

FOR DRIVER (LIGHT VEHICLE) (NC2)

Department of Occupational Standards
Ministry of Labour and Human Resources
Thimphu Bhutan
(Revised 2015)



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FOREWORD

The Department of Occupational Standards of the Ministry of Labour and Human Resources is pleased to present the National Competency Standards (NCSs) for Driver (Light Vehicle). The standards represent the fruits of hard work and invaluable experiences gained by the department since its establishment in the latter half of 2003. The main aim of developing NCS is to set up a well-defined nationally recognized Vocational Qualifications System that will help set a benchmark for the Technical Vocational Education and Training (TVET) System in our country aligned to international best practices.

NCS is one of the base pillars in the Bhutan Vocational Qualifications Framework (BVQF) and is the first step in its implementation. The NCS are developed and revised to ensure that employees or vocational graduates possess and acquire the desired competencies required by industries and employers. In order to ensure this close match in supply and demand of competencies, NCS have been developed and revised in close consultation and partnership with industry experts and validated by the Technical Advisory Committees of the concerned economic sectors.

A vocational education and training system based on NCS shall ensure that delivered training is of a high quality and relevant to the needs of the labour market. As a result, future TVET graduates will be better equipped to meet the need and expectations of industries and employers. This positive impact on the employability of TVET graduates will enhance the reputation of vocational education and training and make it attractive to school leavers.

I gratefully acknowledge collaboration and the valuable contributions made by experts from industries during the consultation and validation processes of the standards. I look forward for continued engagement and participation of the industry and employers in the development of a quality assured demand driven TVET system and to build competent and productive national workforce that will contribute to the continued socio-economic progress of our country.

Director
Department of Occupational Standards
Ministry of Labour and Human Resource

INTRODUCTION

A. National Competency Standards (NCS)

The National Competency Standards specify the skill, knowledge and attitudes applied to a particular occupation. Standards also specify the standards or criteria of performance of a competent worker and the various contexts in which work may take place. Standards provide explicit advice to assessors regarding the skill and knowledge to be demonstrated by candidates seeking formal recognition either following training or through work experience.

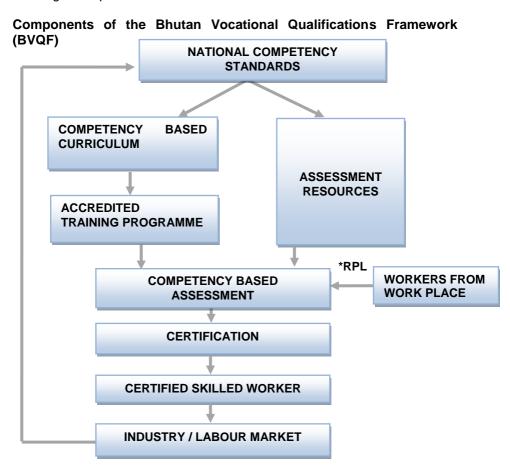
Purpose of National Competency Standards

National Competency Standards serve a number of purposes including:

- Providing advice to curriculum developers about the competencies to be included in curriculum.
- Providing specifications to assessment resource developers about the competencies within an occupation to be demonstrated by candidates.
- Providing advice to industry/employers about job functions, which in turn can be used for the development of job descriptions, performance appraisal systems and work flow analysis.

B. Bhutan Vocational Qualifications Framework (BVQF)

Bhutan Vocational Qualifications Framework is an agreed system of Assessing, Certifying and Monitoring nationally recognized qualifications for all learning in the TVET sector against national competency standards, in training institutions, in the workplace, in schools or anywhere where learning takes place.



^{*} RPL = Recognition of Prior Learning

BVQF Levels

The Bhutan Vocational Qualifications Framework has three levels classified based on the competency of the skilled workers. The three levels are:

- National Certificate Level 3 (NC III)
- National Certificate Level 2 (NC II)
- National Certificate Level 1 (NC I)

BVQF Level Descriptors

The qualification levels are decided based on level descriptors. The detail of the qualification level descriptor is as follows:

National Certificate Level 1 (Semi Skilled)

Carry out processes that:	Learning demand:	Responsibilities which are applied:
 Are narrow in range. Are established and familiar. Offer a clear choice of routine responses. Involve some prioritizing of tasks from known 	 Basic operational knowledge and skill. Utilization of basic available information. Known solutions to familiar problems. Little generation of new ideas. 	 In directed activity. Under general supervision and quality control. With some responsibility for quantity and quality. With no responsibility for quiding others.
solutions.		3

National Certificate Level 2 (Craftsman)

Carry out processes that:	Learning demand:	Responsibilities which are applied:
 Require a range of well-developed skills. Offer a significant choice of procedures requiring prioritization. Are employed within a range of familiar context. 	 Some relevant theoretical knowledge. Interpretation of available information. Discretion and judgments. A range of known responses to familiar problems 	 In directed activity with some autonomy. Under general supervision and quality checking. With significant responsibility for the quantity and quality of output. With some possible responsibility for the output of others.

