

Assessment Guideline

ESP-20-02

Applicability

ARTC Network Wide

Publication Requirement

Internal / External

Primary Source

Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
1.0	17 Jun 24	Standards	Stakeholders	Manager Signalling Standards	Head of Engineering Standards 19/06/2024

Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	17 Jun 24	All	Document is updated to align with ESP-20-01 and Signalling Competency Matrix

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Table of Contents

Table of Contents	2
1 Introduction.....	3
2 Competency sources overview.....	5
3 Skill Level 0 to Level 1	6
4 Skill Level 1 to Level 2	7
5 Skill Level 2 to Level 3	8
6 Routine Tasks (Level 2) and Complex Tasks (Level 3) demonstrated.....	8
7 Amount and type of work in a Task.....	10
8 Alternative to Experience on ARTC Network	10
9 Understanding ARTC Network and Standards.....	11
10 Technically Difficult Subjects	12
11 Certification of work performed when in training for a higher level	13
12 Responsibility when verifying Work Experience	13
13 Verifying Work Experience Records for higher skill levels	13
14 Examples of Information Required Within Work Experience Records.....	14

1 Introduction

1.1 Purpose

This Guideline provides information to signalling personnel, supervisors and ARTC Signalling assessors for the assessment process and upgrading to a new or higher level of skill in a specific competency. It addresses Organised and Work-Based Training and defines the Work Experience Records used as the basis for this Skills Assessment.

1.2 Scope

This Procedure covers:

- a. Requirements for training and work experience for higher skill levels.
- b. Requirements for training on technically difficult equipment or processes.
- c. Requirements for supervision when working at a higher-level task.
- d. Alternatives to Work Experience and Training Courses.
- e. Assessment and Recognition of current competence.
- f. Responsibilities of supervisors and managers for signalling competence.

This procedure should be read in conjunction with ESP-20-01 – Signals Rail Safety Worker Competence Procedure

1.3 Procedure Owner and Contact

The Head of Engineering Standards is the owner of this procedure. For any query, initial contact is to be made at Standards@artc.com.au.

1.4 Responsibilities

The ARTC Signalling Assessor is responsible for following the requirements and processes detailed in this procedure when assessing competency.

A Supervisor/Mentor managing any person undertaking any signalling work is responsible to ensure that that person has the appropriate competency for the task. The Supervisor/Mentor is responsible that appropriate supervision is provided for a person undertaking a task at a higher skill level.

A Supervisor/Mentor is responsible to endorse the Work Experience Record of any person under their responsibility and in accordance with the requirements detailed in this procedure.

The candidate is responsible that the Work Experience Record clearly shows the work completed under mentorship. The Supervisor/Mentor is responsible that the endorsed record clearly shows that the work was undertaken under mentorship.

1.5 Reference Documents

The following documents support this standard:

- ARTC Signalling Competency Matrix – ESP2001F-27
- ESP-20-01 – Signals Rail Safety Worker Competence Procedure
- Signalling Competency Forms and checklist (ESP2001F-XX)

- RLS-PR-003 Protocol for Entering the ARTC Rail Corridor
- External Assessor Agreement
- National Competency Management Framework

1.6 Definitions

The following terms and acronyms are used within this document:

Term or acronym	Description
AQF	Australian Qualifications Framework. The Australian Qualifications Framework is the national policy for regulated qualifications in Australian education and training. It incorporates the qualifications from each education and training sector into a single comprehensive national qualifications framework.
RTO	Registered Training Organisation. A vocational education and training organisation registered by the Australian Skills Quality Authority (ASQA) to deliver training in accordance with the Australian Qualifications Framework
RPL	Recognition of Prior Learning. An assessment process that involves assessment of an individual's relevant prior learning (including formal, informal and non-formal learning) to determine the credits for a competency application.
Role	The various signalling competencies are divided into Roles based on engineering or technical qualifications and the general task being performed. For example, Signalling Design is a separate Role to Signalling Maintenance, Signalling Construction & Testing or Signals Control Systems. Similarly, there are separate Roles for those with Technician level qualifications.
Skill	The person in a Role will undertake a range of different activities. The ability to do these individual activities is called a skill. These skills may be specific to an item of equipment. The more technically complex the item of equipment, the more the need for specific training and work experience. Individual skills are detailed on the Statement of Competency. These may have options as to their equipment or tasks.
Predecessor Qualification	The various Signalling Competency Matrices include references to formal training qualifications. These are regularly updated under the AQF. Each update has a unique identifier. The most up to date qualification is referenced in the Signalling Competency Matrices. A Predecessor Qualification is a qualification that is considered equivalent to the current qualification.
Work Experience Record	As a person's work experience contributes greatly to a person's competence, a formal record of the work experience is required. The Work Experience Record contains details of work undertaken, the level of performance, and endorsement as to accuracy by a suitable supervisor.
Work Experience Breadth	A generic skill may apply to an item of equipment such as a point motor, signalling cable track circuit equipment, etc. However, there are many variations of this equipment in use on a railway. A person may demonstrate Breadth of experience by working on multiple different types of the equipment.
Work Experience Depth	A generic skill may apply to an item of signalling equipment or an activity in support of signals construction, testing, maintenance or design. There are many tasks

