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28th November 2022

ACMA

Attn: SLPS Consultations

Submission of comment

Proposed amateur class licensing arrangements and higher power operation - consultation 31/2022

Dear SLPS @ ACMA,

I wish to make comment and show my unequivocal full support for the proposed Amateur Class Licensing arrangements to allow the use of higher power and request the ACMA alter the act covering Amateur Communications to allow such.

Consultation Questions 8 & 9 (Case by Case & Scientific Purposes) - Responses.

Firstly, I do not think a narrowly defined *case-by-case* approach or *scientific purposes* only is the correct approach criteria for allowing the higher power limit (eg: 1,000 to 1,500 Watts)

The use cases under the “scientific” banner would appear on the surface to be rather limited, and therefore would more than likely not demonstrate to ACMA the true interest and demand and give a false indication of “low demand” in actual interest and want by the VK Amateur community, which is “yes we want the higher power limit of 1,000 Watts or higher”

It could be argued that VHF usage and above is more “scientific/experimental in nature” given it likely involves EME/Moon-Bounce, meteor scatter, microwave, SSTV, ISS, Satellite, etc. But these are usually somewhat specialised in the mode of operation used, and using this as a category only would exclude for example HF, which communication is more typically general (voice/CW) in nature.

The higher power limit is very useful though and certainly warranted in situations of inter-continental ionospheric and trans-equatorial propagation experiments usually at 50 MHz and below.

A case by case-by-case approach likewise would lead to lengthy approval process, a feeling of exclusivity and unfairness having to meet some as yet unspecified criteria, and lead to too much administrative overhead for both the applicant and the ACMA. To reduce this, the ACMA would need to make it broad in nature for applicants to be able to meet the requirement and not make it too stringent a criteria to be able to meet

The above two categories, I do not recommend or support.

Consultation question 10:

What are your views on the medium-term proposal to allow Advanced amateurs to apply for authorisation for other higher power use-cases under certain conditions? Please provide brief information to help us understand your view.

Response:

This "Certain Conditions" category to me feel similar to the Case by Case scenario, but with a broader brush.

Certain conditions/use cases would be:

Remote Station – station is located far away from anywhere (rural, farm station, isolated island) and would well utilise extra power for more reliable communications and during times of emergency.

EmCOMM – Emergency Communications - The Amateur Service provides a valuable community service during times of emergency (bushfires, floods, storms, etc), lives at risk, or natural disaster. The higher power limit during these situations is a no – brainer. A higher power limit means the transmitting station has more chance of being (clearly) heard.

Volunteer - Coast Guard (Marine) Aviation, and specific Radio channel monitoring stations. These stations, while somewhat dedicated/specific in nature and focussing on the particular area of interest of the Operator (Marine, Aviation, Land, etc) could also assist in emergency communications, and a higher power limit would assist in the station being able to punch through any propagation issues or high noise floor at the receiving end by having the higher power limit would provide an extra level of fallback and communications assurance.

Contesting – Higher power limit is surely needed to be able to compete during HF contesting to be heard above other stronger international stations. Even New Zealand Amateurs are allowed to use 1,000 watts and are often heard working very exotic DX stations that we simply can't get through to with our paltry 400 Watt limit in VK.

Our 400 Watt power limit is widely viewed in the local and international Amateur community as "a joke"

Consultation question 11:

Is a 1kW power limit appropriate? Why or why not? If not, what alternative do you propose and why?

Response:

Raising the current paltry 400 W PEP limit to at least 1,000 Watts PEP is a step in the right direction.

I do note some countries allow \$1,500 and some even more.

The higher power limit is particularly needed with operating the newer digital modes and during such modes of operation/use cases such as:

HF and HF Contesting – VK Amateurs are often at a major disadvantage during contesting due to our low 400 Watt limit and often we are trounced by international stations running 1Kw or more and in

many cases imply not heard by the receiving station. This severely hampers the VK based station and its ability to be efficient during contesting by having to call too many times and or not be heard due to lower power signals.

HF Schedules (Skeds) and other regular communications by amateurs traveling by sea, land (rural/outback) air, and other means to very remote locations on land or at sea. Whilst not so much an issue in aircraft given the typical height advantage, a low powered station is just that. A low powered station, who will be harder to hear by all. For these stations, a higher power limit could be the difference between being heard and not – potentially a life-or-death situation.

EmCOMM – Emergency Communications - The Amateur Service provides a valuable community service during times of emergency, lives at risk, or natural disaster. The higher power limit during these situations is a no – brainer.

Consultation question 12:

Are there particular bands that you consider should or should not be able to be accessed for Advanced amateur higher power operations? Which band(s) and why?

Response:

No, I do not personally feel there needs to be a band “top out” where at that band or higher, a higher power limit would not be permitted.

Consultation question 13:

What use-cases would require stations to operate at power limits for Advanced amateurs higher than the 400W currently permitted?

Consultation question 14:

For each use-case, please briefly answer:

- a. Why is a higher power limit needed?***
- b. What are the specific limitations of the current power limit?***
- c. What power level is required?***
- d. What is the technical description of this power level requirement (for example, transmitter output power, emission mode)?***
- e. What amateur service frequency bands would be used?***
- f. How often will a higher power level be required?***
- g. What is the location of the station?***

Use Case #1:

(Very) Remote Station – station is located far away from anywhere (rural, farm station, isolated island) and would well utilise extra power for more reliable communications and during times of emergency, poor propagation and during contesting.

