



Federal Democratic Republic of Ethiopia  
OCCUPATIONAL STANDARD  
RAIL TRAFFIC OPERATION  
NTQF Level II, III and IV



*Ministry of Education  
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## Introduction

Ethiopia has embarked on a process of reforming its TVET-System. Within the policies and strategies of the Ethiopian Government, technology transformation – by using international standards and international best practices as the basis, and, adopting, adapting and verifying them in the Ethiopian context – is a pivotal element. TVET is given an important role with regard to technology transfer. The new paradigm in the outcome-based TVET system is the orientation at the current and anticipated future demand of the economy and the labor market.

The Ethiopia Occupational Standards (EOS) is the core element of the Ethiopian National TVET-Strategy and an important factor within the context of the National TVET-Qualification Framework (NTQF). They are national Ethiopian standards, which define the occupational requirements and expected outcome related to a specific occupation without taking TVET delivery into account.

This document details the mandatory format, sequencing, wording and layout for the Ethiopia Occupational Standard which comprised of Units of Competence.

A Unit of Competence describes a distinct work activity. It is documented in a standard format that comprises:

- Occupational title and NTQF level
- Unit title
- Unit code
- Unit descriptor
- Elements and Performance criteria
- Variables and Range statement
- Evidence guide

Together all the parts of a Unit of Competence guide the assessor in determining whether the candidate is competent.

The ensuing sections of this EOS document comprise a description of the occupation with all the key components of a Unit of Competence:

- chart with an overview of all Units of Competence for the respective level (Unit of Competence Chart) including the Unit Codes and the Unit titles
- contents of each Unit of Competence (competence standard)
- occupational map providing the Technical and Vocational Education and Training (TVET) providers with information and important requirements to consider when designing training programs for this standards and for the individual, a career path

## UNIT OF COMPETENCE CHART

Occupational Standard: Rail Traffic Operation

Occupational Code: **EIS RTO**

### *NTQF Level II*

[EIS RTO2 01 0313](#)

Apply Fatigue Management Strategies

[EIS RTO2 02 0313](#)

Manage Personal Stress in the Workplace

[EIS RTO2 03 0313](#)

Safely Access the Rail Corridor

[EIS RTO2 04 0313](#)

Monitor and Maintain the Service

[EIS RTO2 05 0313](#)

Provide Protection

[EIS RTO2 06 0313](#)

Respond to Non-Routine Situations

[EIS RTO2 07 0313](#)

Assume and Handover Responsibility for Area of Control

[EIS RTO2 08 0313](#)

Participate in Workplace Communication

[EIS RTO2 09 0313](#)

Work in Team Environment

[EIS RTO2 10 0313](#)

Develop Business Practice

[EIS RTO2 11 0313](#)

Standardize and Sustain 3S

**NTQF Level III**

<a href="#">EIS RTO3 01 0313</a> Organize Personal Work Priorities and Development	<a href="#">EIS RTO3 02 0313</a> Write Simple Documents	<a href="#">EIS RTO3 03 0313</a> Apply Awareness of Railway Fundamentals
<a href="#">EIS RTO3 04 0313</a> Use Electronic Communication Systems	<a href="#">EIS RTO3 05 0313</a> Follow Occupational Health, Safety and Environmental Procedures in the Rail Industry	<a href="#">EIS RTO3 06 0313</a> Apply Awareness of Dangerous Goods and Hazardous Materials Requirements
<a href="#">EIS RTO3 07 0313</a> Apply Local Incident Response Procedures	<a href="#">EIS RTO3 08 0313</a> Control Operational Rail Traffic through Worksites	<a href="#">EIS RTO3 09 0313</a> Conduct Track Protection Assessment
<a href="#">EIS RTO3 10 0313</a> Implement Track Blocking Protection	<a href="#">EIS RTO3 11 0313</a> Operate Signal Panel or Equipment	<a href="#">EIS RTO3 12 0313</a> Apply Safe Working Rules and Regulations to Rail Functions
<a href="#">EIS RTO3 13 0313</a> Control and Coordinate Local Rail Traffic Movement	<a href="#">EIS RTO3 14 0313</a> Operate Stand Alone Signaling/Point Control Equipment	<a href="#">EIS RTO3 15 0313</a> Monitor Implementation of Work Plan/Activities
<a href="#">EIS RTO3 16 0313</a> Apply Quality Control	<a href="#">EIS RTO3 17 0313</a> Lead Workplace Communication	<a href="#">EIS RTO3 18 0313</a> Lead Small Teams
<a href="#">EIS RTO3 19 0313</a> Improve Business Practice	<a href="#">EIS RTO3 20 0313</a> Prevent and Eliminate MUDA	

**NTQF Level IV**

[EIS RTO4 01 0313](#)

Control and Coordinate Incident Responses

[EIS RTO4 02 0313](#)

Implement Safe Working Rules and Regulations for Network Control

[EIS RTO4 03 0313](#)

Identify and Meet Customer Requirements

[EIS RTO4 04 0313](#)

Arrange Alternative Passenger Transport

[EIS RTO4 05 0313](#)

Apply and Amend Rosters

[EIS RTO4 06 0313](#)

Organize Marshalling and Shunting Operations

[EIS RTO4 07 0313](#)

Conduct Marshalling Operations

[EIS RTO4 08 0313](#)

Control and Coordinate Rail Traffic Movement

[EIS RTO4 09 0313](#)

Implement and Amend Daily Train Plan

[EIS RTO4 10 0313](#)

Develop Out-of-Course Rail Traffic Plans and Schedules

[EIS RTO4 11 0313](#)

Develop Train Plans and Schedules

[EIS RTO4 12 0313](#)

Conduct Marshalling Operations

[EIS RTO4 13 0313](#)

Plan and Organize Work

[EIS RTO4 14 0313](#)

Migrate to New Technology

[EIS RTO4 15 0313](#)

Establish Quality Standards

[EIS RTO4 16 0313](#)

Develop Individuals and Team

[EIS RTO4 17 0313](#)

Utilize Specialized Communication Skills

[EIS RTO4 18 0313](#)

Manage and Maintain Small/Medium Business Operations

[EIS RTO4 19 0313](#)

Apply Problem Solving Techniques and Tools

## NTQF Level II

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Apply Fatigue Management Strategies
Unit Code	<a href="#">EIS RTO2 01 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to apply fatigue management strategies, including identifying and acting upon signs of fatigue and implementing appropriate strategies to minimize fatigue during work activities, in accordance with legislative and regulatory requirements.

Elements	Performance Criteria
1. Identify and act upon signs of fatigue	<p>1.1 Potential causes of fatigue are identified and action is taken to minimize their effects in accordance with company procedures.</p> <p>1.2 Personal warning signs of fatigue are recognized and necessary steps are taken in accordance with workplace procedures to ensure that effective work capability and alertness are maintained.</p> <p>1.3 <b>The need for fatigue management in a range of industry situations</b> are communicated to other relevant people.</p> <p>1.4 Workplace policies and procedures related to fatigue management and the control of <b>work-related factors that may contribute to fatigue</b> and fatigue-related accidents.</p> <p>1.5 Relevant <b>applicable legislation, regulations and codes</b> of practice and safe working system requirements.</p>
2. Implement strategies to minimize fatigue	<p>2.1 <b>Workplace</b> procedures are assessed to minimize fatigue.</p> <p>2.2 Factors which increase the risk of fatigue-related accidents and safety incidents are understood and minimized.</p> <p>2.3 <b>Worker/operator-related factors that may contribute to fatigue</b> are implemented in accordance with company policy.</p> <p>2.4 Lifestyle choices are made which promote the effective long-term management of fatigue.</p> <p>2.5 Effective practices in combating fatigue are adopted and applied.</p> <p>2.6 Personal fatigue management strategies are communicated to other relevant people.</p> <p>2.7 Appropriate counter measures are planned to combat fatigue.</p> <p>2.9 <b>Responsibilities of individual for fatigue risk</b></p>

	<p><b>management</b> are to follow organization's fatigue management policy and procedures.</p> <p>2.9 Work <b>schedules</b> and shift rosters.</p> <p>2.10 Check compliance between work and safe working rules and regulations and take appropriate action <b>depending on the organization, operating procedures</b> when non-compliance is identified.</p> <p>2.11 <b>Information and documents</b> relating to workplace instructions and procedures on fatigue management is obtained and analysed.</p>
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Variable	Range
The need for fatigue management in a range of industry situations	<p>Including:</p> <ul style="list-style-type: none"> <li>• operations conducted at all times but particularly at night</li> <li>• typical weather conditions</li> <li>• while working and/or driving at a workplace, depot, base or warehouse</li> <li>• while working and/or driving at a client's workplace or worksite</li> <li>• driving a motor vehicle on the open road</li> <li>• driving a motor vehicle on a private road</li> <li>• driving a train, locomotive or motive power unit</li> <li>• operating a marine vessel in coastal or international waters</li> <li>• operating an aircraft</li> <li>• operating load shifting equipment</li> <li>• operating safety critical industrial plant and equipment</li> </ul>
Work-related factors that may contribute to fatigue	<p>Include:</p> <ul style="list-style-type: none"> <li>• work demands such as: workload, work duration, shift pattern, time of day, frequency and duration of breaks and the type of work (such as working in isolation, repetitive tasks and boring, monotonous or under-challenging tasks)</li> <li>• organisational factors such as: work environment (including temperature, ventilation, continual rhythmic vibration from equipment), payment system, trip and work scheduling, and the predictability of work</li> </ul>
Applicable legislation, regulations and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant regulations and codes of the federal government and the state/territory regulatory authorities concerning fatigue management</li> <li>• relevant state/territory road rules</li> <li>• relevant rail industry safe working codes and regulations (where applicable)</li> <li>• relevant state/territory permit regulations and requirements</li> <li>• relevant state/territory OHS legislation</li> </ul>
Workplace	<p>May include:</p> <ul style="list-style-type: none"> <li>• Any work environment requiring safety critical operational</li> </ul>



	judgements to be made and in particular when operating equipment, vehicles, load shifting equipment, trains, marine vessels and aircraft at night
Worker/operator-related factors that may contribute to fatigue	<p>Include:</p> <ul style="list-style-type: none"> <li>• lifestyle factors such as: sleep patterns, alcohol and drug use, quantity and timing of food and drink, and opportunities for relaxation with family and friends</li> <li>• working multiple jobs</li> <li>• personal or biological factors such as: state of mental and/or physical health, inadequate sleep, sleep disorders, emotional stress, family responsibilities, relationship difficulties, inadequate competence to complete work tasks, and circadian rhythms</li> </ul>
Responsibilities of individual for fatigue risk management	<p>May include:</p> <ul style="list-style-type: none"> <li>• following the organisation's fatigue management policy and procedures</li> <li>• using time away from work appropriately to rest and recover</li> <li>• checking and ensuring fitness for work</li> <li>• reporting symptoms of fatigue</li> <li>• taking action to minimise risk when symptoms of fatigue are recognised</li> </ul>
Schedules	<p>May include:</p> <ul style="list-style-type: none"> <li>• rosters</li> <li>• vehicle schedules</li> <li>• timetabling</li> <li>• work plans</li> </ul>
Depending on the organisation, operating procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• standard operating procedures</li> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• federal and state/territory regulations and guidelines concerning fatigue management in various transport and workplace situations</li> <li>• workplace instructions and procedures on fatigue management</li> <li>• relevant OHS regulations and procedures</li> <li>• work schedules and shift rosters</li> <li>• emergency procedures</li> <li>• log book or record book (where required)</li> <li>• records and reports of fatigue-related errors and safety incidents</li> <li>• relevant standards and certification requirements</li> <li>• quality assurance procedures</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant codes, regulations, permit and licence requirements related to fatigue management</li> <li>• Relevant OHS regulations as they relate to fatigue</li> <li>• Workplace policies and procedures related to fatigue management and the control of factors that can contribute to fatigue and fatigue-related accidents</li> <li>• Sources of information on fatigue</li> <li>• The risks and hazards created by fatigue in the workplace</li> <li>• How fatigue affects workplace performance</li> <li>• How fatigue contributes to workplace accidents</li> <li>• Ways of recognising fatigue</li> <li>• Strategies and ways of managing fatigue</li> <li>• Causes and effects of fatigue on workers/drivers</li> <li>• Factors which increase fatigue-related accidents</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when applying fatigue management strategies</li> <li>• Read and interpret instructions, procedures, regulations and signs related to fatigue management and apply them to work activities</li> <li>• Recognise symptoms of fatigue and take appropriate action in accordance with fatigue management regulations and workplace procedures</li> <li>• Work collaboratively with others to manage and minimise the effects of fatigue during work activities</li> <li>• Adjust lifestyle patterns to ensure effective fatigue management during work activities</li> <li>• Modify activities and take appropriate initiatives to manage fatigue in the workplace depending on differing work contexts, risk situations and environments</li> <li>• Apply precautions and required action to minimise and control the effects of fatigue when carrying out own work functions</li> <li>• Adapt to changes in rosters and standard operating procedures as they may relate to fatigue management</li> </ul> <p>Participate in identifying and meeting own learning needs on matters related to fatigue management</p>

Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Manage Personal Stress in the Workplace
Unit Code	<a href="#">EIS RTO2 02 0313</a>
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to manage personal stress in a customer contact environment.

Elements	Performance Criteria
1. Develop personal awareness of stress	1.1 <b>Signs and sources of stress</b> are recognized. 1.2 Stress and <b>difficult situations</b> are acknowledged. 1.3 Potential areas of stress are analyzed and understood in the work environment.
2. Develop stress management techniques	2.1 An effective understanding of a range of <b>stress management techniques</b> is developed. 2.2 Appropriate techniques are used effectively to manage stressful situations. 2.3 Focus on areas of stress within personal control. 2.4 Adopt strategies to effectively reduce, manage and deal with stress.
3. Manage time	3.1 Job role priorities are developed and understood. 3.2 Techniques are developed to support the achievement of <b>key performance indicators (KPIs)</b> and priorities. 3.3 Appropriate <b>time management tools and techniques</b> are used. 3.4 Tools and techniques are regularly evaluated. 3.5 Relevant personnel are promptly identified and informed of any variations and difficulties affecting work requirements, through regular reviews.
4. Recover from a stressful contact	4.1 The contact or situation is reviewed. 4.2 The root cause/s of stressful contact or situation is analyzed. 4.3 The context of contact or situation is depersonalized. 4.4 Outcomes are discussed with appropriate staff members. 4.5 Prepare for next contact or situation in a positive manner. 4.6 Follow-up or take action where needed.
5. Maintain personal stamina and	5.1 <b>Sources of fatigue</b> are identified in contact centre role. 5.2 Adopt work routine and procedural strategies to minimize stress and fatigue.

resilience	<p>5.3 Personal performance is monitored against performance requirements.</p> <p>5.4 Adapt <b>stamina management strategies</b> to maximize performance.</p> <p>5.5 Assistance is sought from team members and management in managing stamina.</p>
6. Maintain work/life balance	<p>6.1 Work/life priorities are identified.</p> <p>6.2 Strategies are adopted to support work/life priorities.</p> <p>6.3 High priority is given to health and wellbeing.</p> <p>6.4 Work/life balance is monitored.</p> <p>6.5 The ability to effectively leave work are developed behind at the end of the day.</p>

Variable	Range
Signs of stress	<p>May include:</p> <ul style="list-style-type: none"> <li>• absence from work</li> <li>• conflict</li> <li>• fatigue</li> <li>• lack of self-esteem and confidence</li> <li>• poor work performance</li> <li>• sickness</li> </ul>
Sources of stress	<p>May include:</p> <ul style="list-style-type: none"> <li>• challenging KPIs and/or priorities</li> <li>• complex tasks</li> <li>• difficult customer contact</li> <li>• external factors</li> <li>• inadequate physical environment</li> <li>• interpersonal relationships</li> </ul>
Difficult situations	<p>May include:</p> <ul style="list-style-type: none"> <li>• changing regulations and legislation</li> <li>• customer abuse</li> <li>• customer complaint</li> <li>• high number of customer contacts</li> <li>• sensitive customer situations</li> <li>• unreliable technology</li> </ul>
Stress management techniques	<p>May include:</p> <ul style="list-style-type: none"> <li>• debriefing with peers and/or line manager</li> <li>• relaxation methods</li> <li>• specific training</li> <li>• stretching and exercises</li> <li>• taking breaks</li> </ul>
KPIs (key performance indicators)	<p>May include:</p> <ul style="list-style-type: none"> <li>• call rates</li> <li>• compliance with schedules (adherence)</li> </ul>

	<ul style="list-style-type: none"> <li>• customer satisfaction results</li> <li>• performance measures</li> <li>• quality assurance ratings</li> <li>• sales targets</li> <li>• targets</li> </ul>
Time management tools and techniques	<p>May include:</p> <ul style="list-style-type: none"> <li>• diary and/or schedule</li> <li>• organising information</li> <li>• prioritisation of tasks</li> <li>• self-management of training requirements</li> </ul>
Sources of fatigue	<p>May include:</p> <ul style="list-style-type: none"> <li>• ergonomic factors</li> <li>• excessive overtime</li> <li>• external issues</li> <li>• overload of information</li> <li>• repetitive tasks and/or contacts</li> <li>• shift rostering and hours of work</li> </ul>
Stamina management strategies	<p>May include:</p> <ul style="list-style-type: none"> <li>• management of personal wellbeing, for example: <ul style="list-style-type: none"> <li>➤ breaks</li> <li>➤ hydration</li> <li>➤ life balance</li> <li>➤ meals</li> <li>➤ recognizing fatigue</li> </ul> </li> <li>• management of the environment, for example: <ul style="list-style-type: none"> <li>➤ ergonomics</li> <li>➤ climate</li> <li>➤ noise</li> </ul> </li> <li>• management of work, for example: <ul style="list-style-type: none"> <li>➤ minimizing re-working</li> <li>➤ sequencing tasks</li> </ul> </li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> <li>• understanding of signs and sources of stress</li> <li>• understanding of job role priorities and KPIs</li> <li>• Knowledge of occupational health and safety guidelines and policies.</li> </ul>
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Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• escalation pathways</li> <li>• job role priorities and KPIs</li> <li>• internal and external sources of assistance</li> <li>• occupational health and safety guidelines and policies</li> <li>• signs and sources of existing and potential stress or difficult situations</li> <li>• stress management and reduction techniques</li> <li>• time management tools and techniques</li> <li>• Workplace policies and procedures.</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• analytical skills to understand the needs of internal and external customers</li> <li>• communication skills to relate to people from diverse backgrounds and people with diverse abilities</li> <li>• customer service skills to handle customer contacts confidently and effectively</li> <li>• interpersonal skills to establish rapport and to build relationships with customers, team members and stakeholders</li> <li>• literacy skills to communicate and articulate clearly and effectively</li> <li>• negotiation skills to effectively deal with customers and work colleagues</li> <li>• organisational skills to manage own tasks within timeframes</li> <li>• problem-solving skills to solve problems creatively, independently and confidently</li> <li>• self-confidence skills to confidently introduce own ideas and abilities</li> <li>• self management skills to evaluate and monitor own performance and wellbeing</li> <li>• Teamwork skills to participate positively within the team and to be supported by the team.</li> </ul>
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Safely Access the Rail Corridor
Unit Code	<a href="#">EIS RTO2 03 0313</a>
Unit Descriptor	This unit involves 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 policies, procedures and protocols of the access provider for situational awareness and rail safety.

Elements	Performance Criteria
1. Take appropriate safety precautions to access the rail corridor	<p>1.1 Authority to enter the <b>rail corridor</b> is confirmed.</p> <p>1.2 Appropriate personal protective equipment (PPE) is worn consistent with role in accessing the rail system.</p> <p>1.3 A visual assessment is conducted to determine if the rail corridor can be accessed clear of the danger zone.</p> <p>1.4 The rail corridor is entered and a visual assessment is maintained to identify potential risks.</p> <p>1.5 Relevant policies, procedures and protocols of the <b>access provider</b> are followed for situational awareness and rail safety.</p> <p>1.6 Rail <b>terminology and related meanings</b> are applied as defined in the applicable safe working system.</p> <p>1.7 Appropriate <b>safety clothing and equipment</b> are used.</p> <p>1.8 <b>Information and documents</b> relating to workplace instructions and procedures are obtained and analysed.</p>
2. Take appropriate safety precautions to access the danger zone	<p>2.1 A line of sight is established.</p> <p>2.2 Direction of approaching trains and maximum speed is recognized.</p> <p>2.3 A safe place is identified.</p> <p>2.4 Types of warning provided are recognized and understood.</p> <p>2.5 A <b>situational awareness</b> is maintained to identify changed local conditions.</p> <p>2.6 <b>Communications</b> with other personnel are maintained in accordance with workplace procedures.</p> <p>2.7 <b>Unsafe situations</b> and/or emergencies are identified, and appropriate action is taken in accordance with workplace procedures.</p> <p>2.8 Receive, acknowledge and send messages with available communications equipment and system.</p>



Variable	Range
Rail corridor	May include: <ul style="list-style-type: none"> <li>• danger zone</li> <li>• main line</li> <li>• adjacent networks</li> <li>• adjacent lines</li> <li>• sidings/yards</li> <li>• platforms/buildings</li> <li>• structures</li> <li>• safe place</li> </ul>
Access provider	May also be known as: <ul style="list-style-type: none"> <li>• network owner</li> </ul>
Access	May occur: <ul style="list-style-type: none"> <li>• by day or night</li> <li>• under varied weather conditions and situations</li> </ul>
Terminology	May be as defined by: <ul style="list-style-type: none"> <li>• national rail body</li> <li>• access provider</li> </ul>
Safety clothing and equipment	May include: <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• protective footwear</li> <li>• hearing protection</li> <li>• eye protection</li> <li>• gloves</li> <li>• head protection</li> </ul>
Information and documents	May include: <ul style="list-style-type: none"> <li>• workplace procedures, policies and work instructions</li> <li>• site safety plan</li> <li>• emergency plan</li> <li>• safety briefing</li> <li>• emergency contact details</li> <li>• access contact details</li> </ul>
Situational awareness	Will be: <ul style="list-style-type: none"> <li>• as defined within the workplace procedures/instructions</li> <li>• as defined in the risk assessment for situational awareness including:               <ul style="list-style-type: none"> <li>➤ view - line of sight</li> <li>➤ direction of approaching trains</li> <li>➤ maximum speed of trains</li> <li>➤ safe place</li> <li>➤ changed local conditions</li> </ul> </li> </ul>
Communications	May include: <ul style="list-style-type: none"> <li>• give or receive verbal messages/information</li> <li>• report unsafe situations</li> <li>• respond to emergencies</li> <li>• emergency messages</li> </ul>

	<ul style="list-style-type: none"> <li>• general safety messages</li> </ul>
Communications equipment and systems	<p>May include:</p> <ul style="list-style-type: none"> <li>• hand signals</li> <li>• audible signals</li> </ul>
Unsafe situations	<p>May include:</p> <ul style="list-style-type: none"> <li>• risks to the individual</li> <li>• risks to the public</li> <li>• risks to the rail traffic</li> <li>• risks to the physical assets of the network</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> <li>• the timeframes typically expected for the work function and industrial environment</li> <li>• Compliance with site safety plans, OHS regulations and other regulatory requirements</li> <li>• Assessment must include exercises which demonstrate competent performance of the following in a range of situations: <ul style="list-style-type: none"> <li>• safely accessing the rail corridor</li> <li>• recognizing the danger zone</li> <li>• identifying position of safety/safe place</li> <li>• maintaining a situational awareness to identify potential risks</li> <li>• identifying unsafe situations within the rail system</li> </ul> </li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• Extent of rail corridor</li> <li>• Access provider's defined entry requirements and limitations</li> <li>• Access provider's policies, procedures and protocols</li> <li>• Basic rail terminology as defined by the applicable network</li> <li>• Access provider's policies, procedures and protocols in the event of identified unsafe situations or emergencies within the limits of the role being undertaken</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with individuals and/or groups</li> <li>• Follow workplace policies, procedures and protocols</li> <li>• Recognise hazards that may arise and take appropriate action</li> <li>• Conduct a situational awareness assessment</li> </ul>

	<ul style="list-style-type: none"> <li>• Use personal protective equipment conforming to required standards</li> </ul>
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Monitor and Maintain the Service
Unit Code	<a href="#">EIS RTO2 04 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required with signaling trains in and out of the area of control and observing trains safely through the area. To prove your competence in this unit you must demonstrate your ability to use all available signaling equipment and to monitor and ensure the passage of trains safely. Sufficient evidence must be collected to enable competence to be assessed against all the performance criteria and knowledge and understanding requirements for this unit.

Elements	Performance Criteria
1. Signal trains safely through area of control	<p>1.1 Relevant <b>information</b> is collected and updated as and when required.</p> <p>1.2 Clarification is promptly obtained where information obtained is unclear or insufficient.</p> <p>1.3 Signaling equipment is operated according to relevant rules, regulations instructions and procedures.</p> <p>1.4 The current timetable is correctly interpreted and operated.</p> <p>1.5 Complete required documents accurately and legibly and process them correctly.</p> <p>1.6 Supplementary information can be obtained from <b>written records</b>.</p>
2. Monitor the safe passage of trains	<p>2.1 All relevant information sources are regularly and promptly accessed.</p> <p>2.2 Relevant information is evaluated to determine safety and performance of the service.</p> <p>2.3 Action is taken as a result of monitoring, which is within the limits of your own authority and complies with relevant rules, regulations, instructions and procedures.</p> <p>2.4 Communicate information to the relevant person(s).</p> <p>2.5 Information that is accurately, complete and legible are recorded.</p>

Variable	Range
Information	Can relate to : <ul style="list-style-type: none"> <li>• late running of trains</li> <li>• alteration to timetables</li> </ul>

	<ul style="list-style-type: none"> <li>• platform alterations</li> <li>• train faults and failures</li> <li>• monitoring level crossings</li> <li>• staffing levels</li> <li>• environmental conditions e.g. adverse weather</li> </ul>
Written records	<p>Could be:</p> <ul style="list-style-type: none"> <li>• train register book</li> <li>• log books</li> <li>• train record books</li> <li>• special train notices</li> <li>• automatic train recording data</li> <li>• telexes</li> <li>• timetables</li> <li>• weather forecast</li> <li>• traffic circulars or equivalent</li> <li>• engineering notices</li> <li>• train registers</li> <li>• train running computerized recording systems</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• It is likely that performance evidence will be collected from which the assessor can infer that candidates possess much of the necessary knowledge and understanding for this element. However, where this cannot be inferred from performance evidence, or where "what if " scenarios implied in the performance criteria need to be assessed, oral, written or computer based questioning should be used to ensure that the candidate possesses knowledge and understanding of: <ul style="list-style-type: none"> <li>➤ the relevant rules, regulation, instructions and procedures are within the organization</li> <li>➤ use relevant methods of communication</li> </ul> </li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• access relevant sources of information</li> <li>• operate signaling equipment and systems</li> <li>• the lines and methods of effective communication are within the company</li> <li>• communicate effectively with relevant person (s)</li> </ul>
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>

Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"><li>• Interview / Written Test</li><li>• Observation / Demonstration with Oral Questioning</li></ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Provide Protection
Unit Code	<a href="#">EIS RTO2 05 0313</a>
Unit Descriptor	This unit outlines the requirements that are needed for providing protection and dealing with a number of different situations as they may arise. To prove your competence in this unit you must demonstrate your ability to implement approved safety measures for protection according to relevant rules, regulations and procedures, to optimize service provision, within operational constraints, implement a modified, safe service and return safety devices and procedures to normal operations when the line is clear and safe for traffic to run.

Elements	Performance Criteria
1. Safety measures for protection	1.1 Confirm up to date requirements with relevant person(s). 1.2 Approved safety measures are implemented for protection according to relevant rules, regulations and procedures. 1.3 Optimize service provision, within operational constraints, where it is necessary to implement a modified, safe service, 1.4 Supplementary information can be obtained from <b>written records</b> ,
2. Optimize service provision	2.1 Resume normal working when the line is clear and safe for traffic to run. 2.2 Safety devices and procedures are returned to normal operations when the line is clear and traffic is safe to run. 2.3 Required documents are completed accurately and processed correctly. 2.4 Instructions, procedures, regulations and signs related to provide protection are read and interpreted and applied to <b>work activities</b> .

Variable	Range
Written records	Could be : <ul style="list-style-type: none"> <li>• incident reports</li> <li>• signal irregularity forms</li> <li>• log Book entries</li> <li>• train registers</li> </ul>
Work activities	Could be: <ul style="list-style-type: none"> <li>• examination of key switches</li> </ul>

	<ul style="list-style-type: none"> <li>• monitoring of messages</li> <li>• monitoring voice recordings</li> <li>• examination of signal collars</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>• The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:</li> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• It is likely that performance evidence will be collected from which the assessor can infer that candidates possess much of the necessary knowledge and understanding for this element. However, where this cannot be inferred from performance evidence, or where "what if " scenarios implied in the performance criteria need to be assessed, oral, written or computer based questioning should be used to ensure that the candidate possesses knowledge and understanding of: <ul style="list-style-type: none"> <li>➤ the planned schedules are for engineering and other work which requires protection</li> <li>➤ the rules, regulations and instructions and procedures are relating to providing protection</li> </ul> </li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• constitutes operational constraints</li> <li>• documentation completion requirements are for the organisation</li> <li>• the lines and methods of effective communication are within the organisation</li> </ul>
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>



Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Respond to Non-Routine Situations
Unit Code	<a href="#">EIS RTO2 06 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required with identifying of non-routine and emergency situations and requirements which are needed for responding to faults and failures in signaling equipment. The ability to identify non-routine situations and knowledge of regulations are essential features of this unit as is the ability to respond effectively and communicate and record information.

Elements	Performance Criteria		
1. Respond to non-routine and emergency situations	<p>1.1 Non-routine and emergency situations are correctly identified within you area of control.</p> <p>1.2 Non-routine and emergency situations are promptly communicated to the relevant person(s).</p> <p>1.3 Action is taken in non-routine and emergency situations that are within the limits of your own authority and give priority to safety.</p> <p>1.4 Service provision is optimized within operational constraints, where it is necessary to modify routine running.</p> <p>1.5 Approved procedures are followed where hazardous substances are involved in emergency situations.</p> <p>1.6 Re-Instate normal working at the earliest opportunity, where alternative methods of signaling are used.</p> <p>1.7 <b>Written record</b> all actions that you take clearly and accurately are communicated promptly to the relevant person(s).</p> <p>1.8 Adhere to relevant rules, regulations and instructions during non-routine and emergency situations in order to maintain safety.</p> <p>1.9 Normal operations are resumed at the earliest opportunity, within limits of your won authority.</p> <p>1.10 <b>Communication</b> with other personnel is maintained in accordance with workplace procedures.</p>		
2. Respond to faults and failures in signaling systems and equipment	<p>2.1 The efficiency of equipment is established according to relevant rules, regulations instructions and procedures.</p> <p>2.2 Faults and failures in operational systems and equipment are accurately identified.</p> <p>2.3 actions are taken to rectify faults and failures which are within the limits of your own authority and follows</p>		
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	<p>relevant rules, regulations instructions and procedures.</p> <p>2.4 Assistance is promptly sought from relevant person(s) where faults and failures cannot be rectified.</p> <p>2.5 Assistance is provided to others in the testing of equipment according to relevant rules, regulations, instructions and procedures.</p> <p>2.6 Faults and failures are recorded clearly and accurately and reported promptly according to relevant rules, regulations, instructions and procedures.</p> <p>2.7 Signaling <b>systems and equipment</b> are operated.</p>
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Variable	Range
Written records	<p>Could be:</p> <ul style="list-style-type: none"> <li>• incident reports</li> <li>• Signal irregularity forms</li> <li>• Log Book entries</li> <li>• Train Registers</li> <li>• log book entries</li> <li>• Voice recording entries</li> </ul>
Communication	<p>Can be:</p> <ul style="list-style-type: none"> <li>• Control Room staff</li> <li>• contractors</li> <li>• local response staff</li> <li>• local station staff</li> <li>• Drivers</li> <li>• emergency services</li> <li>• Fast Action Response Teams</li> </ul>
Systems and equipment	<p>Could be :</p> <ul style="list-style-type: none"> <li>• automated logging systems</li> <li>• points</li> <li>• telephones</li> <li>• levers</li> <li>• switches</li> <li>• level crossings</li> <li>• computers</li> </ul>

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>

Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• It is likely that performance evidence will be collected from which the assessor can infer that candidates possess much of the necessary knowledge and understanding for this element. However, where this cannot be inferred from performance evidence, or where "what if " scenarios implied in the performance criteria need to be assessed, oral, written or computer based questioning should be used to ensure that the candidate possesses knowledge and understanding of: <ul style="list-style-type: none"> <li>➤ types of faults and failures</li> <li>➤ The impact of faults and failures on signaling systems</li> <li>➤ the rules, regulations, instructions and procedures are relating to faults and failures in signaling equipment</li> <li>➤ the relevant persons are to contact in the event of faults and failures occurring</li> <li>➤ authority the emergency services possess during emergency situations</li> </ul> </li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• the methods and procedures are for routinely testing signalling equipment</li> <li>• operate signalling equipment</li> <li>• the lines and methods of effective communication are within the company</li> <li>• operate alternative methods of signalling</li> <li>• actions to take in the event of emergency situations</li> <li>• action needs to be taken in the event of hazardous substances being involved in non-routine or emergency situations</li> </ul>
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Assume and Handover Responsibility for Area of Control
Unit Code	<a href="#">EIS RTO2 07 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to take up duty, including taking over responsibility from colleagues and to hand over that responsibility to your colleague on completion of your duties. To prove your competence in this unit, you must demonstrate your ability to comply with rules, regulations, instructions and procedures, identify faults and also to communicate and record information.

