



Technical and Vocational Education and Training Authority



National Competency Standard for Heavy Vehicle Operator

Standard Code: TRNS02V1/20

Qualification Name: National Certificate III in Heavy Vehicle Operations
Qualification Code: TRNS02Q1L3V1/20

PREFACE

Technical and Vocational Education and Training (TVET) Authority was established with the vision to develop a TVET system in the Maldives that is demand driven, accessible, beneficiary financed and quality assured, to meet the needs of society for stability and economic growth, the needs of Enterprise for a skilled and reliable workforce, the need of young people for decent jobs and the needs of workers for continuous mastery of new technology.

TVET system in the Maldives flourished with the Employment Skills Training Project (ESTP) funded by ADB with the objective of increasing the number of Maldivians, actively participating in the labor force, employed and self-employed. The Project supported expansion of demand driven employment-oriented skills training in priority occupations and to improve the capacity to develop and deliver Competency Based Skill Training (CBST). The project supported delivery of CBST programs to satisfy employer demand-driven needs.

Recognizing the importance of developing the youth sector to enable Maldives to transition from an upper-middle-income country to high-income country, the World Bank Country Partnership Framework (CPF) proposes to finance the Maldives Enhancing Employability and Resilience of Youth (MEERY) project. As part of the MEERY project is financing for skills development and entrepreneurship in priority sectors such as tourism, ICT and construction sector MEERY continues to provide support to TVET Authority to develop National Occupational Standard, instructional materials, assessment resource book and trainees log book for the National Occupational Standard for "Heavy Vehicle Operator". As part of the MEERY Project, TVET Authority has only undertaken to review standard which were developed in the ESTP Project to increase the economic opportunities for youth's trainees and promote equitable economic & social development in the country.

The National Competency Standards (NCS) provide the base for this training. Currently CBST is offered for six key sectors in the Maldives: Tourism, Fisheries and Agriculture, Transport, Construction, Social and the Information and Technology sectors. These sectors are included as priority sectors that play a vital role in the continued economic growth of the country.

The NCS are developed in consultation with Employment Sector Councils representing employers. They are designed using a consensus format endorsed by the Maldives Qualifications Authority (MQA) to maintain uniformity of approach and the consistency of content amongst occupations. This single format also simplifies benchmarking the NCS against relevant regional and international standards. NCS specify the standards of performance of a competent worker and the various contexts in which the work may take place. NCS also describes the knowledge, skills and attitudes required in a particular occupation. They provide explicit advice to assessors and employers regarding the knowledge, skills and attitudes to be demonstrated by the candidates seeking formal recognition for the competency acquired following training or through work experience. By sharing this information, all participants in the training process have the same understanding of the training required and the standard to be reached for certification. Certification also becomes portable and can be recognized by other employers and in other countries with similar standards.

NCS are the foundation for the implementation of the TVET system in Maldives. They ensure that all skills, regardless of where or how they were developed can be assessed and recognized. They also form the foundation for certifying skills in the Maldives National Qualification Framework (MNQF).

NCS are developed by the Technical and Vocational and Education Training Authority of Ministry of Higher Education. The NCS are endorsed by the Employment Sector Councils of the respective sectors and validated by the Maldives Qualification Authority.





Mohamed Hashim
Minister of State for Higher Education
TVET Authority



Ahmed Nisham
Director, Standard Development & Statistics
TVET Authority

TECHNICAL PANEL MEMBERS			
#	Name	Designation	Organization
01	Ibrahim Afzal	Assistant General Manager	Maldives Ports Limited
02	Ali Shareef Moosa	Senior Technical Manager	Maldives Transport and Contracting Company
03	Ali Rameez	Assistant Manager	Maldives Airports Company Limited
04	Ibrahim Zaeem	First Sergeant	Maldives National Defense Force
05	Mohamed Ibraz Najeeb	Manager of Engineering Department	State Trading Organization
06	Abdullah Iyad Ahmed	Senior Technical Officer	Housing Development Corporation
07	Rilwan Mohamed	Lecturer	Maldives Polytechnic

VERSION	DEVELOPER	DATE	STANDARD CODE
V1	Maldives Institute of Technology	27 th September 2020	TRNS02V1/20

EMPLOYMENT SECTOR COUNCILS			
#	Name	Designation	Organization
01	Captain Adhil Rasheed	CEO	Maritime Academy of Maldives
02	Fathimath Nishar	Assistant Director	Ministry of Youth, Sports, and Community Empowerment
03	Ahmed Ifthikhar	Director	Ministry of Economic Development
04	Hussain Nazeer	Assistant Director	Maldives Transport Authority
05	Captain Ahmed Zubair	Lecturer	Centre for Maritime Maldives, Maldives National University
06	Ahmed Shahid	Port Captain	State Trading Organization (STO)
07	Abdulla Mohamed	Director Airworthiness	Maldives Civil Aviation Authority
08	Ahmed Haleem	Deputy Director	Maldives Transport Authority
09	Abdul Razzaq Adam	Assistant Lecturer	Maldives Polytechnic
10	Aishath Neesha Khaleel	Assistant General Manager	Maldives Ports Limited (MPL)
11	Ali Fathih	Transport Service Department Manager	Maldives Transport Contracting Company
National Occupational Standard has been endorsed by:			
 Captain Adhil Rasheed Chairperson Tourism Employment Sector Council		 Fathimath Nishar Vice-Chairperson Tourism Employment Sector Council	
Technical and Vocational Education and Training Authority Ministry of Higher Education Handhuvaree Hingun, M. World Dream Male', Maldives			
Date of Endorsement: 27 th September 2020		Date of Revision: NA	

Standard Development Process

Heavy Vehicle Operator occupations were profiled through a study of the occupation across Maldivian workplaces. Referred occupational profiling process led to the development of the Draft Occupational Standard.

Draft occupational standard is then used to undertake functional analysis of the Heavy Vehicle Operator occupation and the referred functional process was undertaken with participation of industry experts. For strengthening the development of the National Occupational Standard, a panel with technical experts was formed. The members provide technical support, which needs to be included in the developed standard.

Once the standard is finalized by the panel, it is then submitted to the Transport Employment Sector Council. A brief report on how National Occupational Standard for Heavy Vehicle Operator was developed and presented to the council. Council members then ensures that the industry need has been catered to, and once the standard fullfills the recommendation, it is endorsed by the council.

After endorsing the standard from the Transport Employment Sector Council, the final document is submitted to Maldives Qualification Authority (MQA) for approval. After the approval of MQA the National Occupational Standard for Heavy Vehicle Operator is published, which would be then used by training providers.

Description of “Heavy Vehicle Operator Occupation”

Heavy Vehicle Operator plays an important role in supporting and facilitating transportation of heavy objects required by the Maldivian industries. Services related to heavy vehicle operation and maintenance is required by Maldivian industries, such as construction and tourism sectors. Besides that, important institutions such as Maldives Ports Limited, Maldives Transport and Contracting Company (MTCC), State Electric Company (STELCO), all seek services of heavy vehicles.

Heavy Vehicle Operators will be working with tourism, construction and other sectors, facilitating operating expensive heavy vehicle fleet within the Maldivian enterprises. Properly trained Heavy Vehicle Operators will not only assist the smooth operation of the vehicle fleet, but ensure all such jobs are undertaken with extreme safety and care. They will also have competency to effectively operate such expensive vehicles and will ensure safety of the goods transported, safety around the site and above all, will ensure safety of the people around such heavy lifting jobs.

Job opportunities upon completion of “National Certificate III in Heavy Vehicle Operator”

Upon successful completion of the training and obtaining the “National Certificate III in Heavy Vehicle Operator”, successful students can work in the following jobs.

- ✓ Crane Operator
- ✓ Forklift Operator
- ✓ Excavator Operator
- ✓ Driver/Operator of Heavy Vehicles

KEY FOR CODING

Coding Competency Standards and Related Materials

DESCRIPTION	REPRESENTED BY
Industry Sector as per ESC (Three letters)	Construction Sector (CON) Fisheries and Agriculture (FNA) Information, Communication and Technology (ICT) Transport Sector (TRN) Tourism Sector (TOU) Social Sector (SOC) Foundation (FOU)
Competency Standard	S
Occupation with in an industry sector	Two digits 01-99
Unit	U
Common Competency	CR
Core Competency	CM
Optional / Elective Competency	OP
Assessment Resources Materials	A
Learning Resources Materials	L
Curricular	C
Qualification	Q1, Q2 etc.
MNQF level of qualification	L1, L2, L3, L4 etc.
Version Number	V1, V2 etc.
Year of endorsement of standard, qualification	By “/” followed by two digits responding to the year of last review, example /20 for the year 2020

1. Endorsement Application for Qualification 01		
2. NATIONAL CERTIFICATE III IN HEAVY VEHICLE OPERATIONS		
3. Qualification code: TRNS02Q1L3V1/20		Total Number of Credits: 82
4. Purpose of the qualification This qualification describes the performance outcomes, skills and knowledge required to safely and effectively operate heavy vehicles, for the purpose of transportation of heavy objects required by Maldivian industries. After successful completion of the program and obtaining the relevant licensing from the Transport Authority, holders of this qualification can work as drivers and heavy vehicle operators.		
5. Regulations for the qualification		National Certificate III in Heavy Vehicle Operations will be awarded to those who are competent in the following units of 1+2+3+4+5+6+7+8+9+10+11+12 and “ANY TWO UNITS” from 13, 14, 15, 16, 17 or 18
6. Schedule of Units		
Unit No	Unit Title	Code
Common Competencies		
01	Apply work ethics and professionalism	TRNCM02V1/20
02	Provide effective customer care	TRNCM05V2/20
03	Perform basic computer operations	TRNCM06V2/20
04	Provide first aid	TRNCM07V2/20
Core Competencies		
05	Participate in safe work practices	TRNS02CR05V1/20
06	Use and maintain tools and equipment required for vehicle operations	TRNS02CR06V1/20
07	Perform effective workplace communication	TRNS02CR07V1/20
08	Operate and inspect heavy duty engine and its system	TRNS02CR08V1/20
09	Inspect mechanical systems of heavy vehicles	TRNS02CR09V1/20
10	Comply to road rules and regulations on driving heavy vehicles	TRNS02CR10V1/20
11	Apply safe Forklift operation skills	TRNS02CR11V1/20
12	Apply safe Loader operation skills	TRNS02CR12V1/20
13	Apply safe Excavator operation skills	TRNS02CR13V1/20
14	Apply safe Mobile Cranes operation skills	TRNS02CR14V1/20
15	Apply safe Dump Truck operation skills	TRNS02CR15V1/20
16	Apply safe Road Sweeper operation skills	TRNS02CR16V1/20
17	Apply safe Boom Truck operation skills	TRNS02CR17V1/20
18	Apply safe Reach Stacker operation skills	TRNS02CR18V1/20
7. Accreditation requirements		The training provider should place trainees in relevant industry or sector to provide the trainees, the hands-on experience exposure related to this qualification.
8. Recommended sequencing of units		As appearing under the section 06

