WIRELESS INSTITUTE OF AUSTRALIA

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2nd July, 2018

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

RE: Response to Consultation Paper: New approaches to amateur radio qualifications frameworks

To whom it may concern,

The Wireless Institute of Australia (WIA) Limited (ACN: 004 920 745) thanks the Australian Communications and Media Authority (ACMA) for the opportunity to respond on behalf of all amateur operators, whether members of the WIA or not, on the issue of amateur radio qualifications frameworks, a matter critical to the long term survival of the hobby.

The WIA through its membership directly represents over 25% of the licensed amateur operators within Australia and through approximately 150 WIA affiliated clubs throughout Australia, we represent over 45% of the licensed amateur operators. The Wireless Institute of Australia is the peak representative body for amateur radio in Australia and is recognised as such by the International Amateur Radio Union (IARU) and the International Telecommunications Union (ITU).

Amateur Radio learning and assessment is currently provided on behalf of the WIA and the ACMA through a geographically diverse network of clubs that almost 300 assessors and learning facilitators undertaking approximately 1000 assessments per year on a volunteer cost recovery basis.

The current arrangements were put in place approximately 10 years ago, time which has seen rapid changes in both technology, society and the ACMA's strategic intent.

We enclose herewith our submission entitled "Amateur Radio - The future of learning and assessment in Australia" for your consideration.

Despite the abridged consultation period the WIA received a total of 17 direct submissions from members of the WIA and others within the amateur community expressing deep concern for the approaches suggested in your consultation paper. These concerns and suggestions have been included within the WIA submission.

Key themes that resonate through all submissions received by the WIA is that our members and the broader amateur community strongly oppose any change to the amateur radio qualification framework that:

- results in a reduction in the social and community outcomes that amateur radio provides to approximately 14,000 Australian amateur operators, their clubs and the communities in which they operate; or
- exposes the hobby to further existential risk; or
- Imposes additional the barriers to entry for new operators or the barriers to advancement for existing operators

Should you wish to discuss any matter related this submission please contact the undersigned.

Kind regards

Justin Giles-Clark
President on behalf of the WIA Board

Attachment - WIA Submission - Amateur Radio - The future of learning and assessment in Australia

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Amateur Radio

The Future of Learning and Assessment in Australia

in response to

ACMA Consultation Paper:
New approaches to amateur
radio qualification frameworks

The Wireless Institute of Australia Ltd.

July 2, 2018

Contents

Executive Summary

The Wireless Institute of Australia (WIA) would like to thank the ACMA on behalf of its members for the opportunity to comment on its recently release consultation paper entitled "New approaches to amateur radio qualification arrangements" dated June 2018.

A brief (and as a result, narrow) consultation with our members has identified a number of key factors that are believed to be critical to the long term survival of the hobby and the continued delivery of social and community outcomes not only to the ~14,000 licensed individuals, assessors and learning facilitators but the many thousands of participants in community events around Australia that are supported by amateur radio each year.

This paper serves to outline these critical success factors and to identify areas where in our view the proposed arrangements may fail to deliver intended outcomes that are in the interest of all stakeholders.

Following this analysis we will present an alternate strategy that in our view will result in better outcomes for the regulator, amateur community and the broader community in general.

In order to achieve long term sustainable success with respect to Amateur Radio learning and assessment it is critical that the chosen framework ensures that both now, and in the future:

1. barriers to entry, both real and perceived are reduced including:
   a. Cost of licencing and examination
   b. Accessibility of licencing and examination both in terms of geographical accessibility and accessibility to those with disabilities

2. existential risks are managed such that all participants or would be participants in the hobby irrespective of location, are able to access suitable assessment services on an "on demand" basis in order to enter or progress through the relevant licence tiers in a self-determined manner;

3. the social and community outcomes provided by the ~200 amateur radio clubs, assessors and learning facilitators continue to be delivered and ensures that, to the extent clubs rely on training and assessment for revenue generation and member attraction, there is no negative impact;

4. creates pathways whereby the life skills learned through amateur radio and associated hobbies are able to be leveraged by younger participants in their future careers;

5. the regulator's objectives in terms of its international and local obligations and its publicly stated strategic intent is achieved;

6. a fair and equitable distribution of the costs associated with the operation of the functions required to manage the hobby amongst the participants in the hobby;

7. the amateur community is able to function in a self-determined manner without unnecessarily burdensome regulatory overhead and constraints;

8. The standing of operators holding an Australia issued qualification or certification under any future approach are not viewed in a negative light by regulators in other jurisdictions;

9. Innovation in learning and assessment is encouraged to ensure that operators are able to access learning and assessment products related to Amateur Radio and related disciplines using technologies and methodologies that are consistent with the best practice of the time.