Elements	Performance Criteria
1. Assume responsibility for area of control	<p>1.1 Relevant rules, regulations, instructions and procedures relating to assuming responsibility are complied area of control.</p> <p>1.2 Requirements relating to fitness for duty are complied.</p> <p>1.3 The relevant personal protective equipment and documentation are possessed as specified.</p> <p>1.4 Familiarize yourself with relevant and up to date information.</p> <p>1.5 The availability and correct functioning of required equipment are established.</p> <p>1.6 Record and where necessary, report faults in equipment to the relevant person(s).</p> <p>1.7 Identified faults are rectified within the limits of your own authority.</p> <p>1.8 Confirm that you have assumed responsibility for your area of control with the relevant person(s).</p> <p>1.9 Supplementary information can be obtained from <b>written records</b>.</p>
2. Hand over responsibility for area of control	<p>2.1 Requirements relating to fitness are complied with for duty of others.</p> <p>2.2 Comply with relevant rules, regulations, instructions and procedures relating to handing over responsibility for area of control.</p> <p>2.3 Necessary information is communicated to the relevant person(s).</p> <p>2.4 Required documents are completed accurately and processed correctly.</p>

Variable	Range
Written records	<p>Could be:</p> <ul style="list-style-type: none"> <li>• Signal Box registers</li> <li>• Train Register Books</li> <li>• Log books</li> <li>• Fault Logs</li> <li>• Incident Reports</li> <li>• Voice Recording Equipment</li> </ul>
Written records	<p>Could be:</p> <ul style="list-style-type: none"> <li>• Train record books</li> <li>• Log books</li> <li>• Handover sheets</li> <li>• Isolation forms</li> <li>• Train registers</li> </ul>

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• The underpinning knowledge and skills</li> <li>• Relevant legislation and workplace procedures</li> <li>• Other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• It is likely that performance evidence will be collected from which the assessor can infer that candidates possess much of the necessary knowledge and understanding for this element. However, where this cannot be inferred from performance evidence, or where "what if " scenarios implied in the performance criteria need to be assessed, oral, written or computer based questioning should be used to ensure that the candidate possesses knowledge and understanding of: <ul style="list-style-type: none"> <li>➤ the rules, regulations, instructions and procedures are relating to handover procedures</li> <li>➤ action to take when relieving colleagues who appear unfit to assume responsibility</li> <li>➤ the lines and methods of effective communication are within the company</li> </ul> </li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• the current operational state of equipment</li> <li>• documentation completion requirements are for the company</li> <li>• effectively communicate handover information to others</li> <li>• action to take in the event of non-availability of relieving colleagues</li> </ul>
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>

Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"><li>• Interview / Written Test</li><li>• Observation / Demonstration with Oral Questioning</li></ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Participate in Workplace Communication
Unit Code	<a href="#">EIS RTO2 08 0313</a>
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

Elements	Performance Criteria
1. Obtain and convey workplace information	<p>1.1 Specific and relevant information is accessed from <b>appropriate sources</b>.</p> <p>1.2 Effective questioning, active listening and speaking skills are used to gather and convey information.</p> <p>1.3 Appropriate <b>medium</b> is used to transfer information and ideas.</p> <p>1.4 Appropriate non- verbal communication is used.</p> <p>1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed.</p> <p>1.6 Defined workplace procedures for the location and <b>storage</b> of information are used.</p> <p>1.7 Personal interaction is carried out clearly and concisely.</p>
2. Participate in workplace meetings and discussions	<p>2.1 Team meetings are attended on time.</p> <p>2.2 Own opinions are clearly expressed and those of others are listened to without interruption.</p> <p>2.3 Meeting inputs are consistent with the meeting purpose and established <b>protocols</b>.</p> <p>2.4 <b>Workplace interactions</b> are conducted in a courteous manner.</p> <p>2.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded to.</p> <p>2.6 Meetings outcomes are interpreted and implemented.</p>
3. Complete relevant work related documents	<p>3.1 Range of <b>forms</b> relating to conditions of employment is completed accurately and legibly.</p> <p>3.2 Workplace data is recorded on standard workplace forms and documents.</p> <p>3.3 Basic mathematical processes are used for routine calculations.</p> <p>3.4 Errors in recording information on forms/ documents are identified and properly acted upon.</p> <p>3.5 Reporting requirements to supervisor are completed</p>

	according to organizational guidelines.
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Variable	Range
Appropriate sources	May include but not limited to: <ul style="list-style-type: none"> <li>• Team members</li> <li>• Suppliers</li> <li>• Trade personnel</li> <li>• Local government</li> <li>• Industry bodies</li> </ul>
Medium	May include but not limited to: <ul style="list-style-type: none"> <li>• Memorandum</li> <li>• Circular</li> <li>• Notice</li> <li>• Information discussion</li> <li>• Follow-up or verbal instructions</li> <li>• Face to face communication</li> </ul>
Storage	May include but not limited to: <ul style="list-style-type: none"> <li>• Manual filing system</li> <li>• Computer-based filing system</li> </ul>
Protocols	May include but not limited to: <ul style="list-style-type: none"> <li>• Observing meeting</li> <li>• Compliance with meeting decisions</li> <li>• Obeying meeting instructions</li> </ul>
Workplace interactions	May include but not limited to: <ul style="list-style-type: none"> <li>• Face to face</li> <li>• Telephone</li> <li>• Electronic and two way radio</li> <li>• Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams</li> </ul>
Forms	May include but not limited to: <ul style="list-style-type: none"> <li>• Personnel forms, telephone message forms, safety reports</li> </ul>

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>• Prepared written communication following standard format of the organization</li> <li>• Accessed information using communication equipment</li> <li>• Made use of relevant terms as an aid to transfer information effectively</li> <li>• Conveyed information effectively adopting the formal or informal communication</li> </ul>
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>• Effective communication</li> <li>• Different modes of communication</li> </ul>



	<ul style="list-style-type: none"> <li>• Written communication</li> <li>• Organizational policies</li> <li>• Communication procedures and systems</li> <li>• Technology relevant to the enterprise and the individual's work responsibilities</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Follow simple spoken language</li> <li>• Perform routine workplace duties following simple written notices</li> <li>• Participate in workplace meetings and discussions</li> <li>• Complete work related documents</li> <li>• Estimate, calculate and record routine workplace measures</li> <li>• Basic mathematical processes of addition, subtraction, division and multiplication</li> <li>• Ability to relate to people of social range in the workplace</li> <li>• Gather and provide information in response to workplace Requirements</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Work in Team Environment
Unit Code	<a href="#">EIS RTO2 09 0313</a>
Unit Descriptor	This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

Elements	Performance Criteria
1. Describe team role and scope	<p>1.1 The <b>role and objective of the team</b> are identified from available <b>sources of information</b>.</p> <p>1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources.</p>
2. Identify own role and responsibility within team	<p>2.1 Individual role and responsibilities within the team environment are identified.</p> <p>2.2 Roles and responsibility of other team members are identified and recognized.</p> <p>2.3 Reporting relationships within team and external to team are identified.</p>
3. Work as a team member	<p>3.1 Effective and appropriate forms of communications are used and interactions undertaken with team members who contribute to known team activities and objectives.</p> <p>3.2 Effective and appropriate contributions are made to complement team activities and objectives, based on individual skills and competencies and <b>workplace context</b>.</p> <p>3.3 Protocols are observed in reporting using standard operating procedures.</p> <p>3.4 Contribute to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.</p>

Variable	Range
Role and objective of team	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Work activities in a team environment with enterprise or specific sector</li> <li>• Limited discretion, initiative and judgment maybe demonstrated on the job, either individually or in a team environment</li> </ul>
Sources of information	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Standard operating and/or other workplace procedures</li> <li>• Job procedures</li> </ul>

	<ul style="list-style-type: none"> <li>• Machine/equipment manufacturer's specifications and instructions</li> <li>• Organizational or external personnel</li> <li>• Client/supplier instructions</li> <li>• Quality standards</li> <li>• OHS and environmental standards</li> </ul>
Workplace context	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Work procedures and practices</li> <li>• Conditions of work environments</li> <li>• Legislation and industrial agreements</li> <li>• Standard work practice including the storage, safe handling and disposal of chemicals</li> <li>• Safety, environmental, housekeeping and quality guidelines</li> </ul>

<b>Evidence Guide</b>	
Critical aspects of competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• Operated in a team to complete workplace activity</li> <li>• Worked effectively with others</li> <li>• Conveyed information in written or oral form</li> <li>• Selected and used appropriate workplace language</li> <li>• Followed designated work plan for the job</li> <li>• Reported outcomes</li> </ul>
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Communication process</li> <li>• Team structure</li> <li>• Team roles</li> <li>• Group planning and decision making</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate appropriately, consistent with the culture of the workplace</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Develop Business Practice
Unit Code	<a href="#">EIS RTO2 10 0313</a>
Unit Descriptor	This unit specifies the outcomes required to establish a business operation from a planned concept. It includes researching the feasibility of establishing a business operation, planning the setting up of the business, implementing the plan and reviewing operations once commenced.

Elements	Performance Criteria
1. Identify business opportunity	<p>1.1 <b>Business opportunities</b> are investigated and identified.</p> <p>1.2 Feasibility study is undertaken to determine likely <b>business viability</b>.</p> <p>1.3 Market research on product or service is undertaken.</p> <p>1.4 Assistance with feasibility study of <b>specialist and relevant parties</b> is sought as required.</p> <p>1.5 Impact of emerging or changing technology including e-commerce, on business operations is evaluated.</p> <p>1.6 Practicability of business opportunity is assessed in line with perceived risks, returns sought and resources available.</p> <p>1.7 Business plan is completed for operation.</p>
2. Identify personal business skills	<p>2.1 Financial and business skills available are identified and taken into account when business opportunities are researched.</p> <p>2.2 <b>Personal skills/attributes</b> are assessed and matched against those perceived as necessary for a particular business opportunity.</p> <p>2.3 <b>Business risks</b> are identified and assessed according to resources available and personal preferences.</p>
3. Plan for establishment of business operation	<p>3.1 Business structure and operations are determined and documented.</p> <p>3.2 Procedures are developed and documented to guide operations.</p> <p>3.3 Financial backing is secured for business operation.</p> <p>3.4 Business legal and regulatory requirements are identified and complied.</p> <p>3.5 <b>Human and physical resources</b> required to commence business operation are determined.</p>

	3.6 Recruitment strategies are developed and implemented.
4. Implement establishment plan	<p>4.1 Marketing of business operation is undertaken.</p> <p>4.2 Physical and human resources are obtained to implement business operation.</p> <p>4.3 <b>Operational unit</b> is established to support and coordinate business operation.</p> <p>4.4 Monitoring process is developed and implemented for managing operation.</p> <p>4.5 <b>Legal documents</b> are carefully maintained and relevant records are kept and updated to ensure validity and accessibility.</p> <p>4.6 Contractual procurement rights for goods and services including <b>contracts with relevant people</b>, negotiated and secured as required in accordance with the business plan.</p> <p>4.7 Options for leasing/ownership of business premises identified and contractual arrangements are completed in accordance with the business plan</p>
5. Review implementation process	<p>5.1 Review process for implementation of business operation is developed and implemented</p> <p>5.2 Improvements in business operation and associated management process are identified</p> <p>5.3 Identified improvements are implemented and monitored for effectiveness</p>

Variable	Range
Business opportunities	<p>maybe influenced by:</p> <ul style="list-style-type: none"> <li>• expected financial viability</li> <li>• skills of operator</li> <li>• amount and types of finance available</li> <li>• returns expected or required by owners</li> <li>• likely return on investment</li> <li>• finance required</li> <li>• lifestyle issues</li> </ul>
Business viability	<p>may include:</p> <ul style="list-style-type: none"> <li>• opportunities available</li> <li>• market competition</li> <li>• timing/ cyclical considerations</li> <li>• skills available</li> <li>• resources available</li> <li>• location and/ or premises available</li> <li>• risk related to a particular business opportunity, especially</li> <li>• in regard to Occupational Health and Safety and</li> </ul>

	<ul style="list-style-type: none"> <li>• environmental considerations</li> </ul>
Specialist and relevant parties	<ul style="list-style-type: none"> <li>• Chamber of commerce</li> <li>• Financial planners and financial institution representatives, business planning specialists and marketing specialists</li> <li>• accountants</li> <li>• lawyers and providers of legal advice</li> <li>• government agencies</li> <li>• industry/trade associations</li> <li>• online gateways</li> <li>• business brokers/business consultants</li> </ul>
Personal skills/attributes	<p>may include:</p> <ul style="list-style-type: none"> <li>• technical and/ or specialist skills</li> <li>• business knowledge and skills</li> <li>• entrepreneurship</li> <li>• willingness to take risks</li> </ul>
Business risks may be affected by and	<p>May include but are not restricted to:</p> <ul style="list-style-type: none"> <li>• occupational health and safety and environmental considerations</li> <li>• relevant legislative requirements</li> <li>• security of investment</li> <li>• market competition</li> <li>• security of premises/ location</li> <li>• supply and demand</li> <li>• resources available</li> </ul>
Human and physical resources	<p>may include:</p> <ul style="list-style-type: none"> <li>• software and hardware</li> <li>• office premises</li> <li>• communications equipment</li> <li>• specialist services through outsourcing, contracting and consultancy</li> <li>• staff</li> <li>• vehicles</li> </ul>
Operational unit	<p>refers to:</p> <ul style="list-style-type: none"> <li>• office location staffed with required personnel and equipped to service and support business</li> <li>• home-based site or other location such as leased or owned property</li> </ul>
Legal documents	<p>may include:</p> <ul style="list-style-type: none"> <li>• partnership agreements, constitution documents, statutory books for companies (Register of Members, Register of Directors and Minute Books), Certificate of Incorporation, Franchise Agreements and financial documentation, appropriate software for financial records</li> <li>• recordkeeping including personnel, financial, taxation, OHS and environmental</li> </ul>
Contracts with relevant people	<p>may include:</p> <ul style="list-style-type: none"> <li>• owners, suppliers, employees, landlords, agents, distributors, customers or any person with whom the</li> </ul>

	business has, or seeks to have, a performance-based relationship
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<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>A person must be able to provide evidence:</p> <ul style="list-style-type: none"> <li>• that a business operation has been planned and implemented from initial research into feasibility of the business and completion of the plan, through to implementing the plan and commencing operations</li> <li>• the ability to evaluate the results of research and assess the likely viability and practicability of a business opportunity, taking into account the current business/market climate and resources available</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Federal and regional government legislative requirements affecting business operations, especially in regard to occupational health and safety (OHS), equal employment opportunity (EEO), industrial relations and anti-discrimination</li> <li>• Technical or specialist skills relevant to the business operation</li> <li>• Financing options</li> <li>• Business systems and operations</li> <li>• Relevant marketing, management, sales and financial concepts</li> <li>• Methods for researching business opportunities</li> <li>• Principles of risk management relevant to the business</li> <li>• Methods of identifying relevant specialist services to complement the business</li> <li>• Forms and administrative systems</li> <li>• Services available and charges</li> <li>• Planning and control systems (sales,</li> <li>• Advertising and promotion, distribution and logistics</li> <li>• Financial recording systems</li> <li>• Legal rights and responsibilities</li> <li>• Record keeping duties</li> <li>• Operational factors relating to the business (provision of professional services, products)</li> </ul>
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> <li>• Literacy skills to interpret legal requirements, company policies and procedures and immediate, day-to-day demands</li> <li>• Marketing skills</li> <li>• Business planning skills</li> <li>• Entrepreneurial skills</li> <li>• Problem-solving skills</li> <li>• OHS skills</li> </ul>

	<ul style="list-style-type: none"> <li>• Time management skills</li> <li>• Belief in services and products offered by the business</li> <li>• Communication skills including questioning, clarifying, reporting, and giving and receiving constructive feedback</li> <li>• Technical and analytical skills to interpret business documents, reports and financial statements and projections</li> <li>• Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities</li> <li>• Problem solving skills to develop contingency plans</li> <li>• Using computers and software packages to record and manage data and to produce reports</li> <li>• Literacy skills to enable interpretation of business information, numeracy skills for data analysis to aid research</li> <li>• Research skills to identify a business opportunity and to conduct a feasibility study</li> <li>• Analytical skills to assess personal attributes and to identify business risks</li> <li>• Observation skills for identifying appropriate people, resources and to monitor work</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.



Occupational Standard: Rail Traffic Operation Level II	
Unit Title	Standardize and Sustain 3S
Unit Code	<a href="#">EIS RTO2 11 0313</a>
Unit Descriptor	This unit of competence covers the knowledge, skills and attitudes required by worker to standardize and sustain 3S to his/her workplace. It covers responsibility for the day-to-day operations of the workplace and ensuring that continuous improvements of Kaizen elements are initiated and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 <b>OHS requirements</b>, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 <b>Safety equipment and tools</b> are identified and checked for safe and effective operation.</p> <p>1.5 <b>Tools and equipment</b> are prepared and used to implement 3S.</p>
2. Standardize 3S.	<p>2.1 Plan is prepared and used to standardize 3S activities.</p> <p>2.2 <b>Tools and techniques</b> to standardize 3S are prepared and implemented based on <b>relevant procedures</b>.</p> <p>2.3 Checklists are followed for standardize activities and <b>reported to relevant personnel</b>.</p> <p>2.4 The workplace is kept to the specified standard.</p> <p>2.5 Problems are avoided by standardizing activities.</p>
3. Sustain 3S.	<p>3.1 Plan is prepared and followed to standardize 3S activities.</p> <p>3.2 <b>Tools and techniques</b> to sustain 3S are discussed, prepared and implemented based on relevant procedures.</p> <p>3.3 Workplace is inspected regularly for compliance to specified standard and sustainability of 3S techniques.</p>

	<p>3.4 Workplace is cleaned up after completion of job and before commencing next job or end of shift.</p> <p>3.5 Situations are identified where compliance to standards is unlikely and actions specified in procedures are taken.</p> <p>3.6 Improvements are recommended to lift the level of compliance in the workplace.</p> <p>3.7 Checklists are followed to sustain activities and reported to relevant personnel.</p> <p>3.8 Problems are avoided by sustaining activities.</p>
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Variable	Range
OHS requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances.</li> <li>• Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices.</li> <li>• Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization.</li> <li>• Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation.</li> </ul>
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• dust masks / goggles</li> <li>• glove</li> <li>• working cloth</li> <li>• first aid</li> <li>• safety shoes</li> </ul>
Tools and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• paint</li> <li>• hook</li> <li>• sticker</li> <li>• signboard</li> </ul>

	<ul style="list-style-type: none"> <li>• nails</li> <li>• shelves</li> <li>• chip wood</li> <li>• sponge</li> <li>• broom</li> <li>• pencil</li> <li>• shadow board/ tools board</li> </ul>
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• 5S Job Cycle Charts</li> <li>• Visual 5S</li> <li>• The Five Minute 5S</li> <li>• Standardization level checklist</li> <li>• 5S checklist</li> <li>• The five Whys and one How approach(5W1H)</li> <li>• Suspension</li> <li>• Incorporation</li> <li>• Use Elimination</li> </ul>
Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Assign 3S responsibilities</li> <li>• Integrate 3S duties into regular work duties</li> <li>• Check on 3S maintenance level</li> <li>• OHS measures such as signage, symbols / coding and labeling of workplace and equipment</li> <li>• Creating conditions to sustain your plans</li> <li>• Roles in implementation</li> </ul>
Reporting	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• verbal responses</li> <li>• data entry into enterprise database</li> <li>• brief written reports using enterprise report formats</li> </ul>
Relevant personnel	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• supervisors, managers and quality managers</li> <li>• administrative, laboratory and production personnel</li> <li>• internal/external contractors, customers and suppliers</li> </ul>
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• 5S slogans</li> <li>• 5S posters</li> <li>• 5S photo exhibits and storyboards</li> <li>• 5S newsletter</li> <li>• 5S maps</li> <li>• 5S pocket manuals</li> <li>• 5S department/benchmarking tours</li> </ul>

	<ul style="list-style-type: none"> <li>• 5S months</li> <li>• 5S audit</li> <li>• Awarding system</li> <li>• Big cleaning day</li> <li>• Patrolling system may include: <ul style="list-style-type: none"> <li>➢ Top management Patrol</li> <li>➢ 5S Committee members and Promotion office Patrol</li> <li>➢ Mutual patrol</li> <li>➢ Self-patrol</li> <li>➢ Checklist patrol</li> <li>➢ Camera patrol</li> </ul> </li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> <li>• Discuss the relationship between Kaizen elements.</li> <li>• Standardize and sustain 3S activities by applying appropriate tools and techniques.</li> </ul>
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> <li>• Elements of Kaizen</li> <li>• Ways to improve Kaizen elements</li> <li>• Benefits of improving kaizen elements</li> <li>• Relationship between Kaizen elements</li> <li>• The fourth pillar of 5S</li> <li>• Benefits of standardizing and sustaining 3S</li> <li>• Procedures for standardizing and sustaining 3S activities</li> <li>• Tools and techniques to sustain 3S</li> <li>• Relevant Occupational Health and Safety (OHS) and environment requirements</li> <li>• Plan and report</li> <li>• Method of communication</li> </ul>
Underpinning Skills	Demonstrates skills of: <ul style="list-style-type: none"> <li>• improving Kaizen elements by applying 5S</li> <li>• standardizing and sustaining procedures and techniques to avoid problems</li> <li>• technical drawing</li> <li>• procedures to standardizing 3S activities</li> <li>• analyzing and preparing shop layout of the workplace</li> <li>• standardizing and sustaining checklists</li> <li>• preparing and implementing tools and techniques to sustain 3S</li> <li>• working with others</li> <li>• reading and interpreting documents</li> </ul>

	<ul style="list-style-type: none"> <li>• observing situations</li> <li>• solving problems by applying 5S</li> <li>• communication skills</li> <li>• preparing labels, slogans, etc.</li> <li>• gathering evidence by using different means</li> <li>• using Kaizen board properly in accordance the procedure</li> <li>• reporting activities and results using report formats</li> </ul>
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

## NTQF Level III

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Organize Personal Work Priorities and Development
Unit Code	<a href="#">EIS RTO3 01 0313</a>
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to organise own work schedules, to monitor and obtain feedback on work performance, and to maintain required levels of competence.

Elements	Performance Criteria
1. Organize and complete own work schedule	<p>1.1 Ensure that <b>work goals and objectives</b> are understood, negotiated and agreed in accordance with <b>organizational requirements</b>.</p> <p>1.2 Assess and prioritize workload to ensure tasks are completed within identified timeframes.</p> <p>1.3 <b>Factors affecting the achievement of work objectives</b> are identified and contingencies are incorporated into work plans.</p> <p>1.4 <b>Business technology</b> is used efficiently and effectively to manage and monitor scheduling and completion of tasks.</p>
2. Monitor own work performance	<p>2.1 Personal work performance are accurately monitored and adjusted through self-assessment to ensure achievement of tasks.</p> <p>2.2 Ensure that <b>feedback on performance</b> is actively sought and evaluated from colleagues and clients in the context of individual and group requirements.</p> <p>2.3 Routinely identify and report on variations in the quality of service and products in accordance with organizational requirements.</p> <p>2.4 <b>Signs of stress</b> and effects on <b>personal wellbeing</b> are identified.</p> <p>2.5 <b>Sources of stress</b> are identified and appropriate <b>supports and resolution strategies</b> are accessed.</p>
3. Coordinate personal skill development and learning	<p>3.1 Personal learning needs and skill gaps are identified using self-assessment and advice from colleagues and clients in relation to role and organizational requirements.</p> <p>3.2 Opportunities are identified, prioritized and planned for undertaking personal skill development activities in liaison with work groups and relevant personnel.</p> <p>3.3 <b>Professional development opportunities</b> are accessed, completed and recorded to facilitate continuous learning and career development.</p>

	3.4 Formal and informal feedbacks are incorporated into review of further learning needs.
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Variable	Range
Work goals and objectives	<p>May include:</p> <ul style="list-style-type: none"> <li>• budgetary targets</li> <li>• production targets</li> <li>• reporting deadlines</li> <li>• sales targets</li> <li>• team and individual learning goals</li> <li>• team participation</li> </ul>
Organisational requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>• access and equity principles and practice</li> <li>• business and performance plans</li> <li>• defined resource parameters</li> <li>• ethical standards</li> <li>• goals, objectives, plans, systems and processes</li> <li>• legal and organisational policies, guidelines and requirements</li> <li>• OHS policies, procedures and programs</li> <li>• quality and continuous improvement processes and standards</li> <li>• quality assurance and/or procedures manuals</li> </ul>
Factors affecting the achievement of work objectives	<p>May include:</p> <ul style="list-style-type: none"> <li>• budget constraints</li> <li>• competing work demands</li> <li>• environmental factors such as time, weather</li> <li>• resource and materials availability</li> <li>• technology/equipment breakdowns</li> <li>• unforeseen incidents</li> <li>• workplace hazards, risks and controls</li> </ul>
Business technology	<p>May include:</p> <ul style="list-style-type: none"> <li>• computer applications</li> <li>• computers</li> <li>• email</li> <li>• facsimile machines</li> <li>• internet/extranet/intranet</li> <li>• modems</li> <li>• personal schedulers</li> <li>• photocopiers</li> <li>• printers</li> <li>• scanners</li> </ul>



Feedback on performance	<p>May include:</p> <ul style="list-style-type: none"> <li>• formal/informal performance appraisals</li> <li>• obtaining feedback from clients</li> <li>• obtaining feedback from supervisors and colleagues</li> <li>• personal, reflective behaviour strategies</li> <li>• routine organisational methods for monitoring service delivery</li> </ul>
Signs of stress	<p>May include:</p> <ul style="list-style-type: none"> <li>• absence from work</li> <li>• alcohol or other substance abuse</li> <li>• conflict</li> <li>• poor work performance</li> </ul>
Personal wellbeing	<p>May include:</p> <ul style="list-style-type: none"> <li>• cultural</li> <li>• emotional</li> <li>• social</li> <li>• spiritual</li> </ul>
Sources of stress	<p>May include:</p> <ul style="list-style-type: none"> <li>• complex tasks</li> <li>• cultural issues</li> <li>• work and family conflict</li> <li>• workloads</li> </ul>
Supports and resolution strategies	<p>May include:</p> <ul style="list-style-type: none"> <li>• awareness raising</li> <li>• counselling</li> <li>• employee assistance programs (EAP)</li> <li>• family support</li> <li>• group activities</li> <li>• job design</li> <li>• mediation</li> <li>• sharing load</li> <li>• time off</li> <li>• training</li> </ul>
Professional development opportunities	<p>May include:</p> <ul style="list-style-type: none"> <li>• career planning/development</li> <li>• coaching, mentoring and/or supervision</li> <li>• formal/informal learning programs</li> <li>• internal/external training provision</li> <li>• performance appraisals</li> <li>• personal study</li> <li>• quality assurance assessments and recommendations</li> <li>• recognition of current competence/skills recognition</li> <li>• work experience/exchange/opportunities</li> <li>• workplace skills assessment</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	Evidence of the following is essential: <ul style="list-style-type: none"> <li>• preparing work plans</li> <li>• Scheduling and prioritising work objectives and tasks</li> </ul> knowledge of the principles and techniques of goal setting, measuring performance, time management and personal assessment.
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> <li>• key provisions of relevant legislation from all levels of government that may affect aspects of business operations, such as:</li> <li>• anti-discrimination legislation</li> <li>• ethical principles</li> <li>• codes of practice</li> <li>• privacy laws</li> <li>• occupational health and safety (OHS)</li> <li>• organisational policies, plans and procedures</li> <li>• methods to elicit, analyse and interpret feedback</li> <li>• principles and techniques of goal setting, measuring performance, time management and personal assessment</li> <li>• Competency standards and how to interpret them in relation to self methods to identify and prioritise personal learning needs.</li> </ul>
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> <li>• literacy skills to read and understand the organisation's procedures, own work goals and objectives</li> <li>• planning skills to organise work priorities and arrangements</li> <li>• problem-solving skills to solve routine problems</li> <li>• Communication skills to give and receive constructive feedback relating to development needs.</li> </ul>
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Traffic Operation Level III	
<b>Unit Title</b>	<b>Write Simple Documents</b>
<b>Unit Code</b>	<a href="#">EIS RTO3 02 0313</a>
<b>Unit Descriptor</b>	This unit describes the performance outcomes, skills and knowledge required to plan, draft and review a basic document before writing the final version.

Elements	Performance Criteria
1. Plan document	1.1 <b>Audience</b> and <b>purpose</b> for the document are determined. 1.2 <b>Format</b> and <b>structure</b> are determined. 1.3 Key points are established for inclusion. 1.4 <b>Organizational requirements</b> are identified. 1.5 <b>Method of communication</b> is established. 1.6 <b>Means of communication</b> are established.
2. Draft document	2.1 Draft document is developed to communicate key points. 2.2 Any required additional information is obtained and included.
3. Review document	3.1 Draft is checked for suitability of tone for audience, purpose, and format and communication style. 3.2 Draft is checked for readability, grammar, spelling, and sentence and paragraph construction. 3.3 Draft is checked for sequencing and structure. 3.4 Draft is checked to ensure it meets organizational requirements. 3.5 Ensure draft is proofread, where appropriate, by supervisor or colleague.
4. Write final document	4.1 Make and proofread necessary changes. 4.2 Ensure document is sent to <b>intended recipient</b> . 4.3 Copy of document is filed in accordance with organizational policies and procedures.

Variable	Range
Audience	May include: <ul style="list-style-type: none"> <li>• internal and external customers</li> <li>• recipient/s who receive a copy for information</li> <li>• primary recipient/s of the communication</li> </ul>
Purpose	May include: <ul style="list-style-type: none"> <li>• clarification of issues</li> </ul>

	<ul style="list-style-type: none"> <li>• communication about meetings or events</li> <li>• information</li> <li>• minutes/outcomes of meetings</li> <li>• request for information, advice or assistance</li> <li>• statements of fact</li> <li>• straightforward advice</li> </ul>
Format	<p>May include:</p> <ul style="list-style-type: none"> <li>• email</li> <li>• forms</li> <li>• letters</li> <li>• memos</li> <li>• minutes of meetings</li> <li>• organisational templates or proformas for letters, memos or reports</li> <li>• tables</li> </ul>
Structure	<p>May include:</p> <ul style="list-style-type: none"> <li>• organisation of the material to suit the format (e.g. scannability for on-screen use)</li> <li>• treatment of attachments and hyperlinks</li> <li>• visual signposting of material, including use of headings, lists, keywords and text in boxes</li> </ul>
Organisational requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>• house style requirements</li> <li>• identified authorities for signatories for correspondence/communications</li> <li>• protocols, both written and unwritten for the organisation's internal and external communications</li> <li>• requirements for inclusive and non-discriminatory language and for adherence to copyright legislation</li> </ul>
Method of communication	<p>May include:</p> <ul style="list-style-type: none"> <li>• inclusive communication</li> <li>• use of active or passive voice</li> <li>• use of the appropriate register or style of language - formal, standard or informal</li> </ul>
Means of communication	<p>May include:</p> <ul style="list-style-type: none"> <li>• software packages such as MS Word, Excel, PageMaker, PowerPoint and templates</li> </ul>
Intended recipient	<p>May include:</p> <ul style="list-style-type: none"> <li>• audience for document</li> <li>• signatory of the document</li> <li>• supervisor or other staff member who may add to or forward document to another recipient</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	Evidence of the following is essential: <ul style="list-style-type: none"> <li>• producing a range of documents that accurately convey required basic information</li> <li>• using formatting suitable for intended audience</li> <li>• Knowledge of organisational policies and procedures for document production.</li> </ul>
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>• Basic grammar, spelling and punctuation.</li> <li>• communication protocols</li> <li>• how audience, purpose and method of communication influence tone</li> <li>• organisational policies and procedures for document production</li> <li>• Resources to assist in document production, such as dictionary, thesaurus, templates, and style sheets.</li> </ul>
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> <li>• literacy skills to read and understand a variety of texts; to prepare general information and papers according to target audience; and to proofread and edit documents to ensure clarity of meaning and conformity to organisational requirements</li> <li>• Problem-solving skills to determine document design and production processes.</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Apply Awareness of Railway Fundamentals
Unit Code	<a href="#">EIS RTO3 03 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to develop an awareness of railway fundamentals. This includes the track, trackside equipment, fixed structures, rail vehicles and rolling stock.

Elements	Performance Criteria
1. Identify basic terminology and features of track and structures	<p>1.1 Basic terminology is identified for track, <b>trackside equipment</b> and fixed structures.</p> <p>1.2 Features of track, including geography, geometry and classes are identified.</p> <p>1.3 Bridges and other <b>infrastructure</b> categories and their purpose are identified.</p> <p>1.4 Other principal structure types and their purpose are identified.</p> <p>1.5 Relevant stakeholders are identified to report structural faults and anomalies to.</p> <p>1.6 <b>Track components</b> are assembled/ aligned to specification where required.</p> <p>1.7 <b>Track layout</b> dimensions, geometry and condition are checked for compliance with design.</p>
2. Identify overhead and electrical components	<p>2.1 Principal <b>overhead and electrical components</b> and their purpose are identified.</p> <p>2.2 Power supply voltages are identified.</p> <p>2.3 Methods of isolation and their purpose are identified.</p> <p>2.4 Explaining procedures for granting permission for <b>rail traffic</b> to enter occupancy/possession limit.</p>
3. Identify rail track vehicles and rolling stock	<p>3.1 Types of trains and rolling stock are identified.</p> <p>3.2 Types of machines used for track installation and maintenance are identified.</p> <p>3.3 Types of <b>rail track vehicles</b> are identified.</p> <p>3.4 Relevant stakeholders to whom rolling stock faults and anomalies are reported are identified.</p>

Variable	Range
Trackside equipment	May include: <ul style="list-style-type: none"> <li>• signal posts</li> <li>• signage</li> <li>• kilometre posts</li> <li>• relay huts</li> <li>• trunking</li> <li>• troughing</li> <li>• point machines</li> <li>• gantries</li> <li>• level crossing equipment</li> <li>• post/signal phones</li> <li>• track stands</li> <li>• train stops</li> </ul>
Infrastructure	May include: <ul style="list-style-type: none"> <li>• bridges</li> <li>• tunnels</li> <li>• level crossings</li> <li>• stations</li> <li>• platforms</li> <li>• signal boxes</li> <li>• safe working cabins</li> </ul>
Track components	May include: <ul style="list-style-type: none"> <li>• rails, rail fastenings and welds</li> <li>• sleepers and sleeper fastenings</li> <li>• ballast</li> <li>• formation and earthworks</li> <li>• drainage pits</li> <li>• cess or shoulder</li> </ul>
Track layout	May include: <ul style="list-style-type: none"> <li>• plain track</li> <li>• gauge</li> <li>• turnouts</li> <li>• special track, including catch points/derails, expansion switches, diamond crossings and slips</li> </ul>
Overhead and electrical components	May include: <ul style="list-style-type: none"> <li>• catenary</li> <li>• stanchions</li> <li>• drop wire</li> <li>• contact</li> <li>• steady arm</li> <li>• feeder</li> <li>• spark gaps</li> <li>• earth straps</li> <li>• tension weights</li> <li>• pantographs</li> <li>• high voltage cables</li> </ul>

	<ul style="list-style-type: none"> <li>• power supplies</li> <li>• isolation points</li> </ul>
Rail traffic	<p>May include:</p> <ul style="list-style-type: none"> <li>• light locomotives</li> <li>• locomotive hauled freight trains</li> <li>• locomotive hauled passenger trains</li> <li>• railcars</li> <li>• electrical multiple units (EMUs)</li> <li>• diesel multiple units (DMUs)</li> </ul>
Rail track vehicles	<p>May include:</p> <ul style="list-style-type: none"> <li>• road/rail vehicles</li> <li>• maintenance vehicles</li> <li>• track machines</li> <li>• trolleys</li> <li>• elevated platforms</li> <li>• cherry pickers</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant safety, OHS and environmental procedures and regulations</li> <li>• Standard railway terminology</li> <li>• Fundamentals of track structures and equipment</li> <li>• Fundamentals of track layout and geometry</li> <li>• Overhead and electrical components</li> <li>• Types of rail track vehicles, trains and rolling stock</li> <li>• Relevant communication systems and procedures</li> <li>• Procedures for fault reporting</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others</li> <li>• Interpret and follow operational instructions</li> <li>• Interpret voltage readings for power supplies</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> <li>• Interview/Written Test</li> <li>• Observation/Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the workplace or in simulated workplace environment.</p>



Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Use Electronic Communication Systems
Unit Code	<a href="#">EIS RTO3 04 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to use electronic communication systems. It includes identifying system features, operating a communication system effectively, using appropriate communication protocols when using a system, ensuring equipment is operational, identifying any system access requirements (log in) and completing documentation.

