Trackside Safety Curriculum

For Queensland Rail – Rail Industry Workers

Version	Date of Review	Description
V1.0	11/11/2013	Draft for comment
V1.1	25/03/2014	Draft for comment
V1.2	13/03/2015	Final
V1.3	30/10/2017	Update to Unit of Competence versions

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1. Introduction

This document has been developed to provide Queensland Rails contractors with an overview of the enterprise course curriculum for Trackside Safety courses, which includes:

- Target audience
- Learning outcomes
- Course qualifications
- Duration
- Queensland Rail's licenced provider

On successful completion of the courses/qualifications listed in this document, learners can register with the Rail Industry Worker Program via the Onsite Track Easy system for the various trackside safety roles identified within the Rail Industry Worker (RIW) Trackside Safety Matrix.

Attendance and successful completion of the listed courses does not guarantee the learner a Queensland Rail - Rail Industry Worker (RIW) role. Learners must be part of a company contracted to Queensland Rail to provide the work defined in the various Competency Matrices.

2. Training and Assessment

2.1. Enterprise alignment

All trackside safety training associated with roles specific to Queensland Rail are aligned to the enterprise requirements of the organisation. These requirements are specific to Queensland Rails safeworking systems and procedures.

Queensland Rail has licensing arrangements in place with Registered Training Organisations (RTO) to deliver on these specific enterprise requirements.

2.2. National alignment

While all trackside safety training associated with roles specific to Queensland Rail are aligned to the enterprise requirements of the organisation, most of the courses contained within this curriculum document also align to national units of competence.

Queensland Rail and its licenced RTOs do recognise units of competence delivered by other RTO's, however contractors are also required to complete all identified training as it is aligned to the specific enterprise requirements of Queensland Rail, unless Recognition of Current Competence can be demonstrated to the organisation's evidence criteria.

2.3. Assessment outcome

Participants of the trackside safety courses will be issued, on successful completion, a "Statement of Attainment" listing the units of competence achieved. Additionally a "Certificate of Attendance" for Queensland Rail specific trackside safety courses will be issued by the licenced RTO.

Both of these documents, along with a copy of the Psychometric Test certificate (where applicable) must be registered with the Onsite Track easy system to allow a contractor to apply for a Queensland Rail RIW role.

2.4.   Licenced Training Providers

Queensland Rail currently has in place a licencing arrangement with the following RTOs, to deliver its trackside safety enterprise specific courses:

http://www.queenslandrail.com.au/forbusiness/contractors

3. Trackside Safety Course Overview

3.1.   Rail Safety Awareness

Target audience: Workers who are required to access rail operations areas outside of the rail corridor as part of their role.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification.

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Identify what the Rail Corridor is.
- Identify common terms used in relation to the Rail Environment.
- Identify potential hazards and risks in the Rail Environment.
- Recognise and report any unsafe situations in the Rail Environment.
- Identify 'safe' areas designated for workers and customers in the Rail Environment.

Duration: 1 Hour

Reaccreditation: Nil

Assessment method: The learners will be assessed to determine their competence using group discussion and questioning techniques.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:
- Nil

3.2.   Safely access the rail corridor

Target audience: Workers who are required to regularly access the rail corridor as part of their role.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

It is designed to give learners the skills and knowledge required to safely enter and navigate around the rail corridor and danger zone with the permission of the access provider, in accordance with legislative and regulatory requirements. It includes following the policies, procedures and protocols of the access provider for situational awareness and rail safety, and to operate under local track protection rules in accordance with safe working and regulatory requirements and workplace procedures, including accessing and interpreting information about track protection requirements, carrying out assigned protection and/or work activities, and responding appropriately to safety incidents and abnormal situations within the limits of personal responsibility.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national units of competency:

- TLIF2080 Safely Access the rail corridor
- TLIW2001 Operate under track protection rules.