#	Unit Title	Code	Level	No of Credits
01	Apply work ethics and professionalism	TRNCM02V1/20	III	03
02	Provide effective customer care	TRNCM05V2/20	III	05
03	Perform basic computer operations	TRNCM06V2/20	III	03
04	Provide first aid	TRNCM07V2/20	III	05
05	Participate in safe work practices	TRNS02CR05V1/20	III	02
06	Use and maintain tools and equipment required for vehicle operations	TRNS02CR06V1/20	III	02
07	Perform effective workplace communication	TRNS02CR07V1/20	III	02
08	Operate and inspect heavy duty engine and its system	TRNS02CR08V1/20	III	04
09	Inspect mechanical systems of heavy vehicles	TRNS02CR09V1/20	III	04
10	Comply to road rules and regulations on driving heavy vehicles	TRNS02CR10V1/20	III	04
11	Apply safe Forklift operation skills	TRNS02CR11V1/20	III	06
12	Apply safe Loader operation skills	TRNS02CR12V1/20	III	06
13	Apply safe Excavator operation skills	TRNS02CR13V1/20	III	06
14	Apply safe Mobile Cranes operation skills	TRNS02CR14V1/20	III	06
15	Apply safe Dump Truck operation skills	TRNS02CR15V1/20	III	06
16	Apply safe Road Sweeper operation skills	TRNS02CR16V1/20	III	06
17	Apply safe Boom Truck operation skills	TRNS02CR17V1/20	III	06
18	Apply safe Reach Stacker operation skills	TRNS02CR18V1/20	III	06

Packaging of National Qualifications:

National Certificate III in Heavy Vehicle Operations will be awarded to those who are competent in the following units of 1+2+3+4+5+6+7+8+9+10 and “ANY TWO UNITS” from 10, 11, 12, 13, 14, 15 or 16

Qualification Code: TRNS02Q1L3V1/20

Competency Standard for Heavy Vehicle Operator

UNIT TITLE Apply work ethics and professionalism					
DESCRIPTOR	This module covers the knowledge, skills and attitudes required in demonstrating proper work values and professionalism while working as a Heavy Vehicle Operator. Besides ethical values, knowledge and skills also developed on maintaining integrity at work.				
CODE	TRNCM02V1/20	LEVEL	III	CREDIT	03

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Define the purpose of work	<p>1.1 One's unique sense of purpose for working and the whys of work are identified, reflected on and clearly defined for one's development as a person and as a member of society.</p> <p>1.2 Personal mission is in harmony with company's values.</p>
2. Apply work values/ethics	<p>2.1 Work values/ethics/concepts are identified and classified in accordance with companies' ethical standard guidelines.</p> <p>2.2 Work policies are undertaken in accordance with company's policies, guidelines on work ethical standard.</p> <p>2.3 Resources are used in accordance with company's policies and guidelines.</p> <p>2.4 Punctuality, absence from work, sick, family and annual leave is maintained alignment to the Employment Act of the Maldives</p>
3. Deal with ethical problems	<p>3.1 Company ethical standards, organizational policy and guidelines on the prevention and reporting of unethical conduct/behavior are followed.</p> <p>3.2 Work incidents/situations are reported according to company protocol/guidelines.</p> <p>3.3 Resolution and/or referral of ethical problems identified are reported/documented based on standard operating procedure</p>
4. Maintain integrity of conduct in the workplace	<p>4.1 Personal behavior and relationships with co-workers and/or clients are demonstrated consistent with ethical standards, policy and guidelines.</p>

	<p>4.2 Work practices are satisfactorily demonstrated and consistent with industry work ethical standards, organizational policy and guidelines.</p> <p>4.3 Instructions to co-workers are provided based on ethical lawful and reasonable directives</p>
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Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Tools, equipment and material used in this unit may include:

For the purpose of delivering the assignment, students need to be familiarized with the following.

- ✓ Employment act of Maldives

ASSESSMENT GUIDE

Forms of assessment

Assessment for the unit needs to be holistic and must include real or simulated workplace activities.

Assessment context

Assessment of this unit must be completed on the job or in a simulated work environment which reflects a range of practices.

Critical aspects (for assessment)

It is critical that the assessment undertaken for this module be holistic and involve the following.

- ✓ Group discussion
- ✓ Role play
- ✓ Self-paced learning
- ✓ Written
- ✓ Demonstration
- ✓ Observation
- ✓ Interviews/questioning

Assessment conditions

Assessment must reflect both events and processes over a period of time.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Knowledge to be developed:</p> <ul style="list-style-type: none">✓ Work responsibilities/job functions✓ Company code of conduct/values✓ Concept of work values/ethics✓ Company policies and guidelines✓ Work ethical standard✓ Company's identified ethical problems✓ Work incidents/situation✓ Standard operating procedures✓ Report writing and documentation✓ Fundamental rights at work including gender sensitivity✓ Corporate social responsibilities✓ Human and interpersonal Relations✓ Value Formation✓ Professional Code of Conduct and Ethics	<p>Skills to be developed:</p> <ul style="list-style-type: none">✓ Purpose for working and the why's of work are identified, reflected and linked to self-development✓ Work values/ethics/concepts are identified and classified in accordance with companies' ethical standard✓ Work policies are undertaken in accordance with company's policies.✓ Resources are used in accordance with company's policies and guidelines.✓ Work incidents/situations are reported according to company guidelines✓ Personal behavior and relationships with co-workers and clients are within ethical standard✓ Work practices are satisfactorily demonstrated and consistent.✓ Instructions to co-workers are provided based on ethical lawful and reasonable directives

UNIT TITLE Provide effective customer care					
DESCRIPTOR	This unit addresses the importance of caring for customers in the hospitality industry, especially while working as a Lifeguard. It is a very important unit related to providing effective customer care and will include greetings, identifying needs of, delivering quality customer care, handling of inquiries, complaints and managing angry customers.				
CODE	TRNCM05V2/20	LEVEL	III	CREDIT	05

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Greet customers and colleagues	1.1. Customers and colleagues greeted according to standard procedures and social norms 1.2. Sensitivity to cultural and social differences demonstrated
2. Identify and attend to customer needs	2.1 Appropriate interpersonal skills are used to ensure that customer needs are accurately identified 2.2 Customer needs are assessed for urgency so that priority for service delivery can be identified 2.3 Personal limitation in addressing customer needs is identified and where appropriate, assistance is sought from supervisor 2.4 Customers informed correctly 2.5 Personal limitation identified and assistance from proper sources sought when required
3. Deliver service to customers	3.1 Customer needs are promptly attended to in line with organizational procedure 3.2 Appropriate rapport is maintained with customer to enable high quality service delivery 3.3 Opportunity to enhance the quality of service and products are taken wherever possible
4. Handle inquiries	4.1 Customer queries handled promptly and properly 4.2 Personal limitations identified and assistance from proper sources sought when required
5. Handle complaints	5.1 Responsibility for handling complaints taken within limit of responsibility 5.2 Personal limitations identified and assistance from proper sources sought when required

	5.3 Operational procedures to handling irate or difficult customers followed correctly 5.4 Details of complaints and comments from customers properly recorded
6. Handle and manage angry customers	6.1 Apply principles related to anger management 6.2 Meet with angry customers and console them accordingly 6.3 Maintain a log book for recording customer service incidents.

Range Statement

Procedures included:

- ✓ Greeting procedure
- ✓ Complaint and comment handling procedure
- ✓ Incidence reporting procedures
- ✓ General knowledge of property
- ✓ Standard operating procedures for service deliveries
- ✓ Non-verbal and verbal communication
- ✓ Dress and accessories
- ✓ Gestures and mannerisms
- ✓ Voice tonality and volume
- ✓ Culturally specific communication customs and practices
- ✓ Cultural and social differences

Includes but are not limited to:

- ✓ Modes of greeting, fare welling and conversation
- ✓ Body language/ use of body gestures
- ✓ Formality of language

Interpersonal skills:

- ✓ Interactive communication
- ✓ Good working attitude
- ✓ Sincerity
- ✓ Pleasant disposition
- ✓ Effective communication skills
- ✓ Customer needs

Customer with limitation may include:

- ✓ Those with a disability
- ✓ Those with special cultural or language needs
- ✓ Unaccompanied children
- ✓ Parents with young children
- ✓ Pregnant women
- ✓ Single women

Tools, equipment and materials required may include:

- ✓ Relevant procedure manuals
- ✓ Availability of telephone, printer, computer, internet, etc.
- ✓ Availability of data on projects and services; tariff and rates, promotional activities in place etc.

ASSESSMENT GUIDE

Form of assessment

Assessment for the unit needs to be holistic and must include real or simulated workplace activities.

Assessment context

Assessment of this unit must be completed on the job or in a simulated work environment which reflects a range of practices.

Critical aspects (for assessment)

It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations. This unit may be assessed in conjunction with all units which form part of the normal job role.

- ✓ Assessment requires evidence that the candidate:
- ✓ Complied with industry practices and procedures
- ✓ Used interactive communication with others
- ✓ Complied with occupational, health and safety practices
- ✓ Promoted public relation among others
- ✓ Complied with service manual standards
- ✓ Demonstrated familiarity with company facilities, products and services
- ✓ Applied company rules and standards
- ✓ Applied telephone ethics
- ✓ Applied correct procedure in using telephone, printer, computer, internet
- ✓ Handled customer complaints
- ✓ Depict effective communication skills

Assessment conditions

- ✓ Theoretical assessment of this unit must be carried out in an examination room where proper examination rules are followed.
- ✓ Assessment of hygienic work practices must be constantly evaluated.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Knowledge to be developed:</p> <ul style="list-style-type: none">✓ effective customer services principles, including requirements to meet customer service needs and expectations✓ workplace products and services✓ customer service reporting procedures✓ customer service problem-resolution procedures.	<p>Skills to be developed:</p> <ul style="list-style-type: none">✓ promote products and services in a clear and direct manner✓ identify customer needs and expectations✓ resolve customer concerns and complaints by taking appropriate action, including:<ul style="list-style-type: none">• handling customer needs in a courteous, discreet and sensitive manner• addressing customer complaints and escalating where necessary✓ apply workplace procedures relating to customer feedback, including:<ul style="list-style-type: none">• customer service and continuous improvement processes• workplace customer service practices

UNIT TITLE Perform basic computer operations					
DESCRIPTOR	This unit describes the performance outcomes, skills and knowledge required to start up a personal computer or business computer terminal; to correctly navigate the desktop environment; and to use a range of basic functions.				
CODE	TRNCM06V2/20	LEVEL	III	CREDIT	03

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA
1. Start computer, system information and features		1.1. Adjust workspace, furniture and equipment to suit user ergonomic requirements 1.2. Ensure work organization meets organizational and occupational health and safety (OHS) requirements for computer operation 1.3. Start computer or log on according to user procedures 1.4. Identify basic functions and features using system information 1.5. Customize desktop configuration, if necessary, with assistance from appropriate persons 1.6. Use help functions as required
2. Organize files using basic directory and folder structures		2.1 Create folders/subfolders with suitable names 2.2 Save files with suitable names in appropriate folders 2.3 Rename and move folders/subfolders and files as required 2.4 Identify folder/subfolder and file attributes 2.5 Move folders/subfolders and files using cut and paste, and drag and drop techniques 2.6 Save folders/subfolders and files to appropriate media where necessary 2.7 Search for folders/subfolders and files using appropriate software tools

	2.8 Restore deleted folder/subfolders and files as necessary
3. Print information	3.1 Print information from installed printer 3.2 View progress of print jobs and delete as required 3.3 Change default printer if installed and required
4. Shut down computer	4.1 Close all open applications 4.2 Shut-down computer according to user procedures
5. Basic Microsoft Word and Excel skills	5.1. Ensure data is entered, checked and amended in accordance with organizational and task requirements, to maintain consistency of design and layout 5.2. Format spreadsheet using software functions; to adjust page and cell layout to meet information requirements, in accordance with organizational style and presentation requirements 5.3. Ensure formulae are used and tested to confirm output meets task requirements, in consultation with appropriate personnel as required 5.4. Use manuals, user documentation and online help to overcome problems with spreadsheet design and production 5.5. Format document using appropriate software functions to adjust page layout to meet information requirements, in accordance with organizational style and presentation requirements 5.6. Use system features to identify and manipulate screen display options and controls 5.7. Use manuals, user documentation and online help to overcome problems with document presentation and production

Range Statement:

This unit covers computer hardware to include personal computers used independently or within networks, related peripherals, such as printers, scanners, keyboard and mouse, and storage media such as disk drives and other forms of storage. Software used must include but not limited to word processing, spreadsheets, database and billing software packages and Internet browsing software.