Elements	Performance Criteria
1. Apply OHS principles	<p>1.1 <b>Information and documentation</b> on OHS requirements when using electronic communication equipment are accessed and interpreted.</p> <p>1.2 Posture and ergonomic settings of chair and workstation are adjusted following OHS guidelines.</p> <p>1.3 OHS and organisational guidelines on the use of periods of rest and exercise are followed when using electronic communications equipment.</p>
2. Identify electronic communication equipment and systems	<p>2.1 Types of electronic communication equipment, component parts and accessories used in the work area are identified.</p> <p>2.2 Applications for workplace activities of the different electronic communication systems and, where applicable, related software are interpreted.</p> <p>2.3 Routine faults in operating systems, software applications and operator errors are identified and reported, where necessary.</p> <p>2.4 <b>Interpersonal communication</b> skills are used at a level sufficient to communicate with other site personnel.</p> <p>2.5 <b>Communication difficulties</b> are avoided for appropriate work environment.</p>
3. Identify communication equipment features	<p>3.1 Electronic communication system features and control functions are identified.</p> <p>3.2 Electronic communication equipment is set up to optimize communication.</p> <p>3.3 Appropriate communication system is selected.</p> <p>3.4 Required electronic communication equipments are inspected and checked in accordance with relevant <b>regulations and legislations.</b></p>

4. Enter data	<p>4.1 Where required, text and numeric data are entered into a communication system using appropriate technology.</p> <p>4.2 Entered information is checked and corrected.</p>
5. Use communications equipment	<p>5.1 System checks are carried out to confirm communication system is operational in accordance with organisational requirements.</p> <p>5.2 <b>Communication system</b> is operated safely in accordance with organisational procedures and regulatory requirements.</p> <p>5.3 Communication system's security is maintained in accordance with organisational procedures.</p> <p>5.4 Where relevant, communication system appropriate for the location and type of communication is selected.</p> <p>5.5 Messages are transmitted clearly, unambiguously and precisely with due observation of ethics and protocols required of users in accordance with organisational procedures.</p> <p>5.6 Messages are received, interpreted and recorded according to operating procedures and regulatory requirements.</p>
6. Complete documentation	<p>6.1 Appropriate records of <b>communications</b> are maintained in accordance with <b>organisational procedures</b>.</p>

Variable	Range
Information and documentation	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace communication procedures, protocols, checklists and instructions</li> <li>• manufacturer specifications for communications equipment</li> <li>• communication records, including voice logs</li> <li>• client instructions</li> <li>• quality assurance procedures</li> <li>• emergency procedures</li> </ul>
Interpersonal communication	<p>May include:</p> <ul style="list-style-type: none"> <li>• active listening</li> <li>• two-way conversation</li> <li>• questioning to obtain information and clarify information and understanding</li> <li>• routine oral reporting</li> </ul>
Communication difficulties	<p>May include:</p> <ul style="list-style-type: none"> <li>• misunderstanding</li> <li>• limited ability of others to communicate in English</li> <li>• noisy environments or communication channels</li> <li>• illegible writing or print</li> </ul>

	<ul style="list-style-type: none"> <li>• use of non-standard vocabulary</li> <li>• assumption that message has been received and/or correctly understood</li> <li>• not following correct communication protocols and procedures</li> </ul>
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant regulations, standards and codes of practice</li> <li>• Rail Safety Act</li> <li>• dangerous goods and freight regulations and codes</li> <li>• relevant federal, state and territory OHS legislation</li> <li>• environmental protection regulations</li> </ul>
Communication systems	<p>May include:</p> <ul style="list-style-type: none"> <li>• fixed telephone systems</li> <li>• mobile telephone, both on person or hands-free</li> <li>• fax machines</li> <li>• radios</li> <li>• computer applications</li> </ul>
Communication	<p>May be with:</p> <ul style="list-style-type: none"> <li>• train drivers and crews</li> <li>• other workplace personnel and rail safety workers</li> <li>• passengers</li> <li>• customers</li> <li>• security personnel</li> <li>• police and other emergency services personnel</li> <li>• other professional or technical staff</li> <li>• local government authorities</li> </ul>
Organisational procedures	<p>May be known as:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• workplace procedures</li> <li>• established procedures</li> <li>• standard operating procedures</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• OHS risks and hazards when using communication systems</li> <li>• Procedures for the use of communication systems in the workplace</li> <li>• Problems that can occur when using communication systems and associated corrective actions</li> <li>• Protocols and procedures for communicating with others using relevant communication technology</li> </ul>

	<ul style="list-style-type: none"> <li>• Procedures and protocols for the use of communication systems during an emergency</li> <li>• Features of various communications systems</li> </ul> <p>Basic communication techniques, including barriers to effective communication and how to overcome them (e.g. with linguistically diverse people)</p>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others using available communications equipment</li> <li>• Complete documentation related to work activities when using communications equipment</li> <li>• Identify and use required communication technology</li> <li>• Use appropriate numeric functions when entering data into a computer system</li> <li>• Identify and report problems, faults and malfunctions that may occur when using communications equipment in accordance with workplace procedures</li> <li>• Apply precautions and required action to minimise, control or eliminate potential OHS hazards during the use of communications equipment</li> <li>• Prioritise communication activities depending on differing operational contingencies, risk situations and environments</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Follow Occupational Health, Safety and Environmental Procedures in the Rail Industry
Unit Code	<a href="#">EIS RTO3 05 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to follow and apply occupational health, safety and environmental (OHS&E) procedures when carrying out work activities in the rail industry. It includes identifying and following workplace procedures for hazard identification and risk control, contributing to arrangements for the management of OHS&E, and completing appropriate records.

Elements	Performance Criteria
1. Follow workplace procedures for hazard identification and risk control	<p>1.1 Workplace procedures for dealing with environmental incidents, accidents, fires and emergencies are known and followed.</p> <p>1.2 Workplace procedures for OHS and related work instructions for controlling risks in a workplace are followed.</p> <p>1.3 <b>Workplace hazards</b> in the workplace are identified and appropriate action is taken to report them and to minimise or eliminate risk to personnel, workplace and the environment.</p> <p>1.4 Safety regulations and established workplace safety and hazard control practices and procedures are obtained, interpreted and applied to day-to-day <b>work</b> activities.</p> <p>1.5 Where applicable, personal protective clothing and equipment is correctly used in accordance with established safety practices and procedures.</p> <p>1.6 Established emergency and contingency plans are followed in the event of an emergency.</p> <p>1.7 Information on workplace OHS policies, procedures and programs is stored in a readily accessible location and manner.</p> <p>1.8 <b>Work area communication</b> activity is clear, unambiguous and uses appropriate procedures, language and codes.</p>
2. Contribute to arrangements for the management of occupational health and	<p>2.1 OHS issues and identified safety hazards are raised with designated <b>personnel in the work area</b> in accordance with workplace procedures and relevant OHS legislation.</p> <p>2.2 Contributions to OHS management in the workplace are made in accordance with workplace procedures and</p>

safety	<p>provisions of relevant legislation.</p> <p>2.3 OHS issues are raised with designated personnel in accordance with workplace procedures and relevant OHS legislation.</p> <p>2.4 <b>Participative arrangements</b> for OHS management in the workplace are contributed to within workplace procedures and scope of responsibilities and competencies.</p>
3. Implement environmental control procedures	<p>3.1 Environmental protection measures are implemented or applied in accordance with organizational policies and procedures.</p> <p>3.2 Where improvements to existing procedures are identified they are passed on to appropriate personnel.</p> <p>3.3 Input <b>information/documents</b> provided by others are analyzed for fit with the chosen approach and to ensure consistency of values, attitudes and opinions.</p> <p>3.4 Required documentation is inspected and checked in accordance with relevant <b>regulations and legislations</b>.</p>
4. Complete OHS records	<p>4.1 OHS records and reports are completed in accordance with organisational requirements.</p> <p>4.2 OHS issues and identified safety hazards are raised with <b>designated personnel</b> in accordance with workplace procedures and relevant OHS legislation.</p> <p>4.3 Appropriate <b>personal protective equipment</b> is worn.</p> <p>4.4 Operations of OHS follow regulatory requirements, procedures and policies correctly and consistently according to <b>organizational</b> and legal requirements.</p>

Variable	Range
Workplace hazards	<p>May include:</p> <ul style="list-style-type: none"> <li>• chemicals and other harmful substances</li> <li>• movement of equipment, goods and vehicles</li> <li>• toxic substances</li> <li>• broken and damaged equipment</li> <li>• inflammable materials and fire hazards</li> <li>• lifting practices</li> <li>• waste management and disposal</li> <li>• extremes in weather conditions</li> <li>• lighting levels</li> <li>• trip and slip hazards</li> <li>• water hazards</li> <li>• traffic flows</li> </ul>

	<ul style="list-style-type: none"> <li>• vehicle and equipment operation</li> <li>• a range of storage areas</li> </ul>
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> <li>• exposed conditions</li> <li>• controlled or open environments</li> </ul>
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> <li>• telephone</li> <li>• fax</li> <li>• electronic, including email and internet</li> <li>• radio</li> </ul>
Personnel in the work area	<p>May include:</p> <ul style="list-style-type: none"> <li>• site visitors</li> <li>• OHS specialists</li> <li>• union representatives</li> <li>• contractors</li> <li>• official representatives</li> </ul>
Participative arrangements	<p>May include:</p> <ul style="list-style-type: none"> <li>• formal and informal meetings that deal with OHS issues</li> <li>• workplace OHS committees</li> <li>• other committees, for example, consultative, planning and purchasing</li> <li>• OHS representatives</li> <li>• suggestions, requests, reports and concerns put forward by staff</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace OHS procedures and policies</li> <li>• Ethiopian Dangerous Goods Code and material safety data sheets (MSDS)</li> <li>• emergency procedures</li> <li>• relevant legislation, regulations and related documentation</li> </ul>
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state and territory OHS legislation and safety codes</li> <li>• regulations and policies concerning noise, smoking, work station ergonomics and other critical OHS issues</li> <li>• workplace relations regulations</li> <li>• workers compensation regulations</li> </ul>
Designated personnel	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace personnel</li> <li>• supervisors</li> <li>• team leaders</li> <li>• management</li> <li>• occupational health and safety personnel</li> <li>• other persons authorised or nominated by the organisation</li> </ul>
Personal	<p>May include:</p>

protective equipment	<ul style="list-style-type: none"> <li>• gloves</li> <li>• safety headwear and footwear</li> <li>• safety glasses</li> <li>• two-way radios</li> <li>• high visibility clothing</li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:</li> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant OHS procedures and guidelines</li> <li>• Reporting procedures in regard to unsafe situations, fire hazards, broken or damaged equipment or fittings, sickness and accidents</li> <li>• Location and use of safety alarms and emergency communication systems</li> <li>• Signs and signals used for OHS warnings</li> <li>• Relevant environmental protection regulations</li> <li>• Workplace procedures and guidelines for the care of the environment during workplace operations</li> <li>• Typical problems that can occur when caring for the environment</li> <li>• Emergency and evacuation procedures</li> <li>• Housekeeping standards and procedures required in the workplace</li> </ul> <p>Site layout and obstacles</p>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when following OHS procedures</li> <li>• Read and comprehend simple statements in English</li> <li>• Read and interpret relevant safety-related information, including workplace procedures and codes of practice</li> <li>• Interpret and follow operational instructions and prioritise work</li> </ul>



	<ul style="list-style-type: none"> <li>• Complete documentation related to OHS in the workplace</li> <li>• Operate electronic communication equipment in line with required protocol</li> <li>• Work collaboratively with others when following OHS procedures</li> <li>• Report and rectify within limits of own role problems, faults and malfunctions that may arise when following OHS procedures in accordance with regulatory requirements and workplace procedures</li> <li>• Apply precautions and required action to minimise, control or eliminate potential hazards during work activities</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to equipment</li> <li>• Operate and adapt to differences in equipment in accordance with standard operating procedures</li> <li>• Select and use required personal protective equipment conforming to industry and OHS standards</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Apply Awareness of Dangerous Goods and Hazardous Materials Requirements
Unit Code	<a href="#">EIS RTO3 06 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to identify and apply an awareness of dangerous goods and hazardous materials requirements. It includes identifying legislation relating to dangerous goods and hazardous materials; segregating dangerous goods and hazardous materials; and dealing with incidents involving dangerous goods and hazardous materials.

Elements	Performance Criteria
1. Identify and apply appropriate legislation related to transporting dangerous goods and hazardous materials	<p>1.1 Legislation and organisational policies and procedures relating to the transport of <b>dangerous goods and hazardous materials</b> are identified and accessed.</p> <p>1.2 Labelling of different types of dangerous goods and hazardous materials is identified from accessed documentation.</p> <p>1.3 Hazardous loads are identified from transport manifests.</p> <p>1.4 <b>Standard marking and signage for identified dangerous goods and hazardous materials</b> are identified from accessed documentation.</p>
2. Separate dangerous goods and hazardous materials	<p>2.1 Where applicable, dangerous goods are correctly separated in line with relevant documentation and according to class and subsidiary risk information.</p> <p>2.2 OHS issues and identified safety hazards are raised with designated <b>personnel</b> in the work area in accordance with workplace procedures and relevant OHS legislation.</p> <p>2.3 <b>Work area communication</b> activity is clear, unambiguous and uses appropriate procedures, language and codes.</p> <p>2.4 <b>Information and documents</b> relating to workplace instructions and procedures on dangerous goods and hazardous materials is obtained and analysed.</p> <p>2.5 Required documentation is inspected and checked in accordance with <b>applicable regulations and legislations</b>.</p>
3. Deal with incidents involving dangerous goods and	<p>3.1 Where possible information is obtained for dangerous goods and hazardous materials involved</p> <p>3.2 If applicable, documentation is checked for compliance with separation rules in accordance with organisational</p>

hazardous materials	<p>procedures</p> <p>3.3 Information regarding dangerous goods and hazardous materials is relayed to the appropriate persons and authorities</p> <p>3.4 <b><i>Depending on the type of organisation concerned and the local terminology used, workplace procedures</i></b> are communicated to deal with dangerous goods and hazardous materials</p>
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Variable	Range
Classes of dangerous goods and hazardous materials are:	<ul style="list-style-type: none"> <li>• as defined in the respective Ethiopian codes</li> </ul>
Standard marking and signage for identified dangerous goods and hazardous materials are:	<ul style="list-style-type: none"> <li>• as required in the respective Ethiopian codes</li> </ul>
Personnel	<p>May include:</p> <ul style="list-style-type: none"> <li>• organisational personnel</li> <li>• emergency services</li> <li>• contractors</li> <li>• official representatives</li> <li>• other network access providers</li> </ul>
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> <li>• telephone</li> <li>• fax</li> <li>• electronic, including email and internet</li> <li>• radio</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• dangerous goods identification numbers, codes, markings and signs</li> <li>• codes of practice, including:</li> <li>• Ethiopian Code</li> <li>• International Maritime Dangerous Goods (IMDG) Code</li> <li>• Ethiopian and international explosives codes</li> <li>• manifests, bar codes, goods and container identification</li> <li>• supplier instructions</li> <li>• client instructions</li> <li>• material safety data sheets (MSDS)</li> <li>• emergency procedures</li> </ul>
Applicable regulations and	<p>May include:</p> <ul style="list-style-type: none"> <li>• current Ethiopian and international regulations and codes</li> </ul>

legislation	<p>of practice for the handling and transport of dangerous goods and hazardous substances, including:</p> <ul style="list-style-type: none"> <li>• Ethiopian and International Dangerous Goods Codes</li> <li>• Ethiopian Marine Orders and the IMDG Code</li> <li>• International Air Transport Association (IATA)</li> <li>• Dangerous Goods by Air regulations</li> <li>• Ethiopian and international explosives codes</li> <li>• relevant state or territory legislation relating to: <ul style="list-style-type: none"> <li>• environmental protection</li> <li>• equal employment opportunity and affirmative action</li> <li>• OHS</li> <li>• workplace relations regulations</li> </ul> </li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant federal, state and territory regulations and codes pertaining to identifying and labelling dangerous goods and hazardous materials, including appropriate sections of the current Ethiopian Code and any other applicable legislation</li> <li>• Risks and hazards when transporting dangerous goods and hazardous materials</li> <li>• Labelling of dangerous goods and hazardous materials</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others</li> <li>• Read and interpret instructions, procedures, information and signs relevant to transporting dangerous goods and hazardous materials</li> <li>• Identify dangerous goods and hazardous materials labels</li> <li>• Operate electronic communication equipment in line with required protocol</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> </ul>

	<ul style="list-style-type: none"><li>• Observation / Demonstration with Oral Questioning</li></ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Apply Local Incident Response Procedures
Unit Code	<a href="#">EIS RTO3 07 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to apply local incident response procedures according to regulatory and organisational procedures. It includes responding to the incident, carrying out incident response activities, and completing follow-up actions.

Elements	Performance Criteria
1. Respond to the incident	<p>1.1 Details of incident are received, assessed and confirmed.</p> <p>1.2 Immediate response requirements are identified and actioned in accordance with <b>organisational procedures</b>.</p> <p>1.3 <b>Communication system</b> is established with network control personnel and instructions are followed in accordance with organisational policies and procedures.</p> <p>1.4 <b>Action to be taken in the event of an incident</b> to identify unsafe situations and emergencies within the limits of responsibility the occupation concerned.</p> <p>1.5 Information gathered through <b>consultative processes</b> is analyzed and presented to a diverse stakeholder base and options are determined.</p>
2. Perform incident response activities	<p>2.1 Incident response activities are carried out in accordance with organisational policies and procedures.</p> <p>2.2 Local assistance is provided within the limitations of duty of care and organisational requirements.</p> <p>2.3 Assistance is provided to relevant authorities in accordance with organisational policy and legislative requirements.</p> <p>2.4 <b>Information and documents</b> are collected and passed to relevant personnel in accordance with organisational procedures.</p>
3. Complete follow-up actions	<p>3.1 Details of incident are collected, recorded and managed in accordance with organizational procedures.</p> <p>3.2 Where required, a contribution is made to the debrief process.</p> <p>3.3 Required documentation is inspected and checked in accordance with <b>applicable regulations and legislations</b>.</p>

Variable	Range
Organisational procedures	May be known as: <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• workplace procedures</li> <li>• established procedures</li> </ul>
Communication systems	May include: <ul style="list-style-type: none"> <li>• telephone, including mobile telephone</li> <li>• electronic, including email</li> <li>• SMS</li> <li>• radio</li> </ul>
Action to be taken in the event of an incident	May include: <ul style="list-style-type: none"> <li>• identifying and following established incident procedures</li> <li>• assessing the nature and extent of the incident</li> <li>• ensuring medical assistance is provided where required</li> <li>• isolating and coordinating safety of the scene</li> <li>• alerting relevant organisational personnel and emergency services</li> <li>• recording relevant information and reporting on incident situation in accordance with regulatory and organisational requirements</li> </ul>
Consultative processes	May include: <ul style="list-style-type: none"> <li>• personnel and management</li> <li>• designated emergency officers</li> <li>• emergency services personnel, including ambulance, police, fire services and SES</li> <li>• OHS specialists</li> <li>• other professional or technical staff</li> <li>• contractors</li> </ul>
Information and documents	May include: <ul style="list-style-type: none"> <li>• incident response procedures</li> <li>• manifests, goods and container identification numbers and codes</li> <li>• codes of practice, including the Ethiopian Dangerous Goods Code</li> <li>• International Maritime Dangerous Goods (IMDG) Code markings</li> <li>• relevant legislation, regulations and related documentation relating to incident response situations</li> <li>• quality assurance procedures</li> <li>• work instructions</li> </ul>
Applicable regulations and legislation	May include: <ul style="list-style-type: none"> <li>• acts and regulations, including the Rail Safety Act</li> <li>• relevant state and territory legislation relating to:</li> <li>• environmental protection</li> <li>• OH&amp;S</li> <li>• rail safety</li> </ul>

	<ul style="list-style-type: none"> <li>• emergency procedures regulations</li> <li>• dangerous goods and hazardous materials regulations</li> <li>• relevant Ethiopian standards, codes of practice and guidance notes</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> other relevant aspects of the range statement
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>• Relevant OHS and other regulatory codes, procedures and guidelines concerning response to incidents</li> <li>• Risks and hazards and related precautions to control the risk</li> <li>• Organisational procedures and policies for responding to incidents, including procedures for responding to and providing practical assistance where required</li> <li>• Types of incidents that can occur and appropriate action to be taken in each case</li> <li>• Layout of network or area under control and potential obstacles for responding parties</li> <li>• Procedures for contacting emergency personnel and other relevant stakeholders</li> <li>• Procedures for identifying:               <ul style="list-style-type: none"> <li>• goods coding</li> </ul> </li> </ul>
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> <li>• Communicate clearly and effectively with others when applying local incident response procedures</li> <li>• Read and interpret instructions, procedures and information relating to applying local incident response procedures</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation relating to applying local incident response procedures</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Collaborate with others when applying local incident response procedures</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.



Occupational Standard: Rail Traffic Operation Rail Traffic Operation Level III	
Unit Title	Control Operational Rail Traffic Through Worksites
Unit Code	<a href="#">EIS RTO3 08 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to control operational rail traffic through worksites to provide protection for the infrastructure and/or work groups on a rail network during rail work activities, in accordance with legislative and regulatory requirements. It includes following policies, procedures and protocols of the access provider.

Elements	Performance Criteria
1. Identify site protection requirements	<p>1.1 Site safety plan is developed or obtained from relevant personnel and, where necessary, explanation is sought.</p> <p>1.2 Responsibilities of protection officer for site protection are identified from the <b>site safety plan</b>.</p> <p>1.3 Network control officer is notified of intention to obstruct track for <b>work</b> activity and to provide initial approval.</p> <p>1.4 The work group supervisor is advised of network control officer's decision.</p> <p>1.5 Tools and equipment required for site protection are identified, obtained and checked for functional condition.</p> <p>1.6 Type of protection and placement are explained to work group at pre-start briefing.</p> <p>1.7 Work group are informed of their responsibilities for their own safety.</p> <p>1.8 Responsibility to control operational rail traffic through <b>worksites</b> to provide protection for the infrastructure and/or work groups.</p> <p>1.9 Appropriate industry/profession <b>terminology</b> and language are used.</p>
2. Set out protection	<p>2.1 Set-out of protection is determined in accordance with plan and workplace procedures.</p> <p>2.2 A situational awareness is conducted to identify potential risks.</p> <p>2.3 Where protection positions are identified as unsafe and/or ineffective they are reported and rectified in accordance with workplace procedures.</p> <p>2.4 Appropriate warning equipment is placed in accordance with workplace procedures.</p> <p>2.5 Effectiveness of protection and <b>communication</b></p>

	<p><b>protocols</b> is confirmed.</p> <p>2.6 <b>Audible track warning devices</b> are applied in accordance with workplace procedures.</p> <p>2.7 <b>Audible warning equipment</b> is tested and utilized.</p>
3. Coordinate protection of worksite	<p>3.1 Vigilance is maintained and protection officer is alerted to approaching rail traffic in accordance with workplace procedures.</p> <p>3.2 Work group is instructed to move to a safe place prior to passage of rail traffic.</p> <p>3.3 Track is made safe for passage of rail traffic is confirmed with work group supervisor.</p> <p>3.4 Instructions are issued to rail traffic in accordance with workplace procedures.</p> <p>3.5 Work group is instructed to return to worksite on clearance of rail traffic from worksite.</p> <p>3.6 Protection, placement and equipment are continually monitored for effectiveness.</p> <p>3.7 <b>Communication equipments</b> are conducted with work group supervisor to confirm that work activity is complete and track is safe.</p> <p>3.8 <b>Network control officer</b> is advised that track is safe.</p> <p>3.9 Input <b>information/documents</b> provided by others are analyzed for fit with the chosen approach and to ensure consistency of values, attitudes and opinions.</p> <p>3.10 <b>Protection placement principles</b> are identified, confirmed and applied for the work area.</p>
4. Manage unsafe situations or emergencies	<p>4.1 <b>Unsafe situations</b> and/or emergencies are identified.</p> <p>4.2 Work group is instructed to move to a safe place.</p> <p>4.3 Appropriate action is taken to minimize risk and/or injury in accordance with workplace procedures.</p> <p>4.4 Emergencies and/or incidents are recorded and reported to relevant personnel in accordance with workplace procedures.</p> <p>4.5 Appropriate <b>safety clothing and equipment</b> are used.</p> <p>4.6 Appropriate <b>worksite protection equipment</b> is applied.</p>

Variable	Range
Site safety plans	May include: <ul style="list-style-type: none"> <li>• defining the boundaries</li> <li>• identifying positions of safety</li> <li>• identifying positions for inner/outer hand signaller and</li> </ul>

	<p>lookouts</p> <ul style="list-style-type: none"> <li>• identifying level and pedestrian crossings</li> <li>• identifying fixed rail infrastructure including: <ul style="list-style-type: none"> <li>• signals</li> <li>• overhead structures</li> <li>• bridges/tunnels</li> <li>• turn outs</li> <li>• minimum sighting distances</li> <li>• parallel lines</li> </ul> </li> </ul>
Work	<p>Will be:</p> <ul style="list-style-type: none"> <li>• under varied visibility conditions</li> </ul>
Worksites	<p>May include:</p> <ul style="list-style-type: none"> <li>• rail corridor</li> <li>• danger zone: <ul style="list-style-type: none"> <li>• running line</li> <li>• parallel networks (adjacent access providers, shared corridor)</li> </ul> </li> <li>• adjacent lines</li> <li>• sidings/yards</li> <li>• platforms/buildings</li> <li>• structures</li> </ul>
Terminology used	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined by the applicable track safe working system and operating procedures</li> </ul>
Communication protocols	<p>May include:</p> <ul style="list-style-type: none"> <li>• general safety</li> <li>• transmitting and receiving messages:</li> <li>• identification</li> <li>• standard radio terms</li> <li>• phonetic alphabet</li> <li>• testing communications equipment</li> <li>• emergency messages</li> </ul>
Audible track warning devices	<p>May be known as:</p> <ul style="list-style-type: none"> <li>• railway track signals</li> <li>• detonators</li> </ul>
Audible warning equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• horn</li> <li>• whistle</li> </ul>
Communications equipment and systems	<p>May include:</p> <ul style="list-style-type: none"> <li>• hand and audible signals</li> <li>• two-way radio</li> <li>• telephone/mobile phone</li> <li>• signage</li> </ul>
Network control officer	<p>May be:</p> <ul style="list-style-type: none"> <li>• network controller</li> <li>• train controller</li> <li>• area controller</li> </ul>

	<ul style="list-style-type: none"> <li>• signaller</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace procedures, policies and work instructions</li> <li>• worksite safety plan</li> <li>• emergency plan</li> <li>• pre-work briefing</li> <li>• worksite protection plan</li> </ul>
Where applicable, worksite protection equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• warning devices, whistles and sirens</li> <li>• audible track warning devices</li> <li>• demarcation barriers</li> <li>• lights and flags</li> <li>• electronic devices</li> </ul>
Unsafe situations	<p>May include:</p> <ul style="list-style-type: none"> <li>• risks to the individual</li> <li>• risks to the public</li> <li>• risks to rail traffic</li> <li>• risks to the physical assets of the network</li> </ul>
Safety clothing and equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• protective footwear</li> <li>• hearing protection</li> </ul>
Principles for protection placement	<p>May include:</p> <ul style="list-style-type: none"> <li>• meaning of: <ul style="list-style-type: none"> <li>• inner</li> <li>• outer</li> <li>• intermediate</li> </ul> </li> <li>• hand signals</li> <li>• train speeds</li> <li>• line of sight</li> <li>• location conditions</li> <li>• characteristics of the worksite</li> <li>• multiple work activities</li> <li>• type of work activity</li> </ul>
Situational awareness	<ul style="list-style-type: none"> <li>• as defined within the workplace procedures</li> <li>• as defined in the risk assessment for situational awareness including: <ul style="list-style-type: none"> <li>➤ view - line of sight</li> <li>➤ direction of approaching trains</li> <li>➤ speed of approaching trains</li> <li>➤ position of safety</li> <li>➤ changed local conditions</li> </ul> </li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> <li>• the timeframes typically expected for the work function and industrial environment</li> <li>• Compliance with site safety plans, OHS regulations and other regulatory requirements</li> <li>• Assessment must include exercises which demonstrate competent performance of the following in a range of situations: <ul style="list-style-type: none"> <li>• reading and interpreting responsibilities for site protection from site safety plan</li> <li>• identifying appropriate resources for site protection</li> <li>• conducting pre-start briefing for work group</li> <li>• determining and setting out protection</li> <li>• conducting a situational awareness</li> <li>• coordinating protection as rail traffic travels through worksite</li> <li>• explaining how to manage unsafe situations and emergencies</li> </ul> </li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Access provider's and organisational policies, procedures and protocols</li> <li>• Rail terminology as defined by the applicable access provider</li> <li>• Access provider's policies, procedures and protocols in the event of identified unsafe situations or emergencies within workplace role</li> <li>• Audible warning equipment and its use, if applicable</li> <li>• Site safety plans</li> <li>• Equipment available for worksite protection</li> <li>• Hand, light and flag signals as used by day or night</li> <li>• Positioning requirements for hand signallers</li> </ul> <p>Operational communication protocols and systems</p>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Operate electronic communication equipment to required protocol</li> <li>• Apply procedures for the use of audible track warning devices, if applicable</li> <li>• Communicate effectively with individuals and work groups</li> <li>• Follow workplace policies, procedures and protocols</li> <li>• Conduct a situational awareness assessment</li> <li>• Use required personal protective equipment conforming to organisational standards</li> <li>• Identify unsafe situations and emergencies</li> </ul>

	Effectively place protection
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Conduct Track Protection Assessment
Unit Code	<a href="#">EIS RTO3 09 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to perform a track protection assessment to determine the appropriate level of track protection required for the infrastructure and work groups on a rail network during rail work activities, in accordance with legislative and regulatory requirements. It includes following policies, procedures and protocols of the access provider.

Elements	Performance Criteria
1. Undertake track assessment	<p>1.1 Track <b>work</b> activity to be performed and its complexity is identified.</p> <p>1.2 The impact of the work activity on the network is determined.</p> <p>1.3 <b>Types of track protection</b> requirements are analyzed and identified.</p> <p>1.4 Visual assessment is conducted to assess the <b>characteristics of the track worksite</b>.</p> <p>1.5 Use appropriate <b>safety clothing and equipment</b>.</p> <p>1.6 Nature and <b>complexity of work activity</b> to be performed by multiple work groups are identified.</p>
2. Determine the type of track protection required to perform work activity safely	<p>2.1 Outcomes of the visual assessment and the complexity of the track work activity are analyzed to determine the type of track protection required.</p> <p>2.2 A <b>site protection arrangements plan</b> is prepared in accordance with the outcomes of the track assessment and policies, procedures and protocols of the access provider</p> <p>2.3 Plan is communicated to relevant personnel.</p> <p>2.4 A situational awareness assessment is conducted.</p> <p>2.5 <b>Communication</b> systems and procedures are used required.</p> <p>2.6 Receive, acknowledge and send messages with available <b>communications equipment and system</b>.</p> <p>2.7 Appropriate <b>worksite protection equipment</b> is applied.</p> <p>2.8 Input <b>information/documents</b> provided by others are analyzed for fit with the chosen approach and to ensure consistency of values, attitudes and opinions.</p>

Variable	Range
Work	May occur: <ul style="list-style-type: none"> <li>• by day or night, under varied weather conditions and situations</li> </ul>
Types of track protection	May include: <ul style="list-style-type: none"> <li>• lookout</li> <li>• track protection occupancy</li> <li>• rail traffic control</li> <li>• track possession</li> <li>• blocking</li> </ul>
Characteristics of track worksite	May include: <ul style="list-style-type: none"> <li>• location</li> <li>• cuttings and embankments</li> <li>• speed and density of adjacent traffic</li> <li>• parallel networks</li> <li>• electrified network</li> <li>• track circuits</li> <li>• level and pedestrian crossings</li> <li>• limits of worksite</li> <li>• visibility</li> <li>• how the work may affect track under the control of other access providers</li> <li>• multiple work activities</li> </ul>
Safety clothing and equipment	May include: <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• protective footwear</li> <li>• hearing protection</li> </ul>
Complexity of work activity	May include: <ul style="list-style-type: none"> <li>• type of work to be undertaken</li> <li>• hand tools to be used</li> <li>• track vehicles/track machines</li> <li>• machinery</li> <li>• number of work groups</li> <li>• rail traffic within or between worksite/s</li> </ul>
Site protection arrangements plans	May include: <ul style="list-style-type: none"> <li>• defining the boundaries</li> <li>• identifying positions of safety</li> <li>• identifying positions for inner/outer hand signaller and lookouts</li> <li>• identifying level and pedestrian crossings</li> <li>• identifying fixed rail infrastructure including:               <ul style="list-style-type: none"> <li>• signals</li> <li>• overhead structures</li> <li>• bridges/tunnels</li> <li>• turn outs</li> </ul> </li> <li>• minimum sighting distances</li> </ul>



Communications	<p>May include:</p> <ul style="list-style-type: none"> <li>• receive and pass on verbal messages/information</li> <li>• report unsafe situations and respond to emergencies</li> <li>• general safety and emergency messages</li> </ul>
Communications equipment and systems	<p>May include:</p> <ul style="list-style-type: none"> <li>• hand and audible signals</li> <li>• two way radio</li> <li>• telephone/mobile phone</li> <li>• signage</li> </ul>
Where applicable, worksite protection equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• warning devices, whistles and sirens</li> <li>• audible track warning devices</li> <li>• demarcation barriers</li> <li>• lights and flags</li> <li>• electronic devices</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace procedures, policies and work instructions</li> <li>• worksite safety plan</li> <li>• emergency plan</li> <li>• pre-work briefing</li> <li>• worksite protection plan</li> </ul>
Worksites	<p>May include:</p> <ul style="list-style-type: none"> <li>• rail corridor</li> <li>• danger zone:</li> <li>• running line</li> <li>• parallel networks (adjacent access providers, shared corridor)</li> <li>• adjacent lines</li> <li>• sidings/yards</li> <li>• platforms/buildings</li> <li>• structures</li> </ul>
Terminology	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined by the applicable track safe working system and operating procedures</li> </ul>
Situational awareness	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined within the workplace procedures</li> <li>• as defined in the risk assessment for situational awareness including:</li> <li>• view - line of sight</li> <li>• direction of approaching trains</li> <li>• speed of approaching trains</li> <li>• position of safety</li> <li>• changed local conditions</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> <li>• the timeframes typically expected for the work function and industrial environment</li> <li>• Compliance with site safety plans, OHS regulations and other regulatory requirements</li> <li>• Assessment must include exercises which demonstrate competent performance of the following in a range of situations: <ul style="list-style-type: none"> <li>• identifying complexity of track work activity</li> <li>• conducting a visual assessment of the characteristics of track worksite</li> <li>• determining type of track protection required</li> <li>• preparing site safety plan</li> </ul> </li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Access providers and organisational policies, procedures and protocols</li> <li>• Rail terminology as defined by the applicable access provider</li> <li>• Access provider's policies, procedures and protocols in the event of identified unsafe situations or emergencies within workplace role</li> <li>• Types of worksite protection equipment and their use</li> <li>• Audible track warning devices and their use, if applicable</li> <li>• Site safety plans</li> <li>• Positioning requirements for hand signallers</li> <li>• Operational communication protocols and systems</li> <li>• Work activity complexity</li> <li>• Characteristics of track worksites</li> <li>• Types of track protection</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with individuals and work groups</li> <li>• Follow workplace policies, procedures and protocols</li> <li>• Conduct a situational awareness assessment</li> <li>• Use required personal protective equipment conforming to organisational standards</li> <li>• Identify unsafe situations and emergencies</li> <li>• Analyse track work activities for complexity</li> <li>• Visual assessment of a track worksite</li> <li>• Prepare site protection arrangements plans</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>

Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Implement Track Blocking Protection
Unit Code	<a href="#">EIS RTO3 10 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to apply track blocking protection for the infrastructure and work group on a rail network during rail work activities by utilizing a signal system managed by a network control officer, in accordance with legislative and regulatory requirements. It includes following policies, procedures and protocols of the access provider.