Term or acronym	Description
	<p>required to support the equipment in service. The Depth of understanding of the equipment by a person may cover from simple tasks such as installation to more difficult tasks such as to 'set up and adjust' to very difficult such as fault find.</p> <p>Similarly, at the Engineering level, Depth may be indicated by applying the equipment or task as per the standards and manuals through to applying unique solutions that only have signalling principles as guidance.</p>

2 Competency sources overview

A person gains competency through a combination of their Qualifications, Training and Work-Based Experience.

2.1 Qualifications.

The Role that a person may apply for is based on the qualification that they have gained from an approved training organisation.

Higher education provider such as Australian universities have process for approving courses and degree or other qualifications. There are also Accords to recognise technical qualifications and degrees from overseas universities and related institutions.

Australian trade qualifications are covered under the Australian Qualifications Framework (AQF) and delivered by Registered Training Organisations (RTO). There are also provisions for recognition of overseas trade qualifications.

2.2 Training.

There are three areas of training that contribute to a person's competence, namely Industry-Based Training Courses, Product Training Courses and Work-Based Training.

2.2.1 Industry Training Courses.

There is a broad range of Industry Training Courses. These may be mandated for specific skills or for situations that may be encountered.

2.2.2 Product Training Courses.

Suppliers or third-party trainers may run courses for specific technology. These will cover the equipment in depth, the support manuals and will include an assessment of the individual trainee at the end of the course. ARTC requires that these courses be undertaken for technically difficult equipment. Alternate assessments are available for those applicants who have gained a similar knowledge and skill level in the equipment through other processes.

2.2.3 Work-Based Training.

This is a means of learning basic skills from a competent mentor / supervisor. The mentor will explain the skill to the trainee and demonstrate how to perform tasks. The mentor needs to assess the trainee on their knowledge and performance of the tasks. This training method applies to skills not covered by the above training methods.

2.3 Work Experience.

This is a means for increasing a person's competence in a skill where the training or basic level has already been achieved. It allows the trainee to gain a broader understanding through a wide range of different situations in using the skill. Please refer to the signalling Competency Matrix and ESP-20-01 for further information.

3 Skill Level 0 to Level 1

All Level 0 persons working in the rail corridor or in an operational situation shall be under Direct Supervision by a person with at least a Level 2 competency for the tasks being undertaken. The Supervisor/Mentor shall also instruct the candidate in the standards and procedures relating to the competency and the activity.

3.1 Training

The best method for technical qualifications is formal training and assessment by a Registered Training Organisation (RTO). This is mandatory where the subject is covered under the Australian Qualifications Framework (AQF).

Some people may have gained knowledge and skill equivalent to the AQF qualifications by Work-Based Training. These Candidates shall have the RTO assess and recognise this Work-Based Training for the AQF qualification under the Recognition of Prior Learning (RPL) provisions. The Rail Safety National Law (South Australia) Act 2012 requires that AQF course training and qualifications be used where they are available. Candidates shall be able to demonstrate qualifications from the AQF course, a predecessor training course or RPL by the RTO where the competency matrix requires the qualification.

There are only a limited number of other signals competencies currently covered by other AQF qualifications. Many of the signalling equipment specific skills are not covered specifically by AQF course material. However, rail industry and suppliers have often designed and delivered course materials for railway signalling specific equipment. Some of these courses cover simple technical equipment. There is a preference for training using these courses. However, Work-Based Training by experienced personnel is also acceptable.

