

**ASSESSMENT OF COMPETENCY
IN AMATEUR RADIO**

March 2005

Contents

	PAGE
1. Introduction	
1.1 Purpose of this framework	3
1.2 Competency-based training, learning and assessment	3
1.3 Benefits from assessment and certification	4
2. Basis for the assessment system	
2.1 Objectives of the assessment process	5
2.2 Principles of assessment of competence	6
2.3 Methods of assessment of competence	6
3. Assessment System	
3.1 System outline	7
3.2 General Policy	8
3.3 Assessors	8
3.4 Recognition of Prior Learning (RPL)	9
3.5 Review and Revision of System	10
3.6 Record Keeping	10
4. Policy in Relation to Process Issues	
4.1 Assessment time-frames, training courses and current competencies	10
4.2 Stakeholder involvement	10
4.3 Assessor training competence and registration	10
4.4 Quality control	11
4.5 Relationship between assessors and assessment procedures	11
4.6 Role of WIA in Assessment	12
5. Assessment Support System	
5.1 Appeals mechanism	13

1. INTRODUCTION

1.1 Purpose of this framework

Competence is an integral component of the safe and effective operation of any system where technology based tasks are being carried out.

Standards are benchmarks, which are determined by Australian Communication Authority (ACA) after consultation with the Wireless Institute of Australia (WIA), to be representative of the activities required by a person operating an amateur radio station.

To make the standards function, as they are intended, it is important that the assessment of a person's knowledge with reference to those standards is carried out fairly, reliably and validly. This framework establishes the principles on which all amateur radio assessment processes will be based.

The framework applies to the WIA and any organizations or individuals who carry out assessments on behalf of the WIA

1.2 Competency-based training, learning and assessment

Competency standards have been developed for virtually all workplace activities and are the bases of learning and assessment nationally.

It is in the interest of amateur radio to develop a quality approach to assessments and to have a system of assessment aligned as close to as possible the national assessment system based on national competency standards that have been adopted across Australia.

Education and training in Australia has adopted a competency-based training approach. This means that skill development will be based on nationally agreed industry or workplace competency standards. Learners who meet the assessment requirements of amateur radio will potentially gain advanced standing in nationally recognised qualifications by demonstrating prior learning.

An assessment is based on tasks they can achieve in the electrotechnology field rather than relying on inputs such as the amount of formal education and training that the person has had. Assessment in a competency-based system concentrates on individuals demonstrating performance as well as an understanding of the work required. Competence is demonstrated against defined standards of which the person is fully aware before the assessment starts. The assessment compares the person to the standard; there is no comparison with other people undergoing the same assessment.

To be effective, Competency Based Assessment and Training must provide for:

- the identification of learning outcomes which are measurable
- a variable learning time to accommodate different ability levels and situations
- training delivery methods which are flexible and recognise the prior learning of individuals
- assessment of outcomes which ensure achievement of specified standards
- a record system that identifies the outcomes (skills and knowledge), which have been achieved by each individual.

1.3 Benefits from assessment and certification

The overall results from an effective assessment system and a recognised certification process will benefit all aspects of amateur radio learning and development and will ensure that the requirements of persons involved in amateur radio activities meet minimum specified requirements.

The benefits to learning program participants

- an individual's skills and knowledge are formally recognised
- assistance is provided to progress along a path to the highest amateur qualification and potentially a career path in electrotechnology
- amateur radio qualifications are recognised nationally and internationally eg TR61
- training is focused on a known result and measured by assessment
- provides an immediate and constructive feedback as part of the assessment process.

Advantages to the WIA

- a structured system for new entrants to amateur radio
- clear links to vocational, education and training outcomes
- credibility within the electrotechnology industry
- a self managed learning and assessment system
- a system which encourages participation in amateur radio.
-

Advantages to ACA

- confidence that the WIA is managing a consistent, fair, valid and reliable assessment system
- clearly documented and managed records
- an opportunity to manage quality assurance
- monitoring role with minimum impact on day to day operations

2. BASIS FOR AN ASSESSMENT SYSTEM

2.1 Objectives of the amateur radio assessment process

Assessment is the formal process of gathering evidence and making a judgement about a person's ability to perform activities to the specified standards.

The standards are defined, in the case of amateur radio, in the syllabus document; therefore the standards become the basis of learning for amateur radio.

