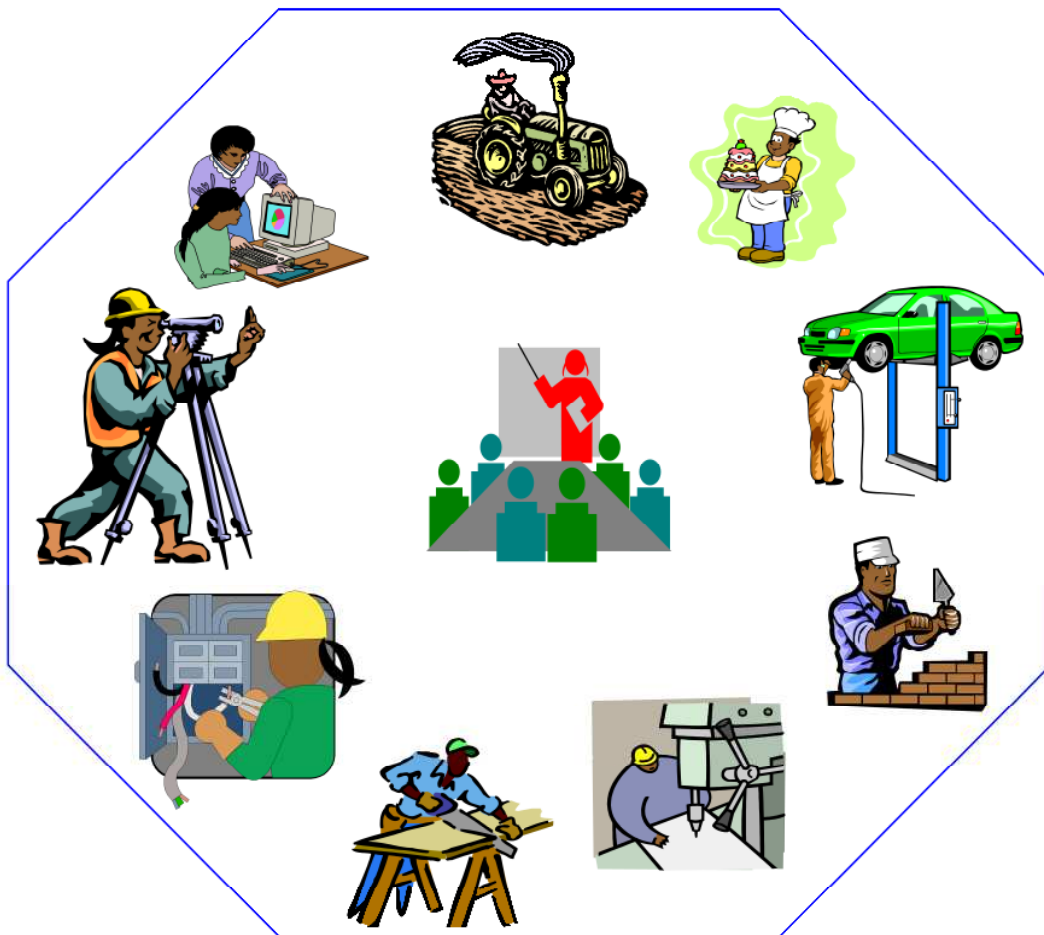




Federal Democratic Republic of Ethiopia
OCCUPATIONAL STANDARD

RAILWAY OPERATION MANAGEMENT

NTQF Level V



*Ministry of Education
March 2013*

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 Operation Management		
Occupational Code: EIS ROM		
<i>NTQF Level V</i>		
EIS ROM5 01 0313 Manage Operational Plan	EIS ROM5 02 0313 Manage Risk	EIS ROM5 03 0313 Develop a Transport Strategy for an Event
EIS ROM5 04 0313 Plan and Implement Maintenance Schedules	EIS ROM5 05 0313 Investigate Rail Safety Incidents	EIS ROM5 06 0313 Manage Emergencies
EIS ROM5 07 0313 Manage a Supply Chain	EIS ROM5 08 0313 Maintain, Monitor and Improve Transport Operations Systems	EIS ROM5 09 0313 Plan and Manage Security Procedures for the Enterprise
EIS ROM5 10 0313 Manage Assets	EIS ROM5 11 0313 Develop, Implement and Review Purchasing Strategies	EIS ROM5 12 0313 Manage and Monitor Technical Data and Information Systems
EIS ROM5 13 0313 Organize Marshalling and Shunting Operations	EIS ROM5 14 0313 Plan and Control Daily Train Operations	EIS ROM5 15 0313 Organize Freight Yard Movement
EIS ROM5 16 0313 Allocate Rolling Stock	EIS ROM5 17 0313 Control Rail Traffic Movement	EIS ROM5 18 0313 Coordinate Train Movement Activities
EIS ROM5 19 0313 Arrange Alternative Passenger Transport	EIS ROM5 20 0313 Manage Project Quality	EIS ROM5 21 0313 Facilitate and Capitalize on Change and Innovation
EIS ROM5 22 0313 Establish and Conduct Business Relationships	EIS ROM5 23 0313 Manage Continuous Improvement Process (Kaizen)	

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage Operational Plan
Unit Code	EIS ROM5 01 0313
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to develop and monitor implementation of the operational plan to provide efficient and effective workplace practices within the organisation's productivity and profitability plans. Management at a strategic level requires systems and procedures to be developed and implemented to facilitate the organisation's operational plan.

Elements	Performance Criteria
1. Develop operational plan	<p>1.1 Resource requirements are researched, analyzed and documented and an operational plan developed in consultation with relevant personnel, colleagues and specialist resource managers.</p> <p>1.2 Consultation processes are developed and/or implemented as an integral part of the operational planning process.</p> <p>1.3 Ensure details of the operational plan include the development of key performance indicators to measure organizational performance.</p> <p>1.4 Contingency plans are developed and implemented at appropriate stages of operational planning.</p> <p>1.5 Ensure the development and presentation of proposals for resource requirements is supported by a variety of information sources and seeks specialist advice as required.</p> <p>1.6 Approvals for plan is obtained from relevant parties and ensure understanding among work teams involved.</p>
2. Plan and manage resource acquisition	<p>2.1 Strategies are developed and implemented to ensure that employees are recruited and/or inducted within the organization's human resources management policies and practices.</p> <p>2.2 Strategies are developed and implemented to ensure that physical resources and services are acquired in accordance with the organization's policies, practices and procedures.</p>
3. Monitor and review operational performance	<p>3.1 Performance systems and processes are developed, monitored and reviewed to assess progress in achieving profit and productivity plans and targets.</p> <p>3.2 Budget and actual financial information are analyzed and interpreted to monitor and review profit and productivity performance.</p>

	<p>3.3 Areas of underperformance, recommend solutions, are identified and prompt action taken to rectify the situation.</p> <p>3.4 Systems are planned and implemented to ensure that mentoring and coaching are provided to support individuals and teams to effectively, economically and safely use resources.</p> <p>3.5 Recommendations are negotiated for variations to operational plans and gain approval from designated persons/groups.</p> <p>3.6 Systems are developed and implemented to ensure that procedures and records associated with documenting performance are managed in accordance with organizational requirements.</p>
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Variable	Range
Resource requirements	<p>May include:</p> <ul style="list-style-type: none"> • goods and services to be purchased and ordered • human, physical and financial resources - both current and projected • stock requirements and requisitions
Relevant personnel, colleagues and specialist resource managers	<p>May include:</p> <ul style="list-style-type: none"> • employees at the same level or more senior managers • managers • occupational health and safety committee/s and other people with specialist responsibilities • supervisors • union or employee representatives
Consultation processes	<p>May refer to:</p> <ul style="list-style-type: none"> • email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual operational plans • mechanisms used to provide feedback to the work team in relation to outcomes of consultation • meetings, interviews, brainstorming sessions
Key performance indicators	<p>May refer to:</p> <ul style="list-style-type: none"> • measures for monitoring or evaluating the efficiency or effectiveness of a system which may be used to demonstrate accountability and to identify areas for improvements
Contingency plans	<p>May include:</p> <ul style="list-style-type: none"> • contracting out or outsourcing human resources and other functions or tasks • diversification of outcomes • finding cheaper or lower quality raw materials and consumables

	<ul style="list-style-type: none"> • increasing sales or production • recycling and re-using • rental, hire purchase or alternative means of procurement of required materials, equipment and stock • restructuring of organisation to reduce labour costs • risk identification, assessment and management processes • seeking further funding • strategies for reducing costs, wastage, stock or consumables • succession planning
Operational plans	<p>May also be termed:</p> <ul style="list-style-type: none"> • action plans • annual plans • management plans • tactical plans
Organisation's policies, practices and procedures	<p>May include:</p> <ul style="list-style-type: none"> • organisational culture • organisational guidelines which govern and prescribe operational functions, such as the acquisition and management of human and physical resources • Standard Operating Procedures • undocumented practices in line with organisational operations
Designated persons/groups	<p>May include:</p> <ul style="list-style-type: none"> • groups designated in workplace policies and procedures • managers or supervisors whose roles and responsibilities include decision making on operations • other stakeholders such as Board members • other work groups or teams whose work will be affected by recommendations for variations

Evidence Guide

Critical Aspects of Competence	<p>Evidence of the following is essential to:</p> <ul style="list-style-type: none"> • Develop operational plan • Plan and manage resource acquisition • Monitor and review operational performance
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • models and methods for operational plans • budgeting processes • Alternative approaches to improving resource usage and eliminating resource inefficiencies and waste
Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • literacy skills to access and use workplace information and to write a succinct and practical plan • technology skills to use software to produce and monitor the plan against performance indicators

	<ul style="list-style-type: none"> • planning and organisational skills • coaching skills to work with people with poor performance • numeracy skills to allocate and manage financial resources
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage Risk
Unit Code	EIS ROM5 02 0313
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to manage risks in a range of contexts across the organisation or for a specific business unit or area. The unit has been designed to be consistent with AS/NZS 4360:2004 Risk management.

Elements	Performance Criteria
1. Establish risk context	<p>1.1 Organizational processes, procedures and requirements are reviewed for undertaking risk management.</p> <p>1.2 Scope is determined for risk management process.</p> <p>1.3 Internal and external stakeholders and their issues are identified.</p> <p>1.4 Political, economic, social, legal, technological and policy context are reviewed.</p> <p>1.5 Strengths and weaknesses of existing arrangements are reviewed.</p> <p>1.6 Critical success factors, goals or objectives for area included in scope are documented.</p> <p>1.7 Support is obtained for risk management activities.</p> <p>1.8 Communicate with relevant parties about the risk management process and invite participation.</p>
2. Identify risks	<p>2.1 Relevant parties are invited to assist in the identification of risks.</p> <p>2.2 Risks that may apply to scope are researched.</p> <p>2.3 Tools and techniques are used to generate a list of risks that apply to the scope, in consultation with relevant parties.</p>
3. Analyze risks	<p>3.1 Likelihood of risks occurring is assessed.</p> <p>3.2 Impact or consequence is assessed if risks occur.</p> <p>3.3 Risks are evaluated and prioritized for treatment.</p>
4. Select and implement treatments	<p>4.1 Most appropriate options are determined and selected for treating risks.</p> <p>4.2 An action plan is developed for implementing risk treatment.</p> <p>4.3 Risk management processes are communicated to relevant parties.</p> <p>4.4 Ensure all documentation is in order and appropriately stored.</p>

	4.5 Action plan is implemented and monitored. 4.6 Risk management process is evaluated.
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Variable	Range
Risks	May include those relating to: <ul style="list-style-type: none"> • commercial relationships • economic circumstances and scenarios • human behaviour • individual activities • legislation • management activities and controls • natural events • political circumstances • technology
Scope	May apply to: <ul style="list-style-type: none"> • given project • specific business unit or area • specific functional such as: <ul style="list-style-type: none"> • financial management • OHS • governance • external environment • internal environment • whole organisation
Relevant parties	May include: <ul style="list-style-type: none"> • all staff • internal and external stakeholders • senior management • specific teams or business units • technical experts
Research	May include: <ul style="list-style-type: none"> • data or statistical information • information from other business areas • lessons learned from other projects or activities • market research • previous experience • public consultation • review of literature and other information sources
Tools and techniques	May include: <ul style="list-style-type: none"> • brainstorming • checklists • fishbone diagrams • flowcharts • scenario analysis
Likelihood	May refer to: <ul style="list-style-type: none"> • probability of a given risk occurring, such as: <ul style="list-style-type: none"> ➤ very likely

	<ul style="list-style-type: none"> ➤ likely ➤ possible ➤ unlikely ➤ rare
Impact or consequence	<p>May refer to:</p> <ul style="list-style-type: none"> • significance of outcomes if the risk occurs, such as: <ul style="list-style-type: none"> ➤ disastrous ➤ severe ➤ moderate impact ➤ minimal impact
Evaluation of risks	<p>Includes:</p> <ul style="list-style-type: none"> • considering the likelihood of the risk occurring • considering the impact of the risk • determining which risks are most significant and are therefore priorities for treatment
Options	<p>May include:</p> <ul style="list-style-type: none"> • avoiding the risk • changing the consequences • changing the likelihood • retaining the risk • sharing the risk with a third party
Action plans	<p>Should include:</p> <ul style="list-style-type: none"> • what actions are required • who is taking responsibility • time lines • monitoring processes

Evidence Guide

Critical Aspects of Competence	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • risk management plan which includes a detailed stakeholder analysis, explanation of the risk context, critical success factors, identified and analysed risks, and treatments for prioritised risks • details of monitoring arrangements for risk management plan and an evaluation of the risk management plan's efficacy in treating risks <p>Knowledge of relevant legislation, codes of practice and national standards</p>
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • AS/NZS 4360:2004 Risk management. • legislation, codes of practice and national standards, for example: <ul style="list-style-type: none"> ➤ duty of care ➤ company law ➤ contract law ➤ environmental law ➤ freedom of information ➤ industrial relations law ➤ privacy and confidentiality

	<ul style="list-style-type: none"> • legislation relevant to organization's operations • legislation relevant to operation as a business entity • organisational policies and procedures, including: <ul style="list-style-type: none"> ➤ risk management strategy ➤ policies and procedures for risk management • overall operations of organisation • reasonable adjustment in the workplace for people with a disability • Types of available insurance and insurance providers
Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • communication and literacy skills to consult and negotiate, to prepare communications about risk management, and to encourage stakeholder involvement • organisational and management skills to plan and implement risk management processes • Problem-solving and innovation skills to find practical ways to manage identified risks
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 accessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Develop a Transport Strategy for an Event
Unit Code	EIS ROM5 03 0313
Unit Descriptor	This unit describes the performance outcomes, skills and knowledge required to identify the transport needs for an event and develop an appropriate transport strategy.