Formal Training courses by industry (Industry Based Training) is a mandatory pre-requisite for technically difficult subjects such as, level crossing predictors, computer based interlockings, processor-based systems such as axle counters, telemetry, audio frequency track circuits and coded track circuits. See section 10 for details. For these subjects, Work-Based training is not acceptable as the only means of training. The Industry-Based signals equipment training, the provider shall conduct an assessment at the end of the training and issue a Statement of Attainment to the candidate upon successful completion of the training course. The candidate records this in the Education & Training Record, form F26.

A candidate can provide evidence of previous industry work experience record in the specific competency or skill within the previous 8 years. This shall be assessed by the approved ARTC Signalling Assessor and may qualify for a Competency Level of 1. This does not apply to skills detailed in section 10 'Technically Difficult Subjects'.

3.2 Work-Based Training

This is training under the supervision and mentorship of a person who is competent in that skill or technology. This is best achieved under the mentorship of a Level 3 person. This is typically phased as follows:

- a. Supervisor/Mentor provides reference information on the new skill or technology to the candidate. This may include manuals and standards.
- b. Supervisor/Mentor demonstrates the skill personally to the candidate.
- c. The Supervisor/Mentor supervises while the candidate undertakes the task.
- d. The candidate performs the task with the Supervisor/Mentor in a hands-off overview. The Supervisor/Mentor then reviews the performance of the candidate and provides guidance.
- e. The candidate then undertakes the task as free performance on three separate occasions to a satisfactory level. Tasks not performed satisfactorily do not count as part of the three sets. The Supervisor/Mentor then assesses and checks how it was performed. During this process the Supervisor/Mentor is responsible for the performance of the task and is required to certify the tasks in accordance with the required standards and procedures.
- f. The candidate completes the above experience in the Work Experience Record specifically for the nominated skill. The Supervisor/Mentor endorses that the candidate can perform the task/competency to a satisfactory level. In some cases, the work may be carried out under different Supervisor/Mentors.

After successful completion of basic level training by one of the methods above, the candidate can submit a Request for Competency Upgrade Assessment to Level 1.

4 Skill Level 1 to Level 2

Having achieved the Level 1 competency as above, the candidate undertakes the tasks with hands off supervision.

The Supervisor/Mentor is responsible for endorsing or certifying the performance of all work experience tasks undertaken by the candidate. These tasks shall be performed under Direct Supervision. The Supervisor/Mentor shall ensure that the candidate has knowledge and understanding of the relevant Standards and Procedures covering the tasks.

- The candidate performs four full sets of the task/competency including any out of course activities associated with the task to a satisfactory level. See section 7 for the amount of work to be demonstrated. Tasks not performed satisfactorily do not count as part of the four sets. This number of performances is to ensure that the candidate has a broader range of experience as not every situation is the same. This work experience is in addition to any Work-Experience as part of Level 1 Work-Based Training.
- Where the competency skill covers a range of different scenarios, the Supervisor/Mentor shall ensure that these are covered in the required four (4) work experiences.
- The candidate completes the above experience in the Work Experience Record.
- The Supervisor/Mentor endorses that the candidate is able to perform the task/competency to a satisfactory Level.
- After completion of the above the candidate can submit a Request for Competency Upgrade Assessment to Level 2.

Having achieved the Level 2 competency the candidate can perform routine tasks for that competency. See section 6 for definition and examples of routine tasks. The candidate is also able to undertake complex tasks under supervision of a person with Level 3 competency.

5 Skill Level 2 to Level 3

Having achieved the Level 2 competency as above, the candidate undertakes the straight forward tasks without supervision including examples that are routine or out of the ordinary.

The candidate then works on complex examples of the task competency when the Supervisor/Mentor considers that the candidate is ready and suitable to undertake a Level 3 task. The Supervisor/Mentor must be ready and able to provide mentorship and guidance as to the issues that affect a complex task. The Supervisor/Mentor must have this skill at Level 3.

The candidate is supervised and mentored during the performance of the task in a complex example. The Supervisor/Mentor is responsible for the task and shall have the competency at the higher level. The Supervisor/Mentor is to check and certify the performance of the task/competency in accordance with the standards and procedures.

The Candidate is to satisfactorily perform the complex task five times under supervision and mentorship. **Tasks not performed at Level 3 competency do not count as part of the five sets.** The candidate completes the above experience in the Work Experience Record and has the Supervisor/Mentor endorse the entry with comments on performance.

It is required that three (3) of these five (5) task performances are undertaken on the ARTC network so that the candidate is exposed to and becomes well versed in the application of the applicable ARTC standards. Alternatively see section 8.