This proposed framework outlines an assessment system that has been developed to effectively provide the following:

- consistent and accurate information about a person's competency in relation to amateur radio
- feedback, allowing both formal and informal courses and other learning approaches to be evaluated and improved to ensure that they are appropriate
- a method of identifying competency for safety purposes
- the basis for learning needs analysis to ensure that appropriate learning opportunities are offered
- a method for people to be given fair recognition for the skills and knowledge that they possess
- information which will contribute to the improvement of skills levels within amateur radio
- a link between a quality system and the acquisition of competencies.

2.2 Principles for all methods of the assessment of competence

When developing or selecting processes to deal with assessment, the following general principles should be considered as fundamental requirements of the system adopted.

Access and participation: processes should actively encourage and support the participation of individuals

Fairness: processes should be valid and just. Participants must be confident that the procedures and results are fair.

Openness: decisions, criteria and procedures should be open to scrutiny by both participants and implementors.

Practicability: the overall effectiveness and efficiency of the system should be practical, realistic, cost effective and reflect the needs of W.I.A and ACA as well as the individual participants.

Quality of outcomes: outcomes should provide results, which clearly ensure reliability and validity of application

Regardless of the assessment purpose, the key characteristics that must be reflected in the procedures and practices are:

Validity: the skills and knowledge to be checked should be assessed using a methodology that measures what is supposed to be checked. The method or procedure should be relevant to the way in which the application would occur in amateur radio.

Reliability: the assessment processes must have the capability to produce consistent results. This includes the need to provide sufficient evidence to make adequate decisions.

Credibility: processes and methodologies should ensure both internal (WIA) and external (ACA) acceptance. This includes meeting any safety or legal/regulatory requirements, which may relate to the skill or knowledge being assessed.

2.3 Methods of assessment of competence

The process of assessment requires the gathering and interpreting of evidence and the formation of a judgement about a person's competence. Addressing three fundamental questions can best sum up the process of determining the assessment method:

- What is to be assessed?
- What type of evidence will be required?
- How can the evidence be gathered?

The evidence required could be categorised into three types and these will control the way in which evidence is collected.

1. Performance evidence:

Practical demonstration of process or products, such as:

- direct observation of an activity
- historical examples
- simulations of activities.

2. Knowledge evidence:

Assessment of knowledge and thinking skills, such as:

- oral questioning
- multiple choice tests

- short answer written tests
- projects/assignments.

3. Evidence from previous achievements, industry, work and life experience (Recognition of Prior Learning (RPL)):

Assessment, through indirect means, of performance or knowledge competencies already held, such as by:

- certificates
- statements confirming competency
- reports.

Assessments pursuant to this part 2.3.3 shall not be inconsistent with the requirements of s 122 (1) (b) (ii) of the Radiocommunications Act 1992.

3. AMATEUR RADIO ASSESSMENT SYSTEM

3.1 System outline

The preferred approach to assessing in amateur radio is where the learner makes an approach to an assessor, when the learner believes they can demonstrate that the relevant standards can be met. At any point, the learner can request to be assessed by an assessor.

However, due to the nature of Amateur Radio, it is realised that the chance of assessors being immediately available will vary considerably, but every effort will be made to accommodate assessments when and as required.

The role of the assessor is to assess by the reviewing of evidence, questioning and/or observation of performance and to make a judgement that the knowledge, generic skills and associated safety related to the defined standards have been achieved.

On successful assessment against standards, the assessor will be required to complete the assessor certification document and return this to the WIA for record keeping purposes. The WIA assessor will advise the learner of their successful assessment immediately. Unsuccessful assessment attempts will require the assessor to clearly report to the learner areas of achievement and deficiency. The assessor must keep a record of all attempts.

On successful completion of all standards specified, and when advised by the assessor the WIA will issue certification.

Each licence level will have specified standards, inclusive of a broad range of variables. The range of variables will be included in the syllabus for the appropriate amateur licence and used to provide a guideline to the assessor for the context of each assessment.

Throughout the learning and assessment process, learners who believe they have been unfairly assessed or have other grounds for discrimination in their assessment will be able to appeal against their results. Refer section 5.2 for the appeals procedures.