Elements	Performance Criteria
1. Analyse transport needs	<p>1.1 Overall event transport needs are determined based on analysis of key event information.</p> <p>1.2 Specific transport needs of different event stakeholders, including those with special needs are identified and assessed.</p> <p>1.3 Needs for specialist assistance and involvement of authorities are determined in the transport planning process.</p>
2. Develop strategies to meet differing transport needs	<p>2.1 Various transport options and resources are identified and assessed in consultation with relevant suppliers.</p> <p>2.2 The particular transport issues and risks presented by event location and geography are assessed</p> <p>2.3 Analyse the legal, safety and insurance issues as they relate to event transport.</p> <p>2.4 Particular transport issues and risks are analysed and incorporated into transport strategy development.</p> <p>2.5 Impacts of broader event management constraints and issues are evaluated as they relate to event transport.</p> <p>2.6 Consult with and gain input from relevant event stakeholders about transport strategies at appropriate times prior to the event.</p> <p>2.7 Evaluation criteria are developed for the transport strategy in consultation with stakeholders.</p>
3. Develop transport logistics plan	<p>3.1 Specific procedures to address transport operational requirements, considering potential new and improved approaches are developed and documented if appropriate.</p> <p>3.2 Critical tasks and responsibilities and timelines are identified.</p> <p>3.3 Transport resources are allocated to maximise efficiency and usage.</p> <p>3.4 Human resource requirements are integrated into the logistics plan and liaise with appropriate colleagues.</p>

	<p>3.5 Contingency and critical incident procedures are developed and articulated within the logistics plan.</p> <p>3.6 Briefings and relevant information are provided to those involved in provision of transport services and to other stakeholders.</p>
4. Evaluate transport strategies	<p>4.1 Efficiency and effectiveness of the transport strategy are evaluated based on agreed evaluation criteria.</p> <p>4.2 Ensure outcomes of evaluation are incorporated into future event preparations.</p>

Variable	Range
Key event information	<p>May include:</p> <ul style="list-style-type: none"> • general nature of event • event management structures • level of government involvement • location • dates and times • duration • number and type of activities, such as sport or individual programmed events • numbers attending • scope of physical staging elements
Event stakeholders	<p>May include:</p> <ul style="list-style-type: none"> • organising committees • media • participants, competitors and delegates • officials • spectators or audiences • VIPs • volunteers and paid staff • authorities, such as local government, emergency services and roads authorities
Specialist assistance	<p>May include:</p> <ul style="list-style-type: none"> • transport experts • local authorities • Emergency services
Authorities	<p>May include:</p> <ul style="list-style-type: none"> • local government • state government, such as state roads authorities • emergency services, including police, ambulance and fire service • other industry bodies, such as certifying bodies
Transport options and resources	<p>May include:</p> <ul style="list-style-type: none"> • public transport system, including: <ul style="list-style-type: none"> ➤ trains ➤ bus network ➤ ferries

	<ul style="list-style-type: none"> ➤ light rail and trams • private transport system, including: <ul style="list-style-type: none"> ➤ airlines ➤ coach services ➤ taxis ➤ hire cars, minibuses and limousines ➤ private vehicles ➤ charter services ➤ dedicated disabled transport, including taxis and buses ➤ animal transport
Transport issues and risks	<p>May relate to:</p> <ul style="list-style-type: none"> • general nature of location, such as major metropolitan, regional, country or remote • restricted access • road surface or terrain • distance between event venues • distance between event venues and other facilities such as accommodation and service centres • distance between accommodation providers and venues • Traffic issues, such as peak periods and traffic regulations
Broader event management constraints and issues	<p>May include:</p> <ul style="list-style-type: none"> • overall event management structures • specific event objectives • budget • human resources • other staging requirements • Factors external to the event, such as other events.
Evaluation criteria	<p>May relate to:</p> <ul style="list-style-type: none"> • service quality • environmental targets • financial targets • attendance targets • Time targets for movement of people and equipment
Procedures to address transport operational requirements may relate to:	<ul style="list-style-type: none"> • contacting relevant authorities for information and permission • available transport and timetables • contingency and backup transport options • security • vehicle refuelling • parking • pick-up and drop-off procedures • human resource requirements, including marshals, guides and drivers • training requirements • adequate provision for buses • emergency services presence and access • arrival of clients - dump or trickle • Adequate provision for disabled people

Human resource requirements	<p>May include:</p> <ul style="list-style-type: none"> • drivers • guides • volunteers • marshals • interpreters and on-site supervisors
Contingency and critical incident procedures	<p>May relate to:</p> <ul style="list-style-type: none"> • equipment breakdown • traffic problems • adverse weather • event staff sickness • Internal and external delays to event
Briefings and relevant information	<p>May include:</p> <ul style="list-style-type: none"> • summary procedures • emergency contact details • contingency procedures • Maps and other geographical information, including route maps between venues and sites and information for venues, sites and local area

Evidence Guide

Critical Aspects of Competence	<p>Evidence of the following is essential:</p> <ul style="list-style-type: none"> • ability to analyse transport needs for an event and develop appropriate strategies and transport logistics plans • knowledge of the factors to be considered when developing an event transport strategy and the particular risk and contingency management issues • Demonstration of skills through the development of a transport strategy and logistics plan for at least one complex event
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • broad event management process and role of transport planning in relation to other event management functions • types of events that require the development of dedicated transport strategies • sources of specialist assistance for complex transport planning • different transport alternatives for consideration in the planning process • the various transport options, including private and public variations for air and land transport • technology and equipment used for coordination of transport services • legislation, regulations and industry codes that affect transport planning • risk management issues associated with event transport • resource requirements for a transport strategy, including financial, human and physical resources

Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • The following skills must be assessed as part of this unit: • planning and organisational skills to develop and manage transport logistics • research and critical thinking skills to source and analyse information on transport options • communication and negotiation skills to consult with stakeholders and negotiate arrangements with suppliers • contingency management skills to address transport problems • literacy skills to develop complex plans and documents for the management of event transport • Numeracy skills to work within event budgets and develop different scenarios for consideration
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 accessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting

Occupational Standard: Rail Operation Management Level V	
Unit Title	Plan and Implement Maintenance Schedules
Unit Code	EIS ROM5 04 0313
Unit Descriptor	This unit involves the skills and knowledge required to plan and implement maintenance schedules in accordance with relevant regulatory requirements and workplace procedures. This includes establishing maintenance requirements, organizing maintenance activities, organizing resources, and completing all required procedures and documentation.

Elements	Performance Criteria
1. Establish maintenance requirements	<p>1.1 Equipment specifications, operations requirements and workplace procedures are checked for recommended maintenance intervals and processes.</p> <p>1.2 Special requirements for maintenance of storage zones are identified.</p> <p>1.3 Comparisons with previous experience, future equipment use, work requirements and standard operating procedures are made to inform the planning process.</p> <p>1.4 Work plan and work schedule are developed.</p> <p>1.5 Contractors and/or maintenance providers (internal/external) are identified.</p> <p>1.6 Costings for process are identified based on work schedule (equipment/staff off-line), equipment manufacturers' recommendations, and charges for materials, equipment and consumables and external/internal labor charges.</p> <p>1.7 Required interruptions, processes and procedures are documented and recorded.</p> <p>1.8 Clearances for any required costs are obtained for maintenance.</p>
2. Organize maintenance activities	<p>2.1 Work schedules and staff rosters are checked to identify times when the maintenance process may be scheduled including optimum timing for any shut down.</p> <p>2.2 Permission from supervisory personnel is obtained for timing of maintenance to optimize the maintenance process and work.</p> <p>2.3 Detailed work plans are developed to accord with work schedules, availability of expertise and the resource availability.</p> <p>2.4 Employees with the required competencies are identified and where necessary appropriate training and assessment is facilitated.</p>

	<p>2.5 Approvals for work schedule, employee work pattern and maintenance schedule adjustments are obtained and work plan is refined to ensure the maintenance program will maintain workplace outputs in terms of workplace policy.</p> <p>2.6 Work area communication activity is made clear, unambiguous and appropriate procedures, language, and codes are used.</p>
3. Organize resources	<p>3.1 Required equipment, personnel and consumables are allocated in accordance with workplace environment.</p> <p>3.2 Consumables, equipment and expertise are located and coordinated to meet maintenance work schedule.</p> <p>3.3 Externally sourced equipment, consumables and expertise are identified and appropriate arrangements made for procurement.</p> <p>3.4 Different organization can be involved for consultancy.</p> <p>3.5 Conflict resolution is inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p> <p>3.6 Access and follow-up shifting producers and polices correctly and consistently according to organization and legal requiems.</p>
4. Complete maintenance procedures	<p>4.1 Completed work is checked against the maintenance schedule and the work plan.</p> <p>4.2 Records of work system are completed and forwarded to appropriate personnel noting areas where additional maintenance is required to maintain optimum work output and equipment life.</p>

Variable	Range
Operations	May be conducted: <ul style="list-style-type: none"> by day or night
Work	May be undertaken in: <ul style="list-style-type: none"> various work environments in the warehousing, storage, transport and distribution industries
Documentation/ records	May include: <ul style="list-style-type: none"> Ethiopian and international codes of practice and regulations relevant to equipment maintenance Ethiopian and international regulations and codes of practice for the handling, storage and transport of dangerous goods and hazardous substances workplace operating procedures, maintenance schedules and policies operations manuals, job specifications and procedures and induction documentation

	<ul style="list-style-type: none"> • Safe Working Limits (SWL) and Working Load Limits (WLL) of transport options • supplier and/or client instructions • statistical information on equipment malfunctions, maintenance and repairs • relevant Ethiopia standards, criteria and certification requirements • communications technology equipment and oral, aural or signed communications • quality assurance and customer service standards and procedures • emergency procedures • relevant competency standards and training materials • QA plans, data and document control • conditions of service, legislation and industrial agreements including workplace agreements and awards 		
Communications systems	<p>May involve:</p> <ul style="list-style-type: none"> • telephone • fax • email • electronic data transfer of information • mail 		
The workplace environment	<p>May involve:</p> <ul style="list-style-type: none"> • twenty-four hour operation • single- and multi-site location • large, medium and small workplaces 		
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • employees, supervisors and managers • equipment manufacturers and suppliers • contractors • industrial relations and OHS specialists • other professional or technical staff 		
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> • regulations and codes of practice related to equipment maintenance • Ethiopia and international regulations and codes of practice for the handling, storage and transfer of dangerous goods and hazardous substances • relevant Ethiopia and international standards and certification requirements • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation • licence, patent or copyright arrangements • relevant workplace relations legislation • relevant workers compensation legislation • equal opportunity, equal employment opportunity and affirmative action legislation 		
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Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
Work systems	<p>May include:</p> <ul style="list-style-type: none"> • preventative and remedial maintenance schedules, protocols and procedures • faulty equipment tagging and repair/replacement systems • equipment inventory and identification systems • communications equipment • workplace operations • authorities and permits • hours of operation • relevant regulations
Customers	<p>May be:</p> <ul style="list-style-type: none"> • internal or external

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • the underpinning knowledge and skills • relevant legislation and workplace procedures • other relevant aspects of the range statement
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Relevant Ethiopian and international regulations, codes of practice and legislative requirements including local and international freight regulations • Relevant OHS and environmental procedures and regulations • Procedures for identification and interpretation of maintenance requirements • Procedures for identification and evaluation of information needed to plan and implement maintenance schedules • Procedures for reviewing system options for maintenance operations including appropriate risk analysis • Procedures for liaising with manufacturers and suppliers • Procedures establishing and/or monitoring suitable maintenance systems • Focus of operation of maintenance systems, resources, management and workplace operating systems • Characteristics and capabilities of equipment, materials and processes used • Relative features and risks of various maintenance systems, their applications and processes, and issues involved in their use

	<ul style="list-style-type: none"> • Quality and customer service standards, policies and procedures • Application of relevant Ethiopian and international standards and associated certification requirements • Resource availability including the competencies of individuals in the team/group • The application of current competencies within functional activity • Coaching and mentoring approaches to support team members to share knowledge and skills • Relevant workplace documentation procedures • Contacts and sources of information/documentation needed when planning and implementing maintenance systems • Procedures for operating electronic communications equipment
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when planning and implementing maintenance schedules • Read and interpret instructions, procedures, information and signs relevant to the planning and implementing of maintenance schedules • Interpret and follow operational instructions and prioritise work • Complete documentation related to the planning and implementing of maintenance schedules • Work collaboratively with others in the planning and implementing of maintenance schedules • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems, faults or malfunctions in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unexpected events • Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Adapt to differences in equipment in accordance with standard operating procedures • Ensure the servicing of equipment in terms of maintenance schedule and standard operating procedures

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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Investigate Rail Safety Incidents
Unit Code	EIS ROM5 05 0313
Unit Descriptor	This unit involves the skills and knowledge required to investigate safety incidents in accordance with regulatory and workplace requirements, including planning the investigation, collecting and analyzing information, and preparing the safety incident report.

Elements	Performance Criteria
1. Plan the investigation	<p>1.1 Clarification of the objectives of the incident investigation is established in conjunction with relevant personnel, and in accordance with workplace and regulatory requirements.</p> <p>1.2 Timeframes and locations for the investigation are established in conjunction with relevant personnel.</p> <p>1.3 Resources required for the investigation are identified and obtained within workplace guidelines.</p> <p>1.4 The relationship b/n customers should be according to the work procedure.</p> <p>1.5 Different personal protective equipment should be handled properly.</p> <p>1.6 Work could be done within different situations.</p>
2. Collect and analyze information	<p>2.1 All relevant available incident information is obtained and collated in order to facilitate a detailed and accurate analysis of the incident.</p> <p>2.2 Interviews are conducted with relevant personnel to establish their recollection of events associated with the incident.</p> <p>2.3 Information is analyzed in accordance with the established objectives of the investigation, based on approved conditions, applicable standards and operational guidelines.</p> <p>2.4 Options for action are generated which are consistent with workplace and/or statutory requirements and lead to recommendations which reduce future risk/hazards.</p> <p>2.5 Criteria are specified to enable objective evaluation of the options to be undertaken.</p> <p>2.6 Work area communication activity is made clear, unambiguous and uses appropriate procedures, language, and codes.</p> <p>2.7 Access and follow shifting producers and polices correctly and consistently according to organization and legal requiems.</p>

	<p>2.8 Conflict resolution is inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p> <p>2.9 Different organization can be involved for consultancy.</p>
3. Prepare report	<p>3.1 Conclusions are drawn and recommendations are made which will enable a satisfactory resolution of the incident issues, and meet workplace and any other statutory requirement.</p> <p>3.2 Opportunities to enhance operational efficiency and safety procedures are documented in accordance with the standard reporting guidelines.</p> <p>3.3 Documentation is filed and distributed to all relevant parties for consideration and subsequent action.</p>

Variable	Range
Depending on the context of the safety incident concerned, the applicable regulatory/code requirements	<p>May include:</p> <ul style="list-style-type: none"> the relevant state/territory OHS regulations the relevant state/territory codes of practice for safe working the Code of Practice for the Defined Interstate Rail Network
Resources required for the investigation	<p>May include:</p> <ul style="list-style-type: none"> personnel time access to incident site access to equipment including rolling stock and infrastructure
Workplaces	<p>May comprise:</p> <ul style="list-style-type: none"> large, medium or small worksites
Customers	<p>May be:</p> <ul style="list-style-type: none"> internal or external
Personal protective equipment	<p>May include:</p> <ul style="list-style-type: none"> gloves safety headwear and footwear safety glasses two-way radios high visibility clothing
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> limited or restricted spaces exposed conditions controlled or open environments <p>May be conducted:</p> <ul style="list-style-type: none"> in a range of work environments by day or night
Incident information	<p>May be obtained from:</p> <ul style="list-style-type: none"> incident reports

	<ul style="list-style-type: none"> • dangerous goods manifest • drivers advice (train load) • safe working forms • special train notices • consist forms • wagon cards • out-of-gauge documents • train journals or train register books transport instructions • load and weight records • material safety data sheets • inspection reports-routine circulars • Interviews with those involved in the incident -f. • interviews with witnesses
Hazards in the work area	<p>May include exposure to:</p> <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods, materials, trains and vehicular traffic
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems • oral, aural or signed communications
Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Code of Practice for the Defined Interstate Rail Network in situations where safety incidents occur on that network • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances, including: <ul style="list-style-type: none"> • Ethiopia and International Dangerous Goods Codes • Ethiopia and International Explosives Codes • Railways of Ethiopia Code of Practices and Conditions for the Carriage of Dangerous Goods

	<ul style="list-style-type: none"> • relevant state/territory OHS and environmental protection legislation • workplace relations regulations • workers compensation regulations
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • other employees, supervisors and managers • affected customers • official representatives • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists
Information/documents	<p>May include:</p> <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • workplace procedures and policies for the investigation of safety incidents • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances, including the ADG Code and Railways of Ethiopia Code of Practices and Conditions for the Carriage of Dangerous Goods • operations manuals, job specifications and induction documentation • manufacturers specifications for equipment • dangerous goods declarations and material safety data sheets (where applicable) • award, enterprise bargaining agreement, and other industrial arrangements • relevant Ethiopian standards and certification requirements • quality assurance and emergency procedures

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Plan the investigation • Collect and analyze information • Prepare report
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies for the investigation of safety incidents

	<ul style="list-style-type: none"> • Focus of operation of work systems, equipment, management and site operating systems for the investigation of safety incidents • Problems that may occur when investigating safety incidents and appropriate action that can be taken to resolve the problems • Data collection and analysis techniques required when investigating safety incidents • Documentation and reporting requirements for the investigation of safety incidents 		
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when investigating safety incidents • Read and interpret instructions, procedures and information relevant to the investigation of safety incidents • Interpret and follow operational instructions and prioritise work • Conduct interviews and take statements • Negotiate, communicate and liaise effectively with others • Prepare reports and recommendations • Complete documentation related to the investigation of safety incidents • Operate electronic communication equipment to required protocol • Work collaboratively with others when investigating safety incidents • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any problems identified when investigating safety incidents in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated situations that may arise when investigating safety incidents • Apply precautions and required action to minimise, control or eliminate hazards that may exist during the investigation of safety incidents • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant computer, communication and office equipment required when investigating safety incidents • Operate and adapt to differences in equipment in accordance with standard operating procedures 		
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	<ul style="list-style-type: none"> • Select and use required personal protective equipment conforming to industry and OHS standards
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage Emergencies
Unit Code	EIS ROM5 06 0313
Unit Descriptor	This unit involves the skills and knowledge required to manage emergencies in accordance with regulatory requirements, relevant codes of practice and workplace procedures, including identifying and responding to emergency situations, arranging follow-on support and assistance, and communicating with staff in accordance with workplace procedures and relevant code requirements.