Tools, equipment and materials required may include:

- ✓ Storage device
- ✓ Different software and hardware
- ✓ Personal computers system
- ✓ Laptop computer
- ✓ Printers
- ✓ Scanner
- ✓ Keyboard
- ✓ Mouse
- ✓ Disk drive /CDs, DVDs, compressed storage device

ASSESSMENT GUIDE

The assessment guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this occupational standard

Forms of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- ✓ direct questioning combined with review of portfolios of evidence and third-party workplace reports of on-the-job performance by the candidate
- ✓ demonstration of techniques
- ✓ oral or written questioning to assess knowledge of computer operations and functions
- ✓ review of shortcuts created
- ✓ review of folders/subfolders created.

Critical aspects (for assessment)

Evidence of the following is essential:

- ✓ navigation and manipulation of the desktop environment within the range of assigned workplace tasks
- ✓ knowledge of organizational requirements for simple documents and filing conventions
- ✓ application of simple keyboard functions to produce documents with a degree of speed and accuracy relevant to the level of responsibility required.

Assessment conditions

- ✓ Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.
- ✓ Assessment must include direct observation of tasks.
- ✓ Where assessment of competency includes third-party evidence, individuals must provide evidence

- ✓ Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Knowledge required:</p> <ul style="list-style-type: none"> ✓ Basic ergonomics of keyboard and computer use ✓ Main types of computers and basic features ✓ Of different operating systems ✓ Main parts of a computer ✓ Storage devices and basic categories of memory ✓ Relevant software ✓ General security and computer Viruses 	<p>Skills required:</p> <ul style="list-style-type: none"> ✓ communication skills to identify lines of communication, to request advice, to effectively question, to follow instructions and to receive feedback ✓ problem-solving skills to solve routine problems in the workplace, while under direct supervision ✓ technology skills to use equipment safely while under direction, basic keyboard and mouse skills and procedures relating to logging on and accessing a computer ✓ basic typing techniques and strategies.

UNIT TITLE Provide first aid					
DESCRIPTOR	This unit deals with the skills and knowledge required for providing essential first aid in case of emergency when working as a Heavy Vehicle Operator. Knowledge and skills learnt include assessment of the situation, application of basic first aid techniques, use of Automated External Defibrillators and undertaking filling of required workplace documentations. The person providing first aid is not expected to deal with complex casualties or incidents, but to provide initial response where first aid is required.				
CODE	TRNCM07V2/20	LEVEL	III	CREDIT	05

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA
1. Assess the situation		1.1. Physical hazards and risks to self and others' health and safety identified 1.2. Immediate risks to self and casualty's health and safety minimized by controlling hazards in accordance with occupational health and safety requirements 1.3. The situation assessed and prompt decision taken on actions required 1.4. Assistance sought from relevant persons/authority, as required and at the appropriate time
2. Apply basic first aid techniques		2.1. Casualty's physical condition assessed by visible vital signs 2.2. First aid provided to stabilize the patient's physical and mental condition in accordance with enterprise policy on provision of first aid and recognized first aid procedures 2.3. Available first aid equipment used as appropriate
3. Monitor the situation		3.1. Back-up services appropriate to the situation identified and notified promptly 3.2. Information about the patient's condition reported accurately and clearly to emergency services personnel or health professionals
4. Prepare required documentation		4.1. Documented emergency situations according to enterprise procedures 4.2. Clear and accurate reports are provided within required time frames

Range Statement

The following explanations identify how this unit may be applied in different workplaces, sectors and circumstances. First aid treatment is that defined in Common Law as emergency assistance provided to a second party in the immediate absence of medical or paramedical care.

Established first aid principles include:

- ✓ Checking and maintaining the casualty's airway, breathing and circulation
- ✓ Checking the site for danger to self, casualty and others and minimizing the danger.

Physical and personal hazards may include:

- ✓ Workplace hazards such as fire, floods, violent persons
- ✓ Environmental hazards such as electrical faults, chemical spills, fires, slippery surfaces, floods, wild animals, fumes,
- ✓ Proximity of other people
- ✓ Hazards associated with the casualty management processes

Risks may include:

- ✓ Worksite equipment, machinery and substances
- ✓ Bodily fluids
- ✓ Risk of further injury to the casualty
- ✓ Risks associated with the proximity of other workers and bystanders

First aid management will need to account for:

- ✓ Location and nature of the work environment
- ✓ Environmental conditions and situations, such as electricity, biological risks, weather and terrain, motor vehicle accidents,
- ✓ The level of knowledge, skills, training and experience of the person administering first aid
- ✓ Familiarity with particular injuries
- ✓ Legal issues that affect the provision of first aid in different industry sectors
- ✓ The characteristics of the site where the injury occurs
- ✓ The nature of the injury and its cause
- ✓ Infection control procedures
- ✓ Availability of first aid equipment, medications and kits or other suitable alternative aids
- ✓ Proximity and availability of trained paramedical and medical/health professional assistance
- ✓ The patient's cardio-vascular condition as indicated by vital signs such as body temperature, pulse rate and breathing rates
- ✓ Unresolved dangers such as fire, chemical contamination or fume toxicity of the area where the injury occurs

Vital signs include:

- ✓ Breathing
- ✓ Circulation
- ✓ Consciousness.

Injuries may include:

- ✓ Abdominal trauma
- ✓ Allergic reactions
- ✓ Bleeding
- ✓ Chemical contamination
- ✓ Choking

- ✓ Cold injuries
- ✓ Cardio-vascular failure
- ✓ Dislocations and fractures
- ✓ Poisoning and toxic substances
- ✓ Medical conditions including epilepsy, diabetes, asthma
- ✓ Eye injuries
- ✓ Head injuries
- ✓ Minor skin injuries
- ✓ Neck and spinal injuries
- ✓ Needle stick injuries
- ✓ Puncture wounds and cuts
- ✓ Crush injuries
- ✓ Shock
- ✓ Smoke inhalation
- ✓ Sprains and strains
- ✓ Substance abuse
- ✓ Unconsciousness
- ✓ Infections
- ✓ Inhalation of toxic fumes and airborne dusts
- ✓ Bone and joint injuries
- ✓ Eye injuries
- ✓ Burns and scalds, thermal, chemical, friction and electrical

Injuries may involve:

- ✓ Unconsciousness
- ✓ Confusion
- ✓ Tremors
- ✓ Rigidity
- ✓ Numbness
- ✓ Inability to move body parts
- ✓ Pain
- ✓ Delirium
- ✓ External bleeding
- ✓ Internal bleeding
- ✓ Heat exhaustion
- ✓ Hypothermia
- ✓ Pre-existing illness

Appropriate others from whom assistance may be sought may include:

- ✓ Emergency services personnel
- ✓ Health professionals
- ✓ Colleagues
- ✓ Customers
- ✓ Passers by

Assistance may include, as appropriate to emergency situations:

- ✓ Maintaining site safety and minimizing the risk of further injury or injury to others
- ✓ Making the casualty comfortable and ensuring maximum safety
- ✓ Assessment of injury situations

- ✓ Providing first aid including managing bleeding through the application of tourniquets, pressure and dressings
- ✓ Giving CPR and mouth-to-mouth resuscitation
- ✓ Giving reassurance and comfort
- ✓ Raising the alarm with emergency services or health professionals
- ✓ Removing debris

Tools, equipment and material used in this unit may include

- ✓ First aid kit
- ✓ Pressure and other bandages
- ✓ Thermometers
- ✓ Eyewash
- ✓ Pocket face masks
- ✓ Rubber gloves
- ✓ Dressings
- ✓ Flags and flares
- ✓ Fire extinguishers
- ✓ Communication equipment such as mobile phones

ASSESSMENT GUIDE

Forms of assessment

Assessment methods must be chosen to ensure that application of accepted first aid techniques can be practically demonstrated. Methods must include assessment of knowledge as well as assessment of practical skills.

The following examples are appropriate for this unit:

- ✓ Practical demonstration of the use of commonly-used equipment and first aid supplies
- ✓ Explanation about management of a variety of common simulated injury situations
- ✓ Questions to test knowledge of injury situations, types of injury and management of injury situations
- ✓ Review of portfolios of evidence and third-party reports of performance of first aid by the candidate

Assessment context

This unit may be assessed in a simulated environment

Critical aspects (for assessment)

Assessment must ensure:

- ✓ Use of real first aid equipment
- ✓ Ability to assess situations requiring first aid and to decide on a plan of action including seeking help
- ✓ Ability to apply established first aid principles including:
 - Checking and maintaining the casualty's airway, breathing and circulation
 - Checking the site for danger to self, casualty and others and minimizing the danger

Assessment conditions

Assessment must ensure:

- ✓ Use of real first aid equipment
- ✓ Use of dummies

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Knowledge to be developed:</p> <ul style="list-style-type: none">✓ Basic anatomy and physiology✓ Resuscitation✓ Bleeding control✓ Care of the unconscious✓ Airway management✓ Basic infection control principles and procedures✓ Legal requirements✓ Duty of care✓ Reporting requirements.	<p>Skills to be developed:</p> <ul style="list-style-type: none">✓ Assertiveness skills✓ Communication skills✓ Decision making✓ Report preparation✓ Provide first aid✓ Provide various types of treatments✓ Demonstrate the four-step process

UNIT TITLE Participate in safe work practices					
DESCRIPTOR	This unit describes the performance outcomes, skills and knowledge required to incorporate safe work practices into own workplace activities. It requires the ability to follow predetermined health, safety and security procedures and to participate in organizational work health and safety (WHS) management practices.				
CODE	TRNS02CR05V1/20	LEVEL	III	CREDIT	02

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Work safely	1.1. Follow organizational health and safety procedures. 1.2. Incorporate safe work practices into own workplace activities. 1.3. Follow safety directions of supervisors, managers and workplace safety warning signs. 1.4. Use personal protective equipment and clothing or designated uniform. 1.5. Promptly report unsafe work practices, issues and breaches of health, safety and security procedures. 1.6. Identify and remove hazards from immediate workplace area and report all workplace hazards as they arise.
2. Participate and follow procedures for emergency situations	2.1. Recognize emergency and potential emergency situations. 2.2. Follow organizational security and emergency procedures. 2.3. Participate in workplace health and safety management practices developed by the organization to ensure a safe workplace. 2.4. Seek assistance from colleagues or authorities during emergency situations.
3. Document incident reports related to workplace health, safety and security	3.1 Develop knowledge and skills related to writing Incident Reports within the workplaces 3.2 Complete emergency incident reports accurately, following organizational procedures.

