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Ms Maureen Cahill
General Manager
Communications Infrastructure Division
Australian Communications and Media Authority
PO Box 78
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Dear Maureen

ACMA file reference ACMA2012/199

Trial of the use of higher transmitter output power by amateur advanced licensees

I refer to your letter of 9 August 2013 advising of the ACMA's decision to not to put in place permanent regulatory arrangements for the use of higher transmitter output power by amateur Advanced Licensees.

As you would be aware, this decision is a disappointment to the WIA and many Advanced Licensees, particularly those that participated in the Trial.

In response, the WIA wishes to make a number of observations and to ask a number of questions concerning the ACMA's decision. Our observations follow the order of the four reasons provided in your letter, and also encompass the summary of findings in the attachment to that letter.

1/
The ACMA's view that 297 trial participants out of 10,690 Advanced Licensees was "not substantial" is a specious comparison, particularly in view of the fact that the WIA indicated, prior to the Trial's announcement, that an estimated 400-450 might be interested. Neither the ACMA, nor the WIA wrote to all the Advanced Licensees to advise them of the trial. Hence, the "whole target audience" was not directly advised and could not possibly have been engaged.

There are fewer individual Advanced Licensees than the "... *total number of 10,690*" quoted, as we are sure you would be aware. That figure includes beacons, repeaters, amateurs holding multiple licences, lapsed licences etc. Checking the ACMA's most recent database CD, there were 9949 individual licensees at the end of August 2013. The figure as at 20 May 2013 would not have been greatly different.

The Institute believes that the ACMA expected that the likely numbers of applicants would be only a small fraction of all individual Advanced Licensees. In the discussions between ACMA staff and the WIA prior to your proposal to conduct the Trial, the Institute, in providing some context by way of outlining the nature of amateur radio and the diversity of activities that amateurs engage in on the HF bands, clearly conveyed that indicative numbers of those who would possibly take out the licence variation to be 400 to 450.

Additionally, the Institute is certain that there would be some amateurs from that group that would object to paying the fee for the licence variation, others would not spend money on high power equipment for a Trial with an uncertain outcome, and others would sit on the fence.

Thus, the Institute believes the ACMA should not have been surprised or disappointed at the number of trial applicants. The ACMA did not convey to the WIA its expectations about the participation in the Trial.

Many amateurs maintain their licences, even though they're inactive. Most are active when first licensed and then go through periods of inactivity, returning to more consistent on-air activity later in life. At any one time, there is a considerable cohort simply maintaining their licence. Hence, as neither the ACMA nor the WIA wrote to all Advanced Licensees to advise of the High Power Trial, only a comparatively small cohort of Advanced Licensees had the opportunity to learn of the trial through the Institute's traditional channels of its website, the weekly amateur band broadcasts and Amateur Radio magazine.

On the WIA's estimate of the available target audience (400-450), the percentage participation was very high, from 66% at minimum to 74% at maximum.

The WIA notes your observation that “. . . *some participants that took part in the desk-based audit . . . had not used Higher Power*”, and that the ACMA then concluded that “. . . *the figure of 297 applicants is not an accurate reflection of the number of Advanced Licensees that actually used Higher Power.*” Unfortunately, “some” is not quantified, even in Attachment A to your letter of 9 August 2013. On page 1, concerning the desk-based audit,

“. . . staff were advised that the reason why the ACMA had not received a response to its letter was because the licensee had not used the Higher Power authorisation.”

On page 2, concerning interference complaints,

“One licensee advised ACMA staff that although they had obtained the Higher Power authorization they did not intend to use it.”

The WIA can only assume that the two cases are not the same person, and that only two desk-based audit participants declined to use high power. If so, they represent only 0.67% of 297 applicants.

2/

The WIA views the ACMA's dismissal of the WIA's submission to be unwarranted.

Firstly, the ACMA's criticism that “*The limited number of contributions is also indicative of limited active engagement from trial participants*” leads us to believe that the ACMA had an underlying expectation that the number of respondents to the WIA's call for comments should have been greater, but your letter of 9 August 2013 has not quantified this.