Elements	Performance Criteria
1. Respond to emergency situations	<p>1.1 Emergency and potential emergency situations are promptly identified and assessed and needs are prioritized in accordance with the workplace emergency response plan/procedures.</p> <p>1.2 Situations are handled appropriately following emergency.</p> <p>1.3 Incident reports are completed accurately in accordance with regulatory and workplace procedures.</p> <p>1.4 Work could be done within different situations.</p> <p>1.5 Documentation is filed and distributed to all relevant parties for consideration and subsequent action.</p>
2. Take required action during an emergency	<p>2.1 Responsibilities are fulfilled in accordance with the workplace emergency response plan and code/regulatory requirements.</p> <p>2.2 Assistance is provided to other staff in conducting an initial survey of the scene of an emergency.</p> <p>2.3 Assistance is provided in controlling the site both prior to and following arrival of emergency services.</p> <p>2.4 Directions of the controlling emergency authority are followed and all possible assistance is provided in response to those directions.</p> <p>2.5 Different personal protective equipment should be handled properly.</p>
3. Arrange follow-on support and assistance	<p>3.1 Medical assistance and support is arranged as required in accordance with workplace procedures.</p> <p>3.2 First aid is provided pending the arrival of medical assistance within limits of responsibility and competence in accordance with workplace procedures.</p> <p>3.3 Access and follow emergency producers and polices correctly and consistently according to organization and legal requiems.</p>

	3.4 Conflict resolution is inspected and checked to travel in accordance with relevant regulations and legislations /permit requirements.
4. Communicate with staff	<p>4.1 Staff and customers are provided with relevant, appropriate and timely advice on hazards situations and instructions to be followed on an ongoing basis.</p> <p>4.2 Evacuation procedures for staff/customers are demonstrated and explained in accordance with workplace procedures.</p> <p>4.3 Customer service and safety needs arising from emergency situations are identified and acted upon in accordance with regulatory and workplace requirements.</p> <p>4.4 Work area communication activity is clear, unambiguous and uses appropriate procedures, language, and codes.</p>

Variable	Range
Emergency situations	May include: <ul style="list-style-type: none"> • chemical spills • fires • bomb threats • derailments • customer emergency
Workplaces	May comprise: <ul style="list-style-type: none"> • large, medium or small worksites
Work	May be conducted: <ul style="list-style-type: none"> • in a range of work environments • by day or night May be conducted in: <ul style="list-style-type: none"> • limited or restricted spaces • exposed conditions • controlled or open environments
Information/documents	May include: <ul style="list-style-type: none"> • relevant regulatory and/or code requirements for the management of emergencies • workplace procedures and policies for the management of emergencies including emergency response plan where applicable • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances, including the ADG Code and Railways of Ethiopia Code of Practices and Conditions for the Carriage of Dangerous Goods • operations manuals, job specifications and induction documentation including first aid manual • manufacturers specifications for equipment

	<ul style="list-style-type: none"> • dangerous goods declarations and material safety data sheets (where applicable) • award, enterprise bargaining agreement, and other industrial arrangements • relevant Ethiopia standards and certification requirements • quality assurance and emergency procedures
Personal protective equipment	<p>May include:</p> <ul style="list-style-type: none"> • gloves • safety headwear and footwear • safety glasses • two-way radios and high visibility clothing
Workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational and established procedures
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> • relevant state/territory regulations, codes of practice and safe working system requirements for management of emergencies • the Code of Practice for the Defined Interstate Rail Network in situations where emergencies occur on that network • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances, including: <ul style="list-style-type: none"> • Ethiopia and International Dangerous Goods Codes • Ethiopia and International Explosives Codes • Railways of Ethiopia Code of Practices and Conditions for the Carriage of Dangerous Goods • relevant state/territory OHS and environmental protection legislation • workplace relations regulations • workers compensation regulations
Customers	May be internal or external
Hazards in the work area	<p>May include exposure to:</p> <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods, materials and vehicular traffic
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems, oral, aural or signed communications
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • other employees, supervisors and managers

	<ul style="list-style-type: none"> • affected customers • official representatives • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists
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Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Respond to emergency situations • Take required action during an emergency • Arrange follow-on support and assistance • Communicate with staff
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • Ethiopia codes of practice, regulations and safe working systems relevant to the management of emergencies, including the Ethiopia Dangerous Goods Code and any applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies for the management of emergencies, including the elements of an emergency response plan and first aid procedures where applicable • Focus of operation of work systems, equipment, management and site operating systems for the management of emergencies • Problems that may occur when managing emergencies and appropriate action that can be taken to resolve the problems • Documentation and reporting requirements for the management of emergencies • Hazards that may occur in transport and allied industries that can lead to emergency situations, and related hazard control strategies, including: handling hot food and equipment; sudden and unexpected movement; infectious and contagious diseases; self-closing doors; sharp objects; syringes and drugs; contact with human and biological waste; fire and explosion; collision; derailment of trains; handling, storage and carriage of dangerous goods and other hazardous substances; and the handling, storage and carriage of explosives • Data collection and analysis techniques required when managing emergencies
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • Communicate effectively with others when managing emergency situations

	<ul style="list-style-type: none"> • Read and interpret instructions, procedures, information and signs relevant to the management of emergency situations • Interpret and follow operational instructions and prioritise work • Conduct interviews and take statements • Complete documentation related to the management of emergency situations • Prepare reports and recommendations • Operate electronic communication equipment to required protocol • Work collaboratively with others when managing emergency situations • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems that may arise when managing emergency situations in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated developments that may occur when managing emergency situations • Follow emergency response plan and procedures • Apply precautions and required action to minimise, control or eliminate hazards that may exist during emergency situations • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Apply fatigue management knowledge and techniques • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant computer/communication/office equipment required when managing emergencies • Operate and adapt to differences in equipment in accordance with standard operating procedures • Select and use required personal protective equipment conforming to industry and OHS standards
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage a Supply Chain
Unit Code	EIS ROM5 07 0313
Unit Descriptor	This unit involves the skills and knowledge required to manage a supply chain, including the relationships between an organization and its supply and demand partners along the chain. It covers implementing a demand-driven supply chain management strategy, managing the supply chain, and evaluating and improving supply chain effectiveness.

Elements	Performance Criteria
1. Implement demand-driven supply chain management strategy	<p>1.1 Responsibility for supply chain management within the organization is assigned in accordance with supply chain management strategy.</p> <p>1.2 Technology and software for implementation of the supply chain management system is accessed and operationalized within the requirements of the strategy and budgetary allocation.</p> <p>1.3 Policies and procedures are designed to guide business relations and operations in accordance with the strategy.</p> <p>1.4 Supporting business processes are designed or re-designed to support implementation of the strategy.</p> <p>1.5 Support is provided to staff, customers and supply chain to assist in implementation of the supply chain management strategy.</p> <p>1.6 Conflict resolution is inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p> <p>1.7 Access and follow demand-driven supply chain producers and polices correctly and consistently according to organization and legal requiems.</p>
2. Manage supply chain	<p>2.1 Communication and information exchange with strategic partners and suppliers is managed in accordance with the supply chain management strategy.</p> <p>2.2 Collaboration with supply chain organizations is facilitated to determine demand at each level of the supply chain in accordance with the supply chain management strategy.</p> <p>2.3 Sales and payments are managed in accordance with supply chain and risk management strategies, and legal and ethical requirements.</p> <p>2.4 Actions to build trust and foster a supply chain culture are implemented in accordance with the supply chain management strategy.</p>

	2.5 Opportunities are identified to adjust policies and procedures to respond to the changing needs of customers, supply chain and the organization.
3. Evaluate and improve supply chain effectiveness	<p>3.1 Demand chain management and supply chain management are monitored in accordance with the supply chain management strategy.</p> <p>3.2 The effectiveness of the supply chain is reviewed with each level of the supply chain, including staff and customers and areas identified for improvement.</p> <p>3.3 Business data and reports are used to compare outcomes, budgets, timelines and forecasts to actual performance.</p> <p>3.4 Technology performance is reviewed and recommendations are made for improvements to hardware, software and/or their use in accordance with strategy and budget.</p> <p>3.5 Feedback and evaluation results are used to plan and improve future supply chain management strategies.</p> <p>3.6 Documentation is filed and distributed to all relevant parties for consideration and subsequent action.</p>

Variable	Range
Improvements in the supply chain	<p>May include:</p> <ul style="list-style-type: none"> the role of 'middlemen' or other middle supply chain elements being reduced or made redundant as newer more efficient supply chain methodologies and technologies are implemented new value being created between producers and consumers
Supporting business processes	<p>May include:</p> <ul style="list-style-type: none"> data input administration ordering delivering and receiving accounting and payments
Support to staff and others	<p>May include:</p> <ul style="list-style-type: none"> policies, procedures and guidelines intranet site information workshops, briefings and training programs written documentation in the form of manuals, help books, protocols provision of a help-desk or contact persons mentoring and coaching arrangements
Applicable legislation and regulations	<p>May include:</p> <ul style="list-style-type: none"> relevant industry codes of practice relevant Ethiopian and state/territory regulations and codes of practice

	<ul style="list-style-type: none"> workplace relations regulations Sale of Goods Act, Trade Practices Act relevant legislation related to the importation of commodities, if relevant
Depending on the organisation concerned, workplace procedures	<p>May be called:</p> <ul style="list-style-type: none"> Standard Operating Procedures (SOPs) company procedures enterprise procedures organisational procedures established procedures
Demand chain management is:	<p>May be:</p> <ul style="list-style-type: none"> a collaborative process that involves determining how much product needs to be produced at each level of the supply chain through to the end consumer
Supply chain management	Is a management of the entire cycle from raw materials to producers, component suppliers, manufacturers, wholesalers, third party service providers, retailers, customers and recyclers, plus freight, distribution and cash flow
Documentation and records	<p>May include:</p> <ul style="list-style-type: none"> relevant OHS and environmental protection regulations quality assurance procedures documentation of policies and procedures associated with managing the supply chain strategy within the organisation dangerous goods declarations and material safety data sheets, where applicable goods manifest relevant Ethiopian Standards and certification requirements

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> Implement demand-driven supply chain management strategy Manage supply chain Evaluate and improve supply chain effectiveness
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> Legislation, codes of practice and national and international standards, for example Trade Practices Act, Sale of Goods Act and contract law Specific OHS issues relevant to goods and services purchased Legislation related to importation of commodities, if relevant Organisation policies and procedures related to supply chain management, purchasing, and contracting and tendering Business terms and conditions for purchasing, tendering and contracting Ethical behaviour

	<ul style="list-style-type: none"> • Product knowledge related to goods and services required by the organisation • Ways to build trust and collaboration as opposed to competition • Procedures for operating electronic communications equipment • Requirements for completing relevant documentation
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Negotiate and liaise with suppliers and relevant stakeholders using verbal skills • Use policy development and implementation support skills • Use appropriate technology, including software • Work with attention to detail and thoroughness • Focus on the customer • Work collaboratively with others • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Implement contingency plans for unplanned events such as problems arising during the implementation and management of the supply chain
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 accessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Maintain, Monitor and Improve Transport Operations Systems
Unit Code	EIS ROM5 08 0313
Unit Descriptor	This unit involves the skills and knowledge required to maintain, monitor and improve an enterprise's transport operations systems. It includes identifying systems involved with operations; overseeing safe and effective operations systems; and reviewing the overall efficiency of those systems.

Elements	Performance Criteria
1. Identify systems involved with operation	<p>1.1 Systems involved with enterprise transport operations are identified.</p> <p>1.2 Relevant safety and efficiency issues regarding operations systems are identified.</p> <p>1.3 Monitoring and maintenance shifting producers and polices are accessed and followed correctly and consistently according to organization and legal requiemis.</p> <p>1.4 Different organization can be involved for consultancy.</p>
2. Oversee conditions required for safe and effective operations systems	<p>2.1 Procedures are implemented for improvement of enterprise operations systems.</p> <p>2.2 Communication changes caused by improvements in operation systems are identified relevant personnel.</p> <p>2.3 Supervision are allocated according to the skill level and job role of the team member.</p> <p>2.4 Appropriate management systems are utilized to oversee operating systems.</p> <p>2.5 Maintenance problem resolution is inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p>
3. Review overall efficiency of transport operation systems	<p>3.1 Procedures are reviewed for improvement of enterprise operations systems and appropriate action taken where necessary.</p> <p>3.2 Team members are provided with regular feedback on their work output in accordance with organizational requirements.</p>

Variable	Range
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • other employees and supervisors • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists

Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems • oral, aural or signed communications
Applicable legislation and regulations	<p>May include:</p> <ul style="list-style-type: none"> • workplace relations regulations • transport regulations, particularly as they apply to the monitoring of operations systems
Documentation and records	<p>May include:</p> <ul style="list-style-type: none"> • records of transport operations, including those in relation to time, quality or cost • relevant OHS and environmental protection regulations • reports of transport activities • emergency procedures • relevant Ethiopian Standards and certification requirements

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Identify systems involved with operation • Oversee conditions required for safe and effective operations systems • Review overall efficiency of transport operation systems
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Relevant sections of national and state or territory regulatory requirements and codes of practice • Relevant OHS and environmental procedures and regulations • Requirements for completing relevant documentation • Code of practice for working collaboratively with others • Principles, purpose and location of controls, monitoring devices, and systems • Steps involved in planning the work activities • Procedures for adjusting controls to optimise the operation of the equipment • Procedures to be followed in the event of an emergency
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when maintaining, monitoring and improving transport operations systems • Read and interpret instructions, procedures, information and signs relevant to work activities • Complete documentation related to work activities • Operate electronic communication equipment to required protocol • Work collaboratively with others

	<ul style="list-style-type: none"> • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Implement contingency plans for unplanned events • Modify activities depending on differing operational contingencies, risk situations and environments • Monitor work activities in terms of planned schedule • Apply fatigue management knowledge and techniques • Adapt to differences in equipment and related standard operating and servicing procedures
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Plan and Manage Security Procedures for the Enterprise
Unit Code	EIS ROM5 09 0313
Unit Descriptor	This unit involves the skills and knowledge required to plan and manage security procedures for the workplace in accordance with relevant regulatory requirements and workplace procedures, including assessing security risks, specifying security requirements, implementing the security plan, and monitoring and reviewing the system performance.