Range Statement:

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

a. Safety Procedures may include the following:

- ✓ Emergency, fire and accident procedures

- ✓ Evacuation involving staff or customers
- ✓ Handling dangerous goods
- ✓ Hazard identification
- ✓ Issue resolution procedures
- ✓ Manual handling
- ✓ Personal safety procedures
- ✓ Procedures for the use of personal protective clothing and equipment
- ✓ Reporting incidents and accidents in the workplace
- ✓ Workplace security
- ✓ Stress management policy among employees
- ✓ Waste disposal procedures of workplace

b. Unsafe Work practices may include the following.

- ✓ Broken or damaged equipment
- ✓ Damaged packing material or containers
- ✓ Electricity and water
- ✓ Inflammable materials and fire hazards
- ✓ Ladders
- ✓ Lifting practices
- ✓ Sharp cutting tools and instruments
- ✓ Spillages, waste and debris
- ✓ Stress
- ✓ Toxic substances

c. Manual Handling practices may include the following.

- ✓ Job procedures
- ✓ Lifting or shifting practices
- ✓ Use of equipment, such as ladders and trolleys.

d. Emergency procedures may include the following

- ✓ Accidents
- ✓ Fire
- ✓ Sickness
- ✓ Fatigue
- ✓ Workplace evacuations
- ✓ Storms and cyclones

Tools, equipment and material used

Assessment must ensure access to:

- ✓ A real or simulated retail work environment
- ✓ Suitable equipment and materials for lifting
- ✓ Relevant documentation, such as:
 - Workplace policy and procedures manuals
 - Manufacturer instructions and operation manuals
 - Workplace Health and Safety (WHS) policies and procedures
 - Legislation and statutory requirements

ASSESSMENT GUIDE

The assessment guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines.

Forms of assessment

Assessment needs to be undertaken at workplace or simulated environment.

Critical aspects (for assessment)

Evidence of the following is essential:

- ✓ Applies safe work practices, in all areas of the workplace, according to WHS procedures
- ✓ Identifies hazardous situations and rectifies where appropriate, or reports to the relevant personnel
- ✓ Reads, interprets and applies manufacturer instructions for using and storing hazardous goods.
- ✓ Applies workplace policies and procedures with regard to emergency situations, evacuation, or accident and illness.

Assessment conditions

Skills must be demonstrated in an operational business environment. This can be:

- ✓ An industry workplace
- ✓ A simulated industry environment.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:</p> <ul style="list-style-type: none">✓ basic aspects of WHS standards and procedures✓ employee responsibilities to participate in WHS practices✓ employee responsibility to ensure safety of self, other workers and other people in the workplace within the scope of own work role✓ workplace hazards and associated health, safety and security risks✓ contents of health, safety and security procedures relating to:<ul style="list-style-type: none">➤ evacuation of staff and customers➤ security management of cash, documents, equipment, keys or people➤ format and use of template reports for hazards and incident and accident reporting➤ safe work practices for individual job roles✓ procedures for WHS management practices:<ul style="list-style-type: none">➤ hazard identification➤ WHS induction training➤ safe work practice training	<p>Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:</p> <ul style="list-style-type: none">✓ demonstrate the use of predetermined health, safety and security procedures and safe work practices in work functions on at least three occasions✓ demonstrate correct procedures to respond in line with organizational security and emergency procedures during one emergency or potential emergency situation, seeking assistance where appropriate✓ participate in one of the following work health and safety (WHS) consultation activities:<ul style="list-style-type: none">➤ discussion with, or formal report to, WHS representatives regarding a WHS matter➤ discussion with supervisor or manager regarding a WHS matter➤ staff meeting that involves WHS discussion.

UNIT TITLE Use and maintain tools and equipment required for vehicle operations					
DESCRIPTOR	This unit describes performance outcomes required to maintain tools and equipment relevant to vehicle operators.				
CODE	TRNS02CR06V1/20	LEVEL	III	CREDIT	02

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA	
1. Select and use tools and equipment	1.1	Job requirements are determined from workplace instructions	
	1.2	Tools and equipment are selected to meet job requirements	
	1.3	Tools and equipment are checked for serviceability according to manufacturer and workplace procedures	
	1.4	Personal protective equipment (PPE) suitable for tools or equipment to be used is selected and checked for serviceability	
	1.5	Tools and equipment, including PPE, are used according to manufacturer procedures and safety requirements	
2. Service, maintain and store workplace tools and equipment	2.1	Tools and equipment are serviced, adjusted and maintained according to workplace and manufacturer schedules and procedures to ensure safe and accurate operation, within scope of own responsibility	
	2.2	Damaged or worn tools and equipment are tagged and removed from the workplace for and reported according to workplace procedures	
	2.3	Remaining tools and equipment are cleaned, checked and stored according to workplace procedures	

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ different hand tools
- ✓ different power tools
- ✓ different air tools
- ✓ one piece of vehicle lifting equipment

- ✓ one piece of vehicle supporting equipment.

ASSESSMENT GUIDE

The assessment guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines.

Forms of assessment

Assessment needs to be undertaken at workplace or simulated environment.

Critical aspects (for assessment) Assessment conditions

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the tools and equipment that they have used and maintained, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- ✓ Automotive repair workshop or simulated workplace
- ✓ Workplace instructions
- ✓ Hand and power tools and equipment
- ✓ PPE required to use workplace tools and equipment
- ✓ Vehicles, components or materials that require the use of tools and equipment
- ✓ Material relevant to maintaining workplace tools and equipment, including tool and equipment operating instructions or manuals
- ✓ Tagging material.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Individuals must be able to demonstrate knowledge of:</p> <ul style="list-style-type: none">✓ Work health and safety (WHS) and occupational health and safety (OHS) requirements relating to using and maintaining workplace tools and equipment, including procedures for:<ul style="list-style-type: none">➤ using specific tools and equipment➤ selecting and using personal protective equipment (PPE)✓ Types, uses, limitations and operating procedures for hand and power tools commonly used in the workshop.✓ Types, characteristics, uses of workplace equipment, including vehicle lifting and supporting equipment such as jacks, jack stands and vehicle hoists	<p>Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:</p> <ul style="list-style-type: none">✓ Use and maintain workplace tools and equipment different hand tools, different power tools and different air tools✓ One piece of vehicle lifting equipment✓ One piece of vehicle supporting equipment

UNIT TITLE Perform effective workplace communication					
DESCRIPTOR	This unit addresses the need for effective communication across the workplace. It describes the ethics of communication and shows the importance of selecting the best method of communication during various situations. It also identifies the barriers to communication and explains how to overcome them. The unit also requires competency in electronic communication.				
CODE	TRNS02CR07V1/20	LEVEL	III	CREDIT	02

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA	
1. Communicate with customers and colleagues		1.1 Proper channels and methods of communication use 1.2 Workplace interactions with customers and colleagues appropriately made 1.3 Appropriate non-verbal communication used 1.4 Appropriate lines of communication followed	
2. Participate in workplace meetings and discussions		2.1 Meetings and discussions attended on time 2.2 Procedures to expressing opinions and following instructions clearly followed 2.3 Questions asked and responded to effectively 2.4 Meeting and discussion outcomes interpreted and implemented correctly	
3. Handle relevant work-related documentation		3.1. Conditions of employment understood correctly 3.2. Relevant information accessed from appropriate sources 3.3. Relevant data on workplace forms and other documents filled correctly 3.4. Instructions and guidelines understood and followed Properly 3.5. Reporting requirements completed properly	
4. Handle electronic communication		4.1 Procedures for sending emails learnt 4.2 Procedure for attaching files learnt 4.3 Basic email writes up in English demonstrated correctly	

Range Statement:

As per the range of communication protocols are involved, students need to undertake the following.

- ✓ Standard communication process and protocols with clients and colleagues
- ✓ Minute taking after formal meetings and discussions
- ✓ Reporting organizational hierarchy to colleagues
- ✓ Sending electronic communication with write up and attachment

Tools, equipment and material used

Tools, equipment and materials used for this unit may include but not limited to the following.

- ✓ Computer or Laptop
- ✓ Note pads
- ✓ Pens/pencils
- ✓ Minute taking forms with formats

ASSESSMENT GUIDE

Forms of assessment

Assessment for the unit needs to be continuous and holistic and must include real or simulated workplace activities.

Critical aspects (for assessment)

It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations in the critical aspects of communicating effectively with others involved in or affected by the work. This unit may be assessed in conjunction with all and units which form part of the normal job role.

Assessment conditions

It is preferable that assessment reflects a process rather than an event and occurs over a period of time to cover varying circumstances.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none">✓ Proper communication channels and methods✓ Appropriate non-verbal communications✓ Communication lines✓ Methods and techniques in participating in meetings and group discussions✓ Methods of taking notes and minutes✓ Understanding employment contract✓ Interpreting and understanding job descriptions✓ Techniques of writing emails and attaching documents	<ul style="list-style-type: none">✓ Handling of communications among customers and colleagues✓ Following employment contractual requirements and job-related tasks✓ Undertake note taking and minutes✓ Compose and Sending emails✓ Sending attachment through emails

UNIT TITLE Operate and inspect heavy duty engine and its systems					
DESCRIPTOR	This unit describes the performance outcomes required to inspect heavy vehicle engines. It is preferred that the capacity of the engine selected for developing this competency be from a heavy vehicle or should have capacity of more than 2000cc				
CODE	TRNS02CR08V1/20	LEVEL	III	CREDIT	04

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Understand and interpret fundamentals of internal combustions engines, their parts and functions	1.1 Fundamentals of internal combustions engines, especially diesel and petrol engines 1.2 Engine cycles including two and four stroke cycles 1.3 Identification of engine parts and their functions 1.4 Engine parts of diesel and petrol engines
2. Understand and interpret various engines systems and their functions	2.1 Overview of engine systems 2.2 Operating and maintenance procedures of engine cooling, lubrication, and fuel, electrical systems
3. Perform all pre-operative checks and start the engine	3.1 Ensure all pre-starting checks are performed prior to starting engine 3.2 Start the engine and undertake checks to be performed while engine is running

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

The following resources must be made available:

- ✓ automotive repair workshop or simulated workplace
- ✓ workplace instructions
- ✓ manufacturer engine specifications
- ✓ two different vehicles or machinery with engines requiring servicing
- ✓ tools, equipment and materials appropriate for inspecting engines

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform safe operation of vehicle engines.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ identification of working principles of engines, their parts, systems
- ✓ inspections for oil and fluid leaks
- ✓ analyzing abnormal engine noises
- ✓ inspecting auxiliary components.
- ✓ inspecting engine smoke and operation

Assessment conditions

- ✓ Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.
- ✓ Assessment must include direct observation of tasks.
- ✓ Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the engines that they have worked on, e.g. repair orders.
- ✓ Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Knowledge requirements:</p> <ul style="list-style-type: none">✓ identification and function of major engine components, including cylinder block and head/ piston and connecting rod / crankshaft / valve train /manifolds / ports and valves/✓ identify functions of engine systems including lubrication / cooling/ fuel and air electrical system etc.✓ applications of engine oils and filters auxiliary components, including mountings, belts, pulleys hoses etc.✓ proper starting techniques of vehicle engines.	<ul style="list-style-type: none">✓ Inspect engines of two different vehicles or machinery, including oil, coolant top up and air filter cleaning process

UNIT TITLE Inspect mechanical systems of heavy vehicles					
DESCRIPTOR	This unit describes the performance outcomes required to identify the function and basic operation of a range of vehicle mechanical systems and components. It involves preparing for the task, locating information on the systems and components, and demonstrating knowledge of mechanical systems.				
CODE	TRNS02CR09V1/20	LEVEL	III	CREDIT	04

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA	
1. Locate and identify operational system and its components		1.1 Task instruction is interpreted and vehicle or machinery to be worked on is identified 1.2 Technical information regarding mechanical system to be identified is located 1.3 Operational system of major components is located and identified on a vehicle or machinery according to safety requirements and task instructions	
2. Demonstrate knowledge of mechanical and operational systems		2.1 System function is determined from technical information and demonstrated during workplace activities 2.2 System major component function and basic operation are determined from technical information and demonstrated during workplace activities 2.3 System relationship to vehicle or machinery operation is determined from technical information and demonstrated during workplace activities	
3. Operate and maintain hydraulic and pneumatic systems		3.1 Fundamental knowledge related to hydraulics and pneumatics developed. 3.2 Operate and maintain hydraulic and pneumatic systems	

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ engine systems
- ✓ transmission and drivetrain
- ✓ steering system
- ✓ suspension system
- ✓ fuel system
- ✓ cooling system
- ✓ braking system
- ✓ exhaust system

- ✓ pneumatic system
- ✓ hydraulic system

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- ✓ Inspect two different vehicles or machinery, including engine oil, coolant top up and air filter cleaning process

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include, direct observation of tasks.

