

### **Maldives National Skills Development Authority**



# National Competency Standard for Automotive Maintenance

Standard Code: TRN01S07V2

Qualification Name: National Certificate I in Automotive Maintenance (Light Vehicle) Qualification Code: TRN01SQ1L107

#### 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. The National Competency Standards (NCS) provide the base for this training. Currently CBST is offered for five key sectors in the Maldives: Tourism, Fisheries and Agriculture, Transport, Construction and the Social 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).

## **KEY FOR CODING**

## Coding Competency Standards and Related Materials

DESCRIPTION	<b>REPRESENTED BY</b>
Industry Sector as per ESC	Construction Sector (CON)
(Three letters)	Fisheries and Agriculture Sector (FNA)
	Transport sector (TRN)
	Tourism Sector (TOU)
	Social Sector (SOC)
	Foundation (FOU)
Competency Standard	S
Occupation with in a industry	Two digits 01-99
Sector	
Unit	U
Common Competency	1
Core Competency	2
Optional/ Elective Competency	3
Assessment Resources Materials	Α
Learning Resources Materials	L
Curricula	С
Qualification	Q1, Q2 etc
MNQF level of Qualification	L1, L2 etc
Version Number	V1, V2 etc
Year of endorsement of standard,	By two digits Example- 07
qualification	

1.Endors	1.Endorsement Application for Qualification 01			
2. NATI	2. NATIONAL CERTIFICATE I IN AUTOMOTIVE MAINTENANCE			
3. Quali	3. Qualification code: TRN01SQ1L107 Total Number of Credits: 21			
The holde Sector as students fulfill the local Auto	<b>4. Purpose of the qualification</b> The holders of this qualification will be will be competent to work in the Automotive Maintenance Sector as Service Mechanics. The level one qualification presented here will facilitate preparing students to the entry level workplace tasks and the competency units are mapped in such a way to fulfill the knowledge and skills requirements of the "Assistant Mechanic" occupation within the local Automotive Industry. This qualification can also be used to award recognition to the "Light Vehicle Operators" within the Automotive Industry			
5. Regulations for the qualification		• National Certificate I in Automotive Maintenance will be awarded to those who are competent in units 1+2+3+4+5+6+7		
6. Sched	6. Schedule of Units			
Unit Title	Unit Title		Code	
1	Work safely in the workplace		TRN01S1U01V1	
2		Maintain workshop TRN01S1U		
3			TRN01S1U03V1	
4	Undertake basic workshop calculati		TRN01S1U04V1	
5	Perform effective workplace commu	inication	TRN01S1U05V1	
6	Move, position and park vehicle TRN01S2U01V1			
7	Wash/clean vehicle body and its interior TRN01S2U02V1			
<b>7. Accreditation requirements</b> The training provider should have an		have an automotive		
		service workshop/garage or similar training		
		facility to provide the trainees the hands-on		
		experience related to this qualification		
<b>8. Recommended sequencing of units</b> As appearing under the section o6		n 06		

#### 1.Endorsement Application for Qualification 02

#### 2. NATIONAL CERTIFICATE III IN AUTOMOTIVE MAINTENANCE

3. Qualification code: TRN01SQ2L307

**Total Number of Credits :63** 

**4. Purpose of the qualification** The holders of the level two qualifications are expected to possess all the relevant knowledge and skills to work as Automotive Maintenance Mechanics in the local Automotive Maintenance Industry. Referred mechanics can undertake general functional assessment of the light vehicle engines and its systems and perform necessary repair and maintenance tasks.

- Degulations for the qualification	National Certificate III in Automotive		
<b>5. Regulations for the qualification</b>	Maintenance will be awarded to those who are competent in unit		
	1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+ $16+17+18+19+20+21$		
6. Schedule of Units			

Unit Unit Title		Code		
Unit Title	Unit litle		Code	
1	Work safely in the workplace		TRN01S1U01V1	
2	Maintain workshop		TRN01S1U02V1	
3	Handle and maintenance of workplace	tools and equipments	TRN01S1U03V1	
4	Undertake basic workshop calculation		TRN01S1U04V1	
5	Perform effective workplace communication		TRN01S1U05V1	
6	Move, position and park vehicle		TRN01S2U01V1	
7	Wash/clean vehicle body and its interio	Dr	TRN01S2U02V1	
8	Perform effectively in team environment		TRN01S1U06V1	
9	Undertake inspection and servicing eng	gines	TRN01S2U03V1	
10	Undertake inspection and servicing cooling systems		TRN01S2U04V1	
11	Undertake petrol fuel systems servicing		TRN01S2U05V1	
12	Service diesel fuel system		TRN01S2U06V1	
13	Service ignition system components		TRN01S2U07V1	
14	Inspect and service steering systems components		TRN01S2U08V1	
15	Inspect and service manual transmissions		TRN01S2U09V1	
16	Inspect and service automatic transmissions		TRN01S2U10V1	
17	Inspect and service braking system components		TRN01S2U11V1	
18	Inspect and service auto electric system components		TRN01S2U12V1	
19	Service final drive assembly components		TRN01S2U13V1	
20	Inspect and Service Auto Air-condition	ing system components	TRN01S2U14V1	
21	Inspect and service hydraulic systems	1	TRN01S2U15V1	
7. Accr	editation requirements	The training provider should	have an automotive	
		service workshop/garage or similar training		
		facility to provide the trainees the hands-on		
experience related to		experience related to this qua	this qualification	
8. Rec	<b>8. Recommended sequencing of units</b> As appearing under the section o6		on 06	