Elements	Performance Criteria		
1. Prepare for track blocking protection	<p>1.1 The <b>worksites</b> safety plan is sourced and read for the terms of track blocking protection.</p> <p>1.2 Network control officer is notified of intention to block and to provide initial approval.</p> <p>1.3 The <b>work</b> group supervisor is advised of network control officer's decision.</p> <p>1.4 <b>Network control</b> officer is explained and demonstrated how to issue track blocking protection permission.</p> <p>1.5 Appropriate industry/profession <b>terminology</b> and language are used.</p>		
2. Issue track blocking protection permission	<p>2.1 Permission to block is requested from network control officer.</p> <p>2.2 Permission to block track is documented in accordance with access providers and/or organizational requirements.</p> <p>2.3 The work group supervisor is advised that blocking has been issued.</p> <p>2.4 <b>Track blocking</b> protection is monitored for effectiveness.</p>		
3. Cancel track blocking protection	<p>3.1 <b>Communication protocol</b> is maintained with work group supervisor to confirm completion of work activity and track is safe for rail traffic.</p> <p>3.2 Permission is documented to cancel track blocking protection in accordance with access providers and/or organizational requirements.</p> <p>3.3 Network control officer is informed of track block cancellation.</p> <p>3.4 <b>Communication equipments</b> are conducted with work group supervisor to confirm that work activity is complete and track is safe.</p>		
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4. Manage unsafe situations or emergencies	<p>4.1 Unsafe <b>situations</b> and/or emergencies are identified.</p> <p>4.2 Work group is instructed to move to a safe place.</p> <p>4.3 Appropriate action is taken to minimize risk and/or injury in accordance with workplace procedures.</p> <p>4.4 Emergencies and/or incidents are recorded and reported to relevant personnel in accordance with workplace procedures.</p>
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Variable	Range
Worksites	May include: <ul style="list-style-type: none"> <li>• rail corridor</li> <li>• danger zone</li> <li>• running line</li> <li>• parallel networks (adjacent access providers, shared corridor)</li> <li>• adjacent lines</li> <li>• sidings/yards</li> <li>• platforms/buildings</li> <li>• structures</li> </ul>
Work	May occur: <ul style="list-style-type: none"> <li>• by day or night, under varied weather conditions and situations</li> </ul>
Network control officer	May be: <ul style="list-style-type: none"> <li>• network controller</li> <li>• train controller</li> <li>• area controller</li> <li>• signaller</li> </ul>
Terminology	Will be: <ul style="list-style-type: none"> <li>• as defined by the applicable track safe working system and operating procedures</li> </ul>
Track blocking signal systems	May include: <ul style="list-style-type: none"> <li>• absolute signal</li> <li>• controlled signal</li> </ul>
Communications	May include: <ul style="list-style-type: none"> <li>• receive and pass on verbal messages/information</li> <li>• report unsafe situations and respond to emergencies</li> <li>• general safety and emergency messages</li> </ul>
Communications equipment and systems	May include: <ul style="list-style-type: none"> <li>• hand and audible signals</li> <li>• radios</li> <li>• telephones/mobile phones</li> <li>• signage</li> </ul>
Situational	Will be:

awareness	<ul style="list-style-type: none"> <li>• as defined within the workplace procedures</li> <li>• as defined in the risk assessment for situational awareness including: <ul style="list-style-type: none"> <li>• view - line of sight</li> <li>• direction of approaching trains</li> <li>• speed of approaching trains</li> <li>• position of safety</li> <li>• changed local conditions</li> </ul> </li> </ul>		
Safety clothing and equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• protective footwear</li> <li>• hearing protection</li> </ul>		
Where applicable, worksite protection equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• warning devices, whistles and sirens</li> <li>• audible track warning devices</li> <li>• demarcation barriers</li> <li>• lights and flags</li> <li>• electronic devices</li> </ul>		
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace procedures, policies and work instructions</li> <li>• worksite safety plan</li> <li>• emergency plan</li> <li>• pre-work briefing</li> <li>• worksite protection plan</li> </ul>		
Characteristics of track worksite	<p>May include:</p> <ul style="list-style-type: none"> <li>• location</li> <li>• cuttings and embankments</li> <li>• speed and density of adjacent traffic</li> <li>• parallel networks (adjacent access providers, shared corridor)</li> <li>• electrified network</li> <li>• track circuits</li> <li>• level and pedestrian crossings</li> <li>• limits of worksite</li> <li>• visibility</li> <li>• the work will affect track under the control of other access providers</li> <li>• multiple work activities</li> </ul>		
Site safety plans	<p>May include:</p> <ul style="list-style-type: none"> <li>• define the boundaries</li> <li>• identify positions of safety</li> <li>• identify level and pedestrian crossings</li> <li>• identify fixed rail infrastructure including: <ul style="list-style-type: none"> <li>• signals</li> <li>• overhead structures</li> </ul> </li> </ul>		
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	<ul style="list-style-type: none"> <li>• bridges/tunnels</li> <li>• turn outs</li> <li>• minimum sighting distances</li> <li>• parallel lines</li> </ul>
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<b>Evidence Guide</b>	
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Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> <li>• the timeframes typically expected for the work function and industrial environment</li> <li>• Compliance with site safety plans, OHS regulations and other regulatory requirements</li> <li>• Assessment must include exercises which demonstrate competent performance of the following in a range of situations: <ul style="list-style-type: none"> <li>• explaining and demonstrating how to implement site safety plan</li> <li>• demonstrating notifying a network control officer of intention to block</li> <li>• issuing track blocking protection permission</li> <li>• monitoring track blocking for effectiveness</li> <li>• explaining and demonstrating how to cancel track blocking protection permission</li> </ul> </li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Access providers and organisational policies, procedures and protocols</li> <li>• Rail terminology as defined by the applicable access provider</li> <li>• Access provider's policies, procedures and protocols in the event of identified unsafe situations or emergencies within workplace role</li> <li>• Site safety plans</li> <li>• Operational communication protocols and systems</li> <li>• Types of track protection</li> <li>• Types of track blocking signal systems</li> </ul> <p>Track blocking documentation</p>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with individuals and workgroups</li> <li>• Follow workplace policies, procedures and protocols</li> <li>• Use required personal protective equipment conforming to organisational standards</li> <li>• Identify unsafe situations and emergencies</li> <li>• Implement site safety plans</li> <li>• Recognise the difference between permissive and absolute signals</li> </ul>

	Complete track blocking documentation
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.



Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Operate Signal Panel or Equipment
Unit Code	<a href="#">EIS RTO3 11 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to operate a signal panel and/or equipment in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes preparing for operation, controlling local rail traffic movement, implementing contingency plans for planned events and for system faults and failures, updating traffic movement documentation, and handing over or relieving the signaller in accordance with workplace requirements.

Elements	Performance Criteria
1. Prepare to operate signal control location	<p>1.1 Reporting for duty is undertaken in accordance with OHS requirements and organisational policies and procedures.</p> <p>1.2 Appropriate network control officer is contacted where required in accordance with organisational policies and procedures.</p> <p>1.3 <b>Documentation</b> is checked for local activities and/or rail traffic movements that may affect rail traffic operations in accordance with organisational procedures and policies.</p> <p>1.4 If required, signalling equipment is switched in for use.</p> <p>1.5 Operation of equipment is tested in accordance with organisational policies and procedures.</p>
2. Control local rail traffic movements	<p>2.1 <b>Control of local rail traffic movements</b> is coordinated with <b>other relevant personnel</b> in accordance with organizational policies and procedures.</p> <p>2.2 Signaling systems are operated and monitored to ensure safe movement of rail traffic.</p> <p>2.3 <b>Activities that may affect the movement of rail traffic</b> operations are reported and recorded in accordance with organizational procedures and policies.</p> <p>2.4 Work undertaken is checked against work schedule and <b>Anomalies with local conditions and timetable</b> reported to authorized persons in accordance with established procedures.</p>
3. Communicate with rail safety workers and other relevant personnel	<p>3.1 <b>Communication systems</b> with relevant <b>rail safety workers</b> is undertaken to ensure that they are informed of local rail traffic movements, in accordance with organizational policies and procedures.</p> <p>3.2 Communication with other relevant personnel is</p>

	<p>undertaken to ensure that they are informed of local rail traffic movements, in accordance with organizational policies and procedures.</p> <p>3.3 <b>Events triggering the need for implementing contingency plans</b> for operation, controlling local rail traffic movement, implementing contingency plans for planned events and for system faults and failures, updating traffic movement documentation.</p> <p>3.4 Relevant <b>applicable procedures, codes</b> of practice and safe working system requirements are used.</p>
4. Monitor and respond to system alarms	<p>4.1 System alarms are monitored as required by organisational policies and procedures.</p> <p>4.2 Activated alarms are responded to appropriately and reported to appropriate personnel in accordance with organisational policies and procedures.</p> <p>4.3 Identified faults are reported to appropriate personnel in accordance with organisational policies and procedures.</p>
5. Implement contingency plans when instructed	<p>5.1 When instructed, contingency plan to suit the disruption, system failure or fault is actioned in accordance with organisational policies and procedures.</p> <p>5.2 Local rail traffic movements are adjusted in accordance with organisational and/or local operational requirements.</p> <p>5.3 Communications with train controller and other relevant personnel are established and maintained as required.</p>
6. Update local rail traffic movement documentation	<p>6.1 Local rail <b>traffic movement documentation</b> is amended, compiled and recorded in accordance with organisational policies and procedures.</p> <p>6.2 Local rail traffic movement information and documentation are handed over when relieved and/or at the completion of shift in accordance with organisational policies and procedures.</p>
7. Hand over control to relieving signaller	<p>7.1 Relieving signaller is informed of <b>operational status</b> and any ongoing issues in accordance with organisational policies and procedures.</p> <p>7.2 Documentation is checked to ensure it is up-to-date and is then endorsed in accordance with organisational policies and procedures.</p>
8. Take over control from signaller	<p>8.1 Information on operational status and any ongoing issues is received from signaller in accordance with organisational policies and procedures.</p> <p>8.2 Documentation is checked to ensure it corresponds to operational status and is then endorsed in accordance</p>

	with organisational policies and procedures.
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Variable	Range
Documentation	May include: <ul style="list-style-type: none"> <li>• log books</li> <li>• train registers</li> <li>• safe working forms and notices</li> <li>• timetables</li> <li>• train graphs</li> </ul>
Control of local rail traffic movements	May require the use of: <ul style="list-style-type: none"> <li>• manual signalling systems</li> <li>• working timetables</li> <li>• network plans</li> <li>• written and verbal authority systems</li> <li>• token systems</li> </ul>
Other relevant personnel	May include: <ul style="list-style-type: none"> <li>• customer service attendants</li> <li>• station supervisors</li> <li>• other network owners</li> </ul>
Activities that may affect the movement of rail traffic	May include: <ul style="list-style-type: none"> <li>• track maintenance</li> <li>• signal maintenance</li> <li>• defective electrical systems</li> <li>• diversion or alternative routing of rail traffic</li> <li>• track inspection</li> </ul>
Anomalies with local conditions and timetable	May include: <ul style="list-style-type: none"> <li>• conflicting schedules</li> <li>• incorrect run/train number</li> <li>• incorrect routing/timetable plan</li> </ul>
Communication systems	May include: <ul style="list-style-type: none"> <li>• radios</li> <li>• telephones, including mobile phones</li> <li>• fax machines</li> <li>• electronic, including email and intranet</li> </ul>
Rail safety workers	May include: <ul style="list-style-type: none"> <li>• train crew</li> <li>• track workers</li> <li>• contractors</li> <li>• train controllers</li> <li>• other signallers</li> <li>• safe working inspectors</li> <li>• rail safety regulation officers</li> </ul>
Events triggering the need for	May include: <ul style="list-style-type: none"> <li>• train breakdowns and/or delays</li> </ul>

implementing contingency plans	<ul style="list-style-type: none"> <li>• signalling faults</li> <li>• hazardous materials spills</li> <li>• track damage</li> <li>• adverse environmental events</li> <li>• collisions</li> <li>• injuries and fatalities</li> <li>• floods</li> <li>• fires</li> <li>• electrical system faults</li> <li>• derailments</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state codes of practice and safe working system requirements</li> <li>• relevant state and territory OHS legislation</li> </ul>
Traffic movement documentation	<p>May include:</p> <ul style="list-style-type: none"> <li>• train timetables</li> <li>• track possessions and work notices</li> <li>• incident and unplanned event reports</li> <li>• signal and overhead diagrams</li> <li>• train notices, including special train notices</li> <li>• weekly notices</li> <li>• safe working documentation</li> </ul>
Operational status	<p>May include:</p> <ul style="list-style-type: none"> <li>• track possessions</li> <li>• blocked sections</li> <li>• signalling equipment maintenance</li> <li>• emergency situations</li> <li>• extreme weather conditions</li> <li>• contingency plans</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant sections of legislated rail safety requirements, including acts and regulations from the applicable state, together with any nationally approved compliance codes and/or guidelines</li> <li>• Organisational procedures for the control and coordination of local rail traffic operations</li> <li>• Signalling and control systems and operations</li> <li>• Specific local conditions and restrictions</li> <li>• Types of communication systems available</li> </ul>

	<ul style="list-style-type: none"> <li>• Types of surveillance and alarm systems in use</li> <li>• Problems that may occur when operating signal panel or equipment, and action that should be taken to resolve the</li> <li>• Relevant documentation requirements</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others</li> <li>• Read, interpret and follow instructions, procedures and information relating to the control of local rail traffic</li> <li>• Accurately complete documentation and enter data relating to the control of local rail traffic</li> <li>• Use appropriate numeric functions when controlling rail traffic movement</li> <li>• Operate communication systems to required protocol</li> <li>• Report and rectify within limits of own role problems, faults and malfunctions identified when controlling local rail traffic in accordance with organisational procedures</li> <li>• Monitor work activities in terms of planned schedule</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Apply Safe Working Rules and Regulations to Rail Functions
Unit Code	<a href="#">EIS RTO3 12 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to apply applicable safe working rules and regulations to rail functions carried out on rail networks. It includes the correct use of communication protocols; interpreting and responding to radio, hand signal and light commands; interpreting and following relevant safe working rules and protocols; and taking appropriate action in the event of safety incidents, unsafe situations or emergencies.

Elements	Performance Criteria
1. Apply safe working rules and regulations	<p>1.1 Relevant safe working system for the area where <b>work</b> activities are to be carried out is identified prior to commencing work.</p> <p>1.2 Relevant rules for the applicable safe working system are followed when carrying out activities as part of rail operation.</p> <p>1.3 All work activities are conducted in compliance with the relevant state/territory safe working regulations pertaining to the activities concerned.</p>
2. Apply communication protocols	<p>2.1 <b>Communication protocols specified within applicable safe working system</b> are followed in accordance with the applicable safe working system requirements.</p> <p>2.2 Appropriate records of communications are maintained as required within the applicable safe working system rules and procedures.</p> <p>2.3 Receive, acknowledge and send messages with available <b>communications equipment</b>.</p>
3. Use and interpret radio, hand, light and flag commands	<p>3.1 The applicable safe working system rules and procedures are applied in the use and interpretation of <b>radio, hand, light and flag commands</b>.</p> <p>3.2 Hand signals are only used in conditions of good visibility</p> <p>3.3 Any command not clearly understood is regarded as a 'STOP' command in accordance with applicable safe working system rules and regulations.</p> <p>3.4 Rail <b>terminology and related meanings</b> are applied as defined in the applicable safe working system.</p>

4. Follow safe working protocols	<p>4.1 Where applicable, relevant <b>track work protocols</b> are followed as specified in the safe working system rules and procedures.</p> <p>4.2 Appropriate records and documentation are completed in accordance with the requirements of the applicable safe working system rules and procedures.</p>
5. Take action in the event of unsafe situations or emergencies	<p>5.1 Unsafe situations are identified in accordance with the requirements of the applicable safe working system rules and procedures.</p> <p>5.2 Where a safety incident, unsafe situation or emergency has been identified, appropriate action is taken to report and/or control the incident or situation in accordance with the limits of responsibility of the worker concerned and the requirements of the applicable safe working system rules and procedures.</p> <p>5.3 Use appropriate <b>safety clothing and equipment</b></p> <p>5.4 <b>Information and documents</b> are collected and passed to relevant personnel in accordance with organisational procedures.</p> <p>5.5 Relevant <b>applicable legislation, regulations and codes</b> of practice and safe working system requirements.</p>
6. Record unsafe situations or emergencies	<p>6.1 Appropriate records and documentation of an identified unsafe situation, an emergency, or a safety incident are completed in accordance with the requirements of the applicable safe working system rules and procedures.</p> <p>6.2 Records of identified unsafe situations, emergencies, or safety incidents are maintained in accordance with the requirements of the applicable safe working system rules and procedures.</p>

Variable	Range
Work	<p>May include:</p> <ul style="list-style-type: none"> <li>• rail operations carried out in the state/territory concerned and covered by the legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines</li> </ul> <p>May occur:</p> <ul style="list-style-type: none"> <li>• by day or night</li> <li>• in both normal and emergency situations</li> <li>• in all weather conditions</li> </ul>
Communication protocols will be as	<p>May include:</p> <ul style="list-style-type: none"> <li>• general safety</li> </ul>

specified within applicable safe working system and	<ul style="list-style-type: none"> <li>• emergency messages</li> <li>• testing communications equipment</li> <li>• transmitting and receiving messages</li> <li>• identification</li> <li>• standard radio terms</li> <li>• phonetic alphabet</li> <li>• spoken figures</li> </ul>
Communications equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• hand-held or portable equipment</li> <li>• fixed equipment</li> <li>• mobile/satellite phones</li> <li>• specialised testing facilities</li> </ul>
Radio, hand, light and flag commands	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined within the applicable safe working system</li> </ul>
Terminology and related meanings	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined within the applicable safe working system</li> </ul>
Track work protocols	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined within the applicable safe working system</li> </ul>
Safety clothing and equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• end of train markers</li> <li>• gloves</li> <li>• sunscreen</li> <li>• sunglasses</li> <li>• safety glasses</li> <li>• insect repellent</li> <li>• safety headwear</li> <li>• safety footwear</li> <li>• portable radios/mobile phones</li> <li>• hand lamps</li> <li>• flags</li> <li>• safety devices</li> <li>• hearing protection</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• instructions of relevant rail authorities concerning rail safety and operations</li> <li>• workplace procedures, policies and work instructions</li> <li>• relevant occupancy authorities (where applicable)</li> <li>• train authorities (where applicable)</li> <li>• worksite safety plan (where applicable)</li> <li>• Emergency Response Plan (ER Plan) and emergency procedure manuals</li> <li>• train running information (TRI)</li> <li>• train notices</li> </ul>



	<ul style="list-style-type: none"> <li>• train register books</li> <li>• failure reports</li> <li>• local instructions</li> <li>• take-off location documents</li> <li>• level crossing location documents</li> <li>• track and infrastructure drawings and diagrams</li> <li>• plant, equipment, track vehicle and communications equipment registers</li> <li>• operating and maintenance instructions of relevant equipment manufacturers</li> <li>• repair cards and books</li> <li>• voice communications log</li> <li>• safe working forms</li> </ul>
Applicable legislation, regulations and codes may include:	<ul style="list-style-type: none"> <li>• legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• relevant Australian Standards and related requirements including AS 4292</li> <li>• relevant state/territory OHS regulations</li> <li>• state, federal or territory environmental protection legislation</li> <li>• conditions of service, legislation and industrial agreements, including workplace agreements and awards</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> <li>• Assessment must include exercises which demonstrate competent performance of the following in a range of situations: <ul style="list-style-type: none"> <li>• identifying all applicable safe working systems for their applicable occupation</li> <li>• using and responding appropriately to a range of radio, hand, light and flag signals as used for their applicable occupation</li> </ul> </li> </ul> <p>identifying unsafe or emergency situations that could occur in their workplace and appropriate responses</p>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• Relevant OHS and environmental protection legislation</li> </ul>

	<p>and policies</p> <ul style="list-style-type: none"> <li>• Basic understanding of applicable safe working systems, requirements and limitations</li> <li>• Rail terminology as defined in the applicable safe working system</li> <li>• Action to be taken in the event of safety incidents, identified unsafe situations and emergencies within the limits of responsibility under the applicable safe working systems</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when applying safe working rules and regulations to rail functions</li> <li>• Read and interpret relevant safe working rules, regulations and instructions applicable to the rail operations concerned</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation related to safe working requirements applicable to the rail operations concerned</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others to fulfil safe working requirements applicable to the rail operations concerned</li> <li>• Implement contingency plans for unplanned events</li> <li>• Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities</li> <li>• Recognise problems and hazards that may arise during rail operations and take appropriate action</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Select and use required personal protective equipment conforming to industry and OHS standards</li> <li>• Check compliance between work and safe working rules and regulations and take appropriate action as per standard operating procedures when non-compliance is identified</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Control and Coordinate Local Rail Traffic Movement
Unit Code	<a href="#">EIS RTO3 13 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to control local rail traffic movement in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes monitoring the status of the current train area plan, implementing the daily working timetable, controlling rail traffic movement, implementing contingency plans for planned events and system faults and failures, and updating traffic movement documentation in accordance with workplace requirements.

Elements	Performance Criteria
1. Monitor status of local conditions and timetable	<p>1.1 <b>Local rail traffic movements</b> and associated activities are analysed to establish current situation.</p> <p>1.2 Proposed <b>rail traffic movements</b> and <b>associated activities</b> are identified to establish status of local conditions and timetable in accordance with organisational procedures and policies.</p> <p>1.3 Train notices are checked for conflicts and adjustments are made to local timetable as required.</p> <p>1.4 Identified anomalies are reported in accordance with organisational procedures and policies.</p>
2. Control local rail traffic movement	<p>2.1 Local rail traffic movements are coordinated with <b>other relevant personnel</b> in accordance with organisational policies and procedures.</p> <p>2.2 Signalling systems are operated and monitored to ensure safe movement of rail traffic.</p> <p>2.3 Irregularities that may affect the timetable are reported and recorded in accordance with organisational procedures and policies.</p> <p>2.4 Work undertaken is checked against work schedule and <b>Anomalies with local conditions and timetable</b> reported to authorized persons in accordance with established procedures.</p>
3. Communicate with rail safety workers and	<p>3.1 <b>Communication systems</b> with relevant <b>rail safety workers</b> is undertaken to ensure that they are informed of local rail traffic movements, in accordance with</p>

other relevant personnel	<p>organisational policies and procedures.</p> <p>3.2 Communication with other relevant personnel is undertaken to ensure that they are informed of local rail traffic movements, in accordance with organisational policies and procedures.</p> <p>3.3 Relevant <b>applicable procedures, codes</b> of practice and safe working system requirements.</p>
4. Implement contingency plans when instructed	<p>4.1 When instructed, contingency plan to suit the disruption, system failure or fault is actioned in accordance with organisational policies and procedures.</p> <p>4.2 Where required, resources to respond to the contingency are arranged in accordance with relevant organisational policies and procedures.</p> <p>4.3 Local rail traffic movements are adjusted in accordance with organisational and local operational requirements.</p> <p>4.4 Communications with train controller and other relevant personnel are established and maintained as required.</p> <p>4.5 <b>Events triggering the need for implementing contingency plans</b> for operation, controlling local rail traffic movement, implementing contingency plans for planned events and for system faults and failures, updating traffic movement documentation.</p>
5. Update local rail traffic movement documentation	<p>5.1 Local rail traffic movement documentation is amended, compiled and recorded in accordance with organisational policies and procedures.</p> <p>5.2 Local rail traffic movement information and documentation are handed over when relieved, and/or at the completion of shift in accordance with organisational policies and procedures.</p>

Variable	Range
Control of local rail traffic movements	<p>May require the use of:</p> <ul style="list-style-type: none"> <li>• manual signalling systems</li> <li>• written and verbal authority systems</li> <li>• token systems</li> </ul>
Traffic movement documentation	<p>May include:</p> <ul style="list-style-type: none"> <li>• train timetables</li> <li>• track possessions and work notices</li> <li>• incident and unplanned event reports</li> <li>• signal and overhead diagrams</li> <li>• train notices, including special train notices</li> <li>• weekly notices</li> <li>• safe working documentation</li> </ul>

Associated activities are those that may affect the movement of rail traffic and	<p>May include:</p> <ul style="list-style-type: none"> <li>• track maintenance</li> <li>• signal maintenance</li> <li>• defective electrical systems</li> <li>• diversion or alternative routing of rail traffic</li> <li>• track inspection</li> </ul>
Other relevant personnel	<p>May include:</p> <ul style="list-style-type: none"> <li>• customer service attendants</li> <li>• station supervisors</li> <li>• other network owners</li> </ul>
Anomalies with local conditions and timetable	<p>May include:</p> <ul style="list-style-type: none"> <li>• conflicting schedules</li> <li>• incorrect run/train number</li> <li>• incorrect routing/timetable plan</li> </ul>
Communication systems	<p>May include:</p> <ul style="list-style-type: none"> <li>• radios</li> <li>• telephones, including mobile phones</li> <li>• fax machines</li> <li>• electronic, including email and intranet</li> </ul>
Rail safety workers	<p>May include:</p> <ul style="list-style-type: none"> <li>• train crew</li> <li>• track workers</li> <li>• contractors</li> <li>• train controllers</li> <li>• other signallers</li> <li>• safe working inspectors</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state or territory codes of practice and safe working system requirements</li> <li>• relevant state or territory OHS legislation</li> </ul>
Events triggering the need for implementing contingency plans	<p>May include:</p> <ul style="list-style-type: none"> <li>• train breakdowns and/or delays</li> <li>• signalling faults</li> <li>• hazardous materials spills</li> <li>• track damage</li> <li>• adverse environmental events</li> <li>• collisions</li> <li>• injuries and fatalities</li> <li>• fires</li> <li>• electrical system faults</li> <li>• derailments</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>the underpinning knowledge and skills</li> <li>relevant legislation and workplace procedures</li> <li>other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>Relevant sections of legislated rail safety requirements, including acts and regulations from each applicable state and territory, together with any nationally approved compliance codes and/or guidelines</li> <li>Organisational procedures for the control and coordination of local rail traffic operations</li> <li>Signalling and control systems and operations</li> <li>Specific local conditions and restrictions</li> <li>Use of local area communication systems</li> <li>Organisational surveillance and alarm systems</li> <li>Problems that may occur when controlling local rail traffic and related action that should be taken</li> <li>Relevant documentation requirements</li> </ul>
Underpinning Skills	Demonstrate skills to: <ul style="list-style-type: none"> <li>Communicate effectively with others</li> <li>Read, interpret and follow instructions, procedures and information relating to the control of local rail traffic</li> <li>Complete documentation and enter data relating to the control of local rail traffic</li> <li>Operate communication systems in line with required protocol</li> <li>Report problems, faults and malfunctions identified when controlling local rail traffic in accordance with organisational procedures</li> <li>Monitor work activities in terms of planned schedule</li> <li>Use appropriate numeric functions when implementing contingency plans</li> </ul> <p>Modify activities depending on differing operational contingencies, risk situations and environments</p>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>Interview / Written Test</li> <li>Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Operate Stand Alone Signaling/Point Control Equipment
Unit Code	<a href="#">EIS RTO3 14 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to physically operate stand alone signaling/point control equipment on a rail network as a part of rail work activities, in accordance with legislative and regulatory requirements. It includes following policies, procedures and protocols of the access provider.

Elements	Performance Criteria
1. Use stand alone signaling control equipment	<p>1.1 Signaling/ point control equipment is identified and confirmed with <b>network control officer</b>.</p> <p>1.2 Authority to operate signaling/point control equipment is obtained from network control officer.</p> <p>1.3 Appropriate personal protective equipment (PPE) is worn in accordance with access providers and organizational requirements.</p> <p>1.4 Track environment is accessed safely in accordance with workplace procedures.</p> <p>1.5 A situational awareness is maintained to identify any changed circumstances.</p> <p>1.6 <b>Stand alone signaling equipment</b> is operated safely and in accordance with any local instructions.</p> <p>1.7 Route is set and confirmed as correct to facilitate safe rail vehicle movement.</p> <p>1.8 <b>Communications</b> with network control officer is maintained using appropriate <b>communication protocols and systems</b> in accordance with workplace procedures.</p> <p>1.9 Unsafe situations and/or emergencies are identified and appropriate action is taken in accordance with workplace procedures.</p> <p>2.0 Access is required to real or appropriately simulated situations, including <b>work locations/areas</b>, materials and equipment, and to information on workplace practices and OHS practices.</p>
2. Restore stand alone signaling control equipment	<p>2.1 Network control officer is informed when <b>rail vehicles</b> are clear of fouling points.</p> <p>2.2 Stand alone signaling/point control equipment is restored to correct position.</p> <p>2.3 Restoration is confirmed with network control officer.</p>

	<p>2.4 Where required, signaling/point control equipment is locked and secured in accordance with workplace procedures.</p> <p>2.5 Any identified faults in the equipment are reported in accordance with workplace procedures.</p> <p>2.6 <b>Terminology</b> is railed as defined in the applicable safe <b>work</b> system.</p> <p>2.7 A <b>situational awareness</b> is conducted to identify potential risks.</p> <p>2.8 Appropriate <b>safety clothing and equipment</b> are used.</p>
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Variable	Range
Network control officer	May be: <ul style="list-style-type: none"> <li>• network controller</li> <li>• train controller</li> <li>• area controller</li> <li>• signaller</li> </ul>
Stand alone signalling equipment	May include: <ul style="list-style-type: none"> <li>• dual control point machines</li> <li>• ground frames</li> <li>• switch locks</li> <li>• plunger lock points</li> <li>• small signal boxes</li> <li>• quadrant levers</li> <li>• master keys</li> <li>• tokens</li> <li>• Annett keys</li> </ul>
Communications	May include: <ul style="list-style-type: none"> <li>• receive and pass on verbal messages/information</li> <li>• report unsafe situations and respond to emergencies</li> <li>• general safety and emergency messages</li> </ul>
Communication protocols and systems	May include: <ul style="list-style-type: none"> <li>• general safety</li> <li>• transmitting and receiving messages:</li> <li>• identification</li> <li>• standard radio terms</li> <li>• phonetic alphabet</li> <li>• testing communications equipment</li> <li>• emergency messages</li> </ul>
Work locations	May include: <ul style="list-style-type: none"> <li>• rail corridor</li> <li>• danger zone:</li> <li>• running line</li> </ul>



	<ul style="list-style-type: none"> <li>• sidings/yards</li> <li>• platforms/buildings</li> </ul>
Rail vehicles	<p>May include:</p> <ul style="list-style-type: none"> <li>• trains</li> <li>• road/rail vehicles</li> <li>• track machines</li> </ul>
Terminology	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined by the applicable track safe working system and operating procedures</li> </ul>
Work	<p>may occur:</p> <ul style="list-style-type: none"> <li>• by day or night, under varied weather conditions and situations</li> </ul>
Situational awareness	<p>Will be:</p> <ul style="list-style-type: none"> <li>• as defined within the workplace procedures</li> <li>• as defined in the risk assessment for situational awareness including: <ul style="list-style-type: none"> <li>• view - line of sight</li> <li>• direction of approaching trains</li> <li>• speed of approaching trains</li> <li>• position of safety</li> <li>• changed local conditions</li> </ul> </li> </ul>
Safety clothing and equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• protective footwear</li> <li>• hearing protection</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> <li>• the timeframes typically expected for the work function and industrial environment</li> <li>• Compliance with site safety plans, OHS regulations and other regulatory requirements</li> <li>• Assessment must include exercises which demonstrate competent performance of the following in a range of situations: <ul style="list-style-type: none"> <li>• explaining procedures to maintain communication with network control officer</li> <li>• selecting and wearing appropriate personal protective equipment</li> <li>• correctly operating stand alone signaling and point control equipment</li> <li>• conducting a situational awareness</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>• correctly restoring stand alone signaling and point control equipment demonstrating locking and, where required, securing stand alone signalling control equipment in accordance with workplace procedures</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Access providers and organisational policies, procedures and protocols</li> <li>• Rail terminology as defined by the applicable access provider</li> <li>• Access provider's policies, procedures and protocols in the event of identified unsafe situations or emergencies within workplace role</li> <li>• Operational communication protocols and systems</li> </ul> <p>Recognition of points, signals and location features</p>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with individuals and work groups</li> <li>• Follow workplace policies, procedures and protocols</li> <li>• Conduct a situational awareness assessment</li> <li>• Use required personal protective equipment conforming to organisational standards</li> <li>• Identify unsafe situations and emergencies</li> <li>• Operate points and signal controls</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Monitor Implementation of Work Plan/Activities
Unit Code	<a href="#">EIS RTO3 15 0313</a>
Unit Descriptor	This unit covers competence required to oversee and monitor the quality of work operations within an enterprise. This unit may be carried out by team leaders or supervisors.