Learning Outcomes: On successful completion of this package learners will have the following knowledge and skills:

- Demonstrate how to safely access and work in the rail corridor.
- Recognise the Danger Zone.
- Identify and access a Safe Place.
- Identify the direction of approaching traffic.
- Apply minimum sighting distances.
- Maintain situational awareness to identify potential risks.
- Identify and explain the use of communication tools when working in the rail environment.
- Identify electrical safety hazards, risks and controls used in the rail corridor
- Identify and report unsafe situations within the rail environment.
- Undertake work activities under local track protection rules in accordance with safeworking rules, procedures and regulatory requirements

Duration: 6 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:
- NHS Category 3 Health Assessment required for the role of 'Working in the Rail Corridor'

3.3.   Communications

Target audience: Workers who are required to communicate with Network Controllers, Rail Traffic Crew and other workers within the Queensland Rail Network

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIE2007 Use Communication Systems.

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Test communication equipment
- Send and receive radio and mobile communications as per Queensland Rail procedures
- Apply effective communication to ensure your safety
- Use standard communication terms when requested by other party
- Use emergency messages appropriately and to procedure
- Explain the barriers to communication and the strategies to overcome them.

Duration: 6 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- Nil

3.4. Lookout working

Target audience: Workers who are required to perform the role of a Lookout when lookout working is being used as a protection method for a worksite.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIF2081 Perform Lookout duties

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Explain the roles and responsibilities of a Lookout
- Explain how a Lookout communicates with the workgroup, other Lookouts, supervisors and the Protection Officer.
- Apply and communicate the minimum sighting distance through a Prestart Safety Briefing.
- Explain what a Lookout can do in different parts of the Network.
- Advise workers to clear the track.
- Acknowledge the rail traffic whistle.
- Stop a train in an emergency.

Duration: 4 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- NHS Category 3 Health Assessment
- Safely access the rail corridor

3.5. Railway Track Signals

Target audience: Workers who are required to use railway track signals to warn workers of oncoming rail traffic.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIF2097 Audible track warning devices

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Identify Railway Track Signals.
- Determine the appropriate actions to take when working with Rail Track Signals.
- Maintain safety when working with Railway Track Signals.
- Implement the actions required if Railway Track Signals are stolen or go missing.
- Dispose of Railway Track Signals appropriately.

Duration: 4 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- Safely access the rail corridor

3.6. Handsignaller

Target audience: Workers who are required to warn and signal rail traffic using handsignalling equipment

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIF2082 Perform Handsignaller duties

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Identify equipment required to handsignal
- Demonstrate the display of hand, flag and light signals
- Identify the correct location and safe position to stand when handsignalling

Duration: 4 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- NHS Category 1 Health Assessment
- Psychometric Testing for Handsignaller
- Safely access the rail corridor
- Communications
- Railway track signals

3.7.   In Field Protection (Formally known as Per Way Protection)

Target audience: Workers who are required to place stop boards to prevent the entry of rail traffic into a worksite (except for rail traffic and/or track machines).

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIW2039 Place and remove permanent way stop boards

Learning Outcomes: At the successful completion of this section participants will have the knowledge & understanding of the following as they relate to their job role:

- Identify types of In-field Protection
- Position In-field STOP signs and STOP AHEAD signs

Duration: 8 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- Safely access the rail corridor
- Communications
- Railway track signals

3.8.   Clipping Points

Target audience: Workers who are required to place or clip on point/s to prevent their movement in emergencies and for the protection of workers at a worksite.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIW2037 – Clip and secure points

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Interpret and apply clipping points procedures
- Attach a points clip correctly
- Remove a points clip correctly

Duration: 4 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- Psychometric Testing for Clipping Points
- Safely access the rail corridor
- Communications

3.9.　Temporary Speed Restrictions

Target audience: Workers who are required to place rail track signs to indicate the rail traffic there is a speed restriction in place due to an emergency, weakening of the track or maintenance. .

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIW2038 Place and remove temporary speed restriction equipment

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Plan for safety
- Place Temporary Speed Restriction Equipment
- Remove temporary Speed Restriction Equipment

Duration: 4 Hours

Reaccreditation: 3 years

Assessment method: The learners will be assessed to determine their competence using both a theory and practical assessment.

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- HNS Category 3 Health Assessment
- Safely access the rail corridor

3.10. Rail Corridor Protection Officer (RCPO)

Target audience: Any Rail Safety worker conducting the duties of a Rail Corridor Protection Officer in the course of their job role

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

* TLIF3083 Conduct track protection assessment.

