



# Competency Australia

## TLI50621 – Diploma of Rail Operations Management

Competency Australia Pty Ltd



## Learner Handbook

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CAM-026 Version 1

RTO Code 40647

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# 1. INTRODUCTION

## 1.1 ABOUT THE COURSE

### 1.1.1 *Course Development*

Originally delivered by Central Queensland University as part of their Graduate Diploma of Rail Operations Management, this material now forms a nationally recognised qualification TLI50621 – Diploma of Rail Operations Management.

The course material is owned, delivered and maintained by Competency Australia Pty Limited.

The course material was originally developed through the Cooperative Research Centre for Railway Engineering and Technologies (Rail CRC), with content advisors from Aurizon, Railcorp, Pacific National, ARTC, AusRail Holding, Central Queensland University, University of Queensland, Queensland University of Technology, University of South Australia, University of Wollongong and Monash University.

### 1.1.2 *Duration*

From course commencement, you will have 12 months to successfully complete all assessment activities. All submissions are made according to a structured submission schedule.

The 12-month period is divided into 3 sessions, each 13 weeks in length.

The course is suitable for students studying part time and working full time.

Each session may be undertaken as part of the Diploma or as a stand-alone subject.

### 1.1.3 *Entry Requirements*

There are no formal pre-requisites for this course however **learners must be currently employed in the rail industry.**

### 1.1.4 *Who Should Enrol?*

TLI50621 Diploma of Rail Operations Management has been developed for individuals wishing to progress their careers in the following areas:

- Network Control
- Passenger Services Management
- Rail Freight Management
- Rail Operations Management
- Rail Maintenance Management
- Rail Safety Management and Investigations

### 1.1.5 *Readings*

Reading material is available for download through the course website. Students are encouraged to conduct their own research beyond the course material.

The following book is highly recommended:

- Railway Operation and Control – Joern Pachl

### 1.1.6 *Course Format*

The course is delivered through distance learning. Soft copies of course materials will be provided to enrolled students through the course website.

Each student is issued with a unique user name and password for secure access to the website.

## 1.2 ASSESSMENT

### 1.2.1 *Assessment Submission*

Appropriate referencing is required for all submissions. The Harvard (author date) referencing style is recommended, however other styles of referencing are acceptable.

If you are unfamiliar with referencing, you can contact your course coordinator for more information. There are also numerous free resources available on the web to guide you through the process.

Assessment submissions are uploaded to our online learning management system for marking.

You will receive an email notification to your nominated email address whenever an assessment submission has been marked by the assessor.

### 1.2.2 *Submission Schedule*

Brief descriptions of each module and submission schedules are provided in Section 4 of this document.

If you are not able to submit an assessment by the specified due date, you must request an extension in writing prior to the due date.

### 1.2.3 *Criteria*

The following criteria will be used to assess your assessment activities:

- Effective use of available material
- Demonstration of the learning outcomes relevant to the assignment.
- Logical organisation and development of ideas and arguments
- Clarity of expression, including correct grammar, spelling and punctuation.

You are expected to read beyond the program materials.

All sources used are to be appropriately referenced.

### 1.2.4 *Resubmissions*

Should an assessment submission be deemed unsatisfactory, you will have two (2) opportunities to resubmit the assessment item(s) based on the feedback provided by the tutor. These two resubmissions are at no additional cost.

Should the learner's submission be deemed unsatisfactory following these two resubmissions, the matter will be referred to the course coordinator.

Should additional training and assessment be required, additional course fees may be charged. The student will be advised of any such fees prior to any charges being made.

### 1.2.5 *Complaints and Appeals*

If you have any concerns or questions about the assessment process, we recommend that you approach the course tutor in the first instance. You can also contact the course coordinator [Jeanette@CompetencyAustralia.com.au](mailto:Jeanette@CompetencyAustralia.com.au) with any concerns.

A complaints and appeals form is also available through the course website <http://CompetencyAustralia.edu.au>.

If a satisfactory outcome cannot be reached internally, an independent third party may be appointed to arbitrate and reassess if necessary.

If no satisfactory solution is reached, students can lodge a complaint with the Australian Skills Quality Authority (ASQA). Further details can be obtained at [Making a complaint | Australian Skills Quality Authority](#) or by telephoning the ASQA Info Line on 1300 701 801 or by emailing [enquiries@asqa.gov.au](mailto:enquiries@asqa.gov.au)

Please see our Complaints Policy, available for download from our website, for further information.

## 2. CONTENT

### 2.1 DIPLOMA OVERVIEW

Along with the learner guide and associated readings, you will be expected to undertake independent research and activities within your workplace to support your learning and complete the assessment tasks.