10. Promotion of amateur radio and electrotechnology hobbies to the broader community is permitted in order to facilitate growth.

The only way in which these objectives can be met is through having a qualification framework that ensures that organisations involved in delivery are:

1. duty bound to support the interests of amateur radio and electrotechnology hobbyists, their local clubs and the community in general.

2. obligated to ensure that barriers to entry into the hobby are minimised.

3. contractually bound to perform the required functions at all times and to performance levels that are agreed with the regulator.

4. unencumbered by regulatory obligations that prevent or constrain innovation.

5. empowered to deliver elements of the amateur syllabus into the vocational market as they see fit.

6. empowered to deliver learning outcomes outside the amateur syllabus to the amateur radio and amateur electrotechnology community as they see fit.

7. are able to be fairly and reasonably compensated for the functions being performed to the extent that these functions are performed to the level required by the amateur radio and electrotechnology community.

It is our view that this can only be achieved with a solution that:

1. Divides the regulator's requirements into two specific functions:
   a. The delivery of learning and assessment (including RPL) under a contract of service; and
   b. The delivery of the statutory functions of call sign management, certificate issuance and licence management using a contract or delegation under the Act.

2. Ensures that there is an appropriate governance framework to ensure the regulators local and international obligations are consistently fulfilled.

3. Permits the participation of the existing cohort of organisations that support amateur radio and electrotechnology hobbies.

4. Delivers as a minimum, a non AQF qualification that meets the requirements of CEPT and HAREC with the learning and assessment outcomes developed and maintained in conjunction with those that represent amateur radio in Australia.

Summary of Approaches

The first three approaches identified below are those suggested by the regulator in the consultation paper.

The fourth approach is an alternate approach that seeks to deliver better outcomes for all stakeholders.

Approach 1 - An approved body to provide training, conduct examinations and issue certificates of proficiency through delegation under the Act.	If adopted, approach one would involve the regulator entering into an agreement with one entity in much the same way that the existing deed of arrangement that leverages the regulators right to delegate functions under the Act. This option is in essence the same model of delegation of functions that the regulator entered into with the WIA in 2009. The key variation between approach 1 and the current model is that an RTO rather than a Nominated Training Organisation (NTO) is mandated to manage the performance of assessors and learning facilitators and to provide general oversight of the assessment function.
Approach 2 - RTOs to provide training, conduct assessments and issue statements of completion (not as a delegate under the Act)	If adopted, approach two would involve the regulator entering into a contract of service with one or more RTOs to provide training and conduct assessments. The RTO would issue a statement of completion that would be accepted by the regulator as meeting the evidentiary requirements required to be granted an amateur station licence.
Approach 3 - RTOs to provide training and conduct assessments and issue statements of attainment for accredited qualifications on the Australian Qualifications Framework.	If adopted, approach three assumes that RTOs choose to deliver and assess units of competency that have been accepted into training packages as part of the AQF. This would occur outside any formal agreement with the regulator and would permit any RTO to deliver the relevant training. The statement of attainment for the relevant units of competency would be accepted by the regulator as meeting the evidentiary requirements required to be granted an amateur station licence.