Elements	Performance Criteria
1. Monitor and improve workplace operations	<p>1.1 Efficiency and service levels are monitored on an ongoing basis.</p> <p>1.2 Operations in the workplace support overall enterprise goals and quality assurance initiatives.</p> <p>1.3 Quality <b>problems</b> and issues are promptly identified and adjustments are made accordingly.</p> <p>1.4 Procedures and systems are changed in consultation with colleagues to improve efficiency and effectiveness.</p> <p>1.5 Colleagues are consulted about ways to improve efficiency and service levels.</p>
2. Plan and organise workflow	<p>2.1 Current workload of colleagues is accurately assessed.</p> <p>2.2 Work is scheduled in a manner which enhances efficiency and customer service quality.</p> <p>2.3 Work is delegated to appropriate people in accordance with principles of delegation.</p> <p>2.4 Workflow is assessed against agreed objectives and timelines and colleagues are assisted in prioritisation of workload.</p> <p>2.5 Input is provided to appropriate management regarding staffing needs.</p>
3. Maintain workplace records	<p>3.1 <b>Workplace records</b> are accurately completed and submitted within required timeframes.</p> <p>3.2 Where appropriate completion of records is delegated and monitored prior to submission.</p>
4. Solve problems and make decisions	<p>4.1 Workplace problems are promptly identified and considered from an operational and customer service perspective.</p> <p>4.2 Short term action is initiated to resolve the immediate problem where appropriate.</p> <p>4.3 Problems are analysed for any long term impact and potential solutions are assessed and actioned in consultation with relevant colleagues.</p> <p>4.4 Where problem is raised by a team member, they are</p>

	<p>encouraged to participate in solving the problem.</p> <p>4.5 Follow up action is taken to monitor the effectiveness of solutions in the workplace.</p>
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Variables	Range
Problems	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• difficult customer service situations</li> <li>• equipment breakdown/technical failure</li> <li>• delays and time difficulties</li> <li>• competence</li> </ul>
Workplace records	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• staff records and regular performance reports</li> </ul>

Evidence Guide	
Critical Aspects of Competence	<p>Assessment must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> <li>• ability to effectively monitor and respond to a range of common operational and service issues in the workplace</li> <li>• understanding of the role of staff involved in workplace monitoring</li> <li>• knowledge of quality assurance, principles of workflow planning, delegation and problem solving</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• roles and responsibilities in monitoring work operations</li> <li>• overview of leadership and management responsibilities</li> <li>• principles of work planning and principles of delegation</li> <li>• typical work organization methods appropriate to the sector</li> <li>• quality assurance principles and time management</li> <li>• problem solving and decision making processes</li> <li>• industrial and/or legislative issues which affect short term work organization as appropriate to industry sector</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• monitoring and improving workplace operations</li> <li>• planning and organizing workflow</li> <li>• maintaining workplace records</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Apply Quality Control
Unit Code	<a href="#">EIS RTO3 16 0313</a>
Unit Descriptor	This unit covers the knowledge, attitudes and skills required in applying quality control in the workplace.

Elements	Performance Criteria
1. Implement quality standards	<p>1.1 Agreed quality standard and procedures are acquired and confirmed.</p> <p>1.2 Standard procedures are introduced to organizational staff/personnel.</p> <p>1.3 Quality standard and procedures documents are provided to employees in accordance with the organization policy.</p> <p>1.4 Standard procedures are revised / updated when necessary.</p>
2. Assess quality of service delivered	<p>2.1 Services delivered are <b>quality checked</b> against organization <b>quality standards</b> and specifications.</p> <p>2.2 Service delivered are evaluated using the appropriate evaluation <b>quality parameters</b> and in accordance with organization standards.</p> <p>2.3 Causes of any identified faults are identified and corrective actions are taken in accordance with organization policies and procedures.</p>
3. Record information	<p>3.1 Basic information on the quality performance is recorded in accordance with organization procedures.</p> <p>3.2 Records of work quality are maintained according to the requirements of the organization.</p>
4. Study causes of quality deviations	<p>4.1 Causes of deviations from final outputs or services are investigated and reported in accordance with organization procedures.</p> <p>4.2 Suitable preventive action is recommended based on organization quality standards and identified causes of deviation from specified quality standards of final service or output.</p>
5. Complete documentation	<p>5.1 Information on quality and other indicators of service performance is recorded.</p> <p>5.2 All service processes and outcomes are recorded.</p>

Variable	Range
Quality check	May include but not limited to: <ul style="list-style-type: none"> <li>• Check against design / specifications</li> <li>• Visual inspection and Physical inspection</li> </ul>
Quality standards	May include but not limited to: <ul style="list-style-type: none"> <li>• Materials</li> <li>• Components</li> <li>• Process</li> <li>• Procedures</li> </ul>
Quality parameters	May include but not limited to: <ul style="list-style-type: none"> <li>• Standard Design / Specifications</li> <li>• Material Specification</li> </ul>

Evidence Guide	
Critical Aspects of Competence	Assessment requires evidence that the candidate: <ul style="list-style-type: none"> <li>• Checked completed work continuously against organization standard</li> <li>• Identified and isolated faulty or poor service</li> <li>• Checked service delivered against organization standards</li> <li>• Identified and applied corrective actions on the causes of identified faults or error</li> <li>• Recorded basic information regarding quality performance</li> <li>• Investigated causes of deviations of services against standard</li> <li>• Recommended suitable preventive actions</li> </ul>
Underpinning Knowledge	Demonstrates knowledge of: <ul style="list-style-type: none"> <li>• Relevant quality standards, policies and procedures</li> <li>• Characteristics of services</li> <li>• Safety environment aspects of service processes</li> <li>• Evaluation techniques and quality checking procedures</li> <li>• Workplace procedures and reporting procedures</li> </ul>
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> <li>• interpret work instructions, specifications and standards appropriate to the required work or service</li> <li>• carry out relevant performance evaluation</li> <li>• maintain accurate work records</li> <li>• meet work specifications and requirements</li> <li>• communicate effectively within defined workplace procedures</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.

Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
<b>Unit Title</b>	<b>Lead Workplace Communication</b>
<b>Unit Code</b>	<a href="#">EIS RTO3 17 0313</a>
<b>Unit Descriptor</b>	This unit covers the knowledge, attitudes and skills needed to lead in the dissemination and discussion of information and issues in the workplace.

Elements	Performance Criteria
1. Communicate information about workplace processes	1.1 Appropriate <b>communication method</b> is selected. 1.2 Multiple operations involving several topics areas are communicated accordingly. 1.3 Questions are used to gain extra information. 1.4 Correct sources of information are identified. 1.5 Information is selected and organized correctly. 1.6 Verbal and written reporting is undertaken when required. 1.7 Communication skills are maintained in all situations.
2. Lead workplace discussion	2.1 Response to workplace issues is sought. 2.2 Response to workplace issues are provided immediately. 2.3 Constructive contributions are made to workplace discussions on such issues as production, quality and safety. 2.4 Goals/objectives and action plan undertaken in the workplace are communicated.
3. Identify and communicate issues arising in the workplace	3.1 Issues and problems are identified as they arise. 3.2 Information regarding problems and issues are organized coherently to ensure clear and effective communication. 3.3 Dialogue is initiated with appropriate staff/personnel. 3.4 Communication problems and issues are raised as they arise.

Variable	Range
Methods of communication	May include but not limited to: <ul style="list-style-type: none"> <li>• Non-verbal gestures</li> <li>• Verbal</li> <li>• Face to face</li> <li>• Two-way radio</li> <li>• Speaking to groups</li> <li>• Using telephone</li> </ul>



	<ul style="list-style-type: none"> <li>• Written</li> <li>• Using Internet</li> <li>• Cell phone</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> <li>• Dealt with a range of communication/information at one time</li> <li>• Made constructive contributions in workplace issues</li> <li>• Sought workplace issues effectively</li> <li>• Responded to workplace issues promptly</li> <li>• Presented information clearly and effectively written form</li> <li>• Used appropriate sources of information</li> <li>• Asked appropriate questions</li> <li>• Provided accurate information</li> </ul>
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> <li>• Organization requirements for written and electronic communication methods</li> <li>• Effective verbal communication methods</li> </ul>
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> <li>• Organize information</li> <li>• Understand and convey intended meaning</li> <li>• Participate in variety of workplace discussions</li> <li>• Comply with organization requirements for the use of written and electronic communication methods</li> </ul>
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Lead Small Teams
Unit Code	<a href="#">EIS RTO3 18 0313</a>
Unit Descriptor	This unit covers the skills, knowledge and attitudes required to determine individual and team development needs and facilitate the development of the work group.

Elements	Performance Criteria
1. Provide team leadership	<p>1.1 <b>Learning and development needs</b> are systematically identified and implemented in line with <b>organizational requirements</b>.</p> <p>1.2 Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented.</p> <p>1.3 Individuals are encouraged to self-evaluate performance and identify areas for improvement.</p> <p>1.4 <b>Feedback on performance</b> of team members is collected from relevant sources and compared with established team learning process.</p>
2. Foster individual and organizational growth	<p>2.1 Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards.</p> <p>2.2 <b>Learning delivery methods</b> are appropriate to the learning goals, the learning style of participants and availability of equipment and resources.</p> <p>2.3 Workplace learning opportunities and coaching/mentoring assistance are provided to facilitate individual and team achievement of competencies.</p> <p>2.4 Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.</p>
3. Monitor and evaluate workplace learning	<p>3.1 Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.</p> <p>3.2 Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.</p> <p>3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.</p> <p>3.4 Records and reports of Competence are maintained</p>

	within organizational requirement.
4. Develop team commitment and cooperation	<p>4.1 Open communication processes to obtain and share information is used by team.</p> <p>4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.</p> <p>4.3 Mutual concern and camaraderie are developed in the team.</p>
5. Facilitate accomplishment of organizational goals	<p>5.1 Team members actively participated in team activities and communication processes.</p> <p>5.2 Teams members developed individual and joint responsibility for their actions.</p> <p>5.3 Collaborative efforts are sustained to attain organizational goals</p>

Variable	Range
Learning and development needs	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Coaching, mentoring and/or supervision</li> <li>• Formal/informal learning program</li> <li>• Internal/external training provision</li> <li>• Work experience/exchange/opportunities</li> <li>• Personal study</li> <li>• Career planning/development</li> <li>• Performance appraisals</li> <li>• Workplace skills assessment</li> <li>• Recognition of prior learning</li> </ul>
Organizational requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Quality assurance and/or procedures manuals</li> <li>• Goals, objectives, plans, systems and processes</li> <li>• Legal and organizational policy/guidelines and requirements</li> <li>• Safety policies, procedures and programs</li> <li>• Confidentiality and security requirements</li> <li>• Business and performance plans</li> <li>• Ethical standards</li> <li>• Quality and continuous improvement processes and standards</li> </ul>
Feedback on performance	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Formal/informal performance appraisals</li> <li>• Obtaining feedback from supervisors and colleagues</li> <li>• Obtaining feedback from clients</li> <li>• Personal and reflective behavior strategies</li> <li>• Routine and organizational methods for monitoring service delivery</li> </ul>

Learning delivery methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• On the job coaching or mentoring</li> <li>• Problem solving</li> <li>• Presentation/demonstration</li> <li>• Formal course participation</li> <li>• Work experience and Involvement in professional networks</li> <li>• Conference/seminar attendance and induction</li> </ul>
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<b>Evidence Guide</b>	
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Critical Aspects of Competence	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>• identified and implemented learning opportunities for others</li> <li>• gave and received feedback constructively</li> <li>• facilitated participation of individuals in the work of the team</li> <li>• negotiated learning plans to improve the effectiveness of learning</li> <li>• prepared learning plans to match skill needs</li> <li>• accessed and designated learning opportunities</li> </ul>
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• coaching and mentoring principles</li> <li>• understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective</li> <li>• understanding how to facilitate team development and improvement</li> <li>• understanding methods and techniques for eliciting and interpreting feedback</li> <li>• understanding methods for identifying and prioritizing personal development opportunities and options</li> <li>• knowledge of career paths and competence standards in the industry</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• ability to read and understand a variety of texts, prepare general information and documents according to target audience; spell with accuracy; use grammar and punctuation effectively</li> <li>• communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management</li> <li>• planning skills to organize required resources and equipment to meet learning needs</li> <li>• coaching and mentoring skills to provide support to colleagues</li> <li>• reporting skills to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes</li> <li>• facilitation skills to conduct small group training sessions</li> <li>• ability to relate to people from a range of social, cultural, physical and mental backgrounds</li> </ul>

Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written exam</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the workplace or in a simulated workplace setting

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Improve Business Practice
Unit Code	<a href="#">EIS RTO3 19 0313</a>
Unit Descriptor	This unit covers the skills, knowledge and attitudes required in promoting, improving and growing business operations.

Elements	Performance Criteria
1. Diagnose the business	1.1 <b>Data required</b> for diagnosis is determined and acquired. 1.2 <b>Competitive advantage</b> of the business is determined from the data. 1.3 <b>SWOT analysis</b> of the data is undertaken.
2. Benchmark the business	2.1 Sources of relevant benchmarking data are identified. 2.2 <b>Key indicators</b> for benchmarking are selected in consultation with key stakeholders. 2.3 Like indicators of own practice are compared with benchmark indicators. 2.4 Areas for improvement are identified.
3. Develop plans to improve business performance	3.1 A consolidated list of required improvements is developed. 3.2 Cost-benefit ratios for required improvements are determined. 3.3 Work flow changes resulting from proposed improvements are determined. 3.4 Proposed improvements are ranked according to agreed criteria. 3.5 An action plan is developed and agreed to implement the top ranked improvements. 3.6 <b>Organizational structures</b> are checked to ensure they are suitable.
4. Develop marketing and promotional plans	4.1 The practice vision statement is reviewed. 4.2 Practice <b>objectives</b> are developed/reviewed. 4.3 Target markets are identified/refined. 4.4 <b>Market research data</b> is obtained. 4.5 <b>Competitor analysis</b> is obtained. 4.6 <b>Market position</b> is developed/reviewed. 4.7 <b>Practice brand</b> is developed.

	<p>4.8 <b>Benefits</b> of practice/practice products/services are identified.</p> <p>4.9 <b>Promotion tools</b> are selected/ developed.</p>
5. Develop business growth plans	<p>5.1 Plans are developed to increase <b>yield per existing client</b>.</p> <p>5.2 Plans are developed to add new clients.</p> <p>5.3 Proposed plans are ranked according to agreed criteria.</p> <p>5.4 An action plan is developed and agreed to implement the top ranked plans.</p> <p>5.5 Practice work practices are reviewed to ensure they support growth plans.</p>
6. Implement and monitor plans	<p>6.1 Implementation plan is developed in consultation with all relevant stakeholders.</p> <p>6.2 Indicators of success of the plan are agreed.</p> <p>6.3 Implementation is monitored against agreed indicators.</p> <p>6.4 Implementation is adjusted as required.</p>

Variable	Range
Data	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• organization capability</li> <li>• appropriate business structure</li> <li>• level of client service which can be provided</li> <li>• internal policies, procedures and practices</li> <li>• staff levels, capabilities and structure</li> <li>• market, market definition</li> <li>• market changes/market segmentation</li> <li>• market consolidation/fragmentation</li> <li>• revenue</li> <li>• level of commercial activity</li> <li>• expected revenue levels, short and long term</li> <li>• revenue growth rate</li> <li>• break even data</li> <li>• pricing policy</li> <li>• revenue assumptions</li> <li>• business environment</li> <li>• economic conditions</li> <li>• social factors</li> <li>• demographic factors</li> <li>• technological impacts</li> <li>• political/legislative/regulative impacts</li> <li>• competitors, competitor pricing and response to pricing</li> <li>• competitor marketing/branding</li> <li>• competitor products</li> </ul>

Competitive advantage	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• services/products</li> <li>• fees</li> <li>• location</li> <li>• timeframe</li> </ul>
SWOT analysis	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• internal strengths such as staff capability, recognized quality</li> <li>• internal weaknesses such as poor morale, under-capitalization, poor technology</li> <li>• external opportunities such as changing market and economic conditions</li> <li>• external threats such as industry fee structures, strategic alliances, competitor marketing</li> </ul>
Key indicators	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• salary cost and staffing</li> <li>• personnel productivity (particularly of principals)</li> <li>• profitability</li> <li>• fee structure</li> <li>• client base</li> <li>• size staff/principal</li> <li>• overhead/overhead control</li> </ul>
Organizational structures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Legal structure (partnership, Limited Liability Company, etc.)</li> <li>• organizational structure/hierarchy</li> <li>• reward schemes</li> </ul>
Objectives should be 'SMART' , that:	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• S: Specific</li> <li>• M: Measurable</li> <li>• A: Achievable</li> <li>• R: Realistic</li> <li>• T: Time defined</li> </ul>
Market research data	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• data about existing clients</li> <li>• data about possible new clients</li> <li>• data from internal sources</li> <li>• data from external sources such as: <ul style="list-style-type: none"> <li>➤ trade associations/journals</li> <li>➤ Yellow Pages small business surveys</li> <li>➤ libraries</li> <li>➤ Internet</li> <li>➤ Chamber of Commerce</li> <li>➤ client surveys</li> <li>➤ industry reports</li> <li>➤ secondary market research</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>• primary market research such as: <ul style="list-style-type: none"> <li>➤ telephone surveys</li> <li>➤ personal interviews</li> <li>➤ mail surveys</li> </ul> </li> </ul>
Competitor analysis	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• competitor offerings</li> <li>• competitor promotion strategies and activities</li> <li>• competitor profile in the market place</li> </ul>
Market position should	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• product</li> <li>• the good or service provided</li> <li>• product mix</li> <li>• the core product - what is bought</li> <li>• the tangible product - what is perceived</li> <li>• the augmented product - total package of consumer</li> <li>• features/benefits</li> <li>• product differentiation from competitive products</li> <li>• new/changed products</li> <li>• Price and pricing strategies (cost plus, supply/demand, ability to pay, etc.)</li> <li>• Pricing objectives (profit, market penetration, etc.)</li> <li>• cost components</li> <li>• market position</li> <li>• distribution strategies</li> <li>• marketing channels</li> <li>• promotion</li> <li>• promotional strategies</li> <li>• target audience</li> <li>• communication</li> <li>• promotion budget</li> </ul>
Practice brand	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• practice image</li> <li>• practice logo/letter head/signage</li> <li>• phone answering protocol</li> <li>• facility decor</li> <li>• slogans</li> <li>• templates for communication/invoicing</li> <li>• style guide</li> <li>• writing style</li> <li>• AIDA (attention, interest, desire, action)</li> </ul>
Benefits	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• features as perceived by the client</li> <li>• benefits as perceived by the client</li> </ul>
Promotion tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• networking and referrals</li> <li>• seminars</li> <li>• advertising</li> </ul>

	<ul style="list-style-type: none"> <li>• press releases</li> <li>• publicity and sponsorship</li> <li>• brochures</li> <li>• newsletters (print and/or electronic)</li> <li>• websites</li> <li>• direct mail</li> <li>• telemarketing/cold calling</li> </ul>
Yield per existing client	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• raising charge out rates/fees</li> <li>• packaging fees</li> <li>• reduce discounts</li> <li>• sell more services to existing clients</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• ability to identify the key indicators of business performance</li> <li>• ability to identify the key market data for the business</li> <li>• knowledge of a wide range of available information sources</li> <li>• ability to acquire information not readily available within a business</li> <li>• ability to analyze data and determine areas of improvement</li> <li>• ability to negotiate required improvements to ensure implementation</li> <li>• ability to evaluate systems against practice requirements and form recommendations and/or make recommendations</li> <li>• ability to assess the accuracy and relevance of information</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• data analysis</li> <li>• communication skills</li> <li>• computer skills to manipulate data and present information</li> <li>• negotiation skills</li> <li>• problem solving</li> <li>• planning skills</li> <li>• marketing principles</li> <li>• ability to acquire and interpret relevant data</li> <li>• current product and marketing mix</li> <li>• use of market intelligence</li> <li>• development and implementation strategies of promotion and growth plans</li> </ul>
Underpinning Skills	<p>Demonstrates skill in:</p> <ul style="list-style-type: none"> <li>• data analysis and manipulation</li> <li>• ability to acquire and interpret required data, current practice systems and structures and sources of relevant benchmarking data</li> <li>• apply methods of selecting relevant key benchmarking indicators</li> <li>• communication skills</li> </ul>

Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level III	
Unit Title	Prevent and Eliminate MUDA
Unit Code	<a href="#">EIS RTO3 20 0313</a>
Unit Descriptor	This unit of competence covers the knowledge, skills and attitude required by a worker to prevent and eliminate MUDA/wastes in his/her their workplace. It covers responsibility for the day-to-day operation of the work and ensures Kaizen elements are continuously improved and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 <b>OHS requirements</b>, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 Appropriate material is selected for work.</p> <p>1.5 <b>Safety equipment and tools</b> are identified and checked for safe and effective operation.</p>
2. Identify MUDA.	<p>2.1 Plan of MUDA identification is prepared and implemented.</p> <p>2.2 Causes and effects of MUDA are discussed.</p> <p>2.3 <b>Tools and techniques</b> are used to draw and analyze current situation of the work place.</p> <p>2.4 Wastes/MUDA are identified and measured based on <b>relevant procedures</b>.</p> <p>2.5 Identified and measured wastes are reported to relevant personnel.</p>
3. Eliminate wastes/MUDA.	<p>3. 1. Plan of MUDA elimination is prepared and implemented.</p> <p>3. 2. Necessary attitude and <b>the ten basic principles for improvement</b> are adopted to eliminate waste/MUDA.</p> <p>3. 3. Tools and techniques are used to eliminate</p>

	<p>wastes/MUDA based on the procedures and OHS.</p> <p>3. 4. Wastes/MUDA are reduced and eliminated in accordance with OHS and organizational requirements.</p> <p>3. 5. Improvements gained by elimination of waste/MUDA are reported to relevant bodies.</p>
4. Prevent occurrence of wastes/MUDA.	<p>4.1 Plan of MUDA prevention is prepared and implemented.</p> <p>4.2 Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement are discussed and prepared.</p> <p>4.3 Occurrences of wastes/MUDA are prevented by using <b>visual and auditory control methods</b>.</p> <p>4.4 Waste-free workplace is created using <b>5W and 1H</b> sheet.</p> <p>4.5 The completion of required operation is done in accordance with standard procedures and practices.</p> <p>4.6 The updating of standard procedures and practices is facilitated.</p> <p>4.7 The capability of the work team that aligns with the requirements of the procedure is ensured.</p>

Variable	Range
OHS requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances.</li> <li>• Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices.</li> <li>• Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization.</li> <li>• Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise</li> </ul>

	first aid requirements and site evacuation.
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• dust masks / goggles</li> <li>• glove</li> <li>• working cloth</li> <li>• first aid</li> <li>• safety shoes</li> </ul>
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Plant Layout</li> <li>• Process flow</li> <li>• Other Analysis tools</li> <li>• Do time study by work element</li> <li>• Measure Travel distance</li> <li>• Take a photo of workplace</li> <li>• Measure Total steps</li> <li>• Make list of items/products, who produces them and who uses them &amp; those in warehouses, storages etc.</li> <li>• Focal points to Check and find out existing problems</li> <li>• 5S</li> <li>• Layout improvement</li> <li>• Brainstorming</li> <li>• Andon</li> <li>• U-line</li> <li>• In-lining</li> <li>• Unification</li> <li>• Multi-process handling &amp; Multi-skilled operators</li> <li>• A.B. control (Two point control)</li> <li>• Cell production line</li> <li>• TPM (Total Productive Maintenance)</li> </ul>
Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Make waste visible</li> <li>• Be conscious of the waste</li> <li>• Be accountable for the waste.</li> <li>• Measure the waste.</li> </ul>

The ten basic principles for improvement	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Throw out all of your fixed ideas about how to do things.</li> <li>• Think of how the new method will work- not how it won.</li> <li>• Don't accept excuses. Totally deny the status quo.</li> <li>• Don't seek perfection. A 50 percent implementation rate is fine as long as it's done on the spot.</li> <li>• Correct mistakes the moment they are found.</li> <li>• Don't spend a lot of money on improvements.</li> <li>• Problems give you a chance to use your brain.</li> <li>• Ask "why?" At least five times until you find the ultimate cause.</li> <li>• Ten people's ideas are better than one person's.</li> <li>• Improvement knows no limits.</li> </ul>
Visual and auditory control methods	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Red Tagging</li> <li>• Sign boards</li> <li>• Outlining</li> <li>• Andons</li> <li>• Kanban, etc.</li> </ul>
5W and 1H	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Who</li> <li>• What</li> <li>• Where</li> <li>• When</li> <li>• Why</li> <li>• How</li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> <li>• discuss why wastes occur in the workplace</li> <li>• discuss causes and effects of wastes/MUDA in the workplace</li> <li>• analyze the current situation of the workplace by using appropriate tools and techniques</li> <li>• identify, measure, eliminate and prevent occurrence of wastes by using appropriate tools and techniques</li> <li>• use 5W and 1H sheet to prevent</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• Targets of customers and manufacturer/service provider</li> <li>• Traditional and kaizen thinking of price setting</li> <li>• Kaizen thinking in relation to targets of</li> </ul>

	<p>manufacturer/service provider and customer</p> <ul style="list-style-type: none"> <li>• value</li> <li>• The three categories of operations</li> <li>• the 3“MU”</li> <li>• waste/MUDA</li> <li>• wastes occur in the workplace</li> <li>• The 7 types of MUDA</li> <li>• The Benefits of identifying and eliminating waste</li> <li>• Causes and effects of 7 MUDA</li> <li>• Procedures to identify MUDA</li> <li>• Necessary attitude and the ten basic principles for improvement</li> <li>• Procedures to eliminate MUDA</li> <li>• Prevention of wastes</li> <li>• Methods of waste prevention</li> <li>• Definition and purpose of standardization</li> <li>• Standards required for machines, operations, defining normal and abnormal conditions, clerical procedures and procurement</li> <li>• Methods of visual and auditory control</li> <li>• TPM concept and its pillars.</li> <li>• Relevant Occupational Health and Safety (OHS) and environment requirements</li> <li>• Plan and report</li> <li>• Method of communication</li> </ul>		
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• draw &amp; analyze current situation of the work place</li> <li>• use measurement apparatus (stop watch, tape, etc.)</li> <li>• calculate volume and area</li> <li>• use and follow checklists to identify, measure and eliminate wastes/MUDA</li> <li>• identify and measure wastes/MUDA in accordance with OHS and procedures</li> <li>• use tools and techniques to eliminate wastes/MUDA in accordance with OHS procedure</li> <li>• apply 5W and 1H sheet</li> <li>• update and use standard procedures for completion of required operation</li> <li>• work with others</li> <li>• read and interpret documents</li> <li>• observe situations</li> <li>• solve problems</li> </ul>		
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	<ul style="list-style-type: none"> <li>• communicate</li> <li>• gather evidence by using different means</li> <li>• report activities and results using report formats</li> </ul>
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

## **NTQF Level IV**

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Control and Coordinate Incident Responses
Unit Code	<a href="#">EIS RTO4 01 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to control and coordinate incident responses according to organisational and regulatory procedures. It includes responding to the incident, coordinating incident response activities, and completing follow-up actions.

Elements	Performance Criteria
1. Respond to the incident	<p>1.1 Details of incidents are received, analysed, confirmed and prioritised.</p> <p>1.2 Immediate coordination requirements are identified and actioned in accordance with organisational and regulatory procedures.</p> <p>1.3 <b>Action to be taken in the event of an incident</b> to identify unsafe situations and emergencies within the limits of responsibility the occupation concerned.</p>
2. Coordinate incident response activities	<p>2.1 Control and coordination of incident response activities are assumed and relevant personnel and other authorities are informed of this action.</p> <p>2.2 Assistance to be provided to clients and operators is arranged within the limitations of duty of care and organisational requirements.</p> <p>2.3 Assistance is provided to relevant authorities in accordance with workplace policy and legislative requirements.</p> <p>2.4 Information is collected and passed to relevant personnel/stakeholders in accordance with workplace procedures.</p> <p>2.5 Information gathered through <b>consultative processes</b> is analyzed and presented to a diverse stakeholder base and options are determined.</p> <p>2.6 Operate <b>communication systems</b> in line with required protocol.</p>
3. Complete follow-up actions	<p>3.1 Details of incident are collected, recorded and managed in accordance with <b>organisational procedures</b>.</p> <p>3.2 Where required, a contribution is made to the debrief process and recommendations are prepared and</p>

	<p>submitted.</p> <p>3.3 <b>Information and documents</b> are collected and passed to relevant personnel in accordance with organisational procedures.</p> <p>3.4 Required documentation is inspected and checked in accordance with <b>applicable regulations and legislations.</b></p>
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Variable	Range
Action to be taken in the event of an incident	<p>May include:</p> <ul style="list-style-type: none"> <li>identifying and following established incident procedures</li> <li>assessing the nature and extent of the incident</li> <li>ensuring medical assistance is provided where required</li> <li>isolating and coordinating safety of the scene</li> <li>alerting relevant organisational personnel and emergency services</li> <li>recording relevant information and reporting on incident situation in accordance with regulatory and organisational requirements</li> </ul>
Consultative processes	<p>May include:</p> <ul style="list-style-type: none"> <li>personnel and management</li> <li>designated emergency officers</li> <li>emergency services personnel, including ambulance, police, fire services and SES</li> <li>OHS specialists</li> <li>other professional or technical staff</li> <li>contractors</li> </ul>
Communication systems	<p>May include:</p> <ul style="list-style-type: none"> <li>telephone, including mobile telephone</li> <li>electronic data interchange (EDI)</li> <li>SMS</li> <li>radio</li> </ul>
Organisational procedures	<p>May be known as:</p> <ul style="list-style-type: none"> <li>company procedures</li> <li>enterprise procedures</li> <li>workplace procedures</li> <li>established procedures</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>acts and regulations, including the Rail Safety Act</li> <li>incident response procedures</li> <li>manifests, goods and container identification numbers and codes</li> <li>codes of practice</li> <li>relevant legislation, regulations and related documentation related to incident response situations</li> <li>quality assurance procedures</li> </ul>

Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state or territory legislation relating to:</li> <li>• environmental protection legislation</li> <li>• OHS</li> <li>• rail safety</li> <li>• emergency procedures regulations</li> <li>• dangerous goods and hazardous materials regulations</li> <li>• relevant Ethiopian standards, codes of practice and guidance notes</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant OHS and other regulatory codes, procedures and guidelines concerning response to incidents</li> <li>• Risks and hazards and related precautions to control the risk</li> <li>• Organisational procedures and policies for responding to incidents</li> <li>• Types of incidents that can occur and appropriate action to be taken in each case</li> <li>• Layout of network or area under control, and potential obstacles for responding parties</li> <li>• Means to control and organise the incident and provide practical assistance where required</li> </ul> <p>Procedures for contacting emergency personnel and other relevant stakeholders</p>
Underpinning Skills	<p>Demonstrates skill to:</p> <ul style="list-style-type: none"> <li>• Communicate clearly and effectively with others when implementing and coordinating incident responses</li> <li>• Read and interpret instructions, procedures and information relating to implementing and coordinating incident responses</li> <li>• Identify where the following are involved in the incident:</li> <li>• containers and goods coding</li> <li>• Ethiopian Dangerous Goods Code</li> <li>• where applicable, emergency information panels</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation relating to the implementation and coordination of incident responses</li> <li>• Operate electronic communication equipment in line with</li> </ul>

	<p>required protocol</p> <ul style="list-style-type: none"> <li>• Collaborate with others when implementing and coordinating incident responses</li> <li>• Report and rectify within limits of own role problems, faults and malfunctions that may arise when implementing and coordinating incident responses in accordance with regulatory requirements and workplace procedures</li> <li>• Implement contingency plans for unplanned events that may occur when implementing and coordinating incident responses</li> <li>• Apply precautions and required action to minimise, control or eliminate potential hazards during work activities</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Implement Safe working Rules and Regulations for Network Control Activities
Unit Code	<a href="#">EIS RTO4 02 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to implement and coordinate safe working rules and regulations for network control activities. It includes implementing safe working rules and regulations; applying and managing safe working protocols and communications; and taking appropriate action in the event of safety incidents, unsafe situations or emergencies. Licensing or certification requirements may be applicable to this unit.