Elements	Performance Criteria
1. Assess security risks	<p>1.1 Records of security breaches, thefts and damage are reviewed to identify past security incidents.</p> <p>1.2 Assessment of potential risks to the security of stock, personnel, facilities, information and equipment are made, considering both internal and external factors.</p> <p>1.3 Relative risks from a range of sources are assessed and compared with existing security measures.</p> <p>1.4 Discrepancies between identified risk and current security processes are noted.</p>
2. Specify security requirements	<p>2.1 Decisions and adjustments to security equipment, facilities and services are made based on risk assessment in relation to benefits to the organization.</p> <p>2.2 Security organizational arrangements are documented and implementation strategies are established.</p> <p>2.3 A finalized security plan including performance indicators is prepared in accordance with workplace requirements and circulated for feedback prior to implementation.</p> <p>2.4 Questions and feedback from stakeholders are responded to promptly and, where appropriate, incorporated in the plan.</p>
3. Implement security plan	<p>3.1 Priorities for implementation are identified and management and workplace personnel are informed.</p> <p>3.2 Competency needs for the work is identified and staff allocated and/or trained and assessed to meet those needs.</p> <p>3.3 Equipment and facilities are allocated and/or obtained.</p> <p>3.4 Workplace personnel and equipment are organized to meet requirements ensuring that work loads are balanced and other workplace activities are met.</p> <p>3.5 Workplace security codes /policies and procedures are amended and trialed to improve performance.</p>

	3.6 Operation procedures and methods are explained to workplace personnel and follow-up communication methods are used to ensure that work place environment requirements are applied.
4. Monitor and review system performance	<p>4.1 Security reports are collated and categorized.</p> <p>4.2 Reports are compared to identify any trends in breaches.</p> <p>4.3 Security coding /procedures are modified to rectify any gaps identified.</p> <p>4.4 Communication changes caused by improvements in operation systems to relevant personnel.</p> <p>4.5 The organizational security should be inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p> <p>4.6 Different organization can be involved for consultancy.</p>

Variable	Range		
Regular insurance assessments	May include: <ul style="list-style-type: none"> • conditions of insurance • insurance assessment of premises • monitoring insurance requirements 		
Work organisation procedures and practices	May include: <ul style="list-style-type: none"> • financial/administrative procedures • security procedures 		
Documentation/records	May include: <ul style="list-style-type: none"> • codes of practice and regulations relevant to the planning and management of security procedures • workplace security procedures and policies • insurance notes and information • documentation of physical protection facilities • security programs operations manuals, job specifications and procedures and induction documentation • supplier and/or client instructions • Ethiopia and International standards, criteria and certification requirements • communications technology equipment and/or oral, aural or signed communications • quality assurance standards and procedures • emergency procedures • relevant competency standards and training materials • QA plans, data and document control • conditions of service, legislation and industrial agreements including workplace agreements and awards 		
Work may be undertaken:	in various work environments in the warehousing, storage, transport and distribution industries		
Workplace procedures	May include: <ul style="list-style-type: none"> • company procedures 		
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	<ul style="list-style-type: none"> • enterprise procedures • organisational procedures • established procedures
Security coding for the identification of assets	<p>May include:</p> <ul style="list-style-type: none"> • stock takes • assets register (coded and labelled)
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> • by day or night
The workplace environment	<p>May involve:</p> <ul style="list-style-type: none"> • twenty-four hour operation • single and multi-site location • large, medium and small workplaces
Security	<p>May be provided:</p> <ul style="list-style-type: none"> • by internal or contract staff
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • mobile and fixed phones • radio • oral, aural or signed communications • fax • email • electronic data transfer of information • mail
Applicable legislation and regulations	<p>May include:</p> <ul style="list-style-type: none"> • regulations and codes of practice relevant to the planning and management of security procedures • relevant Ethiopia Standards and certification requirements • relevant state/territory OHS and environmental protection legislation in terms of duties of employers, employees, suppliers and contractors • licence, patent or copyright arrangements • relevant workplace relations legislation • relevant workers compensation legislation • equal opportunity, equal employment opportunity and affirmative action legislation
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • internal and contract security staff • police • security consultants • relevant authorities, government departments and institutions • other employees and supervisors • management • industrial relations and OHS specialists • other professional or technical staff
Customers	<p>May be:</p> <ul style="list-style-type: none"> • internal or external

Evidence Guide			
Critical Aspects of Competence	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Assess security risks • Specify security requirements • Implement security plan • Monitor and review system performance 		
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • Regulations, codes of practice and legislative requirements relevant to the planning and management of security procedures within a workplace • Relevant OHS and environmental protection procedures and regulations • Workplace procedures for the planning and management of security procedures • Problems that may occur during the planning and management of security procedures for transport and logistics enterprises and action that can be taken to resolve the problems • Risks and hazards related to the planning and management of security procedures and ways of controlling the risks involved • Business policies for security provision, including outsourcing of components of operations and engaging additional resources • Focus of operation of security systems, resources, management and workplace operating systems • Transport and equipment applications, capacities, configurations, safety hazards and control mechanisms • Regulatory, licence and permit requirements relevant to security procedures • Relevant Ethiopian Standards and certification requirements • Workplace policies including issue resolution and grievance procedures • Resource availability including the competencies of individuals in the team/group • The application of current competencies within functional activity • Relevant workplace documentation procedures 		
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • Communicate effectively with others when planning and managing security procedures for transport and logistics enterprises • Read and interpret instructions, procedures, operational data and regulatory requirements relevant to the planning and management of security procedures for transport and logistics enterprises and convey that information to team members 		
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	<ul style="list-style-type: none"> • Complete documentation and records related to the planning and management of security procedures for transport and distribution enterprises • Provide leadership and work collaboratively with others when planning and managing security procedures for transport and distribution enterprises • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems that may arise when planning and managing security procedures for transport and distribution enterprises in accordance with regulatory requirements and workplace procedures • Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities • Plan and organise systems and activities, and prioritise work • Implement contingency plans for unplanned events which may include a breach of the security procedures • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and apply appropriate technology, information systems and procedures • Adapt to differences in equipment in accordance with standard operating procedures
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage Assets
Unit Code	EIS ROM5 10 0313
Unit Descriptor	This unit involves the skills and knowledge required to manage assets. It includes determining asset classification and identification; recording and valuing assets; and maintaining an asset management system.

Elements	Performance Criteria
1. Determine asset classification and identification	<p>1.1 Asset register format is determined on the basis of current needs and business plan in accordance with company requirements.</p> <p>1.2 A compatible classification system that meets asset accounting and asset management needs is selected in accordance with company requirements.</p> <p>1.3 Value thresholds are determined for assets to be recorded in the asset register in accordance with company requirements.</p> <p>1.4 Different organization can be involved for consultancy.</p>
2. Record and value assets	<p>2.1 Specified details of all material assets are identified and recorded in accordance with the asset management policies and procedures.</p> <p>2.2 All assets are recorded in compliance with legislative and company requirements.</p> <p>2.3 Condition of each asset is determined in accordance with manufacturers' specifications and legislative and company requirements.</p> <p>2.4 Useful/residual life of each asset is determined in accordance with manufacturers' specifications and company requirements.</p> <p>2.5 Current value of each asset is calculated based on valid and reliable information in accordance with legislative and company requirements.</p> <p>2.6 Conflict asset resolution is inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p>
3. Maintain asset management system	<p>3.1 Records are updated continuously to record asset purchases, loss, damage or disposal in accordance with organization requirements.</p> <p>3.2 Periodic audits are conducted to ensure accuracy of asset register in accordance with company requirements.</p> <p>3.3 Asset management system is reviewed periodically to ensure it is supporting business needs in accordance with company requirements.</p>

	3.4 Training is provided to support effective management and maintenance of the asset register in accordance with company requirements.
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Variable	Range
Asset register	May be a computer or manual file and include: <ul style="list-style-type: none"> • damage/loss/theft • date of purchase • identifying number • insurance policies and claims • invoices and receipts • location • major repairs • obsolescence • value
Assets	May include: <ul style="list-style-type: none"> • buildings • business and marketing contracts • assets in the process of being transferred • land • office equipment and furniture • plant and equipment • vehicles • facilities
Consultative processes	May involve: <ul style="list-style-type: none"> • other employees and supervisors • suppliers • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists
Documentation and records	May include: <ul style="list-style-type: none"> • lists of assets and or asset registers • regulations and codes of practice relevant to ADG code, including safe working and local authority regulations and procedures • workplace policies and procedures related to ADG code • relevant Ethiopia Standards and certification requirements
Applicable legislation and regulations	May include: <ul style="list-style-type: none"> • relevant regulations, codes and safe working systems for the use and checking of assets • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances • relevant state/territory OHS and environmental protection legislation • workplace relations regulations
Workplace procedures	May be called: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs)

	<ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
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Evidence Guide	
Critical Aspects of Competence	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Determine asset classification and identification • Record and value assets • Maintain asset management system
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • Relevant sections of national and state or territory regulatory requirements and codes of practice • Relevant OHS and environmental procedures and regulations • Different types of asset management systems and their strengths and weaknesses • Types of valuation methodologies and their usefulness in different contexts • Requirements for completing relevant documentation such as asset registers • Code of practice for working collaboratively with others
Underpinning Skills	Demonstrates skills to: <ul style="list-style-type: none"> • Communicate effectively with others when managing assets • Read and interpret instructions, procedures, information and signs relevant to the management of assets • Interpret and follow operational instructions and prioritise work • Complete documentation related to the management of assets • Work collaboratively with others • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Implement contingency plans for unplanned events • Modify activities depending on differing operational contingencies, risk situations and environments • Use financial management skills sufficient to enable accurate recording of asset data
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Develop, Implement and Review Purchasing Strategies
Unit Code	EIS ROM5 11 0313
Unit Descriptor	This unit involves the skills and knowledge required to develop, implement and review an organization's purchasing strategies. It includes determining, developing and implementing purchasing strategies, evaluating these and implementing improvements.

Elements	Performance Criteria
1. Determine purchasing objectives	<p>1.1 Industry benchmarks for purchasing are researched and analyzed for suitability to organization.</p> <p>1.2 Organization's purchasing data and information is analyzed.</p> <p>1.3 Consultations are undertaken with relevant stakeholders and personnel to inform development of purchasing objectives.</p> <p>1.4 Purchasing objectives are drafted in line with organization's goals.</p> <p>1.5 Approval is gained from relevant personnel for purchasing objectives.</p>
2. Develop purchasing strategies	<p>2.1 Purchasing strategies are developed, taking into account legal requirements and purchasing objectives.</p> <p>2.2 Purchasing criteria that include the five rights is used.</p> <p>2.3 Human resource, financial and other plans are developed to implement purchasing strategies.</p> <p>2.4 Approval is gained for plans to implement purchasing strategies.</p> <p>2.5 Changes resulting from approval process are made to plans and strategies, as required.</p>
3. Implement purchasing strategies	<p>3.1 Purchasing strategies are communicated to relevant personnel and stakeholders.</p> <p>3.2 Resources needed to implement purchasing strategies are accessed.</p> <p>3.3 Support is provided to implement purchasing strategies.</p> <p>3.4 Implementation of purchasing strategies by the organization is monitored.</p> <p>3.5 Problems and issues arising during implementation are identified and addressed.</p> <p>3.6 Reports are provided to relevant personnel and stakeholders on implementation of purchasing strategies.</p>

4. Evaluate purchasing strategies and implement improvements	<p>4.1 Implementation of purchasing strategies is reviewed.</p> <p>4.2 Improvements to purchasing strategies are identified from review process.</p> <p>4.3 Approval is gained to implement improvements to purchasing strategies.</p> <p>4.4 Improvements are communicated to relevant stakeholders and support is provided to implement improvements.</p> <p>4.5 Implementation of improvements is monitored and reviewed to determine effectiveness of improvements.</p> <p>4.6 Documentation is filed and distributed to all relevant parties for consideration and subsequent action.</p> <p>4.7 Purchasing Strategies should be inspected and checked in accordance with relevant regulations and legislations/permit requirements.</p>
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Variable	Range
Depending on the organisation concerned, workplace procedures	<p>May be called:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • company procedures • enterprise procedures • organisational procedures • established procedures
Further information	<p>May include:</p> <ul style="list-style-type: none"> • training programs • written information including procedures and internet or intranet-based information • information sessions and briefings
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • other employees and supervisors • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists
Purchasing strategies	<p>Include:</p> <ul style="list-style-type: none"> • policies, procedures, guidelines and documentation formats for purchasing from suppliers including entities owned by the organisation, partners, alliance members and local and distant suppliers • criteria for evaluating purchasing performance • methodology for evaluating purchasing performance • key performance indicators for purchasing • different policies, procedures and strategies for different dollar values of purchases • limits of authority to approve purchases • requirements for fairness and transparency in purchasing • organisational and industry codes of conduct and ethics

Legal requirements	<p>May include issues in relation to:</p> <ul style="list-style-type: none"> • access and equity • codes of practice • data collection, storage and retrieval • ethical conduct and governance • industrial relations • insurance • accreditation, licence, patent and copyright • operation, maintenance and service of tools, equipment, plant and machinery • occupational health and safety • planning • privacy and confidentiality • professional development • standards (Ethiopian and international) • warranties
The five rights are:	<p>Right supplier:</p> <ul style="list-style-type: none"> • due diligence requirements • demonstrable expertise and experience • evidence of past legal compliance • ethical conduct requirements • requirements to use organizations linked by ownership, partnership, alliance or other arrangements <p>Right price:</p> <ul style="list-style-type: none"> • value-for-money • cost/price analysis <p>Right quantity:</p> <ul style="list-style-type: none"> • supply guarantees <p>Right quality:</p> <ul style="list-style-type: none"> • confidentiality and probity requirements • measures to manage risk • key performance indicators • quality accreditation <p>Right time:</p> <ul style="list-style-type: none"> • supply guarantees
Resources	<p>include:</p> <ul style="list-style-type: none"> • human, physical and other resources such as: • software systems • staff to undertake or assist with purchasing • documentation required for purchasing, such as proformas, order forms, standard tender documentation and basic standard contracts
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet

	<ul style="list-style-type: none"> • RF systems • oral, aural or signed communications
Relevant personnel	<p>May include:</p> <ul style="list-style-type: none"> • internal users of purchased goods and services • owner and Board • CEO, managers, leaders, coordinators, supervisors and other persons authorised to commit the organisation to purchases • specialist personnel involved in purchasing, asset maintenance and finance
Relevant stakeholders	<p>May include:</p> <ul style="list-style-type: none"> • clients and customers • tenderers, suppliers and contractors
Documentation and records	<p>May include:</p> <ul style="list-style-type: none"> • relevant workplace policies, procedures and codes of conduct relating to purchasing and business management • relevant OHS and environmental protection regulations • quality assurance procedures • operations manuals, job specifications and induction documentation • relevant Ethiopian Standards
Applicable legislation and regulations	<p>May include:</p> <ul style="list-style-type: none"> • relevant legislation from all levels of government that affects business operation • relevant industry codes of practice • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances • relevant state/territory OHS and environmental protection legislation • workplace relations regulations • award and enterprise agreements and relevant industrial instruments

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Determine purchasing objectives • Develop purchasing strategies • Implement purchasing strategies • Evaluate purchasing strategies and implement improvements
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Legislation, codes of practice, national and international standards, for example Trade Practices Act, contract law, sale of goods legislation, and legislation related to the import of goods and services, if relevant • Occupational Health and Safety (OHS) issues relevant to goods and services purchased by the organisation

	<ul style="list-style-type: none"> • Organisation policies and procedures related to purchasing; contracting and tendering; business terms and conditions for purchasing, tendering and contracting; and ethical behaviour • Product knowledge related to goods and services required by the organisation • Information about industry benchmarks for purchasing, including information from peak bodies and industry associations and Ethiopia Standards
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when developing, implementing and reviewing purchasing strategies, including consulting and negotiating with stakeholders, using writing skills to document policies and procedures, and supporting staff to implement strategies • Read and interpret instructions, procedures and information relevant to work activities • Prepare reports appropriate to the development, implementation and review of purchasing strategies • Plan and prioritise work activities and research and analyse data • Develop human resource, financial and other plans when developing, implementing and reviewing purchasing strategies • Use monitoring, review and evaluation skills when developing, implementing and reviewing purchasing strategies • Identify and address any problems relating to the development, implementation and review of purchasing strategies • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interaction with others
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 accessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage and Monitor Technical Data and Information Systems
Unit Code	EIS ROM5 12 0313
Unit Descriptor	This unit involves the skills and knowledge required to manage and monitor all technical data and information creation, capture, use and monitoring activities within the data management system. This competency occurs with the system framework established by others. It may also be used to review these processes and activities.