Approach 4 - Approved RTOs, or other organisation(s) as approved by the regulator, that are focused on amateur radio and electrotechnology, conduct assessments and issue statements of completion. **ACMA delegate authority for call sign management and other incidental licencing matters to a single organisation through a contract or delegation under the Act.**	If adopted, approach 4 would require RTOs, or others learning and assessment organisation(s) that are selected by the regulator to be duty bound to support amateur radio and electrotechnology hobbies. The selected organisation(s) undertake the learning and assessment function and to issue statements of completion or RPL. If these organisations are RTO's and if deemed appropriate, they may seek the inclusion of some or all of the relevant units related to amateur radio into training packages and ultimately into the AQF if deemed to be appropriate. Similarly the same RTOs may choose to deliver existing material from the AQF into the amateur community. Statements of completion are then accepted by ACMAs delegate for the provision of licencing services/call sign allocation services as meeting the evidentiary requirements for licence in the amateur service and, to the extent that the statement of completion is not CEPT compliant, permit the issuance of an AOCP if so requested by the candidate.

Overview of Approaches

The table below seeks to demonstrate the 4 approaches considered by this paper and the extent to which each satisfies or fails to satisfy the success factor that has been identified as being critical to the long term growth of regulated amateur electrotechnology in Australia..

Critical Success Factor	Approach 1	Approach 2	Approach 3	Approach 4
Barriers to Entry	✓	✓	✗	✓
Existential Risk	✓	✓	✗	✓
Social and Community Outcomes	✗	✗	✗	✓
Engagement of Youth	✗	✓	✓	✓
Regulator's Objectives	✗	✗	✗	✓
Fair and Equitable Distribution of Cost	✗	✓	✓	✓
Self determination	✗	✗	✗	✓
International recognition	✓	✗	✗	✓
Innovation	✗	✓	✗	✓

The role of Registered Training Organisations

Background

In seeking to understand the impact the various approaches are likely to have on the hobby of Amateur radio and the social and community services that it provides it is important to understand the role of a Registered Training Organisation in the proposed approaches.

Registered Training Organisations (RTO) have evolved over the past 23 years into bodies that provide Vocational Educational Training (VET) that is consistent with the nationally coordinated VET system that was created through intergovernmental agreements between Commonwealth, state and territory governments in 1992.

Only RTOs deliver consistent, nationally accredited, quality-assured **vocational** education and training services that are accredited with the Australian Qualifications Framework VET qualifications.

In recent years, following consultation with stakeholders, reforms have been undertaken with four primary themes (https://www.education.gov.au/chronology-reforms-implemented) :

- Industry responsiveness
- Quality and regulation
- Funding and governance
- Data and consumer information

A review of the history of RTOs demonstrates that the key objectives of these organisations and the regulatory framework that surrounds them is, as is conveyed by the word "**vocational",** directed at particular occupations and the skills required to perform that occupation.

When considering the appropriateness of a RTO in Amateur Radio it is appropriate to consider first the definition of Amateur Radio.

Australia became a signatory to the Constitution and Convention of the International Telecommunications Union (ITU) on the 22nd of December, 1922.   Article 1.56 of the ITU Radio Regulations defines an amateur service as *"A radiocommunications service for the purpose of self-training, intercommunication and technical investigation carried out by amateurs, that is, by duly authorised persons interested in radio technique sole with a personal aim and **without pecuniary interest**".*

Casual comparison of the definition of an amateur service and the key objectives of RTOs identifies a dichotomy that must be understood and considered.

> *"RTO's focus on occupational outcomes (ie: tasks that are performed with pecuniary interest) while the amateur service is focused on personal objectives without pecuniary interest."*

What role <u>might</u> an RTO play in the amateur service ?

At face value there appears to be limited scope for RTOs in the amateur service for the reasons stated. This notwithstanding, a role may exist if we consider the reasons people have undertaken studies in amateur radio and any alternate value an RTO or like organisation may create.

One online amateur course provided on a volunteer basis within Australia reports that a significant percentage of people who have enrolled in the course have done so for vocational/career advancement reasons and not for the express purpose of obtaining an AOCP.   It is clear that new entrants into industry believe that the syllabus for amateur radio indeed has vocational value.

Similarly, amateur operators, whilst not wishing to gain a formal qualification, stand to gain from the involvement of an RTO through having the opportunity to consume units of study from the broader electrotechnology curriculum to for their personal development and advancement in the hobby. This is especially true of those seeking deeper understand of contemporary technologies.