Elements	Performance Criteria
1. Conduct network control activities following safe working rules and procedures	<p>1.1 Relevant rules for the applicable safe working system are followed when carrying out network control activities as part of rail operation.</p> <p>1.2 All network control activities are conducted in compliance with relevant state and territory safe working rules and regulations.</p> <p>1.3 Requirements of the safe working systems are implemented and managed in accordance with applicable safe working system rules and regulations.</p> <p>1.4 Rail <b>terminology and related meanings</b> are applied as defined in the applicable safe working system.</p> <p>1.5 All required <b>relevant safe working</b> documentation are completed as per workplace procedures and rail regulations.</p>
2. Apply and manage communications	<p>2.1 Communication protocols are applied and managed in accordance with applicable safe working system requirements</p> <p>2.2 Authorities required by safe working systems are issued in accordance with applicable safe working system rules and regulations using communication systems</p> <p>2.3 Appropriate records of communications are managed as required within the applicable safe working system rules, regulations and procedures</p> <p>2.4 Operate electronic <b>communications equipment</b> to required protocol</p>
3. Apply safe working protocols	<p>3.1 Relevant protocols are managed as specified in the applicable safe working system rules and regulations</p> <p>3.2 Appropriate records and documentation pertinent to safe working protocols are completed and managed in</p>

	<p>accordance with the requirements of the applicable safe working system rules and regulations</p> <p>3.3 Relevant <b><i>applicable legislation, regulations and codes of practice</i></b> and safe working system requirements</p>
4. Take action in the event of unsafe situations or emergencies	<p>4.1 Unsafe situations are identified in accordance with the requirements of applicable safe working system rules and regulations</p> <p>4.2 Where a safety incident, emergency or unsafe situation has been identified, appropriate action is taken to report and/or control the incident or situation in accordance with the requirements of applicable safe working system rules and regulations</p> <p>4.3 Appropriate records and documentation of an identified unsafe situation, emergency or safety incident are maintained in accordance with the requirements of applicable safe working system rules and regulations and organisational procedures</p> <p>4.4 Reports of the identified unsafe situation, emergency or safety incident are completed in accordance with organisational requirements</p>

Variable	Range
Terminology and related meanings	<p>Will be:</p> <ul style="list-style-type: none"> <li>as defined within the applicable safe working system</li> </ul>
Relevant safe working documentation	<p>May include:</p> <ul style="list-style-type: none"> <li>rules and operating procedures</li> <li>workplace procedures, policies and work instructions</li> <li>procedure manuals</li> <li>train running information (TRI)</li> <li>train notices</li> <li>train register books</li> <li>train graphs and/or diagrams</li> <li>local instructions</li> <li>track and infrastructure drawings and diagrams</li> <li>log books</li> <li>safe working forms</li> </ul>
Communications equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>hand-held or portable radios</li> <li>fixed equipment</li> <li>telephones, including mobile phones</li> <li>fax machines</li> </ul>
Applicable legislation, regulations and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>legislated rail safety requirements, including acts and regulations from each applicable state and territory, together with any nationally approved compliance codes and/or guidelines</li> </ul>



	<ul style="list-style-type: none"> <li>• relevant Ethiopian standards and related requirements</li> <li>• relevant state and territory OHS regulations</li> <li>• state, federal or territory environmental protection legislation</li> <li>• conditions of service, legislation and industrial agreements, including workplace agreements and awards</li> <li>• relevant national, state and territory dangerous goods legislation</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant OHS, rail safety and environmental protection legislation and policies</li> <li>• Safe working system types, requirements and limitations</li> <li>• Route integrity requirements, including general requirements, position of points and route occupancy requirements</li> <li>• Communication protocols as they relate to the functions of the safe working systems concerned</li> <li>• Safe working system rules and protocols applicable to the individual's area of responsibility and/or control</li> </ul> <p>Action to be taken in the event of safety incidents, identified unsafe situations, and emergencies applicable to the individual's area of responsibility and/or control</p>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when applying safe working rules and regulations to rail functions</li> <li>• Read, interpret and follow relevant rules, regulations and instructions applicable to the rail operations concerned</li> <li>• Use appropriate numeric functions when applying safe working rules and regulations to rail functions</li> </ul> <p>Work collaboratively with others to fulfill safe working requirements applicable to the rail operations concerned</p>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Identify and Meet Customer Requirements
Unit Code	<a href="#">EIS RTO4 03 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to identify and meet customer requirements in accordance with regulatory and organisational needs. It includes identifying customer needs, delivering a service to customers, and communicating customer needs with other members of the organisation.

Elements	Performance Criteria
1. Identify customers and determine their needs	<p>1.1 <b>Customers</b> and their needs are identified in accordance with business goals and shared objectives.</p> <p>1.2 Appropriate questioning and active listening are used to fully determine customer needs.</p> <p>1.3 Customer needs are assessed for urgency to identify priorities for service delivery.</p> <p>1.4 Customers are provided with information about available options for meeting their needs and assisted in identifying preferred options.</p> <p>1.5 Personal limitations in addressing customer needs are identified and assistance is sought from designated persons where required.</p>
2. Deliver service to customers	<p>2.1 Communication is undertaken with customers in a clear, concise and courteous manner.</p> <p>2.2 Appropriate customer service is provided to meet identified needs in accordance with organisational requirements and shared objectives.</p> <p>2.3 Where applicable, information and follow-up regarding problems and delays are provided within appropriate timeframes.</p> <p>2.4 Whenever possible, opportunities to enhance the quality of service are identified and acted upon.</p>
3. Communicate to other members of the organisation	<p>3.1 Outcomes of customer service interactions are communicated to appropriate persons <b>depending on the type of organisation concerned and the local terminology, and used workplace procedures.</b></p> <p>3.2 Feedback mechanisms are used to ensure continuous improvement of customer service outcomes.</p> <p>3.3 Sources of <b>information and documentation</b> needed for workplace operations.</p> <p>3.4 Required documentation is inspected and checked in</p>

	accordance with <b><i>applicable regulations and legislations.</i></b>
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Variable	Range
Customers	May be: <ul style="list-style-type: none"> <li>• internal or external, including:</li> <li>• emergency services</li> <li>• network access</li> <li>• contractors</li> <li>• other network operators</li> </ul>
Depending on the type of organisation concerned and the local terminology used, organisational procedures	May be known as: <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• workplace procedures</li> <li>• established procedures</li> </ul>
Information and documentation	May include: <ul style="list-style-type: none"> <li>• legislation, regulations and documentation relevant to business operations</li> <li>• regulations and policies relating to minimising risks to the environment and ensuring compliance with OHS requirements</li> <li>• reports of accidents and incidents within regulatory requirements and organisational procedures</li> <li>• organisational guidelines on appropriate language and communication strategies and interpretation of relevant information</li> <li>• quality assurance procedures</li> </ul>
Applicable regulations and legislation	May include: <ul style="list-style-type: none"> <li>• relevant regulations, standards and codes of practice</li> <li>• relevant federal, state and territory OHS legislation</li> <li>• equal employment legislation and related policies</li> <li>• environmental protection regulations</li> <li>• dangerous goods and hazardous materials codes</li> <li>• relevant Ethiopian standards and certification requirements</li> </ul>

Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> other relevant aspects of the range statement
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>• Relevant occupational health, safety and environmental (OHS&amp;E) protection policies and procedures</li> <li>• Workplace protocols and procedures for meeting</li> </ul>

	<p>customer and organisation needs, including planning and quality improvement of services and operations</p> <p>Problems that can occur when meeting customer and organization needs, and action that can be taken to resolve them</p>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate and negotiate effectively with others when meeting customer and organisational needs</li> <li>• Read and interpret instructions, procedures and information relevant to meeting customer and organisational needs</li> <li>• Identify and assess customer and organisational requirements</li> <li>• Use appropriate numeric functions when identifying customer needs</li> <li>• Complete documentation related to meeting customer and organisational needs where applicable</li> <li>• Operate electronic communication equipment in line with required protocol</li> <li>• Work collaboratively with others when meeting customer and organisational needs</li> <li>• Report and rectify within limits of own role problems that may arise when meeting customer and organisational needs in accordance with workplace procedures</li> <li>• Implement contingency plans for unanticipated situations that may occur when meeting customer and organizational needs</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Arrange Alternative Passenger Transport
Unit Code	<a href="#">EIS RTO4 04 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to arrange alternative passenger transport in accordance with workplace requirements, including identifying and confirming transport requirements, arranging alternative transport, and monitoring and updating transport arrangements.

Elements	Performance Criteria
1. Identify and confirm transport requirements	<p>1.1 Need for alternative passenger transport is identified with minimal actual disruption to services.</p> <p>1.2 Period for which <b>alternative transport information requirements</b> is determined from situation and services.</p> <p>1.3 <b>Train timetables considered in planning arrangements include</b>, timetable, passenger loadings and luggage quantities are determined from workplace information systems.</p> <p>1.4 Requirements to cater for disabled passengers or others with special needs are determined.</p>
2. Arrange alternative transport	<p>2.1 <b>Type of alternative transport</b> and number of transport units required is determined to provide cost effective movement within workplace guidelines for minimal disruption.</p> <p>2.2 <b>Situations creating a need for alternative transport</b> is arranged within workplace policies and procedures to meet anticipated need.</p> <p>2.3 Arrangements are made to provide assistance for passengers with special needs.</p> <p>2.4 Relevant OHS requirements are identified and included in transport planning considerations.</p> <p>2.5 <b>Consultative processes</b> are developed and implemented</p> <p>2.6 Operate electronic <b>communication</b> equipment to required protocol.</p>
3. Monitor and update transport arrangements	<p>3.1 Passengers are informed of alterations to services as quickly as possible.</p> <p>3.2 Relevant details of incidents are collected and recorded in accordance with workplace policies and procedures for future reference, analysis and investigation purposes.</p> <p>3.3 Irregularities outside own area of responsibility are referred to nominated person or section.</p>

	<p>3.4 <b>Alternative transport</b> arrangements and related financial transactions are documented to meet operational requirements.</p> <p>3.5 Alternative transport arrangements for passengers are communicated to appropriate persons <b>depending on the type of organisation concerned and the local terminology used, organisational procedures.</b></p> <p>3.6 Sources of <b>information and documentation</b> needed for workplace operations.</p> <p>3.7 Required documentation is inspected and checked in accordance with <b>applicable regulations and legislations.</b></p>
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Variable	Range
Alternative transport information requirements	May be obtained from: <ul style="list-style-type: none"> <li>• timetables</li> <li>• passenger loading information</li> <li>• workplace instructions and guidelines</li> <li>• plans incorporating track shutdowns</li> <li>• relevant staff and management providing information on unplanned track shutdowns</li> <li>• incident details</li> </ul>
Train timetables considered in planning arrangements	Include: <ul style="list-style-type: none"> <li>• all services offered by the organisation potentially affected by the contingency situation</li> </ul>
Types of alternative transport	Can include: <ul style="list-style-type: none"> <li>• buses</li> <li>• taxis</li> <li>• air services</li> </ul>
Situations creating a need for alternative transport	May include: <ul style="list-style-type: none"> <li>• planned track shut down</li> <li>• unplanned track shut down</li> <li>• out-of-schedule running which affects connecting services</li> </ul>
Consultative processes	May involve: <ul style="list-style-type: none"> <li>• customers</li> <li>• other workplace personnel</li> <li>• supervisors and managers</li> <li>• representatives of other transport organisations</li> <li>• official representatives</li> </ul>
Communication in the work area	May include: <ul style="list-style-type: none"> <li>• phone</li> <li>• fax</li> <li>• email/internet</li> <li>• electronic data interchange (EDI)</li> </ul>

	<ul style="list-style-type: none"> <li>• radio</li> <li>• oral, aural or signed communications</li> </ul>
Alternative transport	<p>May include:</p> <ul style="list-style-type: none"> <li>• buses</li> <li>• trams</li> <li>• taxis</li> <li>• hire cars</li> <li>• ferries</li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Information/documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• work instructions, job description and induction materials</li> <li>• workplace plans incorporating track shutdowns</li> <li>• timetables</li> <li>• passenger loading information</li> <li>• contingency incident details and/or information on unplanned track shutdowns</li> <li>• manufacturers specifications for office and communications equipment and materials</li> <li>• relevant OHS and environmental protection requirements and policies</li> <li>• relevant codes of practice and regulations</li> <li>• award, enterprise bargaining agreement and other industrial arrangements</li> <li>• customer service and quality assurance procedures</li> <li>• emergency procedures</li> </ul>
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> <li>• applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• relevant state/territory OHS legislation</li> <li>• relevant state/territory environmental protection legislation</li> <li>• workplace relations regulations including equal opportunity, equal employment opportunity and affirmative action legislation</li> <li>• workers compensation regulations</li> </ul>

<b>Evidence Guide</b>			
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>		
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>• Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• Relevant OHS procedures and guidelines</li> <li>• Workplace procedures and policies for arranging alternative passenger transport</li> <li>• Contact arrangements for other transport organisations available to provide alternative transportation</li> <li>• Protocols for contacting other transport organisations</li> <li>• Train timetables</li> <li>• Alternative transport options</li> <li>• Road transport service planning processes</li> <li>• Equipment, and materials used when arranging alternative passenger transport, and procedures that should be followed in their use</li> <li>• Problems that may occur when arranging alternative passenger transport and appropriate action that can be taken to resolve the problems</li> <li>• Documentation and record requirements</li> </ul> Communication and negotiation requirements when arranging alternative passenger transport		
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> <li>• Communicate and negotiate effectively with others when arranging alternative passenger transport</li> <li>• Read and interpret instructions, procedures, information and signs relevant to the arrangement of alternative passenger transport</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation related to the arrangement of alternative passenger transport</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others when arranging alternative passenger transport</li> <li>• Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others</li> <li>• Promptly report and/or rectify any identified problems that may occur when arranging alternative passenger transport in accordance with workplace procedures</li> </ul>		
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	<ul style="list-style-type: none"> <li>• Implement contingency plans for unanticipated situations that may arise when arranging alternative passenger transport</li> <li>• Analyse contingency situations for their impact on services</li> <li>• Schedule and monitor work activities</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Apply precautions and required action to minimise, control or eliminate hazards that may exist during the arrangement of alternative passenger transport</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment</li> <li>• Select and use relevant office and communications equipment and materials when arranging alternative passenger transport</li> <li>• Adapt to differences in transport situations in accordance with standard operating procedures</li> <li>• Select and use required personal protective equipment conforming to industry and OHS standards</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Apply and Amend Rosters
Unit Code	<a href="#">EIS RTO4 05 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to apply and amend rosters in accordance with regulatory and workplace requirements, including identifying changes to timetables, planned activities and support activities; confirming changes to planned activities; confirming personnel availability; re-allocating personnel; and amending rosters.

Elements	Performance Criteria
1. Identify changes to timetables, planned activities and support activities	<p>1.1 Changes to transport timetables are identified and their effect on operation and support areas is assessed.</p> <p>1.2 New work requirements or revised set workings are identified and communicated to appropriate personnel.</p> <p>1.3 Difficulties relating to new <b>work</b> requirements are resolved with central roster operations and the appropriate work areas.</p> <p>1.4 Difficulties in achieving changes to work outcomes are resolved with those initiating change within workplace policies and procedures.</p> <p>1.5 <b>Staff covered by work rosters</b> are prepared in accordance with regulatory and workplace requirements.</p>
2. Confirm changes to planned activities	<p>2.1 <b>Changes to planned services</b> are identified and confirmed and impact on support activities is assessed.</p> <p>2.2 Activities required is supported to achieve amended service are assessed and necessary resources are identified and allocated.</p> <p>2.3 Revised <b>work outcomes or set workings</b> are conveyed to relevant support work area(s) for implementation.</p> <p>2.4 <b>Apply real time issue</b> activities at the workplace.</p> <p>2.5 <b>Communication in the work</b> activity is made clear, unambiguous and uses appropriate procedures, language and codes.</p>
3. Confirm personnel availability	<p>3.1 Amended rosters and work requirements are confirmed and distributed to appropriate work areas.</p> <p>3.2 Personnel on amended rosters who are required to achieve new work outcomes are notified of changes.</p> <p>3.3 Difficulties associated with compliance with amended roster(s) or work outcomes are resolved within the work area to the satisfaction of all involved within workplace policies and procedures.</p>

	<p>3.4 Agreed work area changes to rostered work or amended work outcomes are communicated to central roster operations and the appropriate <b>personnel</b> records area.</p> <p>3.5 <b>Depending on the type of organisation concerned and the local terminology used, workplace procedures</b> are communicated to central roster operations.</p> <p>3.6 Required <b>documentation</b> is inspected and checked in accordance with <b>applicable regulations and legislations</b>.</p>
4. Re-allocate personnel and amend rosters	<p>4.1 Agreed changes to rosters are confirmed with appropriate personnel.</p> <p>4.2 Appropriate arrangements are made for the implementation of amended rosters.</p> <p>4.3 Personnel are re-allocated to achieve agreed work outcomes or amended set workings.</p> <p>4.4 Final amendments to rosters are made to achieve agreed work outcomes or set workings.</p> <p>4.5 Appropriate documents are updated to reflect changes made and ensure their recognition.</p>

Variable	Range
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> <li>• in a range of work environments</li> <li>• by day or night</li> </ul>
Staff covered by work rosters	<p>May include:</p> <ul style="list-style-type: none"> <li>• driving and driving support crews</li> <li>• shunting and marshalling crews</li> <li>• terminal personnel</li> <li>• freight handling personnel</li> <li>• station personnel</li> <li>• inter change personnel</li> <li>• transit officers</li> <li>• security officers</li> <li>• revenue collection officers</li> <li>• passenger assist/customer service personnel</li> <li>• yard support personnel</li> <li>• crew transport personnel</li> <li>• transport control centre personnel</li> <li>• traffic officers</li> </ul>
Changes to planned services	<p>May include:</p> <ul style="list-style-type: none"> <li>• changes in demand</li> <li>• response to emergencies</li> </ul>
Work outcomes or	<p>May apply to:</p> <ul style="list-style-type: none"> <li>• transport crews</li> </ul>

set workings	<ul style="list-style-type: none"> <li>• personnel required for support activities</li> <li>• transport control personnel</li> <li>• transport planning personnel</li> </ul>
Real time issues	<p>May include:</p> <ul style="list-style-type: none"> <li>• absenteeism</li> <li>• additional support services due to injury</li> <li>• emergencies</li> </ul>
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> <li>• phone</li> <li>• electronic data interchange (EDI)</li> <li>• fax</li> <li>• email</li> <li>• internet</li> <li>• RF systems</li> <li>• oral, aural or signed communications</li> </ul>
Personal protective equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• gloves</li> <li>• safety headwear and footwear</li> <li>• safety glasses</li> <li>• two-way radios</li> <li>• high visibility clothing</li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Information/ documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• regulatory and/or code requirements relevant to the application and amendment of rosters</li> <li>• workplace procedures and policies for the application and amendment of rosters</li> <li>• work rosters</li> <li>• transport graphs</li> <li>• hard copy documentation</li> <li>• safe working forms</li> <li>• dangerous goods manifest</li> <li>• operations manuals, job specifications and induction documentation</li> <li>• manufacturers specifications for office equipment</li> <li>• conditions of service, award, enterprise bargaining agreement, and other industrial arrangements</li> <li>• relevant Ethiopian standards and certification requirements</li> <li>• quality assurance procedures</li> <li>• emergency procedures</li> </ul>

Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state/territory regulations, safe working systems and codes of practice relevant to the application and amendment of rosters, including the Ethiopian Code and the Code of Practice for the Defined Interstate Rail Network in situations where the trains are operating on that network</li> <li>• relevant state/territory privacy legislation</li> <li>• relevant state/territory OHS and environmental protection legislation</li> <li>• state, federal or territory award legislation</li> <li>• workplace relations regulations including equal opportunity, equal employment opportunity and affirmative action legislation</li> </ul>
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<b>Evidence Guide</b>			
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Regulations, safe working systems and codes of practice relevant to the application and amendment of rosters</li> <li>• Relevant OHS and environmental protection procedures and guidelines</li> <li>• Workplace procedures and policies for application and amendment of rosters</li> <li>• Focus of operation of work systems, equipment, management and site operating systems for the application and amendment of rosters</li> <li>• Embarkation and disembarkation requirements</li> <li>• Equipment capacities and limitations</li> <li>• Passenger service needs</li> <li>• Personnel capabilities</li> <li>• Requirements for absentee coverage</li> <li>• Safe working systems and requirements</li> <li>• Station, interchange and terminal operations</li> <li>• Support activities</li> <li>• Transport services offered by the organisation</li> <li>• Problems that may occur when amending rosters and appropriate action that can be taken to resolve the problems</li> <li>• Documentation and reporting requirements for the amending rosters, including computer-based systems</li> </ul>		
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when applying and amending rosters</li> <li>• Read and interpret instructions, procedures and</li> </ul>		
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	<p>information and signs relevant to the application and amendment of rosters</p> <ul style="list-style-type: none"> <li>• Interpret set workings and combined set workings</li> <li>• Interpret conditions of employment and industrial agreements and awards</li> <li>• Interpret transport timetables and service details</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation related to the application and amendment of rosters</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others when applying and amending rosters</li> <li>• Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others</li> <li>• Promptly report and/or rectify any identified problems that may occur when applying and amending rosters in accordance with workplace procedures</li> <li>• Implement contingency plans for unanticipated situations that may arise when applying and amending rosters</li> <li>• Allocate suitably qualified personnel to tasks</li> <li>• Monitor work activities in terms of planned schedule</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment</li> <li>• Select and use relevant computer/communication/office equipment required when applying and amending rosters</li> <li>• Adapt to differences in roster requirements in accordance with standard operating procedures</li> </ul> <p>Select and use required personal protective equipment conforming to industry and OHS standards</p>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Organize Marshalling and Shunting Operations
Unit Code	<a href="#">EIS RTO4 06 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to organise marshalling and shunting operations in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes identifying marshalling and shunting requirements, identifying required rolling stock movements, and planning rolling stock movements in accordance with workplace requirements.

Elements	Performance Criteria
1. Identify marshalling and shunting requirements	<p>1.1 Track and siding requirements are established, based on customer needs and safe <b>work</b> practices.</p> <p>1.2 Dangerous goods or other special transportation requirements are established.</p> <p>1.3 Destinations, arrival times and departure times are established that are consistent with timetable requirements.</p> <p>1.4 Relevant safe working systems are identified.</p>
2. Identify required rolling stock movements	<p>2.1 Rolling stock types required are determined from available documentation.</p> <p>2.2 Rolling stock locations are identified and track and siding availabilities are established to facilitate the marshalling and shunting operation.</p> <p>2.3 Rolling stock priorities and sequences are sorted in accordance with workplace procedures.</p> <p>2.4 <b>Information</b> gathered through <b>consultative processes</b> is analyzed and presented to a diverse stakeholder base and options are determined.</p>
3. Plan rolling stock movements	<p>3.1 Marshalling strategy is identified to achieve safe and efficient loading and unloading.</p> <p>3.2 <b>Resources</b> required to carry out the marshalling strategy are identified.</p> <p>3.3 Appropriate motive power is determined to enable completion of shunting <b>operations</b>.</p> <p>3.4 Track and siding access and options for wagon movements are identified from the marshalling strategy.</p> <p>3.5 Contingency strategy for <b>unplanned events</b> is identified or prepared.</p> <p>3.6 Shunting and marshalling plan and train consist is</p>

	<p>documented, filed, and distributed in accordance with operational requirements.</p> <p><b>3.7 Workplace procedures</b> and equipment <b>safety requirements</b> and relevant OHS legislation.</p>
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Variable	Range
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> <li>• restricted spaces</li> <li>• exposed conditions</li> <li>• controlled or open environments</li> </ul> <p>May involve exposure to:</p> <ul style="list-style-type: none"> <li>• chemicals</li> <li>• dangerous or hazardous substances</li> <li>• movements of equipment, goods and vehicles</li> </ul>
Information/documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• the Code of Practice for the Defined Interstate Rail Network in situations where marshalling operations are carried out on that network</li> <li>• order books</li> <li>• cards/deck sheets</li> <li>• notice boards</li> <li>• special train notices</li> <li>• yard orders</li> <li>• periodical circulars</li> <li>• transport authority rules and operating procedures</li> <li>• computer-based data systems</li> <li>• timetables</li> <li>• train consist</li> <li>• incident reports</li> <li>• drivers advice</li> <li>• train register book</li> <li>• safe working forms</li> <li>• dangerous goods manifests/declarations</li> <li>• conditions of service, legislation and industrial agreements including workplace agreements and awards</li> </ul>
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> <li>• workplace personnel including supervisors and managers</li> <li>• other professional or technical staff</li> </ul>
Resources	<p>May include:</p> <ul style="list-style-type: none"> <li>• motor vehicles</li> <li>• fixed signals</li> <li>• draw gear motive power units</li> </ul>



	<ul style="list-style-type: none"> <li>• rail tractors rolling stock</li> <li>• communication equipment</li> <li>• switching equipment</li> <li>• freight handling equipment</li> <li>• turntables</li> </ul>
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> <li>• by day or night</li> <li>• all relevant weather conditions</li> </ul>
Unplanned events	<p>May involve:</p> <ul style="list-style-type: none"> <li>• derailments</li> <li>• breakdowns</li> <li>• injuries and fatalities</li> <li>• hazardous materials, spills, fires and leaks</li> <li>• track damage</li> <li>• power line damage</li> </ul>
workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Safety requirements	<p>May include:</p> <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• sunscreen</li> <li>• insect repellent</li> <li>• safety mask</li> <li>• portable radios</li> <li>• gloves</li> <li>• sun glasses</li> <li>• safety headwear</li> <li>• safety footwear</li> <li>• hearing protection</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state/territory regulations, codes of practice and safe working system requirements</li> <li>• the Code of Practice for the Defined Interstate Rail Network in situations where marshalling/shunting operations are carried out on that network</li> <li>• relevant Australian Standards and related requirements</li> <li>• relevant state/territory OHS legislation</li> <li>• relevant state/territory environmental protection legislation</li> <li>• Ethiopian Code</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul>
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	other relevant aspects of the range statement
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• Relevant OHS and environmental procedures and regulations including codes of practice for manual handling</li> <li>• Dangerous Goods Codes and regulations</li> <li>• Marshalling plan and instructions</li> <li>• Procedures for loading and unloading rolling stock</li> <li>• Procedures for getting on and off rolling stock in an appropriate manner</li> <li>• Procedures for coupling and uncoupling rolling stock</li> <li>• Procedures for operating points and signals</li> <li>• Procedures for managing hazardous situations</li> <li>• Radio communication protocol</li> <li>• Rostering procedures</li> <li>• Characteristics and features of wagons and other rolling stock</li> <li>• Loading and unloading facilities</li> <li>• Yard features and operation</li> <li>• Principles of operation of protective devices, air brakes, handbrakes, derailleurs</li> <li>• Location of signals and points</li> <li>• Local track and signal layouts</li> <li>• Draw gear capacities and related operating procedures</li> <li>• Safe working systems and requirements</li> <li>• Shunting signals and commands and communication systems</li> <li>• Timetables and destination information</li> </ul> <p>Relevant documentation requirements</p>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate and negotiate effectively with others when organising marshalling and shunting operations</li> <li>• Read and interpret instructions, procedures and information relevant to the organisation of marshalling and shunting operations</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation related to the organisation of marshalling and shunting operations</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others when organising marshalling and shunting operations</li> <li>• Adapt appropriately to cultural differences in the</li> </ul>

	<p>workplace, including modes of behaviour and interactions with others</p> <ul style="list-style-type: none"> <li>• Promptly report and/or rectify any identified problems that may occur when organising marshalling and shunting operations in accordance with regulatory requirements and workplace procedures</li> <li>• Implement contingency plans for unanticipated situations that may arise when organising marshalling and shunting operations</li> <li>• Apply precautions and required action to minimise, control or eliminate hazards that may exist during marshalling and shunting operations</li> <li>• Monitor work activities in terms of planned schedule</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Apply fatigue management knowledge and techniques</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment</li> <li>• Select and use relevant computing and communications and other relevant equipment and materials when organising marshalling and shunting operations</li> <li>• Adapt to differences in rolling stock and equipment in accordance with standard operating procedures</li> </ul> <p>Select and use required personal protective equipment conforming to industry and OHS standards</p>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Conduct Marshalling Operations
Unit Code	<a href="#">EIS RTO4 07 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to conduct marshalling operations in accordance with safe working and regulatory requirements and workplace procedures including the planning and organisation of the efficient movement and positioning of rolling stock to make up a train, break up a train, load or unload.

Elements	Performance Criteria
1. Establish marshalling requirements	<p>1.1 Job specifications and instructions are interpreted in order to clarify the train consist requirements.</p> <p>1.2 Personnel requirements and availability to make up the train consist are identified and confirmed.</p> <p>1.3 <b>Equipment</b> requirements are identified, obtained, and prepared for use.</p> <p>1.4 Relevant OHS legislation, codes of practice, organizational policies and procedures and safe working systems and requirements related to marshalling and shunting are identified.</p> <p>1.5 Implement <b>contingency plans and contingencies</b> for unexpected events when conducting marshalling operations.</p> <p>1.6 Marshalling <b>operations</b> are carried out based on relevant legislation, codes of practice and procedures.</p> <p>1.7 <b>OHS requirements are those necessary to meet applicable organizational, state/territory and national policies and procedures</b> are completed in accordance with workplace requirements.</p>
2. Plan rolling stock movements	<p>2.1 <b>Rolling stock</b> is located and movements are planned to ensure that track use and/or rolling stock placements are appropriate.</p> <p>2.2 Rolling stock cards are checked to determine availability and appropriateness.</p>
3. Position rolling stock	<p>3.1 Sequence of rolling stock movements is determined to achieve correct consist.</p> <p>3.2 Rolling stock is sorted, organized in correct sequence, positioned and coupled for efficient movement.</p> <p>3.3 Marshalling strategy minimizes rolling stock movement and restrictions to track access.</p> <p>3.4 Marshalling strategy ensures that rolling stock is moved</p>

	<p>and placed safely by following relevant safe working systems and requirements.</p> <p>3.5 Radio and line of sight communication tools are used in accordance with standard operational procedures and conventions.</p> <p>3.6 <b>Contingency</b> plans are implemented, when necessary, to overcome unplanned events.</p> <p>3.7 Appropriate end-of-train monitoring unit/signals are fitted and operation is confirmed prior to departure.</p> <p>3.8 Train is finalized in accordance with operational requirements, and irregularities are reported and rectified to ensure movement will be safe for personnel and load.</p> <p>3.9 Relevant OHS requirements are followed to prevent injury and damage.</p>
4. Prepare and distribute documentation	<p>4.1 Train consist information is prepared and filed and/or computer entered, according to operational requirements.</p> <p>4.2 Appropriate documentation is delivered to train crews and yard personnel to meet operational requirements.</p> <p>4.3 Documentation is provided to other relevant personnel, including those responsible for marshalling/shunting operations en route, to achieve operational requirements.</p> <p>4.4 Identify factors affecting the achievement of work objectives and incorporate contingencies into work plans.</p> <p>4.5 <b>Depending on the type of organisation concerned and the local terminology used, workplace procedures</b> are communicated to train plans and schedules developers.</p> <p>4.6 <b>Information/documents</b> provided by others are analyzed.</p> <p>4.7 Read and interpret relevant safety-related information, including <b>applicable procedures and codes</b> of practice.</p>

Variable	Range
Equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• draw gear</li> <li>• air brake system components and handbrakes</li> <li>• rail tractors</li> <li>• rolling stock</li> <li>• communication equipment</li> <li>• switching equipment</li> <li>• turntables</li> <li>• motor vehicles</li> </ul>

	<ul style="list-style-type: none"> <li>• fixed signals</li> </ul>
Contingency plans and contingencies	<p>May involve:</p> <ul style="list-style-type: none"> <li>• emergency procedures manuals</li> <li>• Ethiopian code and other regulations pertaining to the carriage of dangerous goods</li> <li>• safe working systems and requirements</li> </ul>
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> <li>• by day or night</li> <li>• in all relevant weather conditions</li> </ul>
OHS requirements are those necessary to meet applicable organisational, state/territory and national policies and procedures	<p>May include the use of:</p> <ul style="list-style-type: none"> <li>• gloves</li> <li>• sunscreen, sunglasses and safety glasses</li> <li>• hearing protection</li> <li>• insect repellent</li> <li>• safety headwear and footwear</li> <li>• portable radios</li> <li>• hand lamps</li> <li>• flags</li> <li>• safety devices</li> <li>• audible indicators</li> <li>• breathing equipment</li> <li>• fire extinguishers</li> <li>• high visibility clothing</li> <li>• breakdown equipment</li> <li>• emergency containers</li> <li>• end-of-train unit or marker</li> <li>• equipment for handling electrical cables</li> <li>• emergency warning devices</li> <li>• portable signs and markers</li> </ul>
Rolling stock	<p>Includes:</p> <ul style="list-style-type: none"> <li>• all rolling stock in service within Australian rail systems</li> </ul>
Contingencies	<p>May include:</p> <ul style="list-style-type: none"> <li>• derailments</li> <li>• collisions</li> <li>• breakdowns</li> <li>• injuries and fatalities</li> <li>• hazardous materials spills</li> <li>• fires and leaks</li> <li>• track damage</li> <li>• power line damage</li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>

procedures	
Information/documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• the Code of Practice for the Defined Interstate Rail Network in situations where marshalling operations are carried out on that network</li> <li>• order books</li> <li>• cards/deck sheets</li> <li>• notice boards</li> <li>• special train notices</li> <li>• yard orders</li> <li>• periodical circulars</li> <li>• transport authority rules and operating procedures</li> <li>• computer-based data systems</li> <li>• timetables</li> <li>• train consist</li> <li>• incident reports</li> <li>• drivers advice</li> <li>• train register book</li> <li>• safe working forms</li> <li>• dangerous goods manifest</li> <li>• marshalling plan</li> <li>• emergency procedures manual</li> <li>• conditions of service, legislation and industrial agreements including workplace agreements and awards</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state/territory codes of practice and safe working system requirements</li> <li>• the Code of Practice for the Defined Interstate Rail Network in situations where marshalling operations are carried out on that network</li> <li>• relevant state/territory OHS legislation</li> <li>• relevant state/territory fatigue management regulations</li> <li>• relevant state/territory environmental protection legislation</li> <li>• relevant Australian Standards</li> <li>• Railways of Ethiopia Code of Practice and Conditions for the Carriage of Dangerous Goods</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
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Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• Relevant OHS and environmental procedures and regulations including codes of practice for manual handling</li> <li>• Dangerous Goods Codes and regulations</li> <li>• Marshalling plan and instructions</li> <li>• Loading and unloading procedures</li> <li>• Procedures for getting on and off rolling stock in an appropriate manner</li> <li>• Procedures for coupling and uncoupling rolling stock</li> <li>• Procedures for operating points and signals</li> <li>• Procedures for managing hazardous situations when marshalling rolling stock</li> <li>• Radio communication protocol</li> <li>• Procedures for completing relevant documentation</li> <li>• Yard features</li> <li>• Characteristics and features of wagons and other rolling stock</li> <li>• Principles of operation of protective devices, air brakes, handbrakes, derailleurs</li> <li>• Local track and signal layouts</li> <li>• Draw gear capacities and related operating procedures</li> <li>• Safe working systems and requirements</li> <li>• Shunting signals and commands and line of sight communication systems</li> <li>• Relevant documentation</li> <li>• Procedures to be followed in the event of an emergency</li> <li>• Procedures for identifying equipment defects and assessing for appropriate action</li> <li>• Local procedures and operating requirements</li> <li>• Defects that can occur on marshalling gear and equipment and related action that should be taken</li> <li>• Procedures for operating mechanical, electronic and other line of sight communications equipment within required protocols</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when conducting marshalling activities</li> <li>• Read and interpret instructions, plans, procedures, information and signs relevant to the conduct of marshalling activities</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation related to the conduct of</li> </ul>



	<p>marshalling activities</p> <ul style="list-style-type: none"> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others when conducting marshalling activities</li> <li>• Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others</li> <li>• Promptly report and/or rectify any identified problems that may occur when conducting marshalling activities in accordance with regulatory requirements and workplace procedures</li> <li>• Implement contingency plans for unexpected events when conducting marshalling activities</li> <li>• Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities</li> <li>• Monitor work activities in terms of planned schedule</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Apply fatigue management knowledge and techniques when conducting marshalling activities</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment</li> <li>• Operate and adapt to differences in equipment in accordance with standard operating procedures</li> </ul> <p>Select and use required personal protective equipment conforming to industry and OHS standards</p>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Control and Coordinate Rail Traffic Movement
Unit Code	<a href="#">EIS RTO4 08 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to control rail traffic movement in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes monitoring the status of the current train area plan, implementing the daily working timetable, controlling rail traffic movement, implementing contingency plans for planned events and system faults and failures, and updating traffic movement documentation in accordance with workplace requirements.