Elements	Performance Criteria
1. Designate detailed technical data and information use, and maintenance responsibilities	<p>1.1 Responsibilities for technical data and information use and maintenance activities are designated to staff in accordance with approved system framework, organizational policy and the abilities of individual staff.</p> <p>1.2 Rules for the operation of the system are devised in compliance with approved systems framework.</p> <p>1.3 Resources for approved budget period are allocated in accordance with policy and the strategic plan.</p>
2. Develop key performance indicators for technical data management activities	<p>2.1 Measurable performance indicators are developed for technical data management activities in accordance with the authorized systems.</p> <p>2.2 Data management responsibilities of individual personnel/organizational units are identified and documented.</p> <p>2.3 Acceptable range of variation for compliance is determined based upon data management responsibilities, applicable data management system and organization's risk management analysis.</p>
3. Develop monitoring methodology	<p>3.1 Methodology for monitoring the technical data management system's rules, standards and procedures is developed based upon authorized systems.</p> <p>3.2 Methodology developed includes timeframes involved, means of surveillance and form of reporting.</p> <p>3.3 Methodology, performance criteria and the ranges of variation from the standards and rules are submitted to appropriate authority for approval.</p>
4. Monitor a technical data management system	<p>4.1 Monitoring is undertaken in accordance with approved timeframes and frequency.</p> <p>4.2 Staff being monitored are notified in accordance with organizational policy and guidelines, where applicable.</p> <p>4.3 Any variation from data management system's framework, rule, standards and procedures that exceed the agreed limit is noted and details of the situation are recorded.</p>

	4.4 Where required, reports are provided to appropriate authority relating to technical data and information use and maintenance, and are in the required format, at the required intervals.
5. Identify and respond to problems and changes	<p>5.1 Problems and changes requiring a systematic response are identified from monitoring reports and external events.</p> <p>5.2 Recommendations are made for revisions to systems, procedures, and future (strategic) plans in response to identified variations, changes and problems.</p> <p>5.3 Amendments to systems are devised and implementation is planned, in response to problems and changes that require a systemic response.</p> <p>5.4 Recommendations for system amendments and the planning and implementation required are prepared, and approval is sought from appropriate authority.</p> <p>5.5 Procedures for using technical data and information systems, and subsequent alterations and amendments to the procedures are authorized, ensuring that performance indicator parameters and access rules are adhered to.</p>
6. Designate technical data and information creation and capture responsibilities	<p>6.1 Responsibilities for technical data and information creation and capture activities are designated to staff in accordance with organizational policy.</p> <p>6.2 Technical data and information creation and capture performance targets are set within the parameters of the technical data management plan.</p> <p>6.3 Resources for the budget period are allocated in accordance with organizational policy and strategic plan.</p>

Variable	Range
Technical data and information	<p>May be:</p> <ul style="list-style-type: none"> • as specified and defined in the technical regulatory framework • included either explicitly or implicitly in the established system framework
Approved system framework	<ul style="list-style-type: none"> • is established by an approved authority and issued as the basis of all technical data and information management • contains: <ul style="list-style-type: none"> ➤ high level accountability and functional responsibilities ➤ high level control/management requirements and protocols ➤ key aspects of technical regulatory framework ➤ outline of the structuring rules for repositories, cataloguing systems, security access systems, processes and software ➤ protocols on functionality, maintainability and growth ➤ technical context and technologies/standards

Rules	<p>May include:</p> <ul style="list-style-type: none"> • allocating access/security status • capturing structural and contextual metadata • classifying and indexing items • generating and allocating unique identifiers to data items • identifying and recording disposal status items • identifying technical data and information creators • links between technical data and information items • locating and tracking items • naming/titling items • negotiating transfer of custody or ownership • recording the use of history of items 		
Measurable performance indicators	<p>May include:</p> <ul style="list-style-type: none"> • those developed for specific tasks • those incorporated in the data management system • performance indicators that relate to: <ul style="list-style-type: none"> • disposal (percentage of data, un sentenced data, overdue for disposal action, functions/data not covered by disposal schedules) • parameters for tracking of technical data and information • retrieval and access (security and access rules, response to request time limits, service levels for requests) 		
Data management responsibilities	<p>May include:</p> <ul style="list-style-type: none"> • established systems framework • organisation's responsibility and accountability analysis • system's rules, standards and procedures 		
Identified and documented	<p>may include:</p> <ul style="list-style-type: none"> • established systems framework • organisation's responsibility and accountability analysis • system's rules, standards and procedures 		
Variation	<p>May include:</p> <ul style="list-style-type: none"> • increases or decreases in the use of particular technologies/standards • variations from the data management system's performance or capacity • variations within the agreed limit but which are consistent 		
Monitoring	<p>May include:</p> <ul style="list-style-type: none"> • number of systems • single data management system 		
Appropriate authority	<p>May include:</p> <ul style="list-style-type: none"> • chief executive officer • delegated individual • external public authority • nominated senior management representative • senior management team • technical/engineering authority 		
Reports	<p>May include:</p> <ul style="list-style-type: none"> • technical data and information capture 		
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	<ul style="list-style-type: none"> • technical data and information compliance • technical data and information creation • technical data and information maintenance • technical data and information use
Problems and changes	<p>May include:</p> <ul style="list-style-type: none"> • changes in administrative changes to functions/activities • changes to organisational structures • legislative or technical regulatory changes • technological change and implementation
Systemic	<p>May include:</p> <ul style="list-style-type: none"> • current technical data management systems • technical systems (which generate technical data and information) • storage facilities systems • systemic changes which may include: <ul style="list-style-type: none"> ➤ amendment to the classification system ➤ bulk movement of technical data and information to control ➤ migration of systems ➤ new classification and control language ➤ new disposal classes or retention periods ➤ new organizational or business unit functions
Revisions	<p>May include:</p> <ul style="list-style-type: none"> • access rules and procedures • classification and indexing schemes • disposal schedules • storage projections and requirements • technical data and information specifications
Recommendations for system amendments	<p>May include:</p> <ul style="list-style-type: none"> • changes to/enforcement of procedures • counselling of non-conforming individuals/business units • disciplinary action
Means of surveillance	<p>May include:</p> <ul style="list-style-type: none"> • examination of results (technical data and information) • form/s of reporting • real-time observation (security of process) • statistical reports • selected snapshots of the system

Evidence Guide

Critical Aspects of Competence	<p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> • apply relevant implementation processes • monitor and report on implementation processes • analyze data and information • apply knowledge of technical data and information plans to assist in work and to guide problem solving • demonstrate understanding of personal role in relation to wider organizational or project context
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	<ul style="list-style-type: none"> Competency should be demonstrated over time and should be observed in a range of actual or simulated work contexts
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> Area of technical expertise Data management, standards, principles, process and functional requirements Details of the technical regulatory framework, organisation's engineering management plans and the technical data management plan Established communication channels and protocols Organisational functions, structure and culture Organisational policy, strategies and procedures Organisation's data management systems Organisation's rules for the capture of, access to, and use and maintenance of, technical data and information Organisation's technical classification scheme and language Problem identification and resolution Procedures for recording, reporting and maintaining workplace records and information Quality assurance principles and processes Work flow and business process re-engineering principles and practices
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> Apply technical data and information and project management knowledge to technical data and information systems Consult and negotiate effectively with key stakeholders (both internal and external) and resolve any potential areas of conflict or concern to ensure that overall technical data and information systems objectives are achieved Display resilience by continuing to move forward despite criticism or setbacks Identify the relationship between organisational goals and recognise how own work contributes to the achievement of those goals Implement processes to enable new technical data and information system requirements to be effectively transitioned across the life cycle - this includes integrated logistics support considerations, including environmental, sustainability issues, and validation and verification activities Monitor processes to ensure that the technical data and information systems continue to enable the operational requirements to be attained - this may include performance metrics

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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Organize Marshalling and Shunting Operations
Unit Code	EIS ROM5 13 0313
Unit Descriptor	This unit involves the skills and knowledge required to organize 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 work practices.</p> <p>1.2 Dangerous goods or other special transportation safety 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 Applicable procedures and codes include different things.</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 Resources required to carry out the marshalling strategy are identified.</p> <p>3.3 Appropriate motive power is determined to enable completion of shunting operations.</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 unplanned events is identified or prepared.</p> <p>3.6 Shunting and marshalling plan and train consist is documented, filed, and distributed in accordance with operational requirements.</p> <p>3.7 There are works to be done under different conditions.</p>

Variable	Range		
Safety requirements	May include: <ul style="list-style-type: none"> • high visibility clothing • sunscreen • insect repellent • safety mask • portable radios • gloves • sun glasses • safety headwear • safety footwear • hearing protection 		
Information/ documents	May include: <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • the Code of Practice for the Defined Interstate Rail Network in situations where marshalling operations are carried out on that network • order books • cards/deck sheets • notice boards • special train notices • yard orders • periodical circulars • transport authority rules and operating procedures • computer-based data systems • timetables • train consist • incident reports • drivers advice • train register book • safe working forms • dangerous goods manifests/declarations • conditions of service, legislation and industrial agreements including workplace agreements and awards 		
Workplace procedures	May include: <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational and established procedures 		
Applicable procedures and codes	May include: <ul style="list-style-type: none"> • relevant state/territory regulations, codes of practice and safe working system requirements • the Code of Practice for the Defined Interstate Rail Network in situations where marshalling/shunting operations are carried out on that network 		
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	<ul style="list-style-type: none"> • relevant Ethiopian Standards and related requirements • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation • ADG Code
Resources	<p>May include:</p> <ul style="list-style-type: none"> • motor vehicles • fixed signals • draw gear motive power units • rail tractors rolling stock • communication equipment • switching equipment • freight handling equipment • turntables
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> • by day or night • all relevant weather conditions
Unplanned events	<p>May involve:</p> <ul style="list-style-type: none"> • derailments • breakdowns • injuries and fatalities • hazardous materials, spills, fires and leaks • track damage • power line damage
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> • restricted spaces • exposed conditions • controlled or open environments <p>May involve exposure to:</p> <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods and vehicles
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • workplace personnel including supervisors and managers • other professional or technical staff

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Identify marshalling and shunting requirements • Identify required rolling stock movements • Plan rolling stock movements
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental procedures and regulations including codes of practice for manual handling • Dangerous Goods Codes and regulations

	<ul style="list-style-type: none"> • Marshalling plan and instructions • Procedures for loading and unloading rolling stock • Procedures for getting on and off rolling stock in an appropriate manner • Procedures for coupling and uncoupling rolling stock • Procedures for operating points and signals • Procedures for managing hazardous situations • Radio communication protocol • Rostering procedures • Characteristics and features of wagons and other rolling stock • Loading and unloading facilities • Yard features and operation • Principles of operation of protective devices, air brakes, handbrakes, derailleurs • Location of signals and points • Local track and signal layouts • Draw gear capacities and related operating procedures • Safe working systems and requirements • Shunting signals and commands and communication systems • Timetables and destination information • Relevant documentation requirements
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate and negotiate effectively with others when organising marshalling and shunting operations • Read and interpret instructions, procedures and information relevant to the organisation of marshalling and shunting operations • Interpret and follow operational instructions and prioritise work • Complete documentation related to the organisation of marshalling and shunting operations • Operate electronic communication equipment to required protocol • Work collaboratively with others when organising marshalling and shunting operations • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • 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 • Implement contingency plans for unanticipated situations that may arise when organising marshalling and shunting operations

	<ul style="list-style-type: none"> • Apply precautions and required action to minimise, control or eliminate hazards that may exist during marshalling and shunting operations • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Apply fatigue management knowledge and techniques • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant computing and communications and other relevant equipment and materials when organising marshalling and shunting operations • Adapt to differences in rolling stock and equipment in accordance with standard operating procedures • Select and use required personal protective equipment conforming to industry and OHS standards
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Plan and Control Daily Train Operations
Unit Code	EIS ROM5 14 0313
Unit Descriptor	This unit involves the skills and knowledge required to plan and control daily train operations in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes developing a daily train plan, implementing daily train movements, monitoring the daily train plan, and maintaining all required documentation and workplace procedures.

Elements	Performance Criteria
1. Develop daily train plan	<p>1.1 The status of current daily train plan is established based on the proposed track movements, and possessions.</p> <p>1.2 The current plan is amended if appropriate, to accommodate planned transportation movements priorities.</p> <p>1.3 Contingency plans are developed to cater for unplanned events following company procedures.</p> <p>1.4 Information relating to transportation movement within the area of movement is collated and analyzed.</p> <p>1.5 Safe working standards, circulars, faxes and special train notices are checked for application according to workplace procedures.</p> <p>1.6 Resource availability to accommodate planned transportation movements in daily plan and contingency plan is identified and resources are allocated according to workplace procedures.</p> <p>1.7 Workplaces operational management system information is reviewed against observed status stock in accordance with workplace procedures.</p>
2. Implement daily train movements	<p>2.1 Required authorities and instructions are prepared and issued in accordance with plan.</p> <p>2.2 Traffic movements are directed to ensure optimum running according to train plan and workplace procedures.</p> <p>2.3 Resource movements are coordinated according to train plan and workplace procedures.</p> <p>2.4 Contingency strategy for unplanned events is identified or prepared.</p> <p>2.5 There are works to be done under different conditions.</p> <p>2.6 Work area communication activity is clear, unambiguous and uses applicable procedures and codes, language, and codes.</p>

	2.7 Internal and external customers are consisting of different things are served.
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Variable	Range
Information/ documents	<p>May include:</p> <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • workplace procedures and job specification • induction and training materials • daily running records • incident reports • track possession information • electronic management systems • two-way radio operation procedures • local instructions • emergency procedures manual • equipment operations manuals • isolation and lock out procedures • track speed, length and load limitations information • conditions of service, legislation and industrial agreements including workplace agreements and awards
Resources	<p>May include:</p> <ul style="list-style-type: none"> • motive power units • train crews • alternative forms of transport • rolling stock • fuelling and servicing locations
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> • by day or night • in all relevant weather conditions
workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
Authorisations	<p>May include:</p> <ul style="list-style-type: none"> • safe working and track possession authorities
The control of train operations within the defined rail network of the workplace	<p>Embraces:</p> <ul style="list-style-type: none"> • the movement of trains • related operating personnel • track machines • alternate transport arrangements
Unplanned events	<p>May include:</p> <ul style="list-style-type: none"> • derailment • rail damage

	<ul style="list-style-type: none"> • illness • dangerous goods spillage • major equipment failure • fire • injury and fatality • earthworks • collisions • bomb threat • accidents • acts of nature • overhead line damage • out-of-course running • energy disruptions • flood • obstructions • bridge damage • explosions
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> • restricted spaces • exposed conditions • controlled or open environments <p>May involve exposure to:</p> <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods and vehicles
Communication forms	<p>May include:</p> <ul style="list-style-type: none"> • telephones • radio network • designated software and computer systems • facsimile • written notices • oral and signed communications and forms
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> • relevant state/territory codes of practice and safe working system requirements • relevant Ethiopian Standards • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation
Internal customers	<p>May include:</p> <ul style="list-style-type: none"> • train crews • resource controllers • area controllers/signallers • workplace's emergency services • yard and station staff • crew transport service • engineering groups • train crewing personnel

	<ul style="list-style-type: none"> • adjacent control areas • business groups within the workplace
External customers	<p>May include:</p> <ul style="list-style-type: none"> • business groups • private rail operators • contracted companies • general public • public emergency services • Interstate rail groups.