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

* Plan work in the rail corridor outside the danger zone
* Establish a worksite in the rail corridor
* Establish the best protection level required for workers and equipment for the worksite

Duration: 6 Hours

Reaccreditation: 3 years – field assessment of monitoring events maintained. If not full retraining is required.
Utilisation: To be completed upon successful completion of theory assessment and mentoring events.
Monitoring: 3, 6 & 12 months for first time qualified and then annually from date of first being qualified.

Assessment method: The learners will be required to:

* Successfully complete a theory assessment in the classroom,
* Complete a mentoring process in the field prior to being practically assessed
* Successfully complete a practical assessment

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

* NHS Category 3 Health Assessment
* Safely access the rail corridor
* Communications
* Mentoring

3.11. Protection Officer Level 1 (PO1)

Target audience: Any workers who have the responsibility to assess, determine and implement suitable trackside safety protection for themselves or workgroup

This level of protection officer can use the following levels of protection for a worksite:

- Personnel continual vigilance
- Lookout working
- Absolute signal blocking
- Electronic absolute signal blocking

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national units of competency:

- TLIF3083 Conduct track protection assessment
- TLIL3082 Implement absolute signal block
- TLIE2029 Conduct Workplace Information Briefings
- TLIE2008 Process workplace documentation

Learning Outcomes: On successful completion of this unit/s learners will have the following knowledge and skills:

- Describe the role and responsibilities of a Protection Officer 1 (PO1)
- Use the Rules and Procedures to obtain relevant information for PO1 activity
- Identify key considerations in their area of operation (Walking in the danger zone)
- Describe the methods and types of protection relevant to given situations, relating to:
- Undertake the requirements for planning for protection, including:
- Undertake the requirements for implementing and managing protection, including:

Duration: 3 days

Reaccreditation: 3 years – field assessment of monitoring events maintained. If not full retraining is required.

Utilisation: To be completed upon successful completion of theory assessment and mentoring events.

Monitoring: 3, 6 & 12 months for first time qualified and then annually from date of first being qualified.

Assessment method: The learners will be required to:

- Successfully complete a theory assessment in the classroom,
- Complete a mentoring process in the field prior to being practically assessed
- Successfully complete a practical assessment

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- NHS Category 3 Health Assessment
- Psychometric Testing for Protection Officer
- Mentoring
- Safely access the rail corridor
- Communications

3.12. Protection Officer Level 2 (PO2 - TOA)

Target audience: Workers who are required to perform the role of a Protection Officer level 2 to implement a Track Occupancy Authority (TOA) as a means of protection to a worksite.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIL 3065 Implement a track occupancy protection (TOA)

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Demonstrate the roles and responsibilities of a Protection Officer 2
- Apply rules for a Track Occupancy Authority
- Apply Protection Track Occupancy Authority limits
- Apply Protection of worksites
- Complete Protection Officer duties
- Rail Traffic creating a Track Occupancy Authority
- Operate multiple worksites within a Track Occupancy Authority.

Duration: 12 Hours

Reaccreditation: 3 years – field assessment of monitoring events maintained. If not full retraining is required.
Utilisation: To be completed upon successful completion of theory assessment and mentoring events.
Monitoring: 3, 6 & 12 months for first time qualified and then annually from date of first being qualified.

Assessment method: The learners will be required to:

- Successfully complete a theory assessment in the classroom,
- Complete a mentoring process in the field prior to being practically assessed
- Successfully complete a practical assessment

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- NHS Category 3 Health Assessment
- Psychometric Testing for Protection Officer
- Mentoring
- Protection Officer Level 1 (PO1)
- Infield Protection
- Clipping of Points
- Railway Track Signals

Prerequisites to Protection Officer Level 1 (PO1):

- SARC
- Communications
- Mentoring

3.13. Protection Officer Level 2 (PO2 - TWA)

Target audience: Workers who are required to perform the role of a Protection Officer level 2 to implement a Track Work Authority (TWA) as a means of protection to a worksite.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national unit of competency:

- TLIL 3083 Implement protection track work authority and manage rail traffic through worksites

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:
- Implement rules for Track Work Authority
- Protect worksites under a TWA
- Fulfil Protection Officer duties
- Protect multiple worksites within a Track Work Authority.