When the candidate has completed five (5) complex tasks, then the Supervisor/Mentor is requested to endorse the Work Experience Record, that this performance has been satisfactory and in accordance with the standards and procedures.

After completion of the above the candidate can submit a Request for Competency Upgrade Assessment to Level 3.

A competency at Level 3 represents the ability to handle any aspect of the competency including complex situations and those not detailed in the standards and procedures. It also represents a full and clear understanding of the standards, procedures for the item and the safety and engineering outcomes to be achieved in performing the competency. The Level 3 practitioner will also be able to provide guidance to others in the subject.

6 Routine Tasks (Level 2) and Complex Tasks (Level 3) demonstrated.

Complex tasks are any tasks or activities that are novel or unique in nature, require the application of a worker's knowledge and skills in non-routine ways, or work that has multiple simultaneous elements of risk. The complexity may arise from the type of technical issue, the number and interrelationship of the technical issues or the technical issue being without general precedent.

Provided all other requirements for a skill level progression have been met for the relevant stage of progression, successful completion of complex tasks can be considered as an appropriate demonstration of this skill levels.

Routine Tasks (Level 2) and Complex Tasks (Level 3) demonstrated.

Examples of Routine Tasks and Complex Tasks. The ARTC Signalling Assessor will need to consider whether work experience episodes are adequate for the work experience assessment.

	Routine Task (Level 2)	Complex Task (Level 3)
A	Design of a CTC crossing loop	Design of a Double Track Bi-directional working section
B	Design of a single-line level crossing	Design of a double track level crossing
C	Design of automatic 2-aspect signalling for 8 signals	Design of automatic signalling with 5-minute headway and 4 aspects
D	Design of a CBI crossing loop	Design of CBI LX adjacent to crossing loop Home signal
E	Design of Auto signalling	Design of Auto signalling with conditional clearing of aspects
F	Design of a single-track junction	Design of a double-track junction

Table 1 Design skills for Signal Design Engineer or Signal Designer

	Routine Task (Level 2)	Complex Task (Level 3)
A	Maintenance of 2 turnouts or a crossover	Fault finding on a turnout detector circuit
B	Maintenance service on a level crossing	Maintenance logs for LX monitor download and review for fault or incident
C	Bridging single track level crossing circuits for re-railing	Bridging double track Predictor level crossing for re-railing on one track only
D	Track Circuit maintenance after track work and record on History Card	Track Circuit inspection, set up and adjust after significant event such as derailment, flooding etc
E	All maintenance services as per TMP	

Table 2 Maintenance skills for Signal Technician

	Routine Task (Level 2)	Complex Task (Level 3)
A	Investigation of a SPAD and report	Fault finding on a turnout detector circuit
B	Condition assessment of a level crossing	Fault finding for track circuit fail to detect
C	Scope for equipment maintenance renewal	Condition assessment for a crossing loop
D	Test Team leader for reinstatement of signalling after renewal	Tester in charge for commissioning of new signalling

Table 3 Maintenance skills for Signal Maintenance Engineer

	Routine Task (Level 2)	Complex Task (Level 3)
A	Wiring an equipment cupboard	Wiring a relay room
B	Installation of a signal	Installation of a gantry with signals
C	Installation of a point motor	Installation of crossover with swing nose
D	Installation of a track circuit	Installation of single line section for train detection
E	Testing of a signals cupboard	Testing of an interlocking

Amount and type of work in a Task.

	Routine Task (Level 2)	Complex Task (Level 3)
F	Set to work of a track circuit or point motor or signal	Test team leader for set to work for an interlocking

Table 4 Maintenance skills for Signal Construction Technician

	Routine Task (Level 2)	Complex Task (Level 3)
A	Scope of works for a level crossing	Scope of works for a CTC crossing loop
B	Draft CWP for a level crossing or similar small project	Draft CWP for a crossing loop or double track level crossing
C	Direct site works for a level crossing or loop extension	Direct site works for a crossing loop or double track level crossing
E	Tester in charge of a single line level crossing	Tester in Charge of a double track level crossing
F	Test team leader for all track circuits in a single line CTC crossing loop.	Test team leader for all track circuits for a double track junction

Table 5 Construction and Testing skills for Signal Construction Engineer

7 Amount and type of work in a Task.

For Work Experience requirements the items in Section 6 provide a good basis for the type of work expected for Levels 2 and 3. If the candidate was only involved in half the work or doing amendments or updates, then this would not qualify as a full work experience example for Level 3 assessment purposes but may qualify for Level 2. Within each of the examples in Section 6, the candidate has many opportunities to practice the application of the competency. This practice is an important part of expanding a candidate's work experience.