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Develop daily train plan • Implement daily train movements
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental procedures and regulations including codes of practice for manual handling • Workplace procedures for the planning and control of train operations, including: office and customer service, rostering, radio communication, completing relevant documentation, and procedures to be followed in the event of an emergency • Train control diagrams and graphing • Timetabling principles • System limitations • Safe working systems and requirements • Rail system geography • Yards, depots and station workings • Restrictions relating to loads and conditions • Draw gear capacities • Operations coordination system • Track characteristics and limitations • Train journey and Relevant documentation requirements
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when planning and controlling daily train operations • Read and interpret instructions, procedures, information and signs relevant to the planning and control of daily train operations • Interpret and follow operational instructions and prioritise work • Document train operations and incidents • Complete documentation or enter data related to the planning and control of daily train operations

	<ul style="list-style-type: none"> • Operate electronic communication equipment to required protocol • Work collaboratively with others when planning and controlling daily train operations • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when planning and controlling daily train operations in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated situations that may arise when planning and controlling daily train operations • Implement safe working systems when controlling train operations • Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities • Monitor journey schedule • Monitor work activities in terms of planned schedule • Monitor and anticipate operational hazards and take appropriate action • Modify activities depending on differing operational contingencies, risk situations and environments • Apply fatigue management knowledge and techniques • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant equipment and diagrams when planning and controlling daily train operations • Meet agreed workplace tolerances for train operations • Adapt to differences in equipment in accordance with standard operating procedures
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Organize Freight Yard Movement
Unit Code	EIS ROM5 15 0313
Unit Descriptor	This unit involves the skills and knowledge required to organize freight yard movement in accordance with regulatory and workplace requirements, including identifying loading/unloading requirements and priorities, and coordinating freight yard movement activities.

Elements	Performance Criteria
1. Identify loading/unloading requirements and priorities	<p>1.1 Freight movement requirements are identified using the freight load plan.</p> <p>1.2 Freight movement priorities are established in accordance with freight movement documentation/information , workplace policies and procedures.</p> <p>1.3 Freight movement timings and the availability of loading/unloading equipment are established using appropriate freight movement documentation and train schedules.</p> <p>1.4 There are works to be done under different conditions</p> <p>1.5 Work area communication activity is clear, unambiguous and uses appropriate procedures, language, and codes.</p> <p>1.6 Freight yard movement relocation should be checked to see that it meets work requirements, with any variance(s) reported.</p>
2. Coordinate freight yard movement activities	<p>2.1 Yard freight handling equipment is allocated to loading/unloading operations in line with identified priorities.</p> <p>2.2 Marshalling of rolling stock and movement of freight are coordinated to minimize time and potential damage in the freight transfer.</p> <p>2.3 Freight for delivery or collection is appropriately and clearly marked and placed in freight holding area according to workplace procedures.</p> <p>2.4 Conflict resolution is inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p> <p>2.5 Different organization can be involved for consultancy.</p> <p>2.6 According to the organization/company situation there is different workplace procedure.</p> <p>2.7 Personal protective equipment like safety glasses is used.</p>

Variable	Range
Information/ documents	<p>May include:</p> <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • workplace procedures and policies for the organisation of freight yard movements • freight documentation including cart notes, delivery notes, special clearances, consignment notes, dangerous goods certificates, authorised weighbridge certificates, list of contents • operations manuals, job specifications and induction documentation • manufacturers specifications and instructions for equipment use • conditions of service, award, enterprise bargaining agreement, and other industrial arrangements • relevant Ethiopia standards and certification requirements • quality assurance procedures • emergency procedures
Work	<p>May be conducted:</p> <ul style="list-style-type: none"> • in a range of work environments • by day or night <p>Conducted in:</p> <ul style="list-style-type: none"> • restricted spaces • exposed conditions • controlled or open environments <p>May involve exposure to:</p> <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods and vehicular traffic
Communication in the work area	<p>May include:</p> <ul style="list-style-type: none"> • phone • Electronic Data Interchange (EDI) • fax • email • internet • RF systems • oral, aural or signed communications
Freight handling equipment	<p>May include:</p> <ul style="list-style-type: none"> • all forms of freight handling equipment used by a rail organisation for the loading/unloading, lifting, moving or storage of freight, including mechanical lifting devices, forklifts and pallets
Freight	<p>May include:</p> <ul style="list-style-type: none"> • packages • luggage

	<ul style="list-style-type: none"> • bicycles • animals
Workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational and established procedures
Applicable regulations and legislation	<p>May include:</p> <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Ethiopia and international regulations and codes of practice for the transport of dangerous goods and hazardous substances, including: <ul style="list-style-type: none"> • Ethiopia and International Dangerous Goods Codes • Ethiopia and International Explosives Codes • relevant state/territory OHS and environmental protection legislation • workplace relations regulations including equal opportunity, equal employment opportunity and affirmative action legislation • workers compensation regulations
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> • other employees, supervisors and managers • customers and agents • official representatives • relevant authorities and institutions • management and union representatives • industrial relations and OHS specialists
Personal protective equipment	<p>May include:</p> <ul style="list-style-type: none"> • gloves • safety headwear and footwear • safety glasses • two-way radios and high visibility clothing

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Identify loading/unloading requirements and priorities • Coordinate freight yard movement activities
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental protection procedures and guidelines • Workplace procedures and policies for the organisation of freight yard movement

	<ul style="list-style-type: none"> • Focus of operation of work systems, equipment, management and site operating systems for the organisation of freight yard movement • Train consist documentation • Load details and specifications • Capacity of materials handling equipment • Ethiopia Dangerous Goods Code • Workplace's freight tracking system • Workplace operating policies and procedures • Train timetables • Yard operating procedures for rail movements • Marshalling constraints affecting loading/unloading • Problems that may occur when organising freight yard movement and appropriate action that can be taken to resolve the problems • Documentation and reporting requirements for the organization of freight yard movement including computer based personnel recording systems
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when organising freight yard movement • Read and interpret instructions, procedures, information and signs relevant to the organisation of freight yard movement • Interpret train consist documentation • Interpret and follow operational instructions and prioritise work • Complete documentation related to the organisation of freight yard movement • Operate electronic communication equipment to required protocol • Provide leadership when coordinating and controlling work teams • Work collaboratively with others when organising freight yard movement • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems that may occur when organising freight yard movement in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated situations that may arise when organising freight yard movement • Apply precautions and required action to minimise, control or eliminate hazards that may exist during the organisation of freight yard movement • Plan freight yard movement

	<ul style="list-style-type: none"> • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant computer/communication/equipment required when organising freight yard movement • Operate a freight tracking system • Adapt to differences in equipment in accordance with standard operating procedures • Select and use required personal protective equipment conforming to industry and OHS standards
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Allocate Rolling Stock
Unit Code	EIS ROM5 16 0313
Unit Descriptor	This unit involves the skills and knowledge required to allocate rolling stock in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes identifying train consists and passenger and/or freight requirements, establishing available rolling stock, allocating rolling stock to trains, and monitoring and amending rolling stock allocation.

Elements	Performance Criteria
1. Identify train consists and passenger and/or freight requirements	<p>1.1 Details of train consist and passenger numbers acquired from train planning are evaluated against available resources in accordance with workplace procedures.</p> <p>1.2 Train running times and train details are identified to confirm timings in accordance with applicable procedures.</p> <p>1.3 Initial estimate of required rolling stock by numbers and types for each rail service is made.</p> <p>1.4 Different operations will be done situations.</p>
2. Establish available rolling stock	<p>2.1 Passenger numbers and class of travel to be catered for with a passenger train are identified to ensure suitable carriages are provided.</p> <p>2.2 Types of freight train rolling stock required for the established freight loads and track dimensions are identified in accordance with workplace procedures.</p> <p>2.3 Passenger or freight train rolling stock locations are established using available tracking systems and procedures.</p> <p>2.4 Serviceability of the required factors involved in establishing rolling stock is confirmed using appropriate workplace procedures.</p> <p>2.5 Support rolling stock for passenger trains (such as dining cars) is located and assigned for each rail service.</p> <p>2.6 Rolling stock committed for the rail service is recorded as being required for use prior to positioning for service/loading operations.</p> <p>2.7 Contingency strategy for planned events is identified or prepared.</p> <p>2.8 Rolling stock types required are determined from available documentation.</p> <p>2.9 Applications that appropriate for team relocation of rolling stock are carried in accordance with proper information procedure.</p>

Variable	Range
Workplace procedures	May include: <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
Applicable procedures and codes	May include: <ul style="list-style-type: none"> • relevant state/territory regulations, codes of practice and safe working system requirements • relevant codes and regulations pertaining to the carriage of dangerous and hazardous goods including the ADG Code • relevant Ethiopia Standards and related requirements • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation
Rolling stock tracking systems	May include: <ul style="list-style-type: none"> • manual tracking systems • computer-based tracking systems
Trains/services for which allocations are made	May include: <ul style="list-style-type: none"> • long distance passenger service • urban passenger service • short distance freight service • long distance freight service • work trains • special freight trains
Operations	May be: <ul style="list-style-type: none"> • by day or night • in all relevant weather conditions
Factors involved in establishing rolling stock requirements and availability	May include: <ul style="list-style-type: none"> • operating policies • available rolling stock • track specifications and limitations • gauges • distances • communication requirements • tonnages (for freight trains) • load types (for freight trains) • configuration • coupling requirements
Support rolling stock	May include: <ul style="list-style-type: none"> • dining cars • lounge cars • observation decks • conference cars • bar cars
Contingency plans	May include: <ul style="list-style-type: none"> • non-availability of specified rolling stock

	<ul style="list-style-type: none"> operational breakdowns equipment failure communications difficulties
Information/ documents	<p>May include:</p> <ul style="list-style-type: none"> applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines workplace rules and operating procedures print-outs from office machines displays on computer monitors hard copy documentation computer-based data systems verbal and written information from relevant staff and management
Consultative processes	<p>May involve:</p> <ul style="list-style-type: none"> workplace personnel including supervisors and managers other professional or technical staff

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> Identify train consists and passenger and/or freight requirements Establish available rolling stock
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines Relevant OHS and environmental procedures and regulations including codes of practice Workplace procedures and policies for allocating rolling stock Rolling stock and specifications, capabilities and capacity Allocation and maintenance schedules of rolling stock Track specifications and restrictions Gauges, distance, gradients and tonnages for relevant track area Communication requirements Load types Load calculation and allocation requirements Load handling equipment use and capacities Shunting and marshalling requirements Equipment and materials used when allocating rolling stock, and procedures that should be followed in their use Problems that may occur when allocating rolling stock and appropriate action that can be taken to resolve the problems

	<ul style="list-style-type: none"> • Documentation and record requirements • Communication and negotiation requirements when allocating rolling stock
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when allocating rolling stock • Read and interpret instructions, procedures and information relevant to the allocation of rolling stock • Interpret train movement graphs and diagrams • Interpret and follow operational instructions and prioritise work • Complete documentation and enter data related to the allocation of rolling stock • Operate electronic communication equipment to required protocol • Calculate load requirements • Work collaboratively with others when allocating rolling stock • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any problems, faults or malfunctions that may be identified when allocating rolling stock in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated situations that may arise when allocating rolling stock • Apply precautions and required action to minimise, control or eliminate hazards that may exist during the allocation of rolling stock • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Operate and adapt to differences in equipment in accordance with standard operating procedures
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 accessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Control Rail Traffic Movement
Unit Code	EIS ROM5 17 0313
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 system faults and failures and for planned events; and updating traffic movement documentation in accordance with workplace requirements.

Elements	Performance Criteria
1. Monitor status of current train area plan	<p>1.1 Actual train/rail traffic movements and associated activities are analyzed to establish current situation.</p> <p>1.2 Proposed train movements and associated activities are identified to establish status of area plan in accordance with workplace procedures and policies.</p> <p>1.3 Circulars, telegrams and special train notices are checked for accuracy and adjustments made as required.</p> <p>1.4 Operational management system information is reviewed against observed status and inconsistencies corrected.</p>
2. Implement the daily working timetable	<p>2.1 Train movements activities are prioritized and directed in accordance with authorizations to ensure optimum and consistent running to timetable.</p> <p>2.2 Relevant information is communicated to internal and external customers to minimize the effect of changes.</p> <p>2.3 Planned train movements, circulars and special train notices are implemented using safe working systems and requirements to ensure safety.</p> <p>2.4 Access and follow traffic shifting producers and polices correctly and consistently according to organization and legal requiems.</p> <p>2.5 There are works to be done under different conditions.</p>
3. Control rail traffic movement	<p>3.1 Layout, characteristics and condition of track section of responsibility is assessed for its effect on train running.</p> <p>3.2 Train movements are coordinated with other relevant personnel in accordance with safe working systems and requirements and workplace policies and practices.</p> <p>3.3 Surveillance and alarm systems are monitored to identify emergency situations.</p> <p>3.4 Signaling system is operated to ensure track section of responsibility is open or closed to train pathways as required.</p>

	3.5 Signaling systems are operated and monitored to ensure safe movement of traffic.
4. Implement contingency plans for system faults and failures, and for planned events	<p>4.1 Contingency plan to suit the event or system failure or fault is identified and reviewed as necessary.</p> <p>4.2 Resources to cover the contingency are deployed in coordination with relevant personnel.</p> <p>4.3 Communications with event site are established.</p> <p>4.4 Train plan is adjusted in accordance with safe working systems and requirements and in coordination with relevant personnel to minimize interruptions and provide alternative services.</p> <p>4.5 Arrangements are made to maintain communications with internal and external customers where possible.</p> <p>4.6 Operational management system information is updated to reflect changes resulting from plan implementation.</p>
5. Update traffic movement documentation	<p>5.1 Traffic movement documentation is receipted, compiled and recorded to provide accurate basis for train movement.</p> <p>5.2 Traffic movement documentation is endorsed at the completion of shift in accordance with workplace applicable procedure requirements to ensure accurate hand-over.</p>

Variable	Range
Control of rail traffic movements	<p>May require:</p> <ul style="list-style-type: none"> • the use of automated and manual signalling combined with centralised train control
Operations	<p>May be conducted:</p> <ul style="list-style-type: none"> • by day or night • in all relevant weather conditions
Associated activities are those that may affect the movement of trains and	<p>Include:</p> <ul style="list-style-type: none"> • track maintenance • signal maintenance • electrical wiring • diversion/alternative routing of trains • track inspection • construction • environmental work • special events
Customers can be both internal and external,	<p>Including:</p> <ul style="list-style-type: none"> • other members of a work group or team, crew, section or division of the workplace to whom a service is provided • other work groups or teams, crews, sections or divisions of the workplace to whom a service is provided