Critical aspects (for assessment)

Inspection needs to include the following.

- ✓ pre- and post-service inspections for oil and fluid leaks
- ✓ analyzing abnormal engine noises
- ✓ Inspecting auxiliary components.

Assessment conditions

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- ✓ Automotive workshop or simulated workplace
- ✓ Workshop or task instructions
- ✓ Information regarding basic mechanical principles and fundamentals
- ✓ Information regarding vehicle mechanical systems and components
- ✓ Workplace safety equipment, including PPE
- ✓ Vehicle or a range of automotive mechanical systems and components
- ✓ Automotive tools and equipment.

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Individuals must be able to demonstrate knowledge of:</p> <ul style="list-style-type: none"> ✓ work health and safety (WHS) and occupational health and safety (OHS) requirements relating to identifying vehicle mechanical systems and components, including procedures for: <ul style="list-style-type: none"> ➤ selecting and using personal protective equipment (PPE) ➤ using tools and equipment ➤ working safely ✓ basic theory and principles of automotive mechanical systems, including: <ul style="list-style-type: none"> ➤ mechanical advantage ➤ gear ratio/ hydraulics/ pneumatics ✓ identification, function and basic operation of vehicle mechanical systems and components, including: <ul style="list-style-type: none"> ➤ engine systems ➤ transmission and drivetrain ➤ steering system ➤ suspension system ➤ fuel system ➤ cooling system ➤ braking system ➤ exhaust system ➤ Automotive terminology relating to mechanical systems. 	<p>Before competency can be determined, individuals must demonstrate they can perform the following, according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:</p> <ul style="list-style-type: none"> ✓ identify, locate and demonstrate knowledge of the operation of the following vehicle mechanical systems while carrying out workplace activities that involve all of the following systems: <ul style="list-style-type: none"> ➤ engine systems ➤ transmission and drivetrain ➤ steering system ➤ suspension system ➤ fuel system ➤ cooling system ➤ braking system ➤ Exhaust system. ➤ Hydraulic Systems ➤ Pneumatic Systems

UNIT TITLE Comply to road rules and regulations on driving heavy vehicles					
DESCRIPTOR	This unit involves the skills and knowledge required for higher-order operating of heavy vehicles. This unit applies to heavy vehicle drivers required to apply safe operating driving behaviors.				
CODE	TRNS02CR10V1/20	LEVEL	III	CREDIT	04

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Apply relevant legislation applicable to safe operation of a heavy vehicle	<p>1.1 Current road rules and heavy vehicle national law or applicable state/territory law and regulations are identified, interpreted and applied</p> <p>1.2 Road signs, signals and markings are identified and complied with in safe heavy vehicle driving activities</p> <p>1.3 Purpose of road rules and traffic safety laws in ensuring safe and efficient regulation of traffic flow is interpreted and applied when driving a heavy vehicle</p>
2. Inspect vehicle and secure load for safe transportation of goods/cargo	<p>2.1 Visual safety checks of internal and external condition of vehicle/trailer is undertaken in accordance with manufacturer specifications and workplace procedures</p> <p>2.2 Internal controls and gauges relating to safe vehicle operation are inspected</p> <p>2.3 Pre-operational inspections and checks of vehicle/trailer brake systems, suspension, axles, electrical systems, wheels and tires, and couplings are undertaken in accordance with national road safety standards, as required</p> <p>2.4 Distribution of vehicle load is checked to ensure it is even, legal and within safe working capacity and mass management requirements</p> <p>2.5 Load is checked to ensure dangerous goods (DG) and hazardous substances are appropriately segregated.</p> <p>2.6 Load is secured in accordance with load restraint guidelines and protection equipment for different loads, carrying and storage conditions</p> <p>2.7 Load is protected in accordance with legal and workplace safety requirements</p> <p>2.8 All required goods documentation is</p>

	completed in accordance with workplace requirements and available guidelines.
3. Apply safe heavy vehicle driving behaviors	<p>3.3 Requirements for safe heavy vehicle driving are applied</p> <p>3.4 Importance of attitude in complying with road rules in relation to level of risk faced by a driver is applied when driving a heavy vehicle</p> <p>3.5 Importance of road sharing principles is applied when driving a heavy vehicle, including interacting courteously with other road users, in accordance with road rules to ensure safe and efficient traffic flow</p> <p>3.6 Importance of motivation to drive safely is interpreted and explained</p> <p>3.7 Principles of proactive driving methods that maintain one's driving at a low-level risk are identified and applied</p> <p>3.8 Contributing risk factors to potential crash risks are identified and taken into consideration</p>
4. Apply low-risk heavy vehicle driving strategies	<p>4.1 Contributing risk factors to forming opinions and beliefs about low-risk driving are applied</p> <p>4.2 Human factors that can influence low-risk driving behavior are outlined</p> <p>4.3 Low-risk driving strategies are applied and their rationale explained</p>
5. Explain risk factors that contribute to accidents when driving a heavy vehicle	<p>5.1 Contributing risk factors to accidents are recognized</p> <p>5.2 External factors that could lead to accidents are outlined</p> <p>5.3 Internal factors that could lead to accidents are outlined</p> <p>5.4 Consequences of accidents in relation to relevant traffic laws and physical, financial and psychological costs to the individual and society are explained</p> <p>5.5 Functions of vehicle operations and control, and how to recover control of a vehicle are explained</p>
6. Apply heavy vehicle operation and control skills	<p>6.1 Appropriate action is taken to respond to hazardous situations and various road surfaces</p> <p>6.2 Principles of braking are applied to a high level of technical competence</p> <p>6.3 Principles of steering are applied to a high</p>

	<p>level of technical competence</p> <p>6.4 Slow speed maneuvers are carried out to a high level of technical competence</p> <p>6.5 Vehicle is operated and controlled at a high level of technical competence</p>
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Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ Traffic regulations of the Maldives
- ✓ Good driving skills
- ✓ Heavy vehicle Loading regulations
- ✓ Road Code
- ✓ Traffic Sign
- ✓ Parking regulation
- ✓ Incident management
- ✓ Speed Regulation
- ✓ Road worthiness
- ✓ Tow regulation
- ✓ Relevant International Regulation and Best Practice

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ Traffic regulation of the Maldives
- ✓ Loading regulations of vehicles if there is any
- ✓ Road conditions and safe driving practices

Assessment conditions

Assessment must occur in workplace operational situations in a heavy vehicle typical of that used in industry and on a variety of road conditions.

Resources for assessment must include:

- ✓ a range of relevant exercises, case studies and/or simulations
- ✓ applicable documentation including workplace procedures and regulations.
- ✓ relevant materials, tools and equipment currently used in industry
- ✓ Suitable heavy vehicle that meets road worthiness regulations of Maldives

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:</p> <ul style="list-style-type: none"> ✓ Additional equipment fitted to heavy vehicles ✓ Consequences of heavy vehicle accidents ✓ Critical factors underpinning high-level heavy vehicle driving technical competence ✓ Driving hazards and related low-risk driving techniques ✓ Factors contributing to accidents including: ✓ Driver values, emotions, limitations and personal needs including behaviors of driver. ✓ Relevant road rules and traffic safety legislation including: <ul style="list-style-type: none"> ➤ driver licensing ➤ vehicle registration ➤ vehicle standards ➤ fatigue management ➤ mass, dimensions and loading management ➤ speed compliance ➤ road signs, signals and markings ➤ steering operation and control ✓ types of driving conditions commonly encountered requiring correct selection of appropriate gears to avoid losing control of a heavy vehicle ✓ types of driving conditions commonly encountered requiring steering operation/control to maintain a heavy vehicle under adverse conditions 	<p>Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:</p> <ul style="list-style-type: none"> ✓ Adapting to differences in heavy vehicles, including their controls and safety devices, and the driving environment ✓ Applying correct selection and application of a braking and gear system ✓ Applying correct steering control techniques in a variety of driving conditions ✓ Applying road rules ✓ Carrying out pre-operational checks and related action on heavy vehicles including checking appropriate signage, lights and equipment for operational effectiveness and for conformity to prescribed traffic regulations ✓ Complying with appropriate legislative, regulatory and procedural requirements while driving a heavy vehicle ✓ Dealing with adverse conditions while driving a heavy vehicle ✓ Evaluating risk and consequences of own driving actions ✓ Implementing work health and safety requirements and practices when: <ul style="list-style-type: none"> ➤ conducting prestart-up checks ➤ identifying hazards ➤ loading/unloading and manual handling ➤ minimizing, controlling or eliminating hazards ➤ observing and interpreting driver behavior that may put people at risk ➤ maintaining situational awareness ➤ making necessary adjustments to suit driving environment ➤ managing speed and space while driving a heavy vehicle ➤ maneuvering a heavy vehicle at slow speed ➤ monitoring and anticipating traffic hazards and taking appropriate and timely action

UNIT TITLE Apply safe Forklift operation skills					
DESCRIPTOR	This unit involves the skills and knowledge required to operate a forklift, including checking forklift condition, driving the forklift to fulfil operational requirements, monitoring site conditions, and monitoring and maintaining forklift performance.				
CODE	TRNS02CR11V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Check forklift condition	1.1 Condition of forklift is checked for compliance with OH&S and workplace requirements for warning devices, manufacturers specifications and the nature of the load shifting task 1.2 Attachments are checked to ensure appropriate adjustment and operation 1.3 Mirrors and seats are adjusted for safe operation by the driver 1.4 Log books are checked and appropriate workplace documentation is completed in accordance with workplace requirements
2. Drive the forklift	2.1 Forklift is started, steered, maneuvered, positioned and stopped in accordance with regulations and manufacturer's instructions 2.2 Engine power is managed to ensure efficiency and performance and to minimize engine and gear damage 2.3 Operational hazards are identified and/or anticipated and avoided or controlled through defensive driving and appropriate hazard control techniques 2.4 Forklift is driven in reverse, maintaining visibility and achieving accurate positioning 2.5 The forklift is parked, shut down and secured in accordance with manufacturers specifications, regulations and workplace procedures
3. Operate a forklift to handle loads	3.1 Identify location of forklift data plate and determine its loading capacity 3.2 The lifting task to be undertaken is appropriately planned and the correct lifting truck and attachments are selected 3.3 The load is lifted, carried, lowered and set down in accordance with manufacturers specifications and company procedures
4. Monitor site conditions	4.1 When selecting the most efficient route,