3.2 General policy

- 3.2.1 The WIA will establish examination guidelines
- 3.2.2 Examination questions will be set by the WIA
- 3.2.3 All assessors will be trained and registered. The assessment system will include an assessor's manual provided during assessor training, which contains general, and specific assessment guidelines and procedures for each level of licence.
- 3.2.4 The assessment system will provide methods, without unnecessary restrictions, which enable access to assessment for any person
- 3.2.5 The practical assessment process n will integrate the skills and knowledge being assessed in simulated situations.
- 3.2.6 Assessment will not be restricted to the use of one assessment technique, but will combine a range of techniques when appropriate. Oral questions will be used whenever required to assess the learner's knowledge.
- 3.2.7 The learner will initiate assessment. However, a number of individuals involved in the learning and assessment process, may encourage him/her to apply for assessment.
- 3.2.8 The assessor will take responsibility for the safe work practices of a learner during the assessment. The assessment must be stopped if the learner is endangering any person, or is likely to damage any equipment during the assessment process. In this case the learner will be judged to be "not yet" competent.
- 3.2.9 The assessor will be expected to assist in controlling the costs of the assessment by making use of all existing evidence about the learner's competency
- 3.2.10 The learner may appeal against the result of an assessment. A mechanism has been established to acknowledge appeals to WIA and set out the process by which they must be resolved

3.3 Assessors

- 3.3.1 Assessors will be formally trained by a registered training organisation, accredited and registered by the WIA.

- 3.3.2 Registered assessors will be approved to assess all amateur examinations. The register of assessors will be maintained by the WIA
- 3.3.3 Assessor registration will last for three years, after which time the WIA will review the assessor and, where appropriate, re-register the assessor.
- 3.3.4 Assessors must be competent in the process of assessment. The quality and consistency of the assessors is the key to validity and reliability of assessment.
- 3.3.5 Assessors must be fully familiar with the activities being carried out by the learner during an assessment and have substantial experience in carrying out similar activities.
- 3.3.6 It is a requirement for the assessor to be competent in the examination being assessed.
- 3.3.7 Assessors must understand the material provided in the assessor's manual and follow the procedures described.
- 3.3.8 Audit procedures will be established where all amateur radio assessors will be subject to audit.
- 3.3.9 Where training and assessment of minors is to take place, evidence of State requirements for child protection must be provided prior to registration by the WIA.
- 3.3.10 There will be two types of assessor:
 - 1. WIA assessors
 - 2. Specialist assessors called "nominated assessors", who will carry out all special requirement assessments, and audit WIA assessors and assessments.
- 3.3.11 Amateur radio assessors need not be providers of training

Assessor Qualifications

WIA assessors will have successfully completed BSZ404A Train Small Groups and the WIA assessor training as well as being competent in the area in which they are assessing.

Nominated Assessors will have successfully completed BSZ 401A Plan Assessment, BSZ 402A Conduct Assessment, BSZ 403A Review Assessment and BSZ 404A Train Small Groups, as well as being competent in the area in which they are assessing

Assessor Audits

Assessment system audits will be conducted by the WIA in conjunction with an appropriate RTO and reports provided to the ACA.

Nominated assessors will conduct an audit of each WIA assessor at least once within the 3-year registration period. The WIA will advise the nominated assessors of the WIA assessors to be audited.

The role of the nominated assessor is to assist WIA assessors in carrying out assessments.

3.4 Recognition of prior learning (RPL)

3.4.1 Where individuals have knowledge and skills obtained through previous formal training and/or relevant experience, they can apply for RPL to determine their eligibility for RPL

3.4.2 RPL assessments require satisfaction on reasonable grounds and will only be conducted by persons who have been trained and registered by the WIA as nominated assessors.

3.5 Review and Revision of the System

3.5.1 Mechanisms have been established to allow for the review, revision and reissue of all or part of the assessor's manual to ensure that experience gained in the assessment process is used to improve the system.

3.5.2 A review will be undertaken of the assessment system by the WIA or their representatives annually.

3.7 Record Keeping

3.7.1 The WIA will maintain a database to register details of approved WIA assessors and nominated assessors and be responsible for issuing registration numbers to assessors.

3.7.2 The WIA will maintain a database of all successful assessments as advised by assessors.

3.7.3 The assessor will maintain a record of all assessments completed by that assessor.

4. POLICY IN RELATION TO PROCESS ISSUES

4.1 Assessment time-frames, training courses and current competencies

Assessment and training will be provided in a timely manner using techniques that suit the learner.

4.2 Learner involvement in assessment

Involvement comes from having access to information about assessment, being able to influence when and how evidence is collected and being free to discuss the judgement formed from the evidence.