The RTO process, which includes compliance and auditing, brings with it rigor that seeks to ensure a consistent outcome across multiple suppliers of services who are all delivering their outcome in different ways to different cohorts of individuals. Whilst it could be argued that this rigor is not required in an environment where the pursuit is one of a personal nature and without pecuniary interest, the underlying issue is that for any qualification to be valuable there must be a standard that all recipients of the qualification must achieve and in order to maintain this standard a number functions must be performed:

- Training of assessors and learning facilitators
- Accreditation and periodic auditing of assessors and learning facilitators
- Production and maintenance of learning and assessment material that is aligned with the approved syllabus
- Development and maintenance of the learning and assessment quality management system
- General oversight and quality control of the end to end learning and assessment process

The amateur operator qualification brings with it the opportunity to leverage the qualification to gain privileges that, if used incorrectly, may cause (and have caused) material harm to others in the broader community. The broader community expects their regulators to ensure that to the extent possible policies are introduced that protect the broader community from harm.

"To do anything less than vigorously defended the qualification standards devalues the qualification and places the community that amateur radio supports through its network of clubs, assessors and learning facilitators at risk."

The best outcome is therefore one where the rigor and opportunity associated with an RTO or like organisation is preferred to the extent that it can be achieved without the financial overheads that may increase barriers to entry (such as those associated with full compliance with the AQF).

Should the regulator provide learning and assessment ?

The regulator's published strategic intent describes its responsibilities as including:

- promoting self-regulation and competition in the communications industry, while protecting consumers and other users

Any attempt by the regulator to deliver learning and assessment services runs afoul of this responsibility as it would neither promote self-regulation or competition.

The question of whether competition is appropriate is explored in "Analysis of Approaches - Innovation".

Analysis of Proposed Approaches

Barriers to Entry

- *Cost*
  In approach 1, 2 and 4 the learning and assessment provider is not bound to deliver units that are auditable under the AQF.   For this reason the provider is also not bound to distribute the cost of compliance with the AQF to participants undertaking learning and assessment activities.

  Under approach 3, the learning and assessment organisation is reasonably bound to distribute the costs of AQF compliance related to the units being delivered to the amateur community.

- *Accessibility*
  In approach 1, 2 and 4 there are less hurdles for providers of learning and assessment to pass in selecting appropriate individuals to deliver learning and assessment outcomes.   This permits a broad cross section of the volunteer community to be leveraged in providing creative solutions to the learning assessment needs of candidates whether these needs are created through disability or the tyranny of distance.

  Under approach 3, market forces will determine the models by which learning and assessment takes place and as such effort will gravitate towards providing for those cohorts from whom the greatest contribution margin can be extracted furthermore the level of qualification required of those delivering learning and assessment outcomes is greater.

Existential Risk

In approach 1,2 and 4 at least one organisation is contractually bound to provide learning, assessment and associated services. In option 3 the market forces of supply and demand are expected to be leveraged to ensure continuity of supply.

There is a risk that as a result of the pricing structures that are required to support an AQF compliant solution demand drops to a level at which supply cannot continue.

This will result there being no Australian qualification available to operators. It should be noted that this has in fact been realised in the vocational market in respect of commercial radio communications qualifications (eg. BOCP and TVOCP) and is clearly an undesirable outcome.

Social and Community Outcomes

None of the approaches presented in the consulting paper guarantee that the community and social outcomes provided by the cohort of Australian amateur operators, assessors and learning facilitators and the clubs to which they belong are preserved.

Option 4 supports the continuity of these outcomes through engaging with organisations that are duty bound to support both the community and amateur electrotechnology hobbyists.

Engagement of Youth

Arrangement 2, 3 and 4 revolve around RTOs. As RTO's are vocational organisations it would be expected that these organisations would have higher likelihood of attracting younger participants.

The ability (or in the case of arrangement 4 the mandate) for the RTO to embed amateur radio units of study within existing electrotechnology learning frameworks will increase the likelihood of amateur radio being exposed to a broader cross section of tomorrow's leaders and innovators.

Regulators objectives

The ACMA's strategic intent as published (https://www.acma.gov.au/theACMA/About/Corporate/Authority/role-of-the-acma) is not served completely by any of the proposed arrangements.