	<p>hazards and traffic flow are identified and appropriate adjustments are made</p> <p>4.2 Site conditions are assessed to enable safe operations and to ensure no injury to people or damage to property, equipment, loads or facilities occurs</p>
5. Monitor and maintain forklift performance	<p>5.1 Performance and efficiency of vehicle operation is monitored during use</p> <p>5.2 Defective/irregular performance and malfunctions reported to relevant personnel</p> <p>5.3 Forklift records are maintained/updated in accordance with workplace procedures and legislative requirements</p>

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ Properly functioning forklift
- ✓ Forklift operating knowledge and skills and it is preferred to have forklift operator's manual
- ✓ Good driving skills
- ✓ Forklift loading knowledge and skills

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Assessment must confirm appropriate knowledge and skills to:

- ✓ Operate a forklift safely in a workplace environment
- ✓ Handle loads and drive defensively
- ✓ Manage forklift controls, read instruments and adjust engine power to site requirements
- ✓ Locate, interpret and apply relevant information
- ✓ Carry out pre-operational checks on a forklift
- ✓ Work effectively with colleagues
- ✓ Convey information in written and oral form
- ✓ Maintain workplace records
- ✓ Meet relevant regulatory requirements

Assessment conditions

Following conditions are noted to be associated while undertaking the assessment

- ✓ Assessment of competence must comply with the assessment requirements of the relevant forklift licensing authority of the Maldives
- ✓ Assessment of this unit must be undertaken by a Registered Training Organization:
 - As a minimum, assessment of knowledge must be conducted through appropriate oral and/or written questioning
- ✓ Appropriate practical assessment must occur in an appropriate work situation

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none">✓ Workplace operating procedures✓ Forklift controls, instruments and indicators and their use✓ Forklift handling procedures✓ Procedures to be followed in the event of an operational emergency✓ Engine power management and safe operating strategies✓ Efficient driving techniques✓ Operating hazards and related defensive driving and hazard control techniques✓ Pre-operational checks carried out on forklift and related action✓ Principles of stress management when driving a forklift✓ Site layout and obstacles	<ul style="list-style-type: none">✓ Read and interpret instructions, procedures, information and signs relevant to the operation of a forklift✓ Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment✓ Identify points of balance and safe lifting positions on a range of loads when operating a forklift (including accessories)✓ Monitor performance of forklift and its equipment and take appropriate action where required✓ Check and replenish fluids and carry out lubrication processes in the course of work activities

UNIT TITLE Apply safe Loader operation skills					
DESCRIPTOR	This unit describes the skills and knowledge required to operate and shift loads using wheel loader operations.				
CODE	TRNS02CR12V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Plan and prepare for wheel loader operations	1.1 Access, interpret and apply wheel loader operations documentation 1.2 Obtain, interpret, clarify and confirm work requirements 1.3 Identify hazards and environmental issues, assess the risks and implement control measures in line with workplace policies 1.4 Select and wear personal protective equipment required for work activities 1.5 Access, interpret and apply geological and survey data required to complete the work activity 1.6 Inspect and prepare work area in coordination with others in line with workplace procedures 1.7 Select required loader equipment and confirm suitability for work activities 1.8 Obtain and interpret emergency procedures for loaders, and be prepared for fires, accidents and emergencies 1.9 Coordinate and communicate planned activities with others at the site prior to commencement of work activity
2. Operate the wheel loader in line with established requirements to complete work activity	2.1 Carry out prestart and start-up checks in line with workplace procedures 2.2 Identify faults or defects and rectify or report within scope of own responsibility and according to workplace procedures 2.3 Drive and operate loader using techniques suited to equipment capabilities, site and work conditions, and according to workplace environments 2.4 Monitor and manage equipment performance using indicators and alarms in line with manufacturers' specifications 2.5 Monitor hazards and risks during operations, and ensure safety of self, other

	personnel, plant and equipment 2.6 Park up, shut down, secure and carry out post operational inspection of equipment in line with workplace procedures
3. Conduct housekeeping activities	3.1 Clear work area and dispose or recycle materials according to workplace procedures 3.2 Manage and/or report hazards, and maintain a safe working environment 3.3 Complete and file or distribute documentation in a manner that complies with workplace practices

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ loader
- ✓ logs/slash for loading and/or segregation and stacking
- ✓ personal protective equipment required in harvesting operations
- ✓ vehicle-to-vehicle communication system

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ Traffic regulation of the Maldives
- ✓ Loading regulations of vehicles if there is any
- ✓ Road conditions and safe driving practices

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

Include access to:

- ✓ wheel loader
- ✓ materials to be shifted
- ✓ personal protective equipment
- ✓ be conducted in a safe environment; and,
- ✓ be assessed in context of this sector's work environment; and,

- ✓ be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- ✓ confirm consistent performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit.</p> <p>This includes:</p> <p>Key policies and procedures, legislation and established requirements for wheel loader operation without attachments, including those relating to:</p> <ul style="list-style-type: none"> ✓ work health and safety, including signs of operator fatigue and how it should be managed identifying ✓ operational, maintenance and basic diagnostics ✓ housekeeping activities ✓ personal protective equipment ✓ maintenance and basic diagnostics ✓ fire, accident and emergency <p>Key factors affecting work activities described in performance evidence above, including:</p> <ul style="list-style-type: none"> ✓ equipment processes, technical capability and limitations ✓ geological and technical data ✓ loading techniques ✓ plans, reports, maps, specifications 	<p>The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit.</p> <p>The candidate must demonstrate completion of wheel loader operations that safely, effectively and efficiently follows workplace procedures to carry out work activity on at least two occasions, and include:</p> <ul style="list-style-type: none"> ✓ conducting prestart checks prior to commencing operations and shutdown procedures on completion of operations ✓ driving and operating the wheel loader for operations and adjusting techniques to suit site conditions ✓ shifting loads, carries the load as close to the ground as possible and deposits load to the correct location ✓ parking and securing the equipment <p>In the course of the above work, the candidate must also:</p> <ul style="list-style-type: none"> ✓ locate and apply relevant documentation, policies and procedures ✓ select and wear personal protective equipment required for work activities ✓ carry out vehicle refueling requirements and procedures where applicable ✓ apply safe work practices, identifying and reporting all potential hazards, risks and environmental issues ✓ apply problem solving and troubleshooting techniques ✓ conduct loading and unloading ✓ manage changes in the loads center of gravity during transportation ✓ select and use the required tools and equipment according to original equipment

	<p>manufacturer manual</p> <ul style="list-style-type: none"> ✓ monitor and manage equipment performance using indicators and alarms ✓ identify common equipment faults ✓ inspect and prepare work area ✓ use a range of communication techniques and equipment essential to the safe completion of work activity, including hand, audible and other signals ✓ meet written and verbal reporting requirements and procedures associated with equipment operations
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UNIT TITLE Apply safe Excavator operation skills					
DESCRIPTOR	This unit describes a participant's skills and knowledge required to conduct civil construction excavator operations in Civil construction.				
CODE	TRNS02CR13V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Plan and prepare for excavator operations	1.1 Access, interpret and apply excavator operations documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address risks, hazards and environmental issues and implement control measures 1.4 Select and wear personal protective equipment appropriate for work activities 1.5 Obtain, identify and implement traffic management signage requirements 1.6 Select, and check for faults, equipment and/or attachments for work activities 1.7 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Operate excavator	2.3 Carry out pre-start, start-up, park, shutdown and secure equipment procedures 2.4 Coordinate activities with others at the site prior to commencement of, and during, the work activity 2.5 Continually monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment 2.6 Drive and operate excavator, and modify the operating technique to meet changing work conditions
3. Lift, carry and place materials	2.1 Conduct communication practices associated with transportation and lifting of materials 2.2 Establish weight of load and ensure it is within safe operational limits of the machine 2.3 Select, attach and use slings and lifting gear in accordance with safe working load requirements 2.4 Position machinery and ensure stability and locate to effectively shift materials according to job specifications

	2.5 Shift load safely and effectively 2.6 Move load using hand /audible / communication signals
4. Select, remove and fit attachments	4.3 Select attachment for the task 4.4 Remove and fit attachment according to manufacturer's manual and site requirement 4.5 Test attachment and ensure correct fitting and operation 4.6 Use attachment in accordance with recommendations and design limits 4.7 Remove, clean and store attachments in designated location
5. Relocate the excavator	5.3 Prepare excavator for relocation 5.4 Move excavator safely between worksites, observing relevant codes and traffic management requirements 5.5 Load and unload machine from float/trailer
6. Carry out machine operator maintenance	6.3 Prepare machine for maintenance 6.4 Conduct inspection and fault finding 6.5 Carry out scheduled maintenance tasks 6.6 Process written maintenance records
7. Conduct housekeeping activities	7.3 Clear work area and dispose of or recycle materials 7.4 Process records

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range of activities need to include civil related construction such as digging for foundation, making trenches, earth moving. Excavators are also used for sand and gravel excavation and backfill operations purposes.

Tools, equipment and material used

- ✓ Excavator
- ✓ Various buckets for various functions
- ✓ personal protective equipment
- ✓ vehicle-to-vehicle communication system

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ Traffic regulation of the Maldives
- ✓ Safe handling of excavator operations
- ✓ Buckets or attachments to suit the various functions related to the job

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must include, access to:

- ✓ Excavator
- ✓ materials to be shifted
- ✓ personal protective equipment
- ✓ be conducted in a safe environment; and,
- ✓ be assessed in context of this sector's work environment; and,
- ✓ be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- ✓ confirm consistent performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:</p> <ul style="list-style-type: none"> ✓ hazards and risks associated with excavator operations ✓ excavator and site safety requirements ✓ excavator components, controls, features, technical capabilities and limitations ✓ excavator operation and maintenance manual ✓ duty of care to self, others and the environment when operating an excavator ✓ relevant legislation with regard to excavator operation and licensing requirements ✓ environmental impacts relevant to the operation of excavators ✓ workplace procedures applicable to health and safety in the workplace requirements to operate an excavator safely ✓ industry and workplace biosecurity procedures. 	<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has prepared for, carried out and shut down excavator operations at least once and has demonstrated the following:</p> <ul style="list-style-type: none"> ✓ identified hazards and implemented safe operating procedures for excavator operations ✓ carried out excavator pre-operational checks for safe excavator operation ✓ driven and operated an excavator safely including modifying operating technique to meet changing work conditions ✓ carried out excavator shut down procedures including securing and safe storage of excavator ✓ minimized environmental impacts associated with excavator operation ✓ followed workplace health and safety procedures while undertaking pre-operational checks, operational and shut down procedures for the excavator ✓ followed industry and workplace biosecurity procedures ✓ completed required documentation for excavator use