The submission conveyed the results of the Institute's request for comments on the Trial, publicised via the WIA broadcast and website in early 2013. The limited number of responses is indicative of the limited publicity period. The WIA had no idea of the number of trial participants, or their callsigns – and understands that the ACMA was constrained in providing that information – and so the WIA was unable to write to participants in order to conduct a more effective survey. These facts were clearly stated in the submission's preamble.

Attachment A to your letter of 9 August 2013 reveals that the ACMA had a variety of expectations regarding “*active participant engagement in the trial assessment process.*” However, the WIA believes the ACMA did not adequately articulate its expectations, which could have been included in the survey questions when comments were requested. As a result, those who responded to the survey could not address unknown expectations in their comments, and neither could the WIA in the submission. In particular, the issue of demonstrating “*broader benefits to the community*” was not raised by the ACMA; it implies that the ACMA expected the WIA to canvass this issue.

The Institute has concluded that, in part, the ACMA has based its decision on its expectations not being met, but in the WIA's opinion those expectations were not adequately articulated before or during the Trial and the Trial assessment.

In Attachment A, the WIA notes the ACMA's particular criticism concerning a comment from one survey respondent, who wrote:

“I think the use of 1kW is academic in a lot of cases, as those with amps capable of 400w or more are using it in any case.”

The Institute believes this is ambiguous and that the respondent's meaning is not entirely clear. As you would be aware, there is no restriction on Advanced Licensees using amplifiers capable of 400 watts (PEP) as this meets the requirements of the Advanced LCD. In technical and engineering considerations, an amplifier capable of more than 400 watts, when operated only at 400 watts maximum (colloquially, “loafing along”), will generally have a longer life than an amplifier rated at 400 watts maximum that is operated at that rating.

The other possible interpretation of the above assertion is that some licensees with amplifiers rated for operation above 400 watts (eg. 1 kW) may be operating them at powers up to full rating and thus in breach of the LCD. At best, the evidence is anecdotal and thus hearsay. It may arise from some boasting by operators, but it is impossible to put factual figures to the number of operators (or even a likely number) running powers in breach of the LCD. The above statement hardly constitutes evidence of wholesale, or even limited, breaching of the LCD by Advanced Licensees.

The Institute acknowledges that there are “*... implications for those licensees' compliance with ... the Apparatus Licence LCD*”, but compliance with the Apparatus Licence LCD pertains to all amateur operators.

3/

It is apparent to the WIA that, of the 90 applicants audited, some Advanced Licensees' knowledge and awareness of the EME regulatory requirements did not meet ACMA expectations. However, the number was limited and the Institute's view is that there is no proper foundation to take that percentage (~19%) and extrapolate it across either the 297 trial participants, or the whole cohort of Advanced Licensees.

The WIA notes that the ACMA's expectations concerning amateurs' awareness and knowledge were unarticulated before or during the Trial, up to the assessment period.

From discussion with ACMA staff during the trial assessment period, it became apparent that a limited number of Advanced Licensees participating in the desk audit had apparently misunderstood, or misinterpreted, the requirements set out in the EME regulations. At the time, the WIA pointed out that the regulations and the supporting guidelines were lacking in clarity, coverage and accessibility. ACMA staff acknowledged this. We also raised this issue at the meeting of 5 August 2013.

The Institute looks forward to working with the ACMA to revise and update the EME regulatory documentation and associated guidelines, to improve the clarity and accessibility of the language, and the scope of their coverage.

While the WIA notes that the ACMA has maintained EME regulatory documentation and related explanatory material on its website for many years, which has occasionally been updated, as well as including Advisory Notes concerning the Apparatus Licence LCD on Amateur licences, nothing further has been done by the ACMA to raise amateur licensees' awareness of their obligations regarding compliance with the EME regulations.

Here, too, the ACMA appears to have based its decision on unarticulated expectations that have not been met, and in the WIA's view, has placed unwarranted significance on the number of non-complying desk-audit respondents.