Arrangement 1 falls short in that it fails to promote competition (and whilst it could be argued that this responsibility is specifically targeted to a narrow segment of the communication industry, it could be equally argued that communications education forms part of that industry).

Arrangement 2 and 3 fall short as they do not promote self regulation (in fact, these options may result in separation forming between those who deliver qualifications and those who represent amateur radio and electrotechnology hobbyists in the community. This could then result in additional input and/or regulation being required by the regulator through the proposed syllabus committee.)

Arrangement 4 ensures that the self-regulation is maintained whilst at the same time not creating an onerous regulatory environment that, by its design, does not support competition.

Fair and Equitable Distribution of Cost

The document is largely silent on the requirements for activities that are not learning and assessment related but are still required in order to ensure that licences are issued, however it is implied that in options 2 and 3 (and stated in option 4) that there will be a need for these functions to be performed and funded through some mechanism.

Arrangement 1 seeks to maintain the current processes which may, over time, result in activities that are performed as "part of the existing process" for a broad group of participants in the hobby being funded by relatively few new entrants into the hobby.

Self Determination

Only approach 4 ensures that organisations associated with learning and assessment are further duty bound to support the interests of the amateur and electrotechnology community.

International Recognition

Approach 1 involves the issuance of an AOCP, a CEPT compliant instrument that can be leveraged internationally to obtain operating privileges in other jurisdictions.

Approach 2 and 3 are silent on whether the statement of attainment/attendance is required to be CEPT compliant. The lack of this may result in additional burden on the regulator in issuing AOCPs for those who do not wish an Australian licence but wish to leverage the qualification in another jurisdiction.

Approach 4 provides a mechanism for AOCP to be issued in the event that the statement of attendance is not CEPT compliant without additional burden on the regulator

Innovation

The link between innovation and competition was examined by the Productivity Commission and the Australian Bureau of Statistics (ABS) in a joint research paper that was released on the 13th of September, 2011. (https://www.pc.gov.au/research/completed/business-innovation)

This paper states that *"For every measure of competition considered except one, the results of the modelling are consistent with an anti-Schumpeterian relationship between competition and innovation — that is, firms appear more likely to innovate if they face stronger competition."*

Whilst a casual review of the approaches would demonstrate that only option 1 creates an environment where competition is not possible it can be argued that a possible n^{th}-order effect of approach 2 and 3 could be an environment where, due to a limited audience, there is an insufficient commercial value in Internal Rate of Return terms, to justify investment in innovation.

Approach 4 delivers a competitive environment due to having the possibility of multiple providers appointed should it be determined that competition be the most appropriate mechanism to drive innovation.

The question of whether mandated competition in the delivery of Amateur Radio qualifications is of benefit must be carefully explored.   A free market need not have multiple suppliers, merely the capacity for additional suppliers to enter the market with few barriers to entry.

The market for Amateur Radio qualifications in Australia is constrained (presently around 1000 per annum) and many of the costs associated with delivery of the service are fixed in nature and must be distributed across the qualifications and assessments that are delivered. If there are multiple competing organisations in a market with anemic (or negative) growth this results in an environment where aggregated fixed costs across all suppliers must be divided across the market.   This may result in driving an increase in the minimum cost per qualification or assessment or driving a material reduction in the quality of the service delivered neither of which are consistent with the amateur radio community's desired outcomes or the regulators strategic intent.

The ideal goal (albeit hard to imagine) would be an environment where the costs associated with delivery of amateur radio assessments and qualifications are reduced to zero, and to the extent that they are not zero, 100% of the revenue is directed outwardly towards the amateur radio and electrotechnology community to deliver social outcomes.

The regulators mandate for "fostering competition", if being considered as a tool for encouraging innovation, may be better served by considering an alternate approaches, for example, non-exclusive agreements and/or ensuring that any agreement between a supplier and the regulator under approach 1, 2 or 4 includes a roadmap that obliges the supplier to deliver agreed social and community outcomes within specific time frames.   This could include:

- Reducing barriers to entry (reducing cost and increasing accessibility)
- Providing additional services that reduce the regulators burden whilst improving outcomes for the amateur and electrotechnology community
- Developing and promoting alternate mechanisms for revenue generation for local clubs to permit them to improve the outcomes they deliver.