The proposed system is based on the following options to allow a good level of involvement without allowing assessments to become inconsistent:

- the learner has full access to information (e.g. standards, assessment rules, procedures and questions)
- the assessor and learner have joint responsibility for decisions on how and when evidence will be collected.
- the assessor confirms their decision with the learner, explains the judgement and provides feedback about what the learner needs to do to become competent, when a “not yet competent” decision is made.

4.3 Assessor selection, competence and registration

Assessors are the key to meeting all of the principles of assessment and the objectives of the assessment process and the requirements of Division 5 of Part 3.3 of Chapter 3 of the Radiocommunications Act 1992. It follows then that they need to be competent in the process of assessment. Selection of assessors will be WIA responsibility.

Assessor selection and training

The minimum criteria for assessor selection will be based on the person being deemed to be competent and having substantial experience in the areas in which they will assess. The WIA will set the minimum criteria for assessors.

After successful completion of an accredited approved assessor and/or recognition of prior learning assessor training course and attaining of the assessor competency standards, assessors will be placed on a register organised by the WIA and allocated an “Approved WIA Assessor” number.

Assessor registration requirements

WIA register of assessors will have to be provided with the following information before a registration number will be issued:

- assessor's name
- assessor's postal address and telephone number
- mobile phone number
- assessor's email address
- amateur licence information
- assessor's qualification or equivalent, plus relevant standards/examinations the assessor is qualified and nominated to assess.
- some indication of the amount of experience in the specialist areas
- evidence and date of successful completion of an assessor's training course and achievement of assessor competency standards as required.
- appropriate references as required by the WIA
- evidence of compliance with state laws for dealing with minors.

4.4 Quality control

Despite the common linkage that will occur through training and assessment of assessors, standards of performance could progressively diverge. A system of on-going monitoring through auditing has been established through the quality auditing system.

The monitoring will be undertaken by the WIA appointing a person who is responsible for aspects of the assessment quality system, nominally a RTO.

Assessors who are considered to be unsuitable through these processes will have their registration withdrawn as an assessor for the WIA and will be no longer able to assess any learner until they are reassessed and re-registered by the WIA as an assessor.

4.5 Relationship between assessors and assessment procedures

The development of the assessment procedures has been aimed at keeping them relatively simple so that they can be easily understood, and has depended on the expertise of the assessors to provide validity and reliability.

4.6 Role of WIA

WIA has the responsibility to provide:

- a system for examination standards, their development and maintenance
- an ACA agreed learning syllabus to assist in the development of initial skills and knowledge requirements, as underpinning preparation to achieve the standards
- associated advice on learning resources and how to access these resources and apply them for relevant licence levels

- a register for assessors for the amateur radio assessment system
- a process to monitor and evaluate all aspects of amateur radio examinations and assessments
- a program to ensure that assessors are appropriately trained and qualified

All these functions will be implemented through consultative processes consistent with customer expectations and ACA requirements.

5. ASSESSMENT SUPPORT SYSTEM

5.1 Appeals mechanism – see section 3.2.9

All disputes in relation to assessments will be resolved using the appeals process 5.2.1.

The need for an appeals process is driven by three requirements:

- The need for justice for learners who believe they have been unfairly treated in any way
- Assurance to learners and customers of the integrity and objectivity of the assessment system
- Feedback to the WIA (via consultative processes) and other interested parties about the functioning of the assessment system

Learners will be able to initiate appeals when they believe that assessments resulting in either 'competent' or 'not yet competent' decisions are incorrect

Both the rights of assessors and the rights of learners must be protected. For assessors this means they must be informed when their assessment work is the subject of an appeal, be kept informed throughout the appeal process and have access to support and training when appropriate.

The focus of the appeal resolution process must be to obtain a valid, reliable and fair judgement and to minimise further disputed assessments in the future.

The approved appeals mechanism is as follows:

5.2.1 When a learner expresses disagreement with the process or result of an assessment, and this is not resolved by normal discussion with the assessor, the assessor must make the learner aware of the appeals process.

5.2.2 Any learner in disagreement with an assessor will be encouraged to reapply for assessment through the same process as the disputed assessment.

Wireless Institute of Australia

- 5.2.3 Learners who do not want to take this option should approach a representative of the WIA and access the appeals process. This will be in the form of a request for the WIA to deal with the appeal. WIA must respond to this request.
- 5.2.4 Should this process fail to resolve the appeal it is anticipated that the ACA will act as an independent arbitrator.
- 5.2.5 No appeal will be allowed to be left unresolved.
- 5.2.6 An appeal will be addressed within 14 days of the appeal notification to the WIA