Depending on the type of organisation concerned and the local terminology used, workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures
Work	<p>May be conducted in:</p> <ul style="list-style-type: none"> • restricted spaces • exposed conditions • controlled or open environments <p>May involve exposure to:</p> <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods and vehicles
Events triggering the need for implementing contingency plans	<p>May include:</p> <ul style="list-style-type: none"> • breakdowns • hazardous materials spills • track damage • wash ways • collisions • injuries and fatalities • fires and leaks • power line damage • derailments
Communication systems	<p>May include but are not limited to:</p> <ul style="list-style-type: none"> • radios • telephones • faxes • computers • email • internet
Information/documents	<p>May include:</p> <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • workplace procedures and job specification • induction and training materials • protocols for dealing with internal and external customers • electronic management systems • information on visual display monitors • train movement graphs and charts • two-way radio operation procedures • emergency procedures manual • ADG Code • incident reports • traffic control equipment operations manuals

	<ul style="list-style-type: none"> • conditions of service, legislation and industrial agreements including workplace agreements and awards
Traffic movement documentation	<p>Can include:</p> <ul style="list-style-type: none"> • train timetables • track possessions notices • unplanned event reports and on-track movement
Applicable procedures and codes	<p>May include:</p> <ul style="list-style-type: none"> • relevant state/territory codes of practice and safe working system requirements • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation • relevant Ethiopia Standards and ADG Code and regulations

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Monitor status of current train area plan • Implement the daily working timetable • Control rail traffic movement • Implement contingency plans for system faults and failures, and for planned events • Update traffic movement documentation
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental procedures and regulations including codes of practice for manual handling • Workplace procedures for the planning and control of train operations, including: workplace management, train movement documentation, radio communication protocol, completing relevant documentation, and procedures to be followed in the event of an emergency • Train movement principles • Timetabling principles • Signalling and control systems and operations • Track layout, characteristics and conditions • Track maintenance and work procedures • Restrictions relating to loads and conditions • Draw gear capacities • Communication systems • Surveillance and alarm systems • Problems that may occur when controlling rail traffic and related action that should be taken • Relevant documentation requirements
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when controlling rail traffic

	<ul style="list-style-type: none"> • Give clear instructions relevant to the control of rail traffic • Read and interpret instructions, procedures and information relevant to the control of rail traffic • Interpret and follow operational instructions and prioritise work • Complete documentation and enter data related to the control of rail traffic • Document train movements and incidents • Operate electronic communication equipment to required protocol • Work both individually and collaboratively with others when controlling rail traffic • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Monitor and anticipate operational problems and hazards and take appropriate action • Promptly report and/or rectify any problems, faults or malfunctions identified when controlling rail traffic in accordance with regulatory requirements and workplace procedures • Apply safe working practices and regulations • Implement contingency plans for unanticipated situations that may occur when controlling rail traffic • Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities • Monitor work activities in terms of planned schedule • Meet agreed workplace tolerances for train operations • Modify activities depending on differing operational contingencies, risk situations and environments • Apply fatigue management knowledge and techniques • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant equipment and materials when planning and controlling daily train operations • Adapt to differences in equipment in accordance with standard operating procedures • Select and use required personal protective equipment conforming to industry and OHS standards
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Coordinate Train Movement Activities
Unit Code	EIS ROM5 18 0313
Unit Descriptor	This unit involves the skills and knowledge required to coordinate train movement activities in accordance with workplace procedures and the requirements of relevant safe working regulations and codes of practice. It includes maintaining communications with drivers, communicating with staff and customers, and overseeing train disablement in accordance with workplace requirements.

Elements	Performance Criteria
1. Communicate with drivers	<p>1.1 Communication with train drivers is undertaken to ensure they are informed of train movements, train arrival, position and departure in accordance with workplace policies and procedures.</p> <p>1.2 Appropriate communication techniques are employed in the case of radio malfunction.</p> <p>1.3 Applicable procedures and codes are different such as relevant state/territory codes and others.</p>
2. Communicate with staff and customers	<p>2.1 Communication with relevant railway personnel is undertaken to ensure that they are informed of train movements in accordance with workplace's policies and procedures.</p> <p>2.2 Customers are informed of train movement details using appropriate communication technologies and following company procedures.</p> <p>2.3 There are works to be done under different conditions.</p> <p>2.4 Different operational works could be done under special conditions.</p> <p>2.5 Different organization can be involved for consultancy.</p>
3. Oversee train disablement	<p>3.1 Disabled trains are secured and protected in accordance with company policies and procedures.</p> <p>3.2 Full details about disablement process are communicated to staff and train control using appropriate communication technologies.</p> <p>3.3 Customers are informed of progress of disablement process and, when required, evacuation procedures are clearly communicated to passengers.</p> <p>3.4 Train disablement documentation/information is completed accurately in the required format.</p> <p>3.5 According to the organization/company situation there is different workplace procedure to be used.</p>

Variable	Range
Train movements	May include: <ul style="list-style-type: none"> • departures • arrivals • disablements • shunting
Communication methods	May include: <ul style="list-style-type: none"> • signals • hand signals and lamps • loud speaker systems • flags • telephone • public address
Applicable procedures and codes	May include: <ul style="list-style-type: none"> • relevant state/territory codes of practice and safe working system requirements • the code of practice for the defined interstate rail network in situations where train movements are carried out on that network • relevant state/territory OHS legislation • relevant state/territory environmental protection legislation • relevant Ethiopia standards
Work	May be conducted in: <ul style="list-style-type: none"> • restricted spaces • exposed conditions • controlled or open environments May involve exposure to: <ul style="list-style-type: none"> • chemicals • dangerous or hazardous substances • movements of equipment, goods and vehicles
Operations	May be conducted: <ul style="list-style-type: none"> • by day or night • in all relevant weather conditions
Consultative processes	May involve: <ul style="list-style-type: none"> • other employees and supervisors • customers • other professional and technical personnel
Information/documents	May include: <ul style="list-style-type: none"> • applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • the code of practice for the defined interstate rail network in situations where train movements occur out on that network • workplace procedures and job specification • induction and training materials • protocols for dealing with internal and external customers

	<ul style="list-style-type: none"> • electronic information systems • information on visual display monitors • verbally communicated train movement information • schedules • timetables • operations manuals • conditions of service, legislation and industrial agreements including workplace agreements and awards
Workplace procedures	<p>May include:</p> <ul style="list-style-type: none"> • company procedures • enterprise procedures • organisational procedures • established procedures

Evidence Guide

Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Communicate with drivers • Communicate with staff and customers • Oversee train disablement
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines • Relevant OHS and environmental procedures and regulations including codes of practice for manual handling • Workplace procedures for the coordination of train movement activities, including: train movement procedures, train movement documentation, train disablement process, communication methods and protocol, completing relevant documentation, and procedures to be followed in the event of an emergency, including evacuation procedures • Train movement principles • Timetabling principles • Communication systems and equipment • Relevant documentation requirements • Problems that may occur when coordinating train movement activities and action that should be taken to resolve the problems
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • Communicate effectively with others when coordinating train movement activities • Read and interpret instructions, procedures and information relevant to the coordination of train movement activities • Interpret and follow operational instructions and prioritise work

	<ul style="list-style-type: none"> • Complete documentation and enter data related to the coordination of train movement activities • Operate electronic communication equipment to required protocol • Work both individually and collaboratively with others when coordinating train movement activities • Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others • Promptly report and/or rectify any identified problems, faults or malfunctions that may occur when coordinating train movement activities in accordance with regulatory requirements and workplace procedures • Implement contingency plans for unanticipated situations that may arise when coordinating train movement activities • Apply precautions and required action to minimise, control or eliminate hazards that may exist when coordinating train movement activities • Monitor work activities in terms of planned schedule • Modify activities depending on differing operational contingencies, risk situations and environments • Apply fatigue management knowledge and techniques • Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment • Select and use relevant equipment and materials when coordinating train movement activities • Adapt to differences in equipment in accordance with standard operating procedures • Meet agreed workplace tolerances for train operations • Select and use required personal protective equipment conforming to industry and OHS standards
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Arrange Alternative Passenger Transport
Unit Code	EIS ROM5 19 0313
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 alternative transport is required is determined from situation and services.</p> <p>1.3 Timetables, passenger loadings and luggage quantities are determined from workplace alternative transport information systems.</p> <p>1.4 Requirements to cater for disabled passengers or others with special needs are determined.</p> <p>1.5 Work could be done within different situations.</p>
2. Arrange alternative transport	<p>2.1 Type of alternative transport units required is determined to provide cost effective movement within workplace guidelines for minimal disruption.</p> <p>2.2 Situations creating a need for alternative transport 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 Different organization can be involved for consultancy.</p> <p>2.6 Work area communication activity is made clear, unambiguous and used appropriate procedures, language, and codes.</p> <p>2.7 According to the organization/company situation there is different workplace procedure to be used.</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 Alternative transport arrangements and related financial transactions are documented to meet operational requirements.</p> <p>3.5 Passenger Transport maintenance problems should be inspected and checked to travel in accordance with relevant regulations and legislations/permit requirements.</p>
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Variable	Range
Alternative transport	May include: <ul style="list-style-type: none"> • buses • trams • taxis • hire cars • ferries
Train timetables considered in planning arrangements	Include: <ul style="list-style-type: none"> • all services offered by the organisation potentially affected by the contingency situation
Alternative transport information requirements	May be obtained from: <ul style="list-style-type: none"> • timetables • passenger loading information • workplace instructions and guidelines • plans incorporating track shutdowns • relevant staff and management providing information on unplanned track shutdowns • incident details
Work	May be conducted in: <ul style="list-style-type: none"> • a range of work environments • by night or day
Types of alternative transport	Can include: <ul style="list-style-type: none"> • buses • taxis • air services
Situations creating a need for alternative transport	May include: <ul style="list-style-type: none"> • planned track shut down • unplanned track shut down • out-of-schedule running which affects connecting services
Consultative processes	May involve: <ul style="list-style-type: none"> • customers • other workplace personnel • supervisors and managers • representatives of other transport organisations • official representatives
Communication in the work area	May include: <ul style="list-style-type: none"> • phone • fax

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

Evidence Guide

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

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage Project Quality
Unit Code	EIS ROM5 20 0313
Unit Descriptor	This unit specifies the outcomes required to manage quality within projects. It covers determining quality requirements, implementing quality assurance processes, and using review and evaluation to make quality improvements in current and future projects.

Elements	Performance Criteria
1. Determine quality requirements	<p>1.1 Quality objectives, standards and levels are determined, with input from stakeholders and guidance of a higher project authority, to establish the basis for quality outcomes and a quality management plan.</p> <p>1.2 Established quality management methods, techniques and tools are selected and used to determine preferred mix of quality, capability, cost and time.</p> <p>1.3 Quality criteria are identified, agreed with a higher project authority and communicated to stakeholders to ensure clarity of understanding and achievement of quality and overall project objectives.</p> <p>1.4 Agreed quality requirements are included in the project plan and implemented as basis for performance measurement.</p>
2. Implement quality assurance	<p>2.1 Results of project activities and product performance are measured and documented throughout the project life cycle to determine compliance with agreed quality standards.</p> <p>2.2 Causes of unsatisfactory results are identified, in consultation with the client, and appropriate actions are recommended to a higher project authority to enable continuous improvement in quality outcomes.</p> <p>2.3 Inspections of quality processes and quality control results are conducted to determine compliance of quality standards to overall quality objectives.</p> <p>2.4 A quality management system is maintained to enable effective recording and communication of quality issues and outcomes to a higher project authority and stakeholders.</p>
3. Implement project quality improvements	<p>3.1 Processes are reviewed and agreed changes implemented continually throughout the project life cycle to ensure continuous improvement to quality.</p> <p>3.2 Project outcomes are reviewed against performance criteria to determine the effectiveness of quality management processes and procedures.</p>

	3.3 Lessons learned and recommended improvements are identified, documented and passed on to a higher project authority for application in future projects.
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Variable	Range
Quality objectives	May include but not limited to: <ul style="list-style-type: none"> • requirements from the client and other stakeholders • requirements from a higher project authority • negotiated trade-offs between cost, schedule and performance • those quality aspects which may impact on customer satisfaction
Quality management plan	May include but not limited to: <ul style="list-style-type: none"> • established processes • authorizations and responsibilities for quality control • quality assurance • continuous improvement
Quality management methods, techniques and tools	May include but not limited to: <ul style="list-style-type: none"> • brainstorming • benchmarking • charting processes • ranking candidates • defining control • undertaking benefit/cost analysis • processes that limit and/or indicate variation • control charts • flowcharts • histograms • pareto charts • scatter gram • run charts
Quality control	May include but not limited to: <ul style="list-style-type: none"> • monitoring conformance with specifications • recommending ways to eliminate causes of unsatisfactory performance of products or processes • monitoring of regular inspections by internal or external agents
Improvements	May include but not limited to: <ul style="list-style-type: none"> • formal practices, such as total quality management or continuous improvement • improvement by less formal processes which enhance both the product quality and processes of the project, for example client surveys to determine client satisfaction with project team performance

Evidence Guide	
<p>Critical Aspects of Competence</p>	<ul style="list-style-type: none"> • A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility for quality management of projects. This will include evidence of managing the work of others within the project team with respect to quality. <p>Products that could be used as evidence include: documentation produced in managing projects such as:</p> <ul style="list-style-type: none"> • lists of quality objectives, standards, levels and measurement criteria • records of inspections, recommended rectification actions and quality outcomes • management of quality management system and quality management plans • application of quality control, quality assurance and continuous improvement processes • records of quality reviews • lists of lessons learned and recommended improvements <p>Processes that could be used as evidence include:</p> <ul style="list-style-type: none"> • how quality requirements and outcomes were determined for projects • how quality tools were selected for use in projects • how team members were managed throughout projects with respect to quality within the project • how quality was managed throughout projects • how problems and issues with respect to quality and arising during projects were identified and addressed • how projects were reviewed with respect to quality management • how improvements to quality management of projects have been acted upon
<p>Underpinning Knowledge and Attitudes</p>	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • the principles of project quality management and their application • acceptance of responsibilities for project quality management • use of quality management systems and standards • the place of quality management in the context of the project life cycle • appropriate project quality management methodologies; and their capabilities, limitations, applicability and contribution to project outcomes • attributes: <ul style="list-style-type: none"> ➤ analytical ➤ attention to detail ➤ able to maintain an overview ➤ communicative ➤ positive leadership

Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities • project management • quality management • planning and organizing • communication and negotiation • problem-solving • leadership and personnel management • monitoring and review skills
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Facilitate and Capitalize on Change and Innovation
Unit Code	EIS ROM5 21 0313
Unit Descriptor	This unit specifies the outcomes required to plan and manage the introduction and facilitation of change; particular emphasis is on the development of creative and flexible approaches, and on managing emerging opportunities and challenges.