Elements	Performance Criteria
1. Monitor status of current train plan	<p>1.1 Train movements and associated activities are analysed to establish current situation.</p> <p>1.2 Rail traffic movements and <b>associated activities are those that may affect the movement of trains.</b></p> <p>1.3 Proposed train movements and associated activities are identified to establish status of train plan in accordance with organisational procedures and policies.</p> <p>1.4 Train notices are checked for accuracy and adjustments made as required.</p> <p>1.5 Operational management system information is reviewed against observed status, and inconsistencies are corrected.</p>
2. Implement the daily working timetable	<p>2.1 Train movements are prioritised and coordinated in accordance with organisational policies and procedures to ensure optimum and consistent running to schedules.</p> <p>2.2 Relevant information is communicated to internal and external customers.</p> <p>2.3 Planned and where applicable unplanned train movements and train notices are implemented in accordance with organisational policies and procedures.</p>
3. Control rail traffic movement	<p>3.1 Train movements are coordinated with other relevant personnel in accordance with organisational policies and procedures.</p> <p>3.2 Where applicable, surveillance and alarm systems are monitored to identify emergency situations.</p> <p>3.3 <b>Control of rail traffic movement</b> is supported by signalling systems are operated and monitored to ensure</p>

	safe work.
4. Communicate with rail safety workers	<p>4.1 Communication with relevant <b>rail safety workers</b> is undertaken to ensure that they are informed of train movements, in accordance with organisational policies and procedures.</p> <p>4.2 Alternative methods of communication are identified and used in the case of normal communication system malfunction.</p> <p>4.3 <b>Events triggering the need for implementing contingency plans</b> for operation, controlling local rail traffic movement, implementing contingency plans for planned events and for system faults and failures, updating traffic movement documentation.</p>
5. Communicate with stakeholders and customers	<p>5.1 Communication with relevant <b>stakeholders and customers</b> is undertaken to ensure that they are informed of train movements, in accordance with organisational policies and procedures.</p> <p>5.2 Applications for workplace activities of the different electronic <b>communication systems</b> and, where applicable, related software are interpreted.</p>
6. Implement contingency plans	<p>6.1 Contingency plan is identified and implemented to suit unplanned track works, disruption, system failure or fault in accordance with organisational policies and procedures.</p> <p>6.2 Resources are arranged to respond to the contingency in accordance with relevant organisational policies and procedures.</p> <p>6.3 Required communications are established.</p> <p>6.4 Train plan or schedule is reviewed and adjusted in accordance with organisational requirements.</p> <p>6.5 Communication with internal and external customers is established and maintained as required.</p> <p>6.6 Operational management systems are updated to reflect changes resulting from the contingency.</p>
7. Update rail traffic movement documentation	<p>7.1 Rail <b>traffic movement documentation</b> is compiled and recorded in accordance with organisational policies and procedures.</p> <p>7.2 Rail traffic movement documentation is handed over when relieved and/or at the completion of shift in accordance with organisational policies and procedures.</p> <p>7.3 Communication systems with relevant rail safety workers is undertaken to ensure that they are informed of local</p>

	<p>rail traffic movements, in accordance with organisational policies and procedures.</p> <p>7.4 Relevant <b><i>applicable procedures, codes</i></b> of practice and safe working system requirements.</p> <p>7.5 Documentation is checked to ensure it corresponds to operational status and is then endorsed in accordance with organisational policies and procedures.</p>
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Variable	Range
Associated activities are those that may affect the movement of trains	<p>May include:</p> <ul style="list-style-type: none"> <li>• track maintenance</li> <li>• signal maintenance</li> <li>• defective electrical systems</li> <li>• diversion and/or alternative routing of trains</li> <li>• track inspection</li> </ul>
Control of rail traffic movements	<p>May require the use of:</p> <ul style="list-style-type: none"> <li>• automated signalling systems</li> <li>• manual signalling systems</li> <li>• centralised train control (CTC)</li> <li>• written authority systems</li> <li>• token systems</li> </ul>
Rail safety workers	<p>May include:</p> <ul style="list-style-type: none"> <li>• train crew</li> <li>• track workers</li> <li>• contractors</li> <li>• other network controllers</li> <li>• signallers</li> <li>• network access supervisors</li> <li>• safe working inspectors</li> </ul>
Events triggering the need for implementing contingency plans	<p>May include:</p> <ul style="list-style-type: none"> <li>• breakdowns</li> <li>• hazardous materials spills</li> <li>• track damage</li> <li>• adverse environmental events</li> <li>• collisions</li> <li>• injuries and fatalities</li> <li>• fires</li> <li>• electrical system faults</li> <li>• derailments</li> </ul>
Stakeholders and customers	<p>May include:</p> <ul style="list-style-type: none"> <li>• regulators</li> <li>• third-party operators</li> <li>• contractors</li> <li>• emergency services</li> <li>• passengers</li> <li>• customer services</li> </ul>

	<ul style="list-style-type: none"> <li>• media unit</li> <li>• state government</li> </ul>
Communication systems	<p>May include:</p> <ul style="list-style-type: none"> <li>• radios</li> <li>• telephones</li> <li>• fax machines</li> <li>• computers</li> <li>• electronic, including email, intranet and internet</li> </ul>
Traffic movement documentation	<p>May include:</p> <ul style="list-style-type: none"> <li>• train timetables</li> <li>• track possessions and work notices</li> <li>• incident and/or unplanned event reports</li> <li>• train graphs and/or diagrams</li> <li>• train notices</li> <li>• special train notices</li> <li>• weekly notices</li> <li>• safe working documentation</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state or territory codes of practice and safe working system requirements</li> <li>• relevant state and territory legislation relating to:</li> <li>• environmental protection legislation</li> <li>• OHS legislation</li> <li>• relevant Ethiopian standards</li> <li>• relevant sections of Ethiopian Code and regulations</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Relevant sections of legislated rail safety requirements, including acts and regulations from each applicable state and territory, together with any nationally approved compliance codes and/or guidelines</li> <li>• Organisational procedures for the control and coordination of train operations</li> <li>• Signalling and control systems and operations</li> <li>• Local area knowledge</li> <li>• Restrictions relating to loads and conditions</li> <li>• Communication systems</li> <li>• Surveillance and alarm systems</li> <li>• Problems that may occur when controlling and coordinating rail traffic and related action that should be taken</li> </ul> <p>Relevant documentation requirements</p>

Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others</li> <li>• Read, interpret and follow instructions, procedures and information relating to the control and coordination of rail traffic</li> <li>• Complete documentation and enter data relating to the control and coordination of rail traffic</li> <li>• Operate communication systems to required protocol</li> <li>• Use appropriate numeric functions when implementing the daily working timetable</li> <li>• Report and rectify within limits of own role problems, faults and malfunctions identified when controlling rail traffic in accordance with organisational procedures</li> <li>• Monitor work activities in terms of planned schedule</li> </ul> <p>Modify activities depending on differing operational contingencies, risk situations and environments</p>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Implement and Amend Daily Train Plan
Unit Code	<a href="#">EIS RTO4 09 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to control daily train operations in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes implementing daily train movements, monitoring and making amendments to the daily train plan as required, and maintaining required documentation.

Elements	Performance Criteria
1. Implement daily train plan	<p>1.1 Rail traffic movements are checked to ensure they are achievable according to daily train plan and organisational procedures.</p> <p>1.2 Where applicable, required <b>resources</b> are confirmed according to daily train plan and workplace procedures.</p> <p>1.3 Required train notices and instructions are prepared and issued in accordance with daily train plan.</p>
2. Amend daily train plan	<p>2.1 Status of daily train plan is determined based on the proposed rail traffic movements and track possessions/works.</p> <p>2.2 Daily train plan is amended if appropriate, to accommodate other rail traffic movement priorities.</p> <p>2.3 Contingency plans are developed to cater for unplanned events in accordance with organisational procedures.</p> <p>2.4 <b>Information and documents</b> relating to rail traffic movement within the area of control is obtained and analysed.</p> <p>2.5 Faxes and train notices are validated and applied in accordance with organisational procedures.</p> <p>2.6 Where applicable, availability of resources to implement planned rail traffic movements and contingency plan is identified and resources are allocated in accordance with organisational requirements.</p>
3. Complete documentation	<p>3.1 <b>Traffic movement documentation</b> is amended, compiled and recorded in accordance with organisational policies and procedures.</p>

Variable	Range
Resources	<p>May include:</p> <ul style="list-style-type: none"> <li>• motive power units</li> <li>• train crews</li> </ul>

	<ul style="list-style-type: none"> <li>• alternative forms of transport</li> <li>• rolling stock</li> <li>• fuelling and servicing locations</li> <li>• signallers</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• daily running records</li> <li>• track possession information</li> <li>• electronic management systems</li> <li>• local instructions</li> <li>• track speed, length and load limitations information</li> <li>• conditions of service, legislation and industrial agreements, including workplace agreements and awards</li> </ul>
Traffic movement documentation	<p>May include:</p> <ul style="list-style-type: none"> <li>• train timetables</li> <li>• track possessions and/or work notices</li> <li>• incident and/or unplanned event reports</li> <li>• train graphs and/or diagrams</li> <li>• train notices and/or special train notices</li> <li>• weekly notices</li> <li>• safe working documentation</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Organisational procedures for the planning and control of train operations</li> <li>• Train control diagrams and graphing</li> <li>• Timetabling protocols</li> <li>• System geography and limitations</li> <li>• Safe working and where applicable signalling system requirements</li> <li>• Familiarity with yards, depots and, where applicable, station workings</li> </ul> <p>Restrictions relating to loads and conditions</p>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate with others when developing and implementing daily train plans</li> <li>• Read and interpret instructions, procedures, and information relevant to implementing and amending daily train plans</li> <li>• Work collaboratively with others when implementing and amending daily train plans</li> <li>• Use appropriate numeric functions when amending daily train plan</li> </ul>



	Work systematically with required attention to detail
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Develop Out-Of-Course Rail Traffic Plans and Schedules
Unit Code	<a href="#">EIS RTO4 10 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to develop out-of-course rail traffic plans and schedules in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes analysing service and/or business requirements, establishing rail traffic requirements, and communicating altered or additional rail traffic movement requirements.

Elements	Performance Criteria
1. Analyse service and business requirements	<p>1.1 Customer is consulted and requirements outside normal operations are identified to establish additional or altered rail service requirements.</p> <p>1.2 Altered or additional rail service provision is recorded according to organisational procedures.</p> <p>1.3 Where applicable, additional resource requirements are identified.</p>
2. Establish rail traffic requirements	<p>2.1 <b>Rail traffic</b> requirement is established to ensure efficient management of the network.</p> <p>2.2 Rail traffic specifications are confirmed to ensure that they meet network <b>operating requirements and restrictions</b>.</p> <p>2.3 Train section run times for rail traffic are established and plotted on the appropriate train graphs and/or diagrams.</p>
3. Communicate altered or additional rail traffic movement	<p>3.1 Documentation relating to the altered or additional rail traffic movement is issued in accordance with organisational procedures.</p> <p>3.2 Alterations and cancellations affecting rail traffic running times are communicated to the appropriate customer, network manager and/or rail operator as required.</p> <p>3.3 Documentation relating to the altered or additional rail traffic movement is stored in accordance with <b>organisational policies and procedures</b>.</p> <p>3.4 Products are described to <b>internal customers</b> identifying features which may affect location, safety or storage requirements.</p> <p>3.5 Communication is established and maintained with internal and <b>external customers</b> as required.</p> <p>3.6 Applications for workplace activities of the different electronic <b>communication systems</b> and, where</p>

	<p>applicable, related software are interpreted.</p> <p>3.7 <b>Depending on the type of organisation concerned and the local terminology used, workplace procedures</b> are communicated to network manager and/or rail operator as required.</p> <p>3.8 <b>Information and documents</b> relating to rail traffic movement within the area of control is obtained and analysed.</p> <p>3.9 Relevant <b>applicable procedures, codes</b> of practice and safe working system requirements are used.</p>
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Variable	Range
Rail traffic	May include: <ul style="list-style-type: none"> <li>• all rail vehicles approved to operate on the network</li> </ul>
Special operating requirements and restrictions	May include: <ul style="list-style-type: none"> <li>• train consist</li> <li>• out of gauge loading restrictions</li> <li>• track condition</li> <li>• specific loading and unloading requirements for passengers or freight</li> <li>• track maintenance vehicles</li> </ul>
Organisational policies and procedures	Include: <ul style="list-style-type: none"> <li>• all relevant documentation appropriate to developing rail traffic plans and schedules</li> </ul>
Internal customers	May include: <ul style="list-style-type: none"> <li>• resource controllers</li> <li>• area controllers and/or signallers</li> <li>• workplace's emergency services</li> <li>• yard and station staff</li> <li>• crew transport service</li> <li>• engineering groups</li> <li>• train crewing personnel</li> <li>• adjacent control areas</li> <li>• business groups within the workplace</li> </ul>
External customers	May include: <ul style="list-style-type: none"> <li>• business groups</li> <li>• rail operators</li> <li>• contracted companies</li> <li>• interface network managers</li> </ul>
Communication systems	May include: <ul style="list-style-type: none"> <li>• telephones</li> <li>• radio network</li> <li>• electronic, including email, intranet and internet</li> <li>• fax machines</li> <li>• written notices and memos</li> <li>• oral and signed communications and forms</li> </ul>

Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Information and documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• workplace procedures and job specification</li> <li>• train timetables</li> <li>• electronic management systems</li> <li>• operation manuals</li> <li>• conditions of service, legislation and industrial agreements, including workplace agreements and awards</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• legislated rail safety requirements, including acts and regulations from each applicable state or territory, together with any nationally approved compliance codes and/or guidelines</li> <li>• relevant state and territory codes of practice and safe working system requirements</li> <li>• relevant Ethiopia standards and related requirements</li> <li>• relevant state and territory legislation relating to: <ul style="list-style-type: none"> <li>• environmental protection</li> <li>• OHS</li> </ul> </li> </ul>

<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Legislated rail safety requirements, including acts and regulations from each applicable state and territory, together with any nationally approved compliance codes and/or guidelines</li> <li>• Workplace procedures for developing train plans and schedules, including office and customer service procedures, communication protocols, and procedures for completing relevant records and documentation</li> <li>• Rail traffic services provided by the organisation</li> <li>• Details of approved rail traffic on the network</li> <li>• Timetables</li> <li>• Safe working systems and requirements</li> <li>• Relevant network interface agreements</li> <li>• Issues or problems that can occur when developing rail traffic</li> <li>• plans and schedules and how they may be addressed</li> </ul>

	<ul style="list-style-type: none"> <li>• Relevant documentation requirements</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Communicate and negotiate effectively with others when developing train plans and schedules</li> <li>• Read and interpret instructions, procedures and information relating to the development of rail traffic plans and schedules</li> <li>• Interpret train control diagrams and graphs</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation and enter data relating to developing rail traffic plans and schedules</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others when developing train plans and schedules</li> <li>• Rectify issues or problems that may occur when developing train plans and schedules in accordance with regulatory requirements and workplace procedures</li> </ul> <p>Operate technology</p>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be accessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Develop Train Plans and Schedules
Unit Code	<a href="#">EIS RTO4 11 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to develop train plans and schedules in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes analysing train requirements, establishing train specifications, establishing train section run times, and monitoring and updating train requirements.

Elements	Performance Criteria		
1. Analyze train requirements	<p>1.1 The customer is consulted to establish their rail service requirements.</p> <p>1.2 Rail service provision is negotiated with the client, recorded and forwarded to <b>operations control</b> as per workplace procedures.</p> <p>1.3 Resource requirements are identified, noting special requirements for dangerous goods.</p> <p>1.4 Protection placement principles are identified, confirmed and applied for the <b>work</b> area.</p> <p>1.5 <b>Equipment</b> requirements are identified, obtained, and prepared for use.</p> <p>1.6 Alternative transport arrangements for <b>customers and passengers</b> are communicated to appropriate persons.</p> <p>1.7 Train plans and schedules for <b>rail services</b> are provided by the organisation.</p>		
2. Establish train specifications	<p>2.1 Train consist is established to ensure efficient movement of freight or passengers.</p> <p>2.2 Train configuration is established to provide for the efficient loading and unloading of freight and/or passengers, taking into account freight /passengers with special loading/unloading requirements.</p> <p>2.3 The train specifications are checked to ensure that they meet <b>special operating requirements and restrictions</b>.</p> <p>2.4 <b>Commercial and financial arrangements</b> are made to provide assistance for passengers with special needs.</p> <p>2.5 Relevant information are collected and recorded in accordance with <b>workplace policies and procedures</b> develop train plans and schedules.</p>		
3. Establish train	3.1 Train section run times are confirmed for normal		
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<p>section run times</p>	<p>operations.</p> <p>3.2 Train section run times for specific trains are established and graphed on the appropriate <b>train timetables</b>.</p> <p>3.3 Train section run times are negotiated with the appropriate rail authorities where required.</p> <p>3.4 Alterations/cancellations affecting train running times are promptly communicated to the appropriate <b>rail authorities</b> as required.</p> <p>3.5 Appropriate <b>communication forms</b> are maintained in accordance with <b>organisational control</b>.</p>
<p>4. Monitor and update train requirements</p>	<p>4.1 Additional requirements are identified and incorporated into existing trains where possible.</p> <p>4.2 Additional requirements not able to be incorporated into existing trains are allocated to alternative trains.</p> <p>4.3 Detailed information relating to updated trains and <b>dangerous goods</b> requirements are conveyed to appropriate personnel as required by the workplace.</p> <p>4.4 Products are described to <b>internal customers</b> identifying features which may affect location, safety or storage requirements.</p> <p>4.5 Communication with <b>external customers</b> is established and maintained as required.</p> <p>4.6 <b>Depending on the type of organisation concerned and the local terminology used, workplace procedures</b> are communicated to train plans and schedules developers.</p> <p>4.7 <b>Information/documents</b> provided by others are analyzed.</p> <p>4.8 Relevant safety-related information, including <b>applicable procedures and codes</b> of practice are read and interpreted.</p>

Variable	Range
Operations	May be conducted: <ul style="list-style-type: none"> <li>• by day or night</li> <li>• in all relevant weather conditions</li> </ul>
Work	May be conducted in: <ul style="list-style-type: none"> <li>• restricted spaces</li> <li>• exposed conditions</li> <li>• controlled or open environments</li> </ul> May involve exposure to: <ul style="list-style-type: none"> <li>• chemicals</li> <li>• dangerous or hazardous substances</li> <li>• movements of equipment, goods and vehicles</li> </ul>

Equipment	May include: <ul style="list-style-type: none"> <li>all trains used within the rail system</li> </ul>
Customers and passengers	Include: <ul style="list-style-type: none"> <li>all current national, key and local account customers as well as all potential customers and internal customers</li> </ul>
Rail services	Include: <ul style="list-style-type: none"> <li>the rail services currently provided by the workplace as well as approved rail services for future operations</li> </ul>
Special operating requirements and restrictions	Include: <ul style="list-style-type: none"> <li>train length and gauge limits</li> <li>track condition</li> <li>specific loading and unloading requirements for passengers or freight</li> </ul>
Commercial and financial arrangements	Include: <ul style="list-style-type: none"> <li>all rates and fares appropriate to the range of rail services and customers/clients (including potential customers/clients) covered by workplace operations</li> </ul>
Workplace policies and procedures	Include: <ul style="list-style-type: none"> <li>all relevant documentation appropriate to dealing with customers/clients</li> </ul>
Train timetables	Include: <ul style="list-style-type: none"> <li>all published documentation applicable to the workplace's rail services provided</li> </ul>
Rail authorities	Include: <ul style="list-style-type: none"> <li>all authorities authorised to control section(s) of track within specified boundaries</li> </ul>
Communication forms	May include: <ul style="list-style-type: none"> <li>telephones</li> <li>radio network</li> <li>computer systems, email and internet</li> <li>fax</li> <li>written notices and memos</li> <li>oral and signed communications and forms</li> </ul>
Operations control	Include: <ul style="list-style-type: none"> <li>the planning functions across a workplace not necessarily located in one location</li> </ul>
Dangerous goods	May include: <ul style="list-style-type: none"> <li>all freight or cargo covered by Ethiopian Code</li> </ul>
Internal customers	May include: <ul style="list-style-type: none"> <li>train crews</li> <li>resource controllers</li> <li>area controllers/signallers</li> <li>workplace's emergency services</li> <li>yard and station staff</li> <li>crew transport service</li> </ul>



	<ul style="list-style-type: none"> <li>• engineering groups</li> <li>• train crewing personnel</li> <li>• adjacent control areas</li> <li>• business groups within the workplace</li> </ul>
External customers	<p>May include:</p> <ul style="list-style-type: none"> <li>• business groups</li> <li>• private rail operators</li> <li>• contracted companies</li> <li>• general public</li> <li>• public emergency services</li> <li>• interstate rail groups</li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Information/documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• workplace procedures and job specification</li> <li>• induction and training materials</li> <li>• train timetables</li> <li>• electronic management systems</li> <li>• two-way radio operation procedures</li> <li>• emergency procedures manual</li> <li>• manufacturers specifications and instructions for equipment</li> <li>• verbally communicated information and instructions</li> <li>• operations manuals</li> <li>• conditions of service, legislation and industrial agreements including workplace agreements and awards</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state/territory codes of practice and safe working system requirements</li> <li>• relevant Ethiopian Standards and related requirements</li> <li>• Ethiopian Code and associated regulations</li> <li>• relevant state/territory OHS legislation</li> <li>• relevant state/territory environmental protection legislation</li> </ul>

<b>Evidence Guide</b>			
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> <li>• other relevant aspects of the range statement</li> </ul>		
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> <li>• Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</li> <li>• Relevant OHS and environmental procedures and regulations</li> <li>• Workplace procedures for developing train plans and schedules, including: office and customer service procedures, communication protocols, and procedures for completing relevant records and documentation</li> <li>• Rail services provided by the organisation</li> <li>• Freight handling equipment used by the organisation</li> <li>• Customer service policies and guidelines</li> <li>• Details of wagons, carriages and locomotives used by the organisation</li> <li>• Timetables</li> <li>• Safe working systems and requirements</li> <li>• Relevant external rail authorities' operating requirements</li> <li>• Contractual arrangements with account customers</li> <li>• Typical problems that can occur when developing train plans and schedules and appropriate action that can be taken to prevent or solve them</li> </ul> Relevant documentation requirements		
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> <li>• Communicate and negotiate effectively with others when developing train plans and schedules</li> <li>• Read and interpret instructions, procedures, information and signs relevant to the development of train plans and schedules</li> <li>• Interpret train graphs and diagrams</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation and enter data related to the development of train plans and schedules</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Carry out calculations related to loads and train data</li> <li>• Work collaboratively with others when developing train plans and schedules</li> <li>• Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others</li> </ul>		
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	<ul style="list-style-type: none"> <li>• Promptly report and/or rectify any identified problems that may occur when developing train plans and schedules in accordance with regulatory requirements and workplace procedures</li> <li>• Plan train consists</li> <li>• Implement safe working systems when developing train plans and schedules</li> <li>• Implement contingency plans for unanticipated situations that may arise when developing train plans and schedules</li> <li>• Monitor work activities in terms of planned schedule</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment</li> <li>• Operate electronic computing equipment Adapt to differences in equipment in accordance with standard operating procedures</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be accessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Conduct Marshalling Operations
Unit Code	<a href="#">EIS RTO4 12 0313</a>
Unit Descriptor	This unit involves the skills and knowledge required to conduct marshalling operations in accordance with safe working and regulatory requirements and workplace procedures including the planning and organization of the efficient movement and positioning of rolling stock to make up a train, break up a train, load or unload.

Elements	Performance Criteria
1. Establish marshalling requirements	<p>1.1 Job specifications and instructions are interpreted in order to clarify the train consist requirements.</p> <p>1.2 Personnel requirements and availability to make up the train consist are identified and confirmed.</p> <p>1.3 <b>Equipment</b> requirements are identified, obtained, and prepared for use.</p> <p>1.4 Relevant OHS legislation, codes of practice, organizational policies and procedures and safe working systems and requirements related to marshalling and shunting are identified.</p> <p>1.5 Implement <b>contingency plans and contingencies</b> for unexpected events when conducting marshalling operations.</p> <p>1.6 Marshalling <b>operations</b> are carried out based on relevant legislation, codes of practice and procedures.</p> <p>1.7 <b>OHS requirements are those necessary to meet applicable organizational, state/territory and national policies and procedures</b> are completed in accordance with workplace requirements.</p>
2. Plan rolling stock movements	<p>2.1 <b>Rolling stock</b> is located and movements are planned to ensure that track use and/or rolling stock placements are appropriate.</p> <p>2.2 Rolling stock cards are checked to determine availability and appropriateness to.</p>
3. Position rolling stock	<p>3.1 Sequence of rolling stock movements is determined to achieve correct consist.</p> <p>3.2 Rolling stock is sorted, organized in correct sequence, positioned and coupled for efficient movement.</p> <p>3.3 Marshalling strategy minimizes rolling stock movement and restrictions to track access.</p> <p>3.4 Marshalling strategy ensures that rolling stock is moved</p>

	<p>and placed safely by following relevant safe working systems and requirements.</p> <p>3.5 Radio and line of sight communication tools are used in accordance with standard operational procedures and conventions.</p> <p>3.6 <b>Contingency</b> plans are implemented, when necessary, to overcome unplanned events.</p> <p>3.7 Appropriate end-of-train monitoring unit/signals are fitted and operation is confirmed prior to departure</p> <p>3.8 Train is finalized in accordance with operational requirements, and irregularities are reported and rectified to ensure movement will be safe for personnel and load</p> <p>3.9 Relevant OHS requirements are followed to prevent injury and damage.</p>
4. Prepare and distribute documentation	<p>4.1 Train consist information is prepared and filed and/or computer entered, according to operational requirements.</p> <p>4.2 Appropriate documentation is delivered to train crews and yard personnel to meet operational requirements.</p> <p>4.3 Documentation is provided to other relevant personnel, including those responsible for marshalling/shunting operations en route, to achieve operational requirements.</p> <p>4.4 <b>Depending on the type of organisation concerned and the local terminology used, workplace procedures</b> are communicated to train plans and schedules developers.</p> <p>4.5 <b>Information/documents</b> provided by others are analyzed.</p> <p>4.6 Relevant safety-related information, including <b>applicable procedures and codes</b> of practice are read and interpreted.</p>

Variable	Range
Equipment	<p>May include:</p> <ul style="list-style-type: none"> <li>• draw gear</li> <li>• air brake system components and handbrakes</li> <li>• rail tractors</li> <li>• rolling stock</li> <li>• communication equipment</li> <li>• switching equipment</li> <li>• turntables</li> <li>• motor vehicles</li> <li>• fixed signals</li> </ul>
Contingency plans	May involve:

and contingencies	<ul style="list-style-type: none"> <li>• emergency procedures manuals</li> <li>• ADG Code and other regulations pertaining to the carriage of dangerous goods</li> <li>• safe working systems and requirements</li> </ul>
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> <li>• by day or night</li> <li>• in all relevant weather conditions</li> </ul>
OHS requirements are those necessary to meet applicable organisational, state/territory and national policies and procedures and	<p>May include the use of:</p> <ul style="list-style-type: none"> <li>• gloves</li> <li>• sunscreen, sunglasses and safety glasses</li> <li>• hearing protection</li> <li>• insect repellent</li> <li>• safety headwear and footwear</li> <li>• portable radios</li> <li>• hand lamps</li> <li>• flags</li> <li>• safety devices</li> <li>• audible indicators</li> <li>• breathing equipment</li> <li>• fire extinguishers</li> <li>• high visibility clothing</li> <li>• breakdown equipment</li> <li>• emergency containers</li> <li>• end-of-train unit or marker</li> <li>• equipment for handling electrical cables</li> <li>• emergency warning devices</li> <li>• portable signs and markers</li> </ul>
Rolling stock	<p>Includes:</p> <ul style="list-style-type: none"> <li>• all rolling stock in service within Australian rail systems</li> </ul>
Contingencies	<p>May include:</p> <ul style="list-style-type: none"> <li>• derailments</li> <li>• collisions</li> <li>• breakdowns</li> <li>• injuries and fatalities</li> <li>• hazardous materials spills</li> <li>• fires and leaks</li> <li>• track damage</li> <li>• power line damage</li> </ul>
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>
Information/ documents	<p>May include:</p> <ul style="list-style-type: none"> <li>• applicable legislated rail safety requirements including acts</li> </ul>

	<p>and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines</p> <ul style="list-style-type: none"> <li>• the Code of Practice for the Defined Interstate Rail Network in situations where marshalling operations are carried out on that network</li> <li>• order books</li> <li>• cards/deck sheets</li> <li>• notice boards</li> <li>• special train notices</li> <li>• yard orders</li> <li>• periodical circulars</li> <li>• transport authority rules and operating procedures</li> <li>• computer-based data systems</li> <li>• timetables</li> <li>• train consist</li> <li>• incident reports</li> <li>• drivers advice</li> <li>• train register book</li> <li>• safe working forms</li> <li>• dangerous goods manifest</li> <li>• marshalling plan</li> <li>• emergency procedures manual</li> <li>• conditions of service, legislation and industrial agreements including workplace agreements and awards</li> </ul>
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> <li>• relevant state/territory codes of practice and safe working system requirements</li> <li>• the Code of Practice for the Defined Interstate Rail Network in situations where marshalling operations are carried out on that network</li> <li>• relevant state/territory OHS legislation</li> <li>• relevant state/territory fatigue management regulations</li> <li>• relevant state/territory environmental protection legislation</li> <li>• relevant Australian Standards</li> <li>• Railways of Australia Code of Practice and Conditions for the Carriage of Dangerous Goods</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• the underpinning knowledge and skills</li> <li>• relevant legislation and workplace procedures</li> </ul> <p>other relevant aspects of the range statement</p>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or</li> </ul>

	<p>guidelines</p> <ul style="list-style-type: none"> <li>• Relevant OHS and environmental procedures and regulations including codes of practice for manual handling</li> <li>• Dangerous Goods Codes and regulations</li> <li>• Marshalling plan and instructions</li> <li>• Loading and unloading procedures</li> <li>• Procedures for getting on and off rolling stock in an appropriate manner</li> <li>• Procedures for coupling and uncoupling rolling stock</li> <li>• Procedures for operating points and signals</li> <li>• Procedures for managing hazardous situations when marshalling rolling stock</li> <li>• Radio communication protocol</li> <li>• Procedures for completing relevant documentation</li> <li>• Yard features</li> <li>• Characteristics and features of wagons and other rolling stock</li> <li>• Principles of operation of protective devices, air brakes, handbrakes, derailleurs</li> <li>• Local track and signal layouts</li> <li>• Draw gear capacities and related operating procedures</li> <li>• Safe working systems and requirements</li> <li>• Shunting signals and commands and line of sight communication systems</li> <li>• Relevant documentation</li> <li>• Procedures to be followed in the event of an emergency</li> <li>• Procedures for identifying equipment defects and assessing for appropriate action</li> <li>• Local procedures and operating requirements</li> <li>• Defects that can occur on marshalling gear and equipment and related action that should be taken</li> <li>• Procedures for operating mechanical, electronic and other line of sight communications equipment within required protocols</li> </ul>		
<p>Underpinning Skills</p>	<p>Demonstrates skill to:</p> <ul style="list-style-type: none"> <li>• Communicate effectively with others when conducting marshalling activities</li> <li>• Read and interpret instructions, plans, procedures, information and signs relevant to the conduct of marshalling activities</li> <li>• Interpret and follow operational instructions and prioritise work</li> <li>• Complete documentation related to the conduct of marshalling activities</li> <li>• Operate electronic communication equipment to required protocol</li> <li>• Work collaboratively with others when conducting marshalling activities</li> </ul>		
<p>Page 183 of 209</p>	<p>Ministry of Education Copyright</p>	<p>Rail Traffic Operation Ethiopian Occupational Standard</p>	<p>Version 1 March 2013</p>



	<ul style="list-style-type: none"> <li>• Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others</li> <li>• Promptly report and/or rectify any identified problems that may occur when conducting marshalling activities in accordance with regulatory requirements and workplace procedures</li> <li>• Implement contingency plans for unexpected events when conducting marshalling activities</li> <li>• Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities</li> <li>• Monitor work activities in terms of planned schedule</li> <li>• Modify activities depending on differing operational contingencies, risk situations and environments</li> <li>• Apply fatigue management knowledge and techniques when conducting marshalling activities</li> <li>• Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment</li> <li>• Operate and adapt to differences in equipment in accordance with standard operating procedures</li> <li>• Select and use required personal protective equipment conforming to industry and OHS standards</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Plan and Organize Work
Unit Code	<a href="#">EIS RTO4 13 0313</a>
Unit Descriptor	This unit covers the knowledge, skills and attitude required in planning and organizing work activities in a production application. It may be applied to a small independent operation or to a section of a large organization.