UNIT TITLE Apply safe Mobile Cranes operation skills					
DESCRIPTOR	This unit specifies the skills and knowledge required to operate a non-slewing mobile crane with a Maximum Rated Capacity (MRC) exceeding 3 tones safely, in accordance with all relevant legislative responsibilities.				
CODE	TRNS02CR14V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA
1. Plan work/task	<ul style="list-style-type: none"> 1.1 Task requirements are identified from work orders or equivalent and a lift plan is confirmed with associated personnel and a site inspection is conducted in accordance with workplace procedure 1.2 Work area operating surface is confirmed to determine the quality of ground suitability for operational use of non-slewing mobile crane in accordance with workplace procedures 1.3 Non-slewing mobile crane rated capacity (RC) and the lifting gear Working Load Limit (WLL) are established for the load/s and work/task requirements in accordance with manufacturer requirements and workplace procedures 1.4 Appropriate paths for operating the mobile crane and moving and placing load/s in work area are assessed and determined in accordance with workplace procedures 1.5 Relevant hazard identification and risk elimination/control measures are applied and advised to associated personnel in accordance with workplace procedures 1.6 Traffic management plan implementation is confirmed and followed in accordance with workplace procedures 1.7 Appropriate communication procedures are identified and tested with associated personnel in accordance with workplace procedures 1.8 All tasks are confirmed to ensure requirements for the relevant work area in accordance with a lift plan and workplace procedures 	
2. Prepare for work/task	<ul style="list-style-type: none"> 2.1 Consultation with workplace personnel is established and maintained to ensure lift plan is clear and consistent with site requirements in accordance with a lift plan and workplace procedures 	

	<p>2.2 Risk control measures for hazards identified are checked for implementation in accordance with the lift plan and safe work procedures</p> <p>2.3 Non-slewing mobile crane is accessed safely in accordance with manufacturer requirements and safe work procedures</p> <p>2.4 Pre-start crane checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer requirements and safe work procedures</p> <p>2.5 Mobile crane is set up correctly with any lifting gear as per the lift plan in accordance with relevant manufacturer requirements including load chart/s and safe work procedures</p> <p>2.6 Fly jib (if fitted) is set up as required in accordance with specific manufacturer requirements and safe work procedures</p> <p>2.7 Operational checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer requirements and safe work procedures</p> <p>2.8 Crane logbook is checked to confirm current compliance, is correct for the crane type, is completed and signed and required rectifications have been signed off in accordance with manufacturer requirements and safe work procedures</p> <p>2.9 Weather and work environment conditions are assessed to determine any impact on mobile crane operations in accordance with manufacturer requirements and safe work procedures</p>
3. Perform work/task	<p>3.1 Lifts are determined within the RC of the non-slewing mobile crane in accordance with the load chart/s and lift plan</p> <p>3.2 Boom/jib and hook block is safely positioned over the load following directions from associated personnel in accordance with the lift plan and safe work procedures</p> <p>3.3 Lifting gear where required is connected to the load and used safely in accordance with the lift plan, safe work procedures and manufacturer requirements</p> <p>3.4 Test lift is carried out in accordance with dogging and safe work procedures</p>

	<p>3.5 Loads are transferred using relevant crane movements and tag lines as required, in accordance with lift plan and safe work procedures</p> <p>3.6 Load and crane movement is monitored constantly and crane is operated safely in accordance with lift plan and safe work procedures</p> <p>3.7 All required communication signals are correctly interpreted and followed whilst crane is operated in accordance with the lift plan and safe work procedures</p> <p>3.8 Load is lowered and landed safely in accordance with lift plan and safe work procedure</p> <p>3.9 Lifting gear is disconnected from load and crane is positioned safely and efficiently for next task in accordance with lift plan and safe work procedures</p>
4. Pack Up	<p>4.1 Crane boom/jib, lifting gear and associated equipment is stowed and secured as required in accordance with manufacturer requirements and safe work procedures</p> <p>4.2 Relevant motion locks and brakes are applied as required in accordance with manufacturer requirements and safe work procedures</p> <p>4.3 Crane is shut down and secured to prevent unauthorized access/use in accordance with safe work procedures</p> <p>4.4 Post-operational crane checks are carried out in accordance with legislative responsibilities, safe work procedures and manufacturer requirements</p>

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ mobile crane
- ✓ appropriate loads as outlined in the performance evidence requirements
- ✓ associated personnel to sling and direct loads
- ✓ communications equipment including two-way radios and whistles
- ✓ personal protective equipment (PPE)
- ✓ relevant documentation for operating mobile crane
- ✓ operator's manual of the crane manufacturer

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ Competency to interpret traffic regulation of the Maldives
- ✓ Interpret safe load handling process
- ✓ Conditions of the site and its surrounding
- ✓ Ensure drivers always maintaining three points of contact whilst accessing crane and ensure rungs / steps are free of hazards

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:
Include access to:

- ✓ mobile crane
- ✓ materials to be shifted
- ✓ personal protective equipment
- ✓ be conducted in a safe environment; and,
- ✓ be assessed in context of this sector's work environment; and,
- ✓ be assessed in compliance with relevant legislation/regulation.
- ✓ confirm consistent performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Appropriate worksite communication procedures including:</p> <ul style="list-style-type: none"> ✓ listening/ hand signals/questioning techniques/ signage /two-way radios ✓ written instructions and whistles ✓ crane configuration mathematical calculations ✓ correct tire pressure (inflation/condition) ✓ crane and lifting gear load chart/s and manufacturer requirements ✓ lift impacting factors including center of gravity, dynamic nature of load\ deflection of boom length, radius of lift, weight and tire inflation pressures. ✓ impact of factors affecting non-slewing mobile crane stability including overloading, pick up and placement of load and unbalanced loads 	<ul style="list-style-type: none"> ✓ applying relevant calculations in conjunction with lift plan and load chart, radius requirements and relevant lifting gear to perform work/task to enable crane to be configured for load. ✓ communicating with other workplace personnel through using 2-way radio, listening, making and interpreting hand signals, signage, verbal language and visual aids, whistles and written instructions ✓ complying with all the relevant regulation of Transport Authority ✓ completing the pre-start check on engines, its systems and Cranes and its systems.

UNIT TITLE Apply safe Dump Truck operation skills					
DESCRIPTOR	This unit specifies the competency required to conduct civil construction dump truck operations. It includes the minimum criteria for competency assessment.				
CODE	TRNS02CR15V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA
1. Plan and prepare	<ul style="list-style-type: none"> 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied to the allotted task 1.2 Safety requirements are obtained from the site safety plan and organizational policies and procedures, confirmed and applied to the allotted task 1.3 Signage requirements are identified and obtained from the project traffic management plan and implemented 1.4 Vehicle, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported 1.5 Environmental protection requirements are identified from the project environmental management plan, confirmed and applied to the allotted task 	
2. Conduct machine pre-operational checks	<ul style="list-style-type: none"> 2.1 Pre-start, start up, park and shut down procedures are carried out in accordance with manufacturers' and/or site-specific requirements 2.2 Dump truck controls and functions, including tray, articulation, brakes and maneuverability are checked for serviceability and any faults are rectified or reported 	
3. Operate truck	<ul style="list-style-type: none"> 3.1 Site hazards associated with dump truck operations are identified and safe operating techniques are used to minimize risk 3.2 Engine power is managed to ensure efficiency of truck movements and to minimize damage to the engine and gears 3.3 Engine power is coordinated with gear selection ensuring smooth transition and operation within torque range 3.4 Dump truck is operated to work instructions 	

	<p>under varied site and weather conditions in accordance with safe work practices and company operating procedures</p> <p>3.5 Road/traffic conditions are constantly monitored taking into account of road standards, traffic flow, distance and load, ensuring no injury to people or damage to property, equipment, loads and facilities</p> <p>3.6 Vehicle is brought to a halt without injury to personnel or damage to property, equipment and loads, through the use of engine retarder, gears and brakes using straight line braking techniques</p> <p>3.7 Responsibility for self-direction to achieve finished product to job/design specification is assumed</p>
4. Load, transport and tip materials	<p>4.1 Vehicle is positioned at load and discharge points with a minimum of man oeuvre</p> <p>4.2 Dump truck movements including the raising and lowering of the tray are smooth and controlled</p> <p>4.3 Weight and distribution of load is assessed for type of material and size of vehicle to ensure it is within vehicle capacity</p> <p>4.4 Safety and security of load, including load cover requirements, are maintained from loading site to discharge site</p> <p>4.5 Load is discharged on slope and/or over face at fill site in accordance with company procedures</p> <p>4.6 Material is dumped/spread evenly in accordance with company procedures</p> <p>4.7 Tray is cleared, lowered and secured before resuming travel in accordance with manufacturers' instructions</p>
5. Clean up	<p>5.1 Work area is cleared and materials disposed of or recycled in accordance with project environmental management plan</p> <p>5.2 Vehicle, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices</p>

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ Dump Truck
- ✓ Loading standards or regulations
- ✓ personal protective equipment required

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following:

- ✓ Location, interpretation and application of relevant information, standards and specifications
- ✓ Compliance with site safety plan, workplace regulations and Maldivian legislation applicable to workplace operations

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must: include access to:

- ✓ dump truck
- ✓ materials to be shifted
- ✓ personal protective equipment
- ✓ be conducted in a safe environment; and,
- ✓ be assessed in context of this sector's work environment; and,
- ✓ be assessed in compliance with relevant legislation/regulations.
- ✓ confirm consistent performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<ul style="list-style-type: none"> ✓ Knowledge of dump truck types, characteristics, technical capabilities and limitations ✓ Basic principles of soil technology for civil works ✓ Site and equipment safety requirements ✓ Dump truck operational techniques related to essential tasks ✓ Operational, maintenance and basic diagnostic procedures ✓ Materials Safety Data Sheets and materials handling methods ✓ Project quality requirements ✓ Civil construction terminology ✓ Methods of changing machine attachments ✓ Safe operating techniques in all terrain ✓ Basic earthworks calculations ✓ Civil construction activity sequences 	<ul style="list-style-type: none"> ✓ Location, interpretation and application of relevant information, standards and specifications ✓ Compliance with site safety plan, ✓ Compliance with organizational policies and procedures including quality requirements ✓ The conduct of site-based dump truck operations which are to be under both wet and dry conditions and include transporting soil, rock and material, static and mobile dumping, discharging on slopes, and discharging over edges. ✓ The application of emergency procedures ✓ The conduct of authorized operator maintenance ✓ Communication and working effectively and safely with others

UNIT TITLE Apply safe Road Sweeper operation skills					
DESCRIPTOR	This unit covers the conduct of pavement sweeping operations in the civil construction industry. It includes planning and preparing, sweeping surfaces, and cleaning up. Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors.				
CODE	TRNS02CR16V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES		PERFORMANCE CRITERIA
1. Plan and prepare		1.1 Access, interpret and apply compliance documentation relevant to the work activity 1.2 Obtain and confirm safety requirements from the site safety plan and organizational policies and procedures, and apply to the allotted task 1.3 Identify, obtain and implement signage requirements from the project traffic management plan 1.4 Select plant, tools and equipment to carry out tasks consistent with the requirements of the job, check for serviceability and rectify or report any faults 1.5 Identify environmental protection requirements from the project environmental management plan, and confirm and apply to the allotted task
2. Sweep surfaces		2.1 Check broom core for wear 2.2 Identify wind direction and develop a sweeping plan to minimize the creation of dust 2.3 Operate broom at a speed and pressure that ensures maximum sweeping effect and minimum damage to bristles 2.4 Extend sweeping 300 mm (minimum) outside the area to be covered, where possible 2.5 Carry out preliminary and final sweeps where there is excessive material 2.6 Sweep material away from work in progress and away from newly finished work 2.7 Use correct sweeping procedures to suit surface type 2.8 Remove loose aggregate from newly sealed surface according to job specifications and without damage
3. Clean up		3.1 Deposit sweepings to avoid contamination drains, pits or nature strips 3.2 Create windrows to protect drains from run off due to overnight rain