Elements	Performance Criteria
1. Participate in planning the introduction and facilitation of change	<p>1.1 Manager contributes effectively to the organization's planning processes to introduce and facilitate change.</p> <p>1.2 Plans are made to introduce change in consultation with appropriate stakeholders.</p> <p>1.3 Organization's objectives and plans are communicated effectively to introduce change to individuals and teams.</p>
2. Develop creative and flexible approaches and solutions	<p>2.1 Variety of approaches are identified and analyzed to manage workplace issues and problems.</p> <p>2.2 Risks are identified and assessed, and action initiated to manage these to achieve a recognized benefit or advantage to the organization.</p> <p>2.3 Workplace is managed in a way which promotes the development of innovative approaches and outcomes.</p> <p>2.4 Creative and responsive approaches to resource management improve productivity and services, and/or reduce costs.</p>
3. Manage emerging challenges and opportunities	<p>3.1 Individuals and teams are supported to respond effectively and efficiently to changes in the organization's goals, plans and priorities.</p> <p>3.2 Coaching and mentoring are made to assist individuals and teams to develop competencies to handle change efficiently and effectively.</p> <p>3.3 Opportunities are identified and taken as appropriate, to make adjustments and to respond to the changing needs of customers and the organization.</p> <p>3.4 Information needs of individuals and teams are anticipated and facilitated as part of change implementation and management.</p> <p>3.5 Recommendations for improving the methods and techniques to manage change are identified, evaluated and negotiated with appropriate individuals and groups.</p>

Variable	Range
Manager	<ul style="list-style-type: none"> • a person with frontline management roles and responsibilities, regardless of the title of their position
Appropriate stakeholders may refer to:	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • organization directors and other relevant managers • teams and individual employees who are both directly and indirectly involved in the proposed change • union/employee representatives or groups • OHS committees • other people with specialist responsibilities • external stakeholders where appropriate - such as clients, suppliers, industry associations, regulatory and licensing agencies
Risks may refer to:	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • any event, process or action that may result in goals and objectives of the organization not being met • any adverse impact on individuals or the organization • various risks identified in a risk management process
Information needs may include:	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • new and emerging workplace issues • implications for current work roles and practices including training and development • changes relative to workplace legislation, such as OHS, workplace data such as productivity, inputs/outputs and future projections • planning documents • reports • market trend data • scenario plans • customer/competitor data

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • Planning the introduction and facilitation of change • Developing creative and flexible approaches and solutions • Managing emerging challenges and opportunities
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination • the principles and techniques involved in: <ul style="list-style-type: none"> • change and innovation management • development of strategies and procedures to implement and facilitate change and innovation • use of risk management strategies: identifying hazards, • assessing risks and implementing risk control measures

	<ul style="list-style-type: none"> • problem identification and resolution • leadership and mentoring techniques • management of quality customer service delivery • consultation and communication techniques • record keeping and management methods • the sources of change and how they impact • factors which lead/cause resistance to change • approaches to managing workplace issues
Underpinning Skills	<p>Demonstrate skills on:</p> <ul style="list-style-type: none"> • Communication skills • Planning work • Managing risk
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Establish and Conduct Business Relationships
Unit Code	EIS ROM5 22 0313
Unit Descriptor	This unit covers the skills, attitudes and knowledge required to manage business relationship with customers.

Elements	Performance Criteria
1. Establish contact with customer	<p>1.1 Welcoming customer environment is maintained.</p> <p>1.2 Customer is greeted warmly according to enterprise policies and procedures.</p> <p>1.3 Effective service environment is created through verbal and non-verbal presentation according to enterprise policies and procedures.</p> <p>1.4 Customer data is maintained to ensure database relevance and currency.</p> <p>1.5 Information on customers and service history is gathered for analysis.</p> <p>1.6 Opportunities to maintain regular contact with customers are identified and taken up.</p>
2. Clarify needs of customer	<p>2.1 Customer needs are determined through questioning and active listening.</p> <p>2.2 Customer needs are accurately assessed against the products/services of the enterprise.</p> <p>2.3 Customer details are documented clearly and accurately in required format.</p> <p>2.4 Negotiations are conducted in a business-like and professional manner.</p> <p>2.5 Maximize benefits for all parties in the negotiation through use of established negotiation techniques and in the context of establishing long term relationships.</p> <p>2.6 The results of negotiations are communicated to appropriate colleagues and stakeholders within appropriate timeframes.</p>
3. Provide information and advice	<p>3.1 Features and benefits of products/services provided by the enterprise are described / recommended to meet customer needs.</p> <p>3.2 Information is provided to satisfy customer needs.</p> <p>3.3 Alternative sources of information/advice are discussed with the customer.</p>
4. Foster and maintain business relationships	<p>4.1 Pro-actively seek, review and act upon information needed to maintain sound business relationships.</p>

	<p>4.2 Agreements are honored within the scope of individual responsibility.</p> <p>4.3 Adjustments to agreements are made in consultation with the customer and share information with appropriate colleagues.</p> <p>4.4 Nurture relationships through regular contact and use of effective interpersonal and communication styles.</p>
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Variables	Range
Opportunities to maintain regular contact with customers may include:	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • informal social occasions • industry functions • association membership • co-operative promotions • program of regular telephone contact
Negotiation techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • identification of goals, limits • clarification of needs of all parties • identifying points of agreement and points of difference • preparatory research of facts • active listening and questioning • non-verbal communication techniques • appropriate language • bargaining • developing options • confirming agreements • appropriate cultural behavior

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • consistently applying enterprise policies and procedures and industry codes of practice in regard to customer service • providing a quality service environment by treating customers in a courteous and professional manner through all stages of the procedure • using effective questioning/active listening and observation skills to identify customer needs • communicating effectively with others involved in or affected by the work • maintaining relevant and current customer databases in accordance with enterprise policies and procedures • ability to build and maintain relationships to achieve successful business outcomes
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • enterprise policies and procedures in regard to: <ul style="list-style-type: none"> ➢ customer service ➢ dealing with difficult customers

	<ul style="list-style-type: none"> ➤ maintenance of customer databases ➤ allocated duties/responsibilities ➤ General knowledge of the range of enterprise merchandise and services, location of telephone extensions and departments/sections • legislation and statutory requirements, including consumer law, trade practices and fair trading legislation • industry/workplace codes of practice in relation to customer service • negotiation and communication techniques appropriate to negotiations that may be of significant commercial value
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • Use workplace technology related to use of customer database • Collect, organize and understand information related to collating and analyzing customer information to identify needs • Communicate ideas and information • Plan and organize activities concerning information for database entries • Use mathematical ideas and techniques to plan database cells and size • Establish diagnostic processes which identify and recommend improvements to customer service
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Rail Operation Management Level V	
Unit Title	Manage Continuous Improvement Process (Kaizen)
Unit Code	EIS ROM5 23 0313
Unit Descriptor	This unit describes the performance, outcomes, knowledge, attitude and skills required to sustain and develop an environment in which continuous improvement, innovation and learning are promoted, rewarded and managed.

Elements	Performance criteria
1. Diagnose the current status.	1.1 Parameters used for study current situation are obtained. 1.2 Internal and external environment is analyzed. 1.3 Problems related to targeted environment is recognized and identified. 1.4 Problems regarding to current situation are analyzed. 1.5 Alternatives are generated. 1.6 Best alternatives are selected.
2. Design an effective continuous improvement process (kaizen).	2.1 The values, mission and goals of kaizen management system are clarified. 2.2 The kaizen management template and a visual management logo full of purpose and meaning are developed. 2.3 A clear action strategy (master and detailed plans) is defined. 2.4 The most effective and proven kaizen tools are chosen and applied. 2.5 A practical way is identified to involve all employees in Gemba activities (top, middle and bottom).
3. Develop change capability.	3. 1. Kaizen Promotion Team Structure is developed. 3. 2. The Kaizen Training Plan is defined and started. 3. 3. Supervisors' kaizen capability and habits are developed. 3. 4. Key people are developed in terms of Individual leadership capability .
4. Implement improved processes.	4.1 Sustainability/continuous improvement are promoted as an essential part of doing business. 4.2 Impacts of change and consequences are addressed for people, and transition plans implemented. 4.3 Objectives, time frames, measures and communication plans are ensured in place to manage implementation.

	<p>4.4 Contingency plans are implemented in the event of non-performance.</p> <p>4.5 Failure is followed-up by prompt investigation and analysis of causes.</p> <p>4.6 Emerging challenges and opportunities are managed effectively.</p> <p>4.7 Continuous improvement systems and processes are evaluated regularly.</p> <p>4.8 Improvements are communicated to all relevant groups and individuals.</p> <p>4.9 Opportunities are explored for further development of value stream improvement processes.</p>
5. Establish direction and control.	<p>5.1 A system audit tool is defined and implemented.</p> <p>5.2 The kaizen management system is deployed across all company levels and functions.</p> <p>5.3 Results are checked and corrections made.</p> <p>5.4 Standard operating procedures are developed and maintained.</p> <p>5.5 The recruit, training and evaluation systems are improved and HR practices compensated.</p>

Variable	Range
Parameters	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Working condition • Resources may include: <ul style="list-style-type: none"> ➢ Human ➢ Material ➢ Machine • Kaizen elements
Kaizen management template	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Visual management board for: <ul style="list-style-type: none"> ➢ displaying characteristic figures, data and graphics ➢ depicting and controlling processes ➢ identifying and marking sources of risks, setting and standards ➢ displaying company's values and goals of kaizen
Kaizen tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S (a visual workplace management) • 7 QC tools(Cause and Effect Diagram, Check Sheet , Pareto Diagram , Histogram, Scatter Diagram, Control Chart and Flow Chart) • Brainstorming • Basic Industrial Engineering (IE) tools such as time study, motion study, line balancing, work sampling

	<ul style="list-style-type: none"> • JIT(JUST IN TIME principles) • MUDA identification and elimination tools • Kanban • Poka-yoke • Takt- time
Gemba activities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Value-adding activities to satisfy the customer • Employee autonomous operations (participating in team to identify nonconformity, propose solutions and implement them autonomously)
Individual leadership capability	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Personal and interpersonal skills • Courage • Honour and integrity • Energy and drive • Strategic skills • Operating skills • Organizational positioning skills
Sustainability/continuous improvement	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Improvements made by following PDCA (Plan, Do, Check and Act) cycle for: <ul style="list-style-type: none"> ➢ Improvements in one's own work ➢ Saving in energy, material and other resources ➢ Improvements in the working environment ➢ Improvements in machines and processes ➢ Improvements in jigs and tools ➢ Improvement in office work ➢ Improvements in product quality ➢ Ideas for new products ➢ Customers services and customer relations
System audit tool	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S audit • Patrol system • Kaizen board • 5M check lists • Key Performance Indicators (KPIs)
Standard operating procedure	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Administrative standards for: <ul style="list-style-type: none"> ➢ Managing the business ➢ Administration ➢ Personnel Guidelines ➢ Job Descriptions ➢ Guidelines for preparing cost information • Operation standards for: <ul style="list-style-type: none"> ➢ Describing the way a job is done. ➢ Help realising Quality, cost, delivery. ➢ Addressing the need to satisfy customers. ➢ Using the process that's the best.

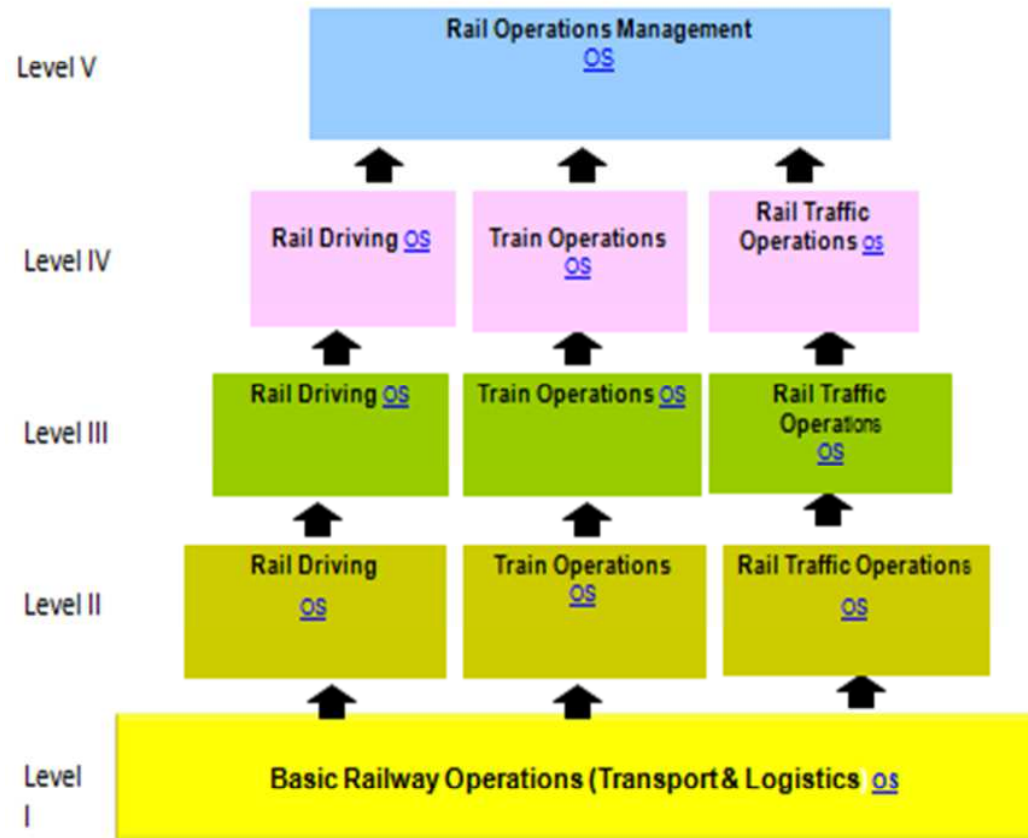
	<ul style="list-style-type: none"> ➤ Producing work in the most cost effective manner. ➤ Assuring total quality for the customer.
HR practices	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Resources may include recruit and retain high quality people with innovative skills and a good track, record in innovation • HR development is used for strategic capability and provide encouragement and facilities for enhancing innovating skills and enhancing the intellectual capital of the organization • Reward will provide financial incentives and rewards and recognition for successful innovation

Evidence Guide

Critical Aspects of Assessment	<p>Demonstrates skills and knowledge competencies to:</p> <ul style="list-style-type: none"> • Establish policy and cross-functional goals for kaizen • Deploy and implement goals as directed through policy deployment and cross-functional management. • Realize goals through deployment and audits. • Build systems, procedures, and structures conducive to kaizen. • Use kaizen in functional capabilities. • Introduce Kaizen as a corporate strategy • Provide support and direction between allocating resources • Establish, maintain and upgrade standards. • Make employees conscious through training programs. • Assist employees develop skills and tools for problem solving.
Underpinning Knowledge and Attitude	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Quality management and continuous improvement theories • creativity/innovation theories/concepts • competitive systems and practices tools, including: <ul style="list-style-type: none"> ➤ 5S ➤ JUST IN Time (JIT) ➤ mistake proofing ➤ process mapping ➤ establishing customer pull ➤ setting of KPIs/metrics ➤ SOP ➤ Kaizen elements/targets. ➤ identification and elimination of waste/MUDA ➤ continuous improvement processes including implementation, monitoring and evaluation strategies for a whole organization and its value stream ➤ Difference between breakthrough improvement and continuous improvement

	<ul style="list-style-type: none"> ➤ organizational goals, processes and structure ➤ approval processes within organization ➤ methods of determining the impact of a change ➤ customer perception of value ➤ Define, Measure, Analyze, Improve and Control (DMAIC) to sustain process
Underpinning Skills	<p>Demonstrates Skills to:</p> <ul style="list-style-type: none"> • Use leadership skills to foster a commitment to quality and openness to improvement. • Analyze training needs and implementing training programs • Prepare and maintain quality and audit documentation • Undertake self-directed problem solving and decision-making on issues of a broad and/or highly specialized nature and in highly varied and/or highly specialized contexts • Communicate at all levels in the organization and to audiences of different levels of literacy and numeracy • Analyze current state/situation of the organization. • Analyze individually and collectively the implementation of competitive systems and practices tools in the organization and determining strategies for improved implementation • Solve highly varied and highly specialized problems related to competitive systems and practices implementation and continuous improvement to root cause • Negotiate with stakeholders, where required, to obtain information required for implementation and refinement of continuous improvements, including management, unions, employees and members of the community. • Review relevant metrics, including all those measures which might be used to determine the performance of the improvement system, including: <ul style="list-style-type: none"> ➤ Key Performance Indicators (KPIs) for existing processes ➤ Quality statistics ➤ Delivery timing and quantity statistics ➤ Process/equipment reliability ('uptime')
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"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Railway Transport Operations



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

COMMENT TEMPLATE

The Federal TVET Agency values your feedback of the document.
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