Elements	Performance Criteria
1. Set objectives	<p>1.1 <b>Objectives</b> are planned consistent with and linked to work activities in accordance with organizational aims.</p> <p>1.2 Objectives are stated as measurable targets with clear time frames.</p> <p>1.3 Support and commitment of team members are reflected in the objectives.</p> <p>1.4 Realistic and attainable objectives are identified.</p>
2. Plan and schedule work activities	<p>2.1 Tasks/work activities to be completed are identified and prioritized as directed.</p> <p>2.2 Tasks/work activities are broken down into steps in accordance with set time frames and achievable components.</p> <p>2.3 Task/work activities are assigned to appropriate team or individuals in accordance with agreed functions.</p> <p>2.4 <b>Resources</b> are allocated as per requirements of the activity.</p> <p>2.5 <b>Schedule of work activities</b> is coordinated with personnel concerned.</p>
3. Implement work plans	<p>3.1 <b>Work methods and practices</b> are identified in consultation with personnel concerned.</p> <p>3.2 <b>Work plans</b> are implemented in accordance with set time frames, resources and <b>standards</b>.</p>
4. Monitor work activities	<p>4.1 Work activities are monitored and compared with set objectives.</p> <p>4.2 Work performance is monitored.</p> <p>4.3 Deviations from work activities are reported and recommendations are coordinated with appropriate personnel and in accordance with set standards.</p> <p>4.4 Reporting requirements are complied with in accordance with recommended format.</p> <p>4.5 Timeliness of report is observed.</p>

	4.6 Files are established and maintained in accordance with standard operating procedures.
5. Review and evaluate work plans and activities	<p>5.1 Work plans, strategies and implementation are reviewed based on accurate, relevant and current information.</p> <p>5.2 Review is done based on comprehensive consultation with appropriate personnel on outcomes of work plans and reliable feedback.</p> <p>5.3 Results of review are provided to concerned parties and formed as the basis for adjustments/simplifications to be made to policies, processes and activities.</p> <p>5.4 Performance appraisal is conducted in accordance with organization rules and regulations.</p> <p>5.5 Performance appraisal report is prepared and documented regularly as per organization requirements.</p> <p>5.6 Recommendations are prepared and presented to <b>appropriate personnel/authorities</b>.</p> <p>5.7 <b>Feedback mechanisms</b> are implemented in line with organization policies.</p>

Variable	Range
Objectives	May include but not limited to: <ul style="list-style-type: none"> <li>• Specific</li> <li>• General</li> </ul>
Resources	May include but not limited to: <ul style="list-style-type: none"> <li>• Personnel</li> <li>• Equipment and technology</li> <li>• Services</li> <li>• Supplies and materials</li> <li>• Sources for accessing specialist advice</li> <li>• Budget</li> </ul>
Schedule of work activities	May include but not limited to: <ul style="list-style-type: none"> <li>• Daily</li> <li>• Work-based</li> <li>• Contractual</li> <li>• Regular</li> </ul>
Work methods and practices	May include but not limited to: <ul style="list-style-type: none"> <li>• Legislated regulations and codes of practice</li> <li>• Industry regulations and codes of practice</li> <li>• Occupational health and safety practices</li> </ul>
Work plans	May include but not limited to: <ul style="list-style-type: none"> <li>• Daily work plans</li> <li>• Project plans</li> <li>• Program plans</li> <li>• Resource plans</li> <li>• Skills development plans</li> </ul>

	<ul style="list-style-type: none"> <li>• Management strategies and objectives</li> </ul>
Standards	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Performance targets</li> <li>• Performance management and evaluation systems</li> <li>• Occupational standards</li> <li>• Employment contracts</li> <li>• Client contracts</li> <li>• Discipline procedures</li> <li>• Workplace assessment guidelines</li> <li>• Internal quality assurance</li> <li>• Internal and external accountability and auditing requirements</li> <li>• Training Regulation Standards</li> <li>• Safety Standards</li> </ul>
Appropriate personnel/ authorities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Appropriate personnel include:</li> <li>• Management</li> <li>• Line Staff</li> </ul>
Feedback mechanisms	<p>May include but not limited to:</p> <ul style="list-style-type: none"> <li>• Feedback mechanisms include:</li> <li>• Verbal feedback</li> <li>• Informal feedback</li> <li>• Formal feedback</li> <li>• Questionnaire</li> <li>• Survey</li> <li>• Group discussion</li> </ul>

### Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> <li>• set objectives</li> <li>• planned and scheduled work activities</li> <li>• implemented work plans</li> <li>• monitored work activities</li> <li>• reviewed and evaluated work plans and activities</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• organization's strategic plan, policies rules and regulations, laws and objectives for work unit activities and priorities</li> <li>• organizations policies, strategic plans, guidelines related to the role of the work unit</li> <li>• team work and consultation strategies</li> </ul>

Underpinning Skills	<p>Demonstrates skill of:</p> <ul style="list-style-type: none"> <li>• plan</li> <li>• lead</li> <li>• organize</li> <li>• coordinate</li> <li>• communicate</li> <li>• inter-and intra-person/motivation skills</li> <li>• present</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Migrate to New Technology
Unit Code	<a href="#">EIS RTO4 14 0313</a>
Unit Descriptor	This unit defines the competence required to apply skills and knowledge in using new or upgraded technology. The rationale behind this unit emphasizes the importance of constantly reviewing work processes, skills and techniques in order to ensure that the quality of the entire business process is maintained at the highest level possible through the appropriate application of new technology. To this end, the person is typically engaged in on-going review and research in order to discover and apply new technology or techniques to improve aspects of the organization's activities.

Elements	Performance Criteria
1. Apply existing knowledge and techniques to technology and transfer	1.1 Situations are identified where existing knowledge can be used as the basis for developing new skills. 1.2 New or upgraded technology skills are acquired and used to enhance learning. 1.3 New or upgraded equipment are identified, classified and used where appropriate, for the benefit of the organization.
2. Apply functions of technology to assist in solving organizational problems	2.1 Testing of new or upgraded equipment is conducted according to the specification manual. 2.2 Features of new or upgraded equipment are applied within the organization 2.3 Features and functions of new or upgraded equipment are used for solving organizational problems 2.4 Sources of information relating to new or upgraded equipment are accessed and used
3. Evaluate new or upgraded technology performance	3.1 New or upgraded equipment is evaluated for performance, usability and against OHS standards. 3.2 <b>Environmental considerations</b> are determined from new or upgraded equipment. 3.3 <b>Feedback</b> is sought from users where appropriate.

Variables	Range
Environmental Considerations	May include but is not limited to: <ul style="list-style-type: none"> <li>Recycling, safe disposal of packaging (e.g. cardboard, polystyrene, paper, plastic) and correct disposal of waste materials by an authorized body</li> </ul>

Feedback	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• surveys,</li> <li>• questionnaires,</li> <li>• interviews and meetings.</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	Competence must confirm the ability to transfer the application of existing skills and knowledge to new technology
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Broad awareness of current technology trends and directions in the industry (e.g. systems/procedures, services, new developments, new protocols)</li> <li>• Knowledge of vendor product directions</li> <li>• Ability to locate appropriate sources of information regarding metal manufacturing and new technologies</li> <li>• Current industry products/services, procedures and techniques with knowledge of general features</li> <li>• Information gathering techniques</li> </ul>
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> <li>• Research skills for identifying broad features of new technologies</li> <li>• Ability to assist in the decision making process</li> <li>• Literacy skills in regard to interpretation of technical manuals</li> <li>• Ability to solve known problems in a variety of situations and locations</li> <li>• Evaluate and apply new technology to assist in solving organizational problems</li> <li>• General analytical skills in relation to known problems</li> </ul>
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Establish Quality Standards
Unit Code	<a href="#">EIS RTO4 15 0313</a>
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to establish quality specifications for work outcomes and work performance. It includes monitoring and participation in maintaining and improving quality, identifying critical control points in the production of quality output and assisting in planning and implementing of quality assurance procedures.

Elements	Performance Criteria
1. Establish quality specifications for product	1.1 Market specifications are <b>sourced</b> and <b>legislated requirements</b> identified. 1.2 Quality specifications are developed and agreed upon. 1.3 Quality specifications are documented and introduced to organization staff / personnel in accordance with the organization policy. 1.4 Quality specifications are updated when necessary.
2. Identify hazards and critical control points	2.1. Critical control points impacting on quality are identified. 2.2. Degree of risk for each hazard is determined. 2.3. Necessary documentation is accomplished in accordance with organization quality procedures.
3. Assist in planning of quality assurance procedures	3.1 Procedures for each identified control point are developed to ensure optimum quality. 3.2 Hazards and risks are minimized through application of appropriate controls. 3.3 Processes are developed to monitor the effectiveness of quality assurance procedures.
4. Implement quality assurance procedures	4.1 Responsibilities for carrying out procedures are allocated to staff and contractors. 4.2 Instructions are prepared in accordance with the enterprise's quality assurance program. 4.3 Staff and contractors are given induction training on the quality assurance policy. 4.4 Staff and contractors are given in-service training relevant to their allocated <b>safety procedures</b> .
5. Monitor quality of work outcome	5.1 Quality requirements are identified. 5.2 Inputs are inspected to confirm capability to meet quality requirements. 5.3 Work is conducted to produce required outcomes.



	<p>5.4 Work processes are monitored to confirm quality of output and/or service.</p> <p>5.5 Processes are adjusted to maintain outputs within specification.</p>
6. Participate in maintaining and improving quality at work	<p>6.1 Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements.</p> <p>6.2 Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements.</p> <p>6.3 Corrective action is taken within level of responsibility, to maintain quality standards.</p> <p>6.4 Quality issues are raised with designated personnel.</p>
7. Report problems that affect quality	<p>7.1 Potential or existing quality problems are recognized.</p> <p>7.2 Instances of variation in quality are identified from specifications or work instructions.</p> <p>7.3 Variation and potential problems are reported to supervisor/manager according to enterprise guidelines.</p>

Variable	Range
Sourced	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• End-users</li> <li>• Customers or stakeholders</li> </ul>
Legislated requirements	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Verification of product quality as part of consumer legislation or specific legislation related to product content or composition.</li> </ul>
Safety procedures.	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Use of tools and equipment for fabrication/production/manufacturing works</li> <li>• Workplace environment and handling of material safety,</li> <li>• Following occupational health and safety procedures designated for the task</li> <li>• Respect the policies, regulations, legislations, rule and procedures for manufacturing/production/fabrication works</li> </ul>

Evidence Guide	
Critical Aspect of Competence	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>• Monitored quality of work</li> <li>• Established quality specifications for product</li> <li>• Participated in maintaining and improving quality at work</li> <li>• Identified hazards and critical control points in the production of quality product</li> </ul>

	<ul style="list-style-type: none"> <li>• Assisted in planning of quality assurance procedures</li> <li>• Reported problems that affect quality</li> <li>• Implemented quality assurance procedures</li> </ul>
Underpinning Knowledge	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• work and product quality specifications</li> <li>• quality policies and procedures</li> <li>• improving quality at work</li> <li>• hazards and critical points of operation</li> <li>• obtaining and using information</li> <li>• applying federal and regional legislation within day-today work activities</li> <li>• accessing and using management systems to keep and maintain accurate records</li> <li>• requirements for correct preparation and operation</li> <li>• technical writing</li> </ul>
Underpinning Skills	<p>Demonstrates skills in:</p> <ul style="list-style-type: none"> <li>• monitoring quality of work</li> <li>• establishing quality specifications for product</li> <li>• participating in maintaining and improving quality at work</li> <li>• identifying hazards and critical control points in the production of quality product</li> <li>• assisting in planning of quality assurance procedures</li> <li>• reporting problems that affect quality</li> <li>• implementing quality assurance procedures</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Develop Individuals and Team
Unit Code	<a href="#">EIS RTO4 16 0313</a>
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to determine individual and team development needs and facilitate the development of the workgroup.

Elements	Performance Criteria
1. Provide team leadership	<p>1.1 <b>Learning and development needs</b> are systematically identified and implemented in line with <b>organizational requirements</b>.</p> <p>1.2 Learning plan to meet individual and group training and developmental needs is collaboratively developed and implemented.</p> <p>1.3 Individuals are encouraged to self-evaluate performance and identify areas for improvement.</p> <p>1.4 <b>Feedback on performance</b> of team members is collected from relevant sources and compared with established team learning process.</p>
2. Foster individual and organizational growth	<p>2.1 Learning and development program goals and objectives are identified to match the specific knowledge and skills requirements of Competence standards.</p> <p>2.2 <b>Learning delivery methods</b> are made appropriate to the learning goals, the learning style of participants and availability of equipment and resources.</p> <p>2.3 Workplace learning opportunities and coaching/mentoring assistance are provided to facilitate individual and team achievement of competencies.</p> <p>2.4 Resources and timelines required for learning activities are identified and approved in accordance with organizational requirements.</p>
3. Monitor and evaluate workplace learning	<p>3.1 Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements.</p> <p>3.2 Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional support.</p> <p>3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning.</p> <p>3.4 Records and reports of competence are maintained within organizational requirement.</p>

4. Develop team commitment and cooperation	<p>4.1 Open communication processes to obtain and share information is used by team.</p> <p>4.2 Decisions are reached by the team in accordance with its agreed roles and responsibilities.</p> <p>4.3 Mutual concern and camaraderie are developed in the team.</p>
5. Facilitate accomplishment of organizational goals	<p>5.1 Team members are actively participated in team activities and communication processes.</p> <p>5.2 Individual and joint responsibility is developed by teams members for their actions.</p> <p>5.3 Collaborative efforts are sustained to attain organizational goals.</p>

Variable	Range
Learning and development needs	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Coaching, monitoring and/or supervision</li> <li>• Formal/informal learning program</li> <li>• Internal/external training provision</li> <li>• Work experience/exchange/opportunities</li> <li>• Personal study</li> <li>• Career planning/development</li> <li>• Performance evaluation</li> <li>• Workplace skills assessment</li> <li>• Recognition of prior learning</li> </ul>
Organizational requirements	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Quality assurance and/or procedures manuals</li> <li>• Goals, objectives, plans, systems and processes</li> <li>• Legal and organizational policy/guidelines and requirements</li> <li>• Safety policies, procedures and programs</li> <li>• Confidentiality and security requirements</li> <li>• Business and performance plans</li> <li>• Ethical standards</li> <li>• Quality and continuous improvement processes and standards</li> </ul>
Feedback on performance	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Formal/informal performance evaluation</li> <li>• Obtaining feedback from supervisors and colleagues</li> <li>• Obtaining feedback from clients</li> <li>• Personal and reflective behavior strategies</li> <li>• Routine and organizational methods for monitoring service delivery</li> </ul>
Learning delivery methods	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• On the job coaching or monitoring</li> <li>• Problem solving</li> <li>• Presentation/demonstration</li> </ul>

	<ul style="list-style-type: none"> <li>• Formal course participation</li> <li>• Work experience and involvement in professional networks</li> <li>• Conference and seminar attendance</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> <li>• identified and implemented learning opportunities for others</li> <li>• gave and received feedback constructively</li> <li>• facilitated participation of individuals in the work of the team</li> <li>• negotiated plans to improve the effectiveness of learning</li> <li>• prepared learning plans to match skill needs</li> <li>• accessed and designated learning opportunities</li> </ul>
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• coaching and monitoring principles</li> <li>• understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspective</li> <li>• understanding how to facilitate team development and improvement</li> <li>• understanding methods and techniques to obtain and interpreting feedback</li> <li>• understanding methods for identifying and prioritizing personal development opportunities and options</li> <li>• knowledge of career paths and competence standards in the industry</li> </ul>
Underpinning Skills	<p>Demonstrates skills in:</p> <ul style="list-style-type: none"> <li>• reading and understanding a variety of texts, preparing general information and documents according to target audience; spell with accuracy; use grammar and punctuation effectively</li> <li>• communication including receiving feedback and reporting, maintaining effective relationships and conflict management</li> <li>• planning skills to organize required resources and equipment to meet learning needs</li> <li>• coaching and mentoring skills to provide support to colleagues</li> <li>• reporting to organize information; assess information for relevance and accuracy; identify and elaborate on learning outcomes</li> <li>• facilitation to conduct small group training sessions</li> <li>• relating to people from a range of social, cultural, physical and mental backgrounds</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>

Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Utilize Specialized Communication Skills
Unit Code	<a href="#">EIS RTO4 17 0313</a>
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to use specialized communication skills to meet specific needs of internal and external clients, conduct interviews, facilitate group discussions, and contribute to the development of communication strategies.

Elements	Performance Criteria
1. Meet common and specific communication needs of clients and colleagues	<p>1.1 Specific communication needs of clients and colleagues are identified and met.</p> <p>1.2 Different approaches are used to meet communication needs of clients and colleagues.</p> <p>1.3 Conflict is addressed promptly and in a timely way and in a manner which does not compromise the standing of the organization.</p>
2. Contribute to the development of communication strategies	<p>2.1 <b>Strategies</b> for internal and external dissemination of information are developed, promoted, implemented and reviewed as required.</p> <p>2.2 Channels of communication are established and reviewed regularly.</p> <p>2.3 Coaching in effective communication is provided</p> <p>2.4 Work related network and relationship are maintained as necessary.</p> <p>2.5 Negotiation and conflict resolution strategies are used where required.</p> <p>2.6 Communication with clients and colleagues is appropriate to individual needs and organizational objectives.</p>
3. Represent the organization	<p>3.1 When participating in internal or external fora, presentation is relevant, appropriately researched and presented in a manner to promote the organization.</p> <p>3.2 Presentation is made clear and sequential and delivered within a predetermined time.</p> <p>3.3 Appropriate media is utilized to enhance presentation.</p> <p>3.4 Differences in views are respected.</p> <p>3.5 Written communication is made consistent with organizational standards.</p> <p>3.6 Inquiries are responded in a manner consistent with organizational standard.</p>

4. Facilitate group discussion	<p>4.1 Mechanisms which enhance <b>effective group interaction</b> are defined and implemented.</p> <p>4.2 Strategies which encourage all group members to participate are used routinely.</p> <p>4.3 Objectives and agenda are routinely set and followed for meetings and discussions.</p> <p>4.4 Relevant information are provided to group to facilitate outcomes.</p> <p>4.5 Evaluation of group communication strategies is undertaken to promote participation of all parties.</p> <p>4.6 Specific communication needs of individuals are identified and addressed.</p>
5. Conduct interview	<p>5.1 A range of appropriate communication strategies are employed in <b>interview situations</b>.</p> <p>5.2 Different <b>types of interview</b> are conducted in accordance with the organizational procedures.</p> <p>5.3 Records of interviews are made and maintained in accordance with organizational procedures.</p> <p>5.4 Effective questioning, listening and nonverbal communication techniques are used to ensure that required message is communicated.</p>

Variable	Range
Strategies	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Recognizing own limitations</li> <li>• Utilizing techniques and aids</li> <li>• Providing written drafts</li> <li>• Verbal and non verbal communication</li> </ul>
Effective group interaction	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Identifying and evaluating what is occurring within an interaction in a non-judgmental way</li> <li>• Using active listening</li> <li>• Making decision about appropriate words, behavior</li> <li>• Putting together response which is culturally appropriate</li> <li>• Expressing an individual perspective</li> <li>• Expressing own philosophy, ideology and background and exploring impact with relevance to communication</li> </ul>
Interview situations	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Establish rapport</li> <li>• obtain facts and information</li> <li>• Facilitate resolution of issues</li> <li>• Develop action plans</li> <li>• Diffuse potentially difficult situation</li> </ul>
Types of Interview	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• Related to staff issues</li> </ul>



	<ul style="list-style-type: none"> <li>• Routine</li> <li>• Confidential</li> <li>• Evidential</li> <li>• Non-disclosure</li> <li>• Disclosure</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	Demonstrates skills and knowledge in: <ul style="list-style-type: none"> <li>• Demonstrated effective communication skills with clients and work colleagues accessing service</li> <li>• Adopted relevant communication techniques and strategies to meet client particular needs and difficulties</li> </ul>
Underpinning Knowledge and Values	Demonstrates knowledge of: <ul style="list-style-type: none"> <li>• communication process</li> <li>• dynamics of groups and different styles of group leadership</li> <li>• communication skills relevant to client groups</li> </ul>
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> <li>• full range of communication techniques including:               <ul style="list-style-type: none"> <li>➤ active listening</li> <li>➤ feedback</li> <li>➤ interpretation</li> <li>➤ role boundaries setting</li> <li>➤ negotiation</li> <li>➤ establishing empathy</li> <li>➤ communication strategies</li> </ul> </li> <li>• communication required to fulfill job roles as specified by the organization</li> </ul>
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Manage and Maintain Small/Medium Business Operations
Unit Code	<a href="#">EIS RTO4 18 0313</a>
Unit Descriptor	This unit covers the operation of day-to-day business activities in a micro or small business. The strategies involve developing, monitoring and managing work activities and financial information, developing effective work habits, and adjusting work schedules as needed.

Elements	Performance Criteria
1. Identify daily work requirements	<p>1.1 Work requirements are identified for a given time period by taking into consideration <b>resources</b> and constraints.</p> <p>1.2 Work activities are prioritized based on business needs, requirements and deadlines.</p> <p>1.3 If appropriate, work is allocated to relevant staff or contractors to optimize efficiency.</p>
2. Monitor and manage work	<p>2.1 People, resources and/or equipment are coordinated to provide optimum results.</p> <p>2.2 Staff, clients and/or contractors are communicated within a clear and regular manner, to monitor work in relation to <b>business goals</b> or timelines.</p> <p>2.3 <b>Problem solving techniques</b> are applied to work situations to overcome difficulties and achieve positive outcomes.</p>
3. Develop effective work habits	<p>3.1 Work and personal priorities are identified and a balance is achieved between competing priorities using appropriate <b>time management strategies</b>.</p> <p>3.2 Input from <b>internal and external sources</b> is sought and used to develop and refine new ideas and approaches.</p> <p>3.3 Business or inquiries is/are responded to promptly and effectively.</p> <p>3.4 Information is presented in a format appropriate to the industry and audience.</p>
4. Interpret financial information	<p>4.1 Relevant documents and reports are identified.</p> <p>4.2 Documents and reports are read and understood and any implications discussed with appropriate persons.</p> <p>4.3 Data and numerical calculations are analyzed, checked, evaluated, organized and reconciled.</p> <p>4.4 Daily financial records and cash flow are maintained correctly and in accordance with legal and accounting requirements.</p>

	<p>4.5 Invoices and payments are prepared and distributed in a timely manner and in accordance with legal requirements.</p> <p>4.6 Outstanding accounts are collected or followed-up on.</p>
5. Evaluate work performance	<p>5.1 Opportunities for improvements are monitored according to business demands.</p> <p>5.2 Work schedules are adjusted to incorporate necessary modifications to existing work and routines or changing needs and requirements.</p> <p>5.3 Proposed changes are clearly communicated and recorded to aid in future planning and evaluation.</p> <p>5.4 Relevant codes of practice are used to guide an ethical approach to workplace practices and decisions.</p>

Variable	Range
Resources	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• staff</li> <li>• money</li> <li>• time</li> <li>• equipment</li> <li>• space</li> </ul>
Business goals	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• sales targets</li> <li>• budgetary targets</li> <li>• team and individual goals</li> <li>• production targets</li> <li>• reporting deadlines</li> </ul>
Problem solving techniques	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• gaining additional research and information to make better informed decisions</li> <li>• looking for patterns</li> <li>• considering related problems or those from the past and how they were handled</li> <li>• eliminating possibilities</li> <li>• identifying and attempting sub-tasks</li> <li>• collaborating and asking for advice or help from additional sources</li> </ul>
Time management strategies	<p>May include but is not limited to:</p> <ul style="list-style-type: none"> <li>• prioritizing and anticipating</li> <li>• short term and long term planning and scheduling</li> <li>• creating a positive and organized work environment</li> <li>• clear timelines and goal setting that is regularly reviewed and adjusted as necessary</li> <li>• breaking large tasks into smaller tasks</li> <li>• getting additional support if identified and necessary</li> </ul>
Internal and external sources	<ul style="list-style-type: none"> <li>• staff and colleagues</li> <li>• management, supervisors, advisors or head office</li> </ul>

	<ul style="list-style-type: none"> <li>• relevant professionals such as lawyers, accountants, management consultants</li> <li>• professional associations</li> </ul>
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<b>Evidence Guide</b>	
Critical Aspects of Competence	<p>A person must be able to demonstrate:</p> <ul style="list-style-type: none"> <li>• ability to identify daily work requirements and allocate work appropriately</li> <li>• ability to interpret financial documents in accordance with legal requirements</li> </ul>
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> <li>• Federal and Local Government legislative requirements affecting business operations, especially in regard to occupational health and safety (OHS), equal employment opportunity, industrial relations and anti-discrimination</li> <li>• technical or specialist skills relevant to the business operation</li> <li>• relevant industry code of practice</li> <li>• planning techniques to establish realistic timelines and priorities</li> <li>• identification of relevant performance measures</li> <li>• quality assurance principles and methods</li> <li>• relevant marketing, management, sales and financial concepts</li> <li>• methods for monitoring performance and implementing improvements</li> <li>• structured approaches to problem solving, idea management and time management</li> </ul>
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> <li>• interpret legal requirements, company policies and procedures and immediate, day-to-day demands</li> <li>• communication skills including questioning, clarifying, reporting, and giving and receiving constructive feedback</li> <li>• numeracy skills for performance information, setting targets and interpreting financial documents and reports</li> <li>• technical and analytical skills to interpret business document, reports and financial statements and projections</li> <li>• ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities</li> <li>• problem solving skills to develop contingency plans</li> <li>• using computers and software packages to record and manage data and to produce reports</li> <li>• evaluation skills for assessing work and outcomes</li> <li>• observation skills for identifying appropriate people, resources and to monitor work</li> </ul>
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>

Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Traffic Operation Level IV	
Unit Title	Apply Problem Solving Techniques and Tools
Unit Code	<a href="#">EIS RTO4 19 0313</a>
Unit Descriptor	This unit of competency covers the knowledge, skills and attitude required to apply scientific problem solving techniques and tools to enhance quality, productivity and other kaizen elements on continual basis.

Elements	Performance criteria
1. Identify and select theme/problem.	<p>1.1 <b>Safety requirements</b> are followed in accordance with safety plans and procedures.</p> <p>1.2 All possible problems related to the process /Kaizen elements are listed using <b>statistical tools and techniques</b>.</p> <p>1.3 All possible problems related to kaizen elements are identified and listed on Visual Management Board/Kaizen Board.</p> <p>1.4 Problems are classified based on obviousness of cause and action.</p> <p>1.5 Critical factors like the number of customers affected, Potentials for bottlenecks, and number of complaints etc... is selected.</p> <p>1.6 Problems related to priorities of <b>Kaizen Elements</b> are given due emphasis and selected.</p>
2. Grasp current status and set goal.	<p>2.1 The extent of the problem is defined.</p> <p>2.2 Appropriate and achievable goal is set.</p>
3. Establish activity plan.	<p>3.1 The problem is confirmed.</p> <p>3.2 High priority problem is selected.</p> <p>3.3 The extent of the problem is defined.</p> <p>3.4 Activity plan is established as per <b>5W1H</b>.</p>
4. Analyze causes of a problem.	<p>4.1 All possible causes of a problem are listed.</p> <p>4.2 Cause relationships are analyzed using <b>4M1E</b>.</p> <p>4.3 Causes of the problems are identified.</p> <p>4.4 Root causes are selected.</p> <p>4.5 The root cause which is most directly related to the problem is selected.</p> <p>4.6 All possible ways are listed using <b>creative idea generation</b> to eliminate the most critical root cause.</p> <p>4.7 The suggested solutions are carefully tested and evaluated for potential complications.</p> <p>4.8 Detailed summaries of the action plan are prepared to</p>

	implement the suggested solution.
5. Examine countermeasures and their implementation.	<p>5.1 Action plan is implemented by <b>medium KPT</b> members.</p> <p>5.2 Implementation is monitored according to the agreed procedure and activities are checked with preset plan.</p>
6. Assess effectiveness of the solution.	<p>6.1 <b>Tangible and intangible results</b> are identified.</p> <p>6.2 The results are verified over time.</p> <p>6.3 Tangible results are compared with targets using <b>various types of diagram</b>.</p>
7. Standardize and sustain operation.	<p>7.1 If the goal is achieved, the new procedures are standardized and made part of daily activities.</p> <p>7.2 All employees are trained on the new <b>Standard Operating Procedures (SOPs)</b>.</p> <p>7.3 SOP is verified and followed by all employees.</p> <p>7.4 The next problem is selected to be tackled by the team.</p>

Variables	Range
Safety requirements	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• OHS requirements include legislation, material safety, managements system, hazardous substances and dangerous goods code and local safe operating procedures</li> <li>• Work is carried out in accordance with legislative obligations, environmental legislations, relevant health regulation, manual handling procedure and organization insurance requirements</li> </ul>
Statistical tools and techniques	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• 7 QC tools may include: <ul style="list-style-type: none"> <li>➤ Stratification</li> <li>➤ Pareto Diagram</li> <li>➤ Cause and Effect Diagram</li> <li>➤ Check Sheet</li> <li>➤ Control Chart/Graph</li> <li>➤ Histogram</li> <li>➤ Scatter Diagram</li> </ul> </li> <li>• QC techniques may include: <ul style="list-style-type: none"> <li>➤ Brain storming</li> <li>➤ Why analysis</li> <li>➤ What if analysis</li> <li>➤ 5W1H</li> </ul> </li> </ul>
Kaizen Elements	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• Quality</li> <li>• Cost</li> <li>• Productivity</li> </ul>

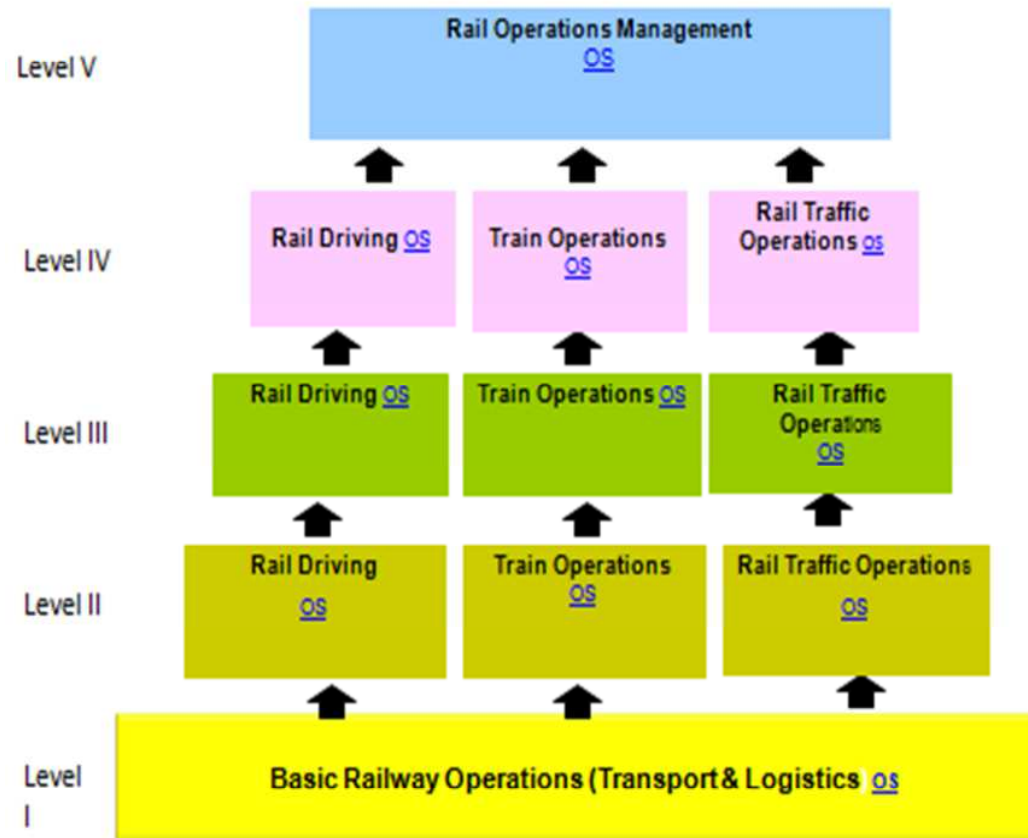
	<ul style="list-style-type: none"> <li>• Delivery</li> <li>• Safety</li> <li>• Moral</li> <li>• Environment</li> <li>• Gender equality</li> </ul>		
5W1H	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• Who: person in charge</li> <li>• Why: objective</li> <li>• What: item to be implemented</li> <li>• Where: location</li> <li>• When: time frame</li> <li>• How: method</li> </ul>		
4M1E	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• Man</li> <li>• Machine</li> <li>• Method</li> <li>• Material and</li> <li>• Environment</li> </ul>		
Creative idea generation	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Exploring and examining ideas in varied ways</li> <li>• Elaborating and extrapolating</li> <li>• Conceptualizing</li> </ul>		
Medium KPT	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• 5S</li> <li>• 4M (machine, method, material and man)</li> <li>• 4P (Policy, procedures, People and Plant)</li> <li>• PDCA cycle</li> <li>• Basics of IE tools and techniques</li> </ul>		
Tangible and intangible results	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• Tangible result may include: <ul style="list-style-type: none"> <li>➢ Quantifiable data</li> </ul> </li> <li>• Intangible result may include: <ul style="list-style-type: none"> <li>➢ Qualitative data</li> </ul> </li> </ul>		
Various types of diagram	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• Line graph</li> <li>• Bar graph</li> <li>• Pie-chart</li> <li>• Scatter diagram</li> <li>• Affinity diagram</li> </ul>		
Standard Operating Procedures (SOPs)	<p>may include but not limited to:</p> <ul style="list-style-type: none"> <li>• The customer demand</li> <li>• The most efficient work routine (steps)</li> <li>• The cycle times required to complete work elements</li> <li>• All process quality checks required to minimize defects/errors</li> <li>• The exact amount of work in process required</li> </ul>		
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<b>Evidence Guide</b>	
Critical Aspects of Assessment	<p>Demonstrates skills and knowledge competencies to:</p> <ul style="list-style-type: none"> <li>• Apply all relevant procedures and regulatory requirements to ensure quality and productivity of an organization.</li> <li>• Detect non-conforming products/services in the work area</li> <li>• Apply effective problem solving approaches/strategies.</li> <li>• Implement and monitor improved practices and procedures</li> <li>• Apply statistical quality control tools and techniques.</li> </ul>
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> <li>• QC story/PDCA cycle/</li> <li>• QC story/ Problem solving steps</li> <li>• QCC techniques</li> <li>• 7 QC tools</li> <li>• Basic IE tools and techniques.</li> <li>• SOP</li> <li>• Quality requirements associated with the individual's job function and/or work area</li> <li>• Workplace procedures associated with the candidate's regular technical duties</li> <li>• Relevant health, safety and environment requirements</li> <li>• organizational structure of the enterprise</li> <li>• Lines of communication</li> <li>• Methods of making/recommending improvements.</li> <li>• Reporting procedures</li> </ul>
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> <li>• Apply problem solving techniques and tools</li> <li>• Apply statistical analysis tools</li> <li>• Apply Visual Management Board/Kaizen Board.</li> <li>• Detect non-conforming products or services in the work area</li> <li>• Document and report information about quality, productivity and other kaizen elements.</li> <li>• Contribute effectively within a team to recognize and recommend improvements in quality, productivity and other kaizen elements.</li> <li>• Implement and monitor improved practices and procedures.</li> <li>• Organize and prioritize activities and items.</li> <li>• Read and interpret documents describing procedures</li> <li>• Record activities and results against templates and other prescribed formats.</li> </ul>

Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> <li>• Interview / Written Test</li> <li>• Observation / Demonstration with Oral Questioning</li> </ul>
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

# Railway Transport Operations



## Acknowledgement

We wish to extend thanks and appreciation to the many representatives of business, industry, academe and government agencies who donated their time and expertise to the development of this occupational standard.

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This occupational standard was finalized on February 2013 at Addis Ababa, Ethiopian Red Cross Training Center.

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### COMMENT TEMPLATE

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