Each assessment task is used as evidence to contribute to your overall competence.

Once you have successfully completed all three sessions and been assessed as competent by Competency Australia, you will have achieved the qualification TLI50621 - Diploma of Rail Operations Management.

There are 14 units of competency that form a full Diploma of Rail Operations Management. These 14 units include 8 core units and 6 elective units.

The units below have been selected by Competency Australia for delivery from October, 2016. Please refer to the training package, accessible through [Training.gov.au](http://Training.gov.au), for further information regarding elective units and packaging rules.

#### 2.1.1 8 Core Units

AHCWHS502 Manage work health and safety processes

TLIE4032 Use internal communication systems for rail industry regulatory compliance

TLIF4104 Manage change in the rail safety environment

TLIF4107 Respond to notifiable rail safety occurrences

TLIF5021 Apply rail safeworking rules and procedures

TLIL5066 Apply rail resource management principles

TLIW5001 Apply rail communication systems

TLIW5002 Manage rail assets and interfaces

#### 2.1.2 6 Elective Units

TLIF4100 Identify and meet rail safety regulatory compliance requirements

TLIF5024 Develop plans for emergency response and recovery of rail networks

TLIW5003 Manage rail network control systems

TLIF5017 Investigate rail safety incidents

TLIL5073 Manage train crewing and rostering

TLIW5004 Manage Train Planning

## 3. ADDITIONAL INFORMATION

### 3.1 CERTIFICATE ISSUANCE

Qualifications will be issued within 14 days of confirmation of successful completion of all 3 sessions.

Qualifications and testamurs will be mailed in hard copy to the address nominated on your enrolment form. If your details have changed, please advise us as soon as possible.

A fee of \$25 will be charged for each replacement certificate required.

### 3.2 PAYMENT

#### 3.2.1 *Individual Learners*

A non-refundable initial deposit and administration fee of \$300 is due prior to course commencement.

50% of the session fee is required by the end of Week 2 of each session.

The remaining 50% of the session fee is due by the end of Week 8.

We accept the following payment methods:

- Direct deposit (preferred)
- Credit card (via Paypal, additional fees apply).
- Cheque

Please note that the session fees are per session. In order to complete the full diploma, you will be required to complete a total of three (3) sessions.

#### 3.2.2 *Employers*

Where an employer engages Competency Australia to provide training and/or assessment, payment shall be as per arrangement.

### 3.3 TIME TO COMPLETE

The qualification must be completed within 12-months of commencement. Each session must be completed prior to the commencement of the next session unless an extension has been applied for and approved in writing.

Additional fees will be charged for those wishing to re-enrol following failure to submit within the allocated time frames.

### 3.4 REFUNDS

Any cancellations prior to commencement will result in a \$300 fee to cover administrative costs.

If notice of cancellation is received following commencement, 50% of the session fee will be payable. If notice of cancellation is received after Week 7, the full session fee will be payable.



Please see our Refund and Cancellation Policy, available for download from our website, for further information.

### **3.5 CANCELLATION**

If for any reason Competency Australia is unable to meet its service agreement to a student, we will provide a full refund. Alternatively, we will be happy to arrange to place you on the next convenient course available.

### **3.6 REASONABLE ADJUSTMENT**

Wherever possible, we will make reasonable adjustments to meet your individual needs. Any special needs, including physical, learning or health conditions which may require adjustments to be made should be advised as part of or prior to the enrolment process. Appropriate adjustments will then be discussed.

### **3.7 ACCESS & EQUITY**

Competency Australia is committed to integrating access and equity principles within all the services that we provide to our clients. All staff recognise the rights of learners and provide information, advice and support.

Regardless of cultural background, religion, gender, sexuality, disability, location or age you have the right to learn in an environment that is free from discrimination and harassment and be treated in a fair and considerate manner while you are studying with us.

### **3.8 DISCRIMINATION**

We will not tolerate any unlawful discrimination or harassment by staff or employee or client, based on their sex, pregnancy, marital status, race (including colour, ethnic background, national identity and ethno- religion), sexuality, disability or age, etc.

Harassment includes any form of behaviour that a person does not want, finds offensive, humiliating or intimidating.

### **3.9 LANGUAGE, LITERACY & NUMERACY (LLN)**

Competency Australia is committed to ensuring accessibility to all prospective students for the training courses we provide.

Many of our students have not studied at this level previously, and we support all students in their learning journey.

Before enroll in the course, we request that you complete the following quiz to assess your Language, Literacy and Numeracy:

[LLN Quiz](#)

If you struggle with answering the questions in the quiz, it doesn't mean that you are unable to complete the course – however you may require some additional support.