The **Breadth** of the work experience is also critical to ensure that the candidate has a full understanding of all the issues associated with the skill. The work experience examples should not be limited to one type of task. For example, the skill Like for Like replacement of a signal cable covers a range of tasks. This includes signal cable to track circuit connections to the rails, small multicore cable to a signal or point motor or LX cross arm and a multicore signal cable between signal locations of 30 to 50 cores. It is expected that the candidate had work experience in each of these types of tasks. Similar issues apply to all of the other skills.

It is recommended that the candidate document a work plan to cover the work episodes required to attain a higher skill level or a new competency.

8 Alternative to Experience on ARTC Network

To attain a Level 3 competency, there is a requirement for work experience on the ARTC network. This is to demonstrate a detailed understanding of the relevant standards and procedures which can have both a direct and indirect impact on the ARTC network. It also provides needed insights into the types of rail traffic; the Network Rules and the way work is performed on the ARTC network.

There may be occasions where a candidate has significant experience in a competency equivalent to Level 3 in another railway network and wants to be directly considered for Level 3 on the ARTC network.

Understanding ARTC Network and Standards

This candidate may undertake an alternative process to demonstrate an understanding of the requirements from sections 5 and 6. This will include the following actions:

- a. Undertake a desktop exercise on the subject to demonstrate knowledge of the subject and the ARTC standards and processes for all Levels 1 to 3.
- b. Undertake detailed study and review of the relevant ARTC standards, procedures and guidelines that directly or indirectly cover the subject matter. This would include the making of notes regarding the significant items.
- c. Review of work that has been completed by other people in accordance with the standards for Level 3. This could include the review of an existing design for a designer, the review of a Commissioning Work Package by a Test & Commissioning Engineer or Tester in Charge, the review of Maintenance work orders and technical maintenance plan by a Maintenance supervisor. This is a critical review, and the document should be marked up with comments to represent an understanding of the subject. This should also identify any areas where the item could be improved.
- d. Interview by the ARTC Signalling Assessor to demonstrate successful completion of the above requirements.

This work is then reviewed by the ARTC Signalling Assessor, who is an SME (or in conjunction with an SME) at Level 3 in the respective competency. The ARTC Signalling Assessor may evaluate the similarity or difference between the Signals practices associated with the applicant's work experience. If these are similar, then the ARTC Signalling Assessor may consider that these meet the ARTC work experience episode requirements. The ARTC Signalling Assessor then determines the rating of the candidate.

9 Understanding ARTC Network and Standards

ARTC requires that people with work experience on other networks can understand and apply the ARTC Standards and Practices. They must be mentored to acquire this understanding and any assessment must consider and review this issue where the candidate does not have prior experience on the ARTC network.

- A candidate may have a skill competency equivalent to ARTC Levels 1, 2 or 3 work experience from other railway networks or in past years. That candidate still requires work experience in the understanding an application of those skills in accordance with the ARTC Standards and practices. In this case the Supervisor/Mentor provides the reference information including the standards, approved forms, and examples of the application from past jobs.
- The candidate reviews the information and asks questions of the Supervisor/Mentor to achieve an adequate understanding of application of the ARTC processes for the skill. The person shall demonstrate having attained the understanding of the skill prior to the assessment.
- It is preferable that the Supervisor/Mentor reviews the understanding of the candidate for the skills and writes this up in the Education & Training Record – Work-Based Training section.

The ARTC Signalling Assessor must review this issue as part of the assessment and not just consider the work experience. If appropriate, a practical and scenario-based demonstration of the skill should be considered by the ARTC Signalling Assessor to assess the candidate's skill level.

10 Technically Difficult Subjects

The list below details a number of technically difficult subjects that require formal training by an industry supplier or trainer.

Formal Industry Training is required in these subjects:

- The technical complexity of the subject means that the item cannot be adequately demonstrated by several work experience episodes.
- There is a need to understand significant technical documentation to adequately undertake the tasks for the technology.
- Training covers the applicability of the various documentation and the use of software tools and hardware tools.
- The training can provide a tailored introduction to the technical complexity so that the principles can be understood.
- The training includes worked examples and assessments by the trainer.
- Training includes actions not to be followed.