Duration: 2 days

Reaccreditation: 3 years – field assessment of monitoring events maintained. If not full retraining is required.
Utilisation: To be completed upon successful completion of theory assessment and mentoring events.
Monitoring: 3, 6 & 12 months for first time qualified and then annually from date of first being qualified.

Assessment method: The learners will be required to:

- Successfully complete a theory assessment in the classroom,
- Complete a mentoring process in the field prior to being practically assessed
- Successfully complete a practical assessment

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- NHS Category 3 Health Assessment
- Psychometric Testing for Protection Officer
- mentoring
- Protection Officer Level 1 (PO1)
- In-field Protection
- Clipping of Points
- Railway Track Signals

Prerequisites to Protection Officer Level 1 (PO1):
- SARC
- Communications
- Mentoring

3.14. Protection Officer Level 3 – Possession Protection Officer (PO3 - PPO)

Target audience: Workers required to conduct an assessment to establish the most suitable means of protection for a worksite.

The PPO has the ability to suspend the safeworking system from the Network Controller or access provider.

Once the safeworking system is suspended they can establish one or more worksites using any of the following means of protection at each worksite:

- Personnel continual vigilance
- Lookout working
- Absolute signal blocking
- Electronic absolute signal blocking
- Track Occupancy Authority (TOA)
- Track Work Authority (TWA)

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification as well as the national units of competency:
- TLIL3084 Implement a local possession authority
- TLIL4069 Plan and coordinate protection for multiple worksites within limits of a work on tack authority
- TLIC2081 Pilot rail traffic within work on track authority limits

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- Apply knowledge of how signals assist with safe movement of rail traffic
- Plan for safety
- Apply the Local Possession Authority
- Fulfil the roles and responsibilities of a Protection Officer
- Complete Possession Protection Officer 3 Tasks
- Explain actions required for safe movement of rail traffic

Duration: 3 days

Reaccreditation: 3 years – field assessment of monitoring events maintained. If not full retraining is required.

Utilisation: To be completed upon successful completion of theory assessment and mentoring events.

Monitoring: 3, 6 & 12 months for first time qualified and then annually from date of first being qualified.

Assessment method: The learners will be required to:

- Successfully complete a theory assessment in the classroom,
- Complete a mentoring process in the field prior to being practically assessed
- Successfully complete a practical assessment

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- NHS Category 3 Health Assessment
- Psychometric Testing for Protection Officer
- Mentoring
- Protection Officer Level 1 (PO1)
- Protection Officer Level 2 – Track Occupancy Authority (PO2 - TOA)
- Protection Officer Level 2 – Track Work Authority (PO2 - TWA)

Prerequisites to Protection Officer Level 1 (PO1):

- Safely access the rail corridor
- Communications
- Mentoring

Prerequisites to Protection Officer Level 2 – Track Occupancy Authority (PO2 - TOA):

- Protection Officer Level 1 (PO1)
- In-field Protection
- Clipping of Points
- Railway Track Signals
- Mentoring

Prerequisites to Protection Officer Level 2 – Track Work Authority (PO2 - TWA):

- Protection Officer Level 1 (PO1)
- In-field Protection
- Clipping of Points
- Railway Track Signals
- Mentoring

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3.15. Key Switching Signals

Target audience: For workers who are required to secure a signal at stop, or disable a signal route in the field by operating the switching device.

Summary: This course is aligned to the specific requirements of Queensland Rails Network Rules and Procedures MD-12-189.

On successful completion of this course learners will obtain a Queensland Rail enterprise qualification.

Learning Outcomes: On successful completion of this unit learners will have the following knowledge and skills:

- How to identify the Switch and Signal
- Procedure to follow when key switching a signal

Duration: 90 minutes

Reaccreditation: 3 years

Assessment method: The learners will be required to:

- Successfully complete a theory assessment in the classroom,

Licenced Provider: Visit the Queensland Rail website for a list of currently licenced training providers

http://www.queenslandrail.com.au/forbusiness/contractors

Prerequisites:

- In-field Protection
- Safely access the rail corridor
- Communications
- Railway track signals