Please let us know if you have any concerns or difficulties completing the required tasks.



We also recognise that at times language and literacy problems may restrict a person from achieving the competencies required for particular courses or programs.

Where possible, the learning activities/assessments may be modified to compensate for those with literacy or numeracy skill needs. Please refer to our Language, Literacy and Numeracy Policy for further information.

### **3.10 LEGISLATIVE REQUIREMENTS**

Competency Australia is committed to ensuring compliance with all legislative requirements of State and Federal Government.

### **3.11 MANAGEMENT & ADMINISTRATION**

Student records are managed securely and confidentially and are available for student perusal on request.

### **3.12 PRIVACY**

Competency Australia strongly supports the privacy and confidentiality of students' information and this is supported through compliance with the Privacy Act 1988 and the Student Identifiers Act 2014. Certain information regarding geographic location, gender, age and results are required for statistic requirements by Government bodies.

### **3.13 RECOGNITION OF PRIOR LEARNING (RPL)**

Recognition of prior learning assessment is available to all learners. If you believe you have relevant current skills and abilities that you have gained previously, please contact your course coordinator.

They will discuss the evidence requirements and documentation required to support your application.

### **3.14 MUTUAL RECOGNITION**

Competency Australia recognises AQF Qualifications and Statements of Attainment issued by other Registered Training Organisations.

### **3.15 ASSESSMENT**

#### **Assessment Malpractice**

Assessment malpractice includes: cheating, collusion and plagiarism.

Competency Australia regards the integrity of assessment as critical to its professional responsibilities as an RTO and therefore strives to ensure the assessment processes are not compromised. Competency Australia has policies and procedures in place for dealing with assessment malpractice. Cheating or the use of another person's work and submitting as your own will not be tolerated.

Collusion is the presentation of work, which is the result in whole or in part of **unauthorised** collaboration with another person or persons. It is your responsibility to ensure that other clients do not have opportunity to copy your work.

Copying from a published work (including the internet), without referencing, will not be tolerated. This includes presentation of work which has been copied in whole or in part from another person's work or from any other source such as the Internet, published books, and periodicals. This includes systematic re-wording or changing key nouns and verbs. **You must follow referencing guidelines if you take another person's idea, and put it into your own words.**

### 3.16 CHANGE OF PERSONAL DETAILS

Clients are required to ensure their personal details recorded with Competency Australia are up-to-date at all times. Should your circumstances or details change please advise us via email.

### 3.17 EVALUATION AND FEEDBACK

Competency Australia values all feedback from clients as it assists us to continuously improve the products and services we offer. Clients are encouraged to provide us with feedback, both positive and constructive.

Thank you in advance for your comments.

## 4. SUBMISSION SCHEDULE

### 4.1 INTRODUCTION TO RAIL OPERATIONS MANAGEMENT

This subject has been divided into eight (8) modules (see below for details).

Assessment for Introduction to Rail Operations Management consists of eight (8) module assessments and two (2) assignments.

#### **Module 1**

Module 1 places rail in the context of the transport industry and the legislative framework that governs the existence of rail organisations.

#### **Module 2**

Module 2 looks at the safeworking rules, procedures and policies governing the rail operations environment.

#### **Module 3**

Module 3 provides an introduction to signalling and control systems. We study signalling, control and communication systems in further detail in Sessions 2 & 3.

#### **Module 4 & 5**

Modules 4 & 5 provide background technical information that dictates the physical aspects of rail operation. Topics covered include fixed and mobile assets (tracks, signals, communications and network control system, stations, yards, rollingstock).

Railway asset management and maintenance is covered in further detail in Session 2.

#### **Module 6**

Topics covered in Module 6 include train planning and optimisation. We look at the various factors which need to be considered when planning train movements and the mechanisms for doing so such as timetables.

#### **Module 7**

In Module 7, we move on to consider the human resource aspects of rail operations and train planning, including train crewing and rostering.

#### **Module 8**

Module 8 provides an introduction to the various aspects of change management, including tools and techniques for successfully managing organisational change.