- a. Why is a higher power limit needed?** Due to “very” remote station geographical location
- b. What are the specific limitations of the current power limit?** Likely inability to reach distant stations due to distance or propagation issues
- c. What power level is required?** Suggest 1000 to 1500 watts
- d. What is the technical description of this power level requirement (for example, transmitter output power, emission mode)?** 1000W PEP. SSB, CW, AM
- e. What amateur service frequency bands would be used?** Varies on a station by station basis – likely between 1.8MHz through 1,200 MHz
- f. How often will a higher power level be required?** Almost full time
- g. What is the location of the station?** Likely 500KM plus from nearest populated town

Use Case #2

EmCOMM – Emergency Communications - The Amateur Service provides a valuable community service during times of emergency (bushfires, floods, storms, etc), lives at risk, or natural disaster. The higher power limit during these situations is a no – brainer. A higher power limit means the transmitting station has more chance of being (clearly) heard.

- a. Why is a higher power limit needed?** During times of Emergency Communication provision – natural, man made disaster, bushfire, flood, typhoon,
- b. What are the specific limitations of the current power limit?** Likely inability to reach distant stations due to distance or propagation issues or RF interference due to weather.
- c. What power level is required?** Suggest 1,000 to 1,500 watts
- d. What is the technical description of this power level requirement (for example, transmitter output power, emission mode)?** 1000W PEP. SSB, CW, AM, Digital
- e. What amateur service frequency bands would be used?** Varies on a station by station basis – likely between 1.8MHz through 24Ghz
- f. How often will a higher power level be required?** Likely would be full time
- g. What is the location of the station?** Station likely to be local, (very) remote depending on disaster or highly mobile, and working via solar, generator. Other off grid power solutions etc.

Use Case #3

Volunteer - Coast Guard (Marine) Aviation, and specific Radio channel monitoring stations. These stations, while somewhat dedicated/specific in nature and focussing on the particular area of

interest of the Operator (Marine, Aviation, Land, etc) could also assist in emergency communications, and a higher power limit would assist in the station being able to punch through any propagation issues or high noise floor at the receiving end by having the higher power limit would provide an extra level of fallback and communications assurance.

- a. Why is a higher power limit needed?** *During times of Volunteer Communication provision – station may be providing service to Marine, Aviation, Land based stations in very remote locations.*
- b. What are the specific limitations of the current power limit?** *Likely inability to reach distant stations due to distance or propagation issues or RF interference due to weather.*
- c. What power level is required?** *Suggest 1,000 to 1,500 watts*
- d. What is the technical description of this power level requirement (for example, transmitter output power, emission mode)?** *1000W PEP. SSB, CW, AM, Digital*
- e. What amateur service frequency bands would be used?** *Varies on a station by station basis – likely between 1.8MHz through 50Mhz*
- f. How often will a higher power level be required?** *Certainly would be full time*
- g. What is the location of the station?** *Station likely to be local or sited in geographically remote location with good HF reception and away from as much RFI/EMI as possible.*

Use Case # 4

Contesting Station – Higher power limit is surely needed to be able to compete during HF contesting to be heard above other stronger international stations. Even New Zealand Amateurs are allowed to use 1,000 watts and are often heard working very exotic DX stations that we simply can't get through to with our paltry 400 Watt limit in VK.

- a. Why is a higher power limit needed?** *During times of Contesting a higher power limit increases station reach and efficiency by not having to call too many times and or repeat one's self due to remote station not being able to hear you above the noise floor or during "contest pileups"*
- b. What are the specific limitations of the current power limit?** *Regular inability to reach distant stations due to distance, propagation, pileup issues, or RF noise floor interference.*
- c. What power level is required?** *Suggest 1,000 to 1,500 watts*
- d. What is the technical description of this power level requirement (for example, transmitter output power, emission mode)?** *1000W PEP. SSB, CW, AM, Digital*
- e. What amateur service frequency bands would be used?** *Varies on a station by station basis – likely between 1.8MHz through 430Mhz*
- f. How often will a higher power level be required?** *Certainly would be full time*
- g. What is the location of the station?** *Station likely to be local/suburban as Ham operator would be at home base, or in some occasions mobile/portable.*

Use Case # 45

General Interest – Some operators prefer the ability to operate on higher power (QRO) in the same manner that other stations like to operate low power (QRP) Neither method of operation is right or wrong, it comes down to personal choice. And just because a station prefers operation at a higher power limit, it does not make it automatically wrong.

- a. **Why is a higher power limit needed?** During times of station operation a higher power limit increases station reach and efficiency by the emission of a stronger signal. Given the highly transient nature of propagation, it may mean the difference between being able to work an exotic remote station or missing it altogether.*
- b. **What are the specific limitations of the current power limit?** Regular inability to reach distant stations due to distance, propagation, pileup issues, exacerbated by the 400 W PEP low power limit in Australia*
- c. **What power level is required?** Suggest 1,000 to 1,500 watts*
- d. **What is the technical description of this power level requirement (for example, transmitter output power, emission mode)?** 1000W PEP. SSB, CW, AM, Digital*
- e. **What amateur service frequency bands would be used?** Varies on a station by station basis – likely between 1.8MHz through 430Mhz*
- f. **How often will a higher power level be required?** Certainly would be full time*
- g. **What is the location of the station?** Station likely to be local/suburban as Ham operator would be at home base, or in some occasions mobile/portable.*

I think I have written enough.

Based on the above I feel there is more than enough use cases and situations justifying the power increase, and I respectfully request ACMA reviews the current 400 Watt PEP power limit in Australia and at it's earliest opportunity raise the limit to at least 1000 Watts, to even 1500 Watts.

Best regards,

Paul Bourke

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