### **Units Details**

Unit Title	Unit Title	Code	Level	No of credits
1	Work safely in the workplace	TRN01S1U01V1	1	3
2	Maintain workshop	TRN01S1U02V1	1	3
3	Handle and maintenance of workplace tools and equipments	TRN01S1U03V1	1	3
4	Undertake basic workshop calculation	TRN01S1U04V1	1	3
5	Perform effective workplace communication	TRN01S1U05V1	1	3
6	Move, position and park vehicle	TRN01S2U01V1	1	3
7	Wash/clean vehicle body and its interior	TRN01S2U02V1	1	3
8	Perform effectively in team environment	TRN01S1U06V1	3	3
9	Undertake inspection and servicing engines	TRN01S2U03V1	3	3
10	Undertake inspection and servicing cooling systems	TRN01S2U04V1	3	3
11	Undertake petrol fuel systems servicing	TRN01S2U05V1	3	3
12	Service diesel fuel system	TRN01S2U06V1	3	3
13	Service ignition system components	TRN01S2U07V1	3	3
14	Inspect and service steering systems components	TRN01S2U08V1	3	3
15	Inspect and service manual transmissions	TRN01S2U09V1	2	3
16	Inspect and service automatic transmissions	TRN01S2U10V1	2	3
17	Inspect and service braking system components	TRN01S2U11V1	2	3
18	Inspect and service auto electric system components	TRN01S2U12V1	2	3
19	Service final drive assembly components	TRN01S2U13V1	2	3
20	Inspect and Service Auto Air-conditioning system components	TRN01S2U14V1	3	3
21	Inspect and service hydraulic systems	TRN01S2U15V1	3	3

## Packaging of National Qualifications:

National Certificate I in Automotive Maintenance (Light Vehicle) will be awarded to those who are competent in units 1+2+3+4+5+6+7

Qualification Code: TRN01SQ1L107

National Certificate III in Automotive Maintenance (Light Vehicle) will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15+16+17+18+19+20+21

Qualification Code: TRN01SQ2L307

<u>Note:</u> For the purpose of these qualifications, Automotive Maintenance Technical Panel along with the Transport Employment Sector Council have agreed that **Light Vehicle are considered as vehicles whose carrying capacity is either equal or less than 2 tons**.

# Competency Standard for

# **AUTOMOTIVE MAINTENANCE**

Unit No	Unit Title
1.	Work safely in the workplace
2.	Maintain workshop
3.	Handle and maintenance of workplace tools and equipments
4.	Undertake basic workshop calculation
5.	Perform effective workplace communication
6.	Perform effectively in team environment
7.	Move, position and park vehicle
8.	Undertake inspection and servicing engines
9.	Wash/clean vehicle body and its interior
10.	Undertake inspection and servicing cooling systems
11.	Undertake petrol fuel systems servicing
12.	Service diesel fuel system
13.	Service ignition system components
14.	Inspect and service steering systems components
15.	Inspect and service manual transmissions
16.	Inspect and service automatic transmissions
17.	Inspect and service braking system components
18.	Inspect and service auto electric system components
19.	Service final drive assembly components
20.	Inspect and Service Auto Air-conditioning system components
21.	Inspect and service hydraulic systems

#### Description of an AUTOMOTIVE MAINTENANCE

At present, Maldives have a population of wide range of vehicles with varying models and types. Inspection, repair, maintenance and overhaul of such vehicle system require varying knowledge and skills. The goal of these qualifications are to prepare competent Automotive Mechanics capable of undertaking all major and minor tasks associated with maintenance, repair and servicing of automotive vehicles in the Maldives. The proposed qualifications were prepared by a group of technical panel members currently working as experienced mechanics employed in government and private enterprises, workshops and service garages

#### **Competency Standard Development Process**

The competencies were determined based on the analysis of the tasks expected to be performed by the automotive mechanic in the Maldives. The task analysis was based on the existing documents prepared among the experts in the industry and on the advice of the experts in the field. Competency standards used for similar type of training in other countries were also examined