It is noted that the ACMA wrote to all 90 participants involved in the desk audit, advising them of the outcome of the audit assessment. It is noted also that the ACMA wrote to the 17 participants who assessed the compliance level of their stations incorrectly, inviting them to provide new records that demonstrate compliance with the current EME requirements.

4/

The WIA is disappointed with the ACMA's research into the regulatory policy considerations concerning permissible amateur licence power limits in other countries. It was too limited in scope to make salient observations from which to draw conclusions that would usefully inform the assessment of the Trial.

As the research was confined to four countries with quite disparate Radiocommunications regulatory regimes – Canada, Ireland, New Zealand and the UK – the WIA has formed the view that it was too limited in scope. The Institute notes that Japan, the USA and many European countries, all having higher population densities than Australia, permit amateur power levels ranging from 750 W to 2000 W, yet have government EME regulatory standards in place with human exposure level limits not dissimilar to the ARPANSA standard.

The Institute is aware that there isn't universal interest in operating with higher power than currently permitted. However, for some amateurs, it is the *availability* of higher power under their licence that is important as it affords the *opportunity* to experiment and learn about the technology, its applications and the advantages that may be obtained. After all, experimentation and self-training are at the very heart of the ITU definition of amateur radio.

Questions

In order for the WIA to fully understand the ACMA's decision, and to plan and implement a program to educate the amateur radio community about its obligations regarding compliance with the regulations on electromagnetic emissions, we seek answers to the following questions:

Q1. As "an evidence based regulator", is the ACMA's concern with the use of higher power by amateurs based on a formal risk assessment/management methodology?

(a) And if so, how did the outcome/s derived from that methodology influence the ACMA's decision?

Q2. Noting that the ACMA wrote to 90 Advanced Licensees that participated in the Trial, what was the basis and methodology used by the ACMA in choosing these 90 participants, and:

(a) what criteria were used to conduct the assessments?

Q3. What level of compliance from the desk audit would have been considered acceptable?

Q4. Noting that, of the 90 licensees that were audited, 17 did not meet the ACMA's expectations on compliance, would the ACMA please provide a breakdown of those 17 into defined categories?

Q5. Noting that the ACMA wrote to those 17 participants inviting them to provide new records to demonstrate compliance with the current EME requirements, what has been the outcome?

Q6. Concerning station inspections in relation to the Trial:

(a) how many were conducted?;

(b) in what states?; and

(c) would the ACMA please provide details of the outcomes?

General Comments

The WIA acknowledges the ACMA's general concern about some amateurs' lack of awareness and knowledge of their licence conditions and their obligations under EME compliance requirements.

However, the WIA is of the view that the decision taken following assessment of the Trial was not wholly warranted as it appears to have been based on specific expectations of the ACMA not being met, yet those expectations were never articulated to the WIA, the Trial participants or the amateur radio community at large.

The WIA believes reasons advanced by the ACMA, taken separately or together, do not provide a compelling argument to support the decision.

The WIA believes that the ACMA could have justifiably acted to put in place permanent regulatory arrangements for the use of higher transmitter output power by Advanced Licensees, conditional upon implementing an awareness and education strategy conducted by the ACMA and the WIA acting in concert.

Noting that discussions with the ACMA about making regulatory arrangements to enable Australian amateurs' to use transmitter powers higher than 400 W (PEP) occurred over some years, the WIA acknowledges the ACMA's courageous decision to propose the High Power Trial in December 2011.

Likewise, the WIA appreciates the time and effort taken by senior staff from the ACMA to discuss the decision in detail on 5 August 2013, and to afford the Institute the opportunity to make another approach in about 12 months' time, as requested.

The Institute looks forward to working with the ACMA to develop and implement a communications strategy to improve amateur's awareness and knowledge of their licence conditions and compliance with EME requirements.

The WIA looks forward to your response.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Phil Wait', with a stylized, flowing script.

Phil Wait
President

Cc: Mr Allan Major, Executive Manager, Convergent Regulation Branch, ACMA
Ms Anne Chadwick, Policy Analyst, Industry Partnerships Section, ACMA