Table of some examples of technically difficult subjects that require formal training.

Design	Maintenance	Construction *
Predictor LX	Predictor LX set up & adjust, Certify, fault find	Predictor LX set up & adjust, Certify
Computer Based Interlocking - data design; data load.	Computer Based Interlocking data load and fault find	Computer Based Interlocking data load and fault find
Computer Based Interlocking circuit design	CBI read design data and data logs	CBI read design data and data logs
Coded Track Circuits - design	Coded Track Circuits – Maintenance and fault find	Coded Track Circuits – Set to Work, Certify, fault find
Axle Counters -design	Axle Counters – fault find and maintenance, load data	Axle Counters – Set to Work, Certify, fault find
Control system – data, configuration	Control System – fault find, log download, re-configure	Control System – data upload, configuration, Certify, fault find
Simulator systems		
Computer based Train Order Systems		

Table 6 * excludes wiring.

Inclusive Training Courses

Personnel undertaking a training course Certificate IV in Rail Signalling or the Graduate Diploma of Rail Signalling have received training in some of the above subjects at a general level. This training is sufficient to cover the general principles of operation of the technology. It does not cover specific technology to the depth of the industry or domain-specific training on the specific equipment.

Certification of work performed when in training for a higher level

For the specific items detailed above the Certificate IV in Rail Signalling or the Graduate Diploma of Rail Signalling are not sufficient training to gain a Level 1 in the specific technology.

11 Certification of work performed when in training for a higher level

When work tasks are performed by a candidate to gain work-based training or experience at a higher competency level, a Supervisor/Mentor is responsible for the work. The Supervisor/Mentor shall have the competency at the higher level. The Supervisor/Mentor is responsible for the work and shall fully check and document all the work performed by the candidate. This check and certification is in lieu of the candidate check and certification. The Supervisor/Mentor is responsible for the certification of this work and must sign all the work. The name of the candidate must be indicated on the work as well.

This check and certification by the Supervisor/Mentor do not replace any other checks or certifications or verification that may be required in accordance with the standards and procedures.

The Supervisor/Mentor shall also indicate the level of proficiency achieved in the performance of the tasks by the candidate. This must be an objective assessment of the performance.

If the work performed by the candidate includes errors or omissions or under-performance, then the Supervisor/Mentor has some responsibility and may be requested to give reasons for these issues.

If the Supervisor/Mentor does not accurately report comments against the performance of the candidate, then the Supervisor/Mentor may be re-assessed as to their understanding and experience of the activity, the competency and the related standards and procedures.

12 Responsibility when verifying Work Experience

The Supervisor/Mentor is best placed to verify the Work Experience Record for a candidate under his/her control. The Verifier shall have a signal competency certificate that demonstrates competency in the related signalling matters.

The Verifier is responsible that the description of the task adequately and accurately describes the task. It shall not overstate the level of task performed by the candidate or the level of complexity of the task.

It shall correctly detail the level of responsibility by the candidate and the contribution of other people where appropriate.

13 Verifying Work Experience Records for higher skill levels

A Supervisor/Mentor with the higher skill level is required to verify a work experience record that is used for an Application for Higher Skill levels or a new skill or competency.

The Verifier shall include comments in the Comments section of the Work Experience Record. These must indicate if the candidate has undertaken the tasks fully, independently and competently. If these comments are not provided the ARTC Signalling Assessor may down rate the value of the work experience in

14 Examples of Information Required Within Work Experience Records

14.1 Example for Maintainer

For a maintainer, the entries in the Work Experience Record should cover a period not exceeding 3 months. If the same work is repeated each 3 months, it is acceptable to copy and paste the entry for each period. Each entry needs to be verified by the Supervisor.