<b>Week</b>	<b>Module</b>	<b>Submission</b>
1	Module 1 – Introduction to the Rail Regulatory Environment	Nil
2	Module 1 – Introduction to the Rail Regulatory Environment	Module 1 Assessment due end Week 2
3	Module 2 – Safe-working	Nil
4	Module 2 – Safe-working	Module 2 Assessment due end Week 4
5	Module 3 – Signalling and Control	Module 3 Assessment due end Week 5
6	Module 4 - Fixed Assets	Module 4 Assessment due end Week 6
7	Module 5 – Rolling Stock	Module 5 Assessment due end Week 7
8	Module 6 – Train Planning	Nil
9	Module 6 – Train Planning	Module 6 Assessment & Assignment 1 due end Week 9
10	Module 7 – Train Crewing and Rostering	Nil
11	Module 7 – Train Crewing and Rostering	Module 7 Assessment due end Week 11
12	Module 8 – Change Management	Module 8 Assessment due end Week 12
13	Assignment Work	Assignment 2 due end Week 13
	Catch Up, resubmissions if required.	

## 4.2 RAIL INFRASTRUCTURE

This subject has been divided into 6 modules (see below for details).

Assessment for Rail Infrastructure consists of six (6) module assessments and one (1) project.

### **Module 1**

Module 1 looks at the legislative framework surrounding Work, Health and Safety (WHS), and the development and implementation of effective WHS processes and systems.

### **Module 2**

In Module 2, concepts related to rail infrastructure reliability, availability, maintainability and safety (RAMS) are identified and explained.

### **Module 3**

Topics covered in Module 3 include asset management, asset lifecycles, management frameworks, asset strategies and track possessions.

### **Module 4**

In Module 4, we examine the wheel-rail interface, including the forces involved and common rail defects.

### **Module 5**

Railway communication systems are discussed in Module 5, including the application of communications systems, safe working, recording and logging.

### **Module 6**

Module 6 provides a formal introduction to Rail Resource Management (RRM) principles, with a focus on leadership and management.

<b>Week</b>	<b>Module</b>	<b>Submission</b>
1	Module 1 – Work, Health and Safety Management Systems	Nil
2	Module 1 – Work, Health and Safety Management Systems	Module 1 Assessment due end Week 2
3	Module 2 – Reliability, Availability, Maintainability and Safety	Nil
4	Module 2 – Reliability, Availability, Maintainability and Safety	Module 2 Assessment due end Week 4
5	Module 3 – Rail Operations Assets and Their Management	Nil
6	Module 3 – Rail Operations Assets and Their Management	Module 3 Assessment due end Week 6
7	Module 4 – The Wheel-Rail Interface and Its Management	Nil
8	Module 4 – The Wheel-Rail Interface and Its Management	Module 4 Assessment due end Week 8
9	Module 5 – Railway Communications Infrastructure	Nil
10	Module 5 – Railway Communications Infrastructure	Module 5 Assessment due end Week 10
11	Module 6 – Rail Resource Management	Nil
12	Module 6 – Rail Resource Management	Module 6 Assessment due end Week 12.
13	Project Finalisation	Project due end Week 13.
	Catch Up, resubmissions if required.	

## 4.3 NETWORK AND LOCALISED TRAIN CONTROL

This subject has been divided into 4 modules.

Assessment for Network and Localised Train Control consists of four (4) module assessments.

### **Module 1**

This module will give you an understanding of what train control is and the tools and techniques that are used by train controllers. You will be expected to apply the principles of train control to a hypothetical scenario.

### **Module 2**

In this module you will gain knowledge about techniques used in disruption management and degraded mode operations, as well as recovery methods for both.

Furthermore, you will be expected to apply the principles to a hypothetical scenario.

### **Module 3**

In this module you will gain knowledge of the legislative requirements and general techniques governing emergency management planning, preparedness, response and recovery. Furthermore, you will be expected to apply the principles of to a hypothetical scenario.

### **Module 4**

In this module you will gain knowledge of the legislative requirements and general techniques governing occurrence investigation and reporting.



<b>Week</b>	<b>Module</b>	<b>Submission</b>
1	Module 1 – Principles of Train Control	Nil
2	Module 1 – Principles of Train Control	Nil
3	Module 1 – Principles of Train Control	Module 1 Assessment due end Week 3
4	Module 2 – Disruption Management and Degraded Mode Operation	Nil
5	Module 2 – Disruption Management and Degraded Mode Operation	Nil
6	Module 2 – Disruption Management and Degraded Mode Operation	Module 2 Assessment Due end Week 6
7	Module 3 – Emergency Planning, Preparedness, Response and Recovery	N/A
8	Module 3 – Emergency Planning, Preparedness, Response and Recovery	N/A
9	Module 3 – Emergency Planning, Preparedness, Response and Recovery	Module 3 Assessment Due end Week 9
10	Module 4 – Incident Investigation and Reporting	N/A
11	Module 4 – Incident Investigation and Reporting	N/A
12	Module 4 – Incident Investigation and Reporting	Module 4 Assessment due end Week 12.
13	Catch Up, resubmissions if required.	