator moves permanently to Australia, and if he/she acquires Australian citizenship.
- An operator can only use an overseas qualification from a country where they have citizenship (or had citizenship prior to obtaining Australian citizenship) or habitually reside (for visitors). This is to prevent “qualification shopping” by people that are not *bona fide* travellers or immigrants.
- An overseas operator that is in Australia for more than ninety days is to obtain an Australian (VK) call sign and use that call sign from that time forth, provided the issuing of call signs is performed in a timely manner. This would apply to people that have immigrated (such as myself), ex-pat workers on assignment to Australia, and for people on long holidays. If there are delays of more than a week in the issuing of call signs to visitors/migrants then a longer grace period of operation under “home” calls should be considered.

Thank you for the opportunity to respond to the consultation regarding non-assigned amateur stations. I hope that regulatory simplification can be achieved, but not at the expense of long-standing administrative and spectrum protections that amateur operators have enjoyed to date.

Yours faithfully,



Dr David Ingram
VK4TDI

¹⁰Overseas amateur visiting Australia class licence [ACMA]