<u>Good Work Experience Record</u>	Comment on level of information
<p>Maintenance Team leader (3 people) maintaining Bullamanka, Bourke, Dunnedoo crossing loops. Maintenance service schedules for monthly and 3 monthly cycle for points, signals, track circuits, interlocking equip, telemetry system, equipment cupboards, ground frame. Equipment comprising M84 points, DC and coded tracks and predictor tracks, Microlok OCS interlocking, AC, DC and solar supplies, LED signals.</p>	<p>This clearly shows the responsibility and Role of the person. It shows the range of systems that have been worked on, the type of equipment and where it is located. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>
<p><u>Just Acceptable – limited to Level 2</u></p> <p>Maintenance team maintaining 4 crossing loop locations on Kangaroo line. CTC signal equipment with LED signals, relay interlocking and M3A point machines.</p>	<p>This indicates only participation in a team without directly indicating the Role. It will be considered as a team member only. It indicates the range of systems but not the individual equipment types and will limit the competency rating for equipment types. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>
<p><u>Poor example –no rating</u></p> <p>Maintenance on Kangaroo line of points, track circuits, signals, level crossings, interlockings and power supplies.</p>	<p>This does not show the role or responsibility of the person doing the maintenance. It does not indicate the complete range of signalling systems nor the actual equipment. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>

Examples of Information Required Within Work Experience Records

14.2 Example for Construction Personnel

For construction personnel the entries in the Work Experience Record should cover a period not exceeding 3 months and for each project worked on. If the same work is repeated each 3 months, it is acceptable to copy and paste the entry for each period. Each entry needs to be verified by the Supervisor.

<u>Good Work Experience Record</u>	Comment on level of information
<p>Construction Team member (3 people) for four crossing loops at Bullamanka, Bourke, Dunnadoo and Palm Springs. Installation of location cases (pre-wired), cables and f/o cables, signals (LED), point machines (D84M), track circuits (microtrax, overlay and DC in loop line) and 2 predictor (GCP) level crossings. Team leader for inspection and testing of the above including cable megger testing, relay bell testing and wire count, null count, signal focusing. Compiled DSS for location cases and cable routes and signals. Commissioning team leader including set to work of microtrax, DC track circuits, predictor tracks, power supplies and LED signals to CWP.</p>	<p>This clearly shows the responsibility and Role of the person. It shows the range of systems and tasks that have been worked on, the type of equipment and where it is located. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>
<p><u>Just Acceptable – limited to Level 2</u></p> <p>Construction team for four CTC loops with Microlok, kingfisher, microtrax, f/o cables, LED signals and predictor LX. Inspection and Test team member to ITP. Commissioning team member to CWP of track circuits and signals (microtrax, DC and overlay tracks).</p>	<p>This indicates only participation in a team without directly indicating the Role. It will be considered as a team member only. It indicates the range of systems and tasks but not all the individual equipment types and will limit the competency rating for equipment types. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>
<p><u>Poor example –no rating</u></p> <p>Kangaroo line CTC of four crossing loops with Microlok. Construction, Testing and Commissioning</p>	<p>This does not show the Role or responsibility of the person doing the maintenance. It does not indicate the complete range of signalling tasks nor the actual equipment. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>

Examples of Information Required Within Work Experience Records

14.3 Example for Signal Design Personnel

For a signal designer the entries in the Work Experience Record should cover a period not exceeding 3 months and for each project worked on. If the same work is repeated each 3 months, it is acceptable to copy and paste the entry for each period. Each entry needs to be verified by the Supervisor.

<u>Good Work Experience Record</u>	Comment on level of information
<p>Signal designer responsible for signal arrangement plan and control table design up to review level. Also responsible for design of Microlok interface circuits at Bullamanka, Bourke, Dunnedoo crossing loops.</p> <p>Design Engineer responsible for conducting the Signal Sighting and resolving issues arising. Updated control tables and design from issues arising from the Microlok simulator testing. Produced circuit mod sheets during commissioning for minor issues. Checking of updating to As- Built for circuits, control tables and signal plan.</p>	<p>To be updated</p> <p>This clearly shows the responsibility and Role of the person. It shows the range of systems that have been worked on, the type of equipment and where it is located. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>
<p><u>Just Acceptable – limited to Level 2</u></p> <p>Four CTC crossing loops on Kangaroo line. Signal designer team member responsible for Microlok interface circuits and microtrax circuits. Conducted Signal Sighting with driver representatives.</p> <p>Updating of As-Built interface circuits.</p>	<p>This indicates only participation in a team without directly indicating the Role. It will be considered as a team member only. It indicates the range of systems. and will limit the competency rating for equipment types. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>
<p><u>Poor example –no rating</u></p> <p>Designer Four crossing loops on Kangaroo line with Microlok and LED signals.</p>	<p>This does not show the Role or responsibility of the person doing the maintenance. It does not indicate the tasks performed within the design process. The reference to the crossing loop is considered as a straightforward task and will only be adequate for a Level 2 rating.</p>