	3.3 Clear work area and dispose of or recycle materials in accordance with project environmental management plan 3.4 Clean, check, maintain and store plant, tools and equipment
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Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ Road Sweeper
- ✓ Roads to sweep
- ✓ personal protective equipment required in harvesting operations
- ✓ vehicle-to-vehicle communication system

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ knowledge of the requirements, procedures and instructions for conducting pavement sweeping operations
- ✓ implementation of requirements, procedures and techniques for the safe, effective and efficient completion of pavement sweeping operations
- ✓ working with others to undertake and complete pavement sweeping operations that meets all of the required outcomes

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must: include access to:

- ✓ road Sweeper
- ✓ roads to be cleaned
- ✓ personal protective equipment
- ✓ be conducted in a safe environment; and,
- ✓ be assessed in context of this sector's work environment; and,
- ✓ performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Knowledge to the following is required to conduct pavement sweeping operations:</p> <ul style="list-style-type: none"> ✓ Site and equipment safety requirements for pavement sweeping operations ✓ Operating platforms for use with mounted broom attachments ✓ Primer seal, seal, asphalt and aggregate materials ✓ Equipment types, characteristics, technical capabilities and limitations ✓ Operational, maintenance and basic diagnostic procedures ✓ Materials safety data sheets and materials handling methods ✓ Project quality requirements ✓ Civil construction terminology 	<p>Specific skills are required includes the ability to carry out the following:</p> <ul style="list-style-type: none"> ✓ Apply organization and site requirements and procedures for conducting pavement sweeping operations ✓ Organize work activities ✓ Select and use relevant tools and equipment safely ✓ Identify and report on hazards related to the worksite and work activity ✓ Communicate effectively to receive and clarify work instructions

UNIT TITLE Apply safe Boom Truck operation skills					
DESCRIPTOR	This unit of competency specifies the outcomes required to safely and effectively operate a truck mounted loading crane to load and unload building products delivered from supplier to the construction site. It includes set-up, operation, and control and shut down of the crane.				
CODE	TRNS02CR17V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Plan and prepare.	<p>1.1 Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed and applied from relevant information for planning and preparation</p> <p>1.2 Safety (OHS) requirements are followed in accordance with safety plans and policies.</p> <p>1.3 Signage and barricade requirements are identified and implemented.</p> <p>1.4 Plant, tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement.</p> <p>1.5 Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations, and are applied.</p>
2. Truck mounted crane is set up and operated.	<p>2.1 Truck mounted crane is positioned at the designated drop off point.</p> <p>2.2 Truck is positioned to ensure a level surface to operate the crane from.</p> <p>2.3 Crane is activated and maneuvers to its operating position from its lock down position.</p> <p>2.4 Crane movements are checked for safe crane operations.</p> <p>2.5 Load is prepared for lifting in accordance with crane, truck and dogging requirements.</p> <p>2.6 Site is confirmed as clear and safe to receive or dispatch the load.</p> <p>2.7 Load is maneuvered to position using the control levers to manufacturer specifications.</p>

	2.8 Load is continually monitored throughout its travel. 2.9 Crane is shut down and returned to its lock down position.
3. Clean up.	3.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, and codes of practice and job specification. 3.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.

Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ Boom truck
- ✓ Items to be transported
- ✓ personal protective equipment required in harvesting operations
- ✓ vehicle-to-vehicle communication system

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following.

- ✓ knowledge of the requirements, procedures and instructions for conducting pavement sweeping operations
- ✓ implementation of requirements, procedures and techniques for the safe, effective and efficient completion of pavement sweeping operations
- ✓ working with others to undertake and complete pavement sweeping operations that meets all of the required outcomes

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must: include access to:

- ✓ Boom truck

- ✓ Items to be transported
- ✓ personal protective equipment
- ✓ be conducted in a safe environment; and,
- ✓ be assessed in context of this sector's work environment; and,
- ✓ performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Required knowledge for this unit is:</p> <ul style="list-style-type: none"> ✓ construction terminology ✓ designs and functions of truck mounted loading cranes ✓ material safety data sheets (MSDS) ✓ materials storage and environmentally friendly waste management ✓ plans, specifications and drawings ✓ processes for the calculation of load mass requirements ✓ quality requirements ✓ truck mounted crane techniques ✓ types, characteristics, uses and limitations of plant, tools and equipment ✓ workplace and equipment safety requirements. 	<p>Required skills for this unit are:</p> <ul style="list-style-type: none"> ✓ enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand ✓ follow instructions ✓ read and interpret documentation from a variety of sources, drawings and specifications, report faults. ✓ use and interpret non-verbal communication, such as hand signals ✓ identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials ✓ teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities

UNIT TITLE Apply safe Reach Stacker operation skills					
DESCRIPTOR	This unit specifies the skills and knowledge required to operate a reach stacker with safely, in accordance with all relevant legislative and company related guidelines and responsibilities.				
CODE	TRNS02CR18V1/20	LEVEL	III	CREDIT	06

ELEMENTS OF COMPETENCIES	PERFORMANCE CRITERIA
1. Plan work/task	1.1. Task requirements are identified from work orders or equivalent and confirmed with relevant people and site inspection is conducted in accordance with workplace procedures 1.2. Work area operating surface is assessed to determine the quality of ground suitability for operational use of reach stacker in accordance with workplace procedures 1.3. Reach stacker MRC and Spreader/lifting gear Work Load Limit (WLL) is established for the Container/s and work/task requirements in accordance with manufacturer specifications and workplace procedures 1.4. Appropriate paths for operating the reach stacker and moving and placing container/s in work area are assessed and determined in accordance with workplace procedures 1.5. Relevant hazard identification and risk elimination/control measures are applied and advised to relevant person/s in accordance with workplace procedures 1.6. Traffic management plan implementation is confirmed and understood in accordance with workplace procedures 1.7. Appropriate communication procedures are identified and tested with associated personnel in accordance with workplace procedures 1.8. All tasks are confirmed to ensure requirements for the relevant work area is in accordance with workplace procedures
2. Prepare for work/task	2.1 Consultation with workplace personnel

	<p>is established and maintained to ensure work plan is clear and consistent with site requirements in accordance with workplace procedures</p> <p>2.2 Risk control measures for hazards identified are checked for implementation in accordance with legislative responsibilities and safe work procedures</p> <p>2.3 Reach stacker is accessed in a safe manner in accordance with manufacturer specifications and safe work procedures</p> <p>2.4 Pre-start reach stacker checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer requirements and safe work procedures</p> <p>2.5 Reach stacker is started and is checked for any abnormal noises/operation in accordance with manufacturer requirements and safe work procedures</p> <p>2.6 Operational checks are carried out and any damage and defects are reported, recorded and appropriate action is taken in accordance with manufacturer specifications and safe work procedures</p> <p>2.7 Reach stacker stability requirements for task are determined in accordance with relevant manufacturer specifications and safe work procedures</p> <p>2.8 Reach Stacker logbook is checked to confirm current compliance, is correct for the reach stacker type, is completed and signed and required rectifications have been signed off in accordance with manufacturer requirements and safe work procedures</p> <p>2.9 Weather and work environment conditions are assessed to determine any impact on reach stacker operations in accordance with manufacturer requirements and safe work procedures</p> <p>2.10 Reach stacker is driven to work area and prepared for container operations in accordance with relevant safe work procedures</p>
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<p>3. Perform work/task</p>	<ul style="list-style-type: none"> 3.1 Container lifts are determined within MRC of the reach stacker in accordance with safe work procedures 3.2 Container spreader is safely positioned over container following directions from associated personnel (if applicable) in accordance with safe work procedures 3.3 Container spreader is latched onto container and reach stacker is stabilized appropriately in accordance with safe work procedures 3.4 Test lift is carried out in accordance with safe work procedures 3.5 Containers are mobile safely using best mobile practice and relevant reach stacker movements in accordance with safe work procedures 3.6 Container and reach stacker movement is monitored constantly and operated in accordance with safe work procedures and manufacturer specifications 3.7 All required communications signals are correctly interpreted, used and followed whilst reach stacker is operated in accordance with safe work procedures 3.8 Container is lowered and landed safely in accordance with safe work procedures 3.9 Container spreader is disconnected from container and positioned safely and efficiently for next task in accordance with safe work procedures
<p>4. Pack up</p>	<ul style="list-style-type: none"> 4.1 Reach stacker boom and container spreader are secured as required in accordance with manufacturer specifications and safe work procedures 4.2 Relevant motion locks and brakes are applied as required in accordance with manufacturer specifications, safe work procedures 4.3 Stabilizers (if fitted) are raised and secured in accordance with manufacturer specifications, safe work procedures 4.4 Reach stacker is parked to avoid hazards and shut down in accordance with safe work procedures 4.5 Post-operational reach stacker checks

	<p>are carried out in accordance with manufacturer specifications, legislative responsibilities and safe work procedures</p> <p>4.6 Reach stacker is secured to prevent unauthorized access/use in accordance with legislative obligations, responsibilities, safe work procedures</p>
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Range Statement:

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Tools, equipment and material used

- ✓ Reach Stacker
- ✓ Containers to shift
- ✓ personal protective equipment required in harvesting operations
- ✓ vehicle-to-vehicle communication system

ASSESSMENT GUIDE

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions, underpinning knowledge and skills.

Forms of assessment

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting. Assessment must include direct observation of tasks.

Critical aspects (for assessment)

Inspection need to include the following:

- ✓ knowledge of the requirements, procedures and instructions for moving containers
- ✓ implementation of requirements, procedures and techniques for the safe, effective and efficient completion of pavement sweeping operations
- ✓ working with others to undertake and complete pavement sweeping operations.

Assessment conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must: include access to:

- ✓ reach stacker
- ✓ containers to be moved
- ✓ personal protective equipment

- ✓ be conducted in a safe environment
- ✓ performance can be applied in a range of relevant workplace circumstances

UNDERPINNING KNOWLEDGE AND SKILLS

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
<p>Evidence of knowledge on the following:</p> <ul style="list-style-type: none"> ✓ appropriate worksite communication procedures including listening, hand signals, signage, two-way radios ✓ each stacker crane chart ✓ lift impacting factors including center of gravity, dynamic nature of load, flex/deflection of boom length, radius of lift, weight. ✓ hazards including ground stability including ground condition, road slopes, insufficient lighting, obstacles ✓ impact of factors affecting reach stacker stability including overloading, poor container placement, unbalanced container, tire deflation/condition ✓ prestart and operational checks required for a reach stacker ✓ problems and equipment faults, and application of appropriate response ✓ starting procedure of reach stacker as per manufacturer requirements 	<p>Following evidence required.</p> <ul style="list-style-type: none"> ✓ carrying container near to ground surface ✓ container spreader as low as possible ✓ gently accelerating and braking ✓ minimizing boom length ✓ minimizing speed as applicable to reach stacker stability ✓ checking container weights to ensure they are within reach stacker capacity in accordance with range diagram/container chart ✓ completing the pre-start operational check ✓ check reach stacker instability in relation to dynamic loads, ground conditions including condition of surface and slopes, impact of tire inflation/condition, overloading ✓ operate reach stacker safely to workplace requirements