National Certificate Level 3 (Master craftsman)

Carry out processes that:	Learning demand:	Responsibilities which are applied:
Requires a wide range of technical or scholastic skills. Offer a considerable choice of procedures requiring prioritization to achieve optimum outcomes. Are employed in a variety of familiar and unfamiliar contexts.	 A broad knowledge base which incorporates some theoretical concepts. Analytical interpretation of information. Informed judgment. A range of sometimes innovative responses to concrete but often unfamiliar problems. 	 In self-directed activity. Under broad guidance and evaluation. With complete responsibility for quantity and quality of output. With possible responsibility for the output of others.

PURPOSE

This qualification is designed for people interested in a career as Driver (Light Vehicle) at the Certificate level. It comprises of four units that cover the essential knowledge and skills required for people working as a Driver.

The pre-requisite for the candidates aspiring to pursue certificate level in Driver (heavy Vehicle) should have minimum educational requirement.

It provides industry specific skills and demands a level of performance that will enable new recruits to the industry to be immediately productive.

PACKAGING OF QUALIFICATIONS FOR DRIVER (LIGHT VEHICLE)

The National Competency Standards for the Driver comprises four units of competencies which are clustered into following levels of qualifications.

National Certificate Level 2

Drive Light Vehicle (8322-U4-L2)

Manage accident emergency procedures (8322-U3-L2)

Perform pre and post operation procedure checks of vehicle (8322-U2-L2)

Perform minor maintenance and servicing on vehicles (8322-U1-L2)



CODING USED FOR NATIONAL COMPETENCY STANDARDS

The coding and classification system developed in Bhutan is logical, easy to use, and also aligned with international best practises. The Bhutanese coding and classification system is based on the International Standard Classification of Occupations, 2008 (ISCO-08) developed by the International Labour Organisation (ILO).

The coding of the National competency standards forms the basis of the identification code for the Vocational Education and Training Management Information System (VET – MIS) both in terms of economic sector identification and that of the individual standard.

Coding the individual national competency standards

Coding the individual skills standard has a multiple purpose:

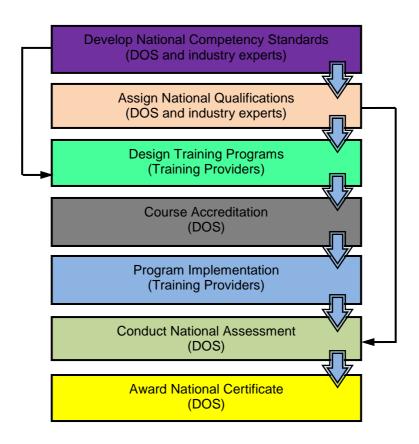
- to identify the level,
- to identify to which module the standard belongs,
- to identify in which order the standard is clustered within that module.

A job can include a number of competencies described in the national competency standards.

However, in order to follow a logical order, only national competency standards related to each other and following a logical sequence in terms of training delivery, from the simple to the complex, are clustered into a module. Some standards are so complex that they need to stand alone.

To illustrate with an example, the ILO assigns the code 8322 to the occupation of driving and related trades. Therefore, in the Bhutan's context, the occupation driver has been assigned the code 8322 in the National Coding System. The first unit is assigned the code U1. Levels are assigned the code L and follow a logical progression from the National Certificate Level 1 (NC I) to the National Certificate Level 3 (NC III). Therefore the National Certificate Level 1 is assigned the code L1.

Implementation and operational procedures for National Competency Standards (NCS)



Key:MoLHR – Ministry of Labour and Human Resources DOS – Department of Occupational Standards

NATIONAL COMPETENCY STANDARDS FOR DRIVER (LIGHT VEHICLE)

Validation date : 11/03/2015 Endorsement date: 24/03/2015

Date of Review : **24/03/2017** (Max. 3 years)

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UNIT TITLE	ELEMENTS OF COMPETENCE	PAGE
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Perform pre and post operation procedures of vehicle	 Perform pre –operation check Perform cockpit drill Perform post-operation procedures. 	05
Manage Accident emergency procedures	Respond to emergencies Arrange follow up support and assistance	08
Drive Light Vehicle.	 Observe traffic rules and regulations Drive vehicle Drive a four-wheel-drive (4WD) vehicle Tow and towed the vehicle 	11

UNIT TITLE : Perform minor maintenance and servicing on

vehicles

DESCRIPTOR: This unit covers the competencies required to carry

out basic servicing and minor maintenance on

vehicles.

CODE : 8322-U1-L2

ELEMENTS OF COMPETENCE	PERFORMANCE CRITERIA
1. Clean vehicle.	1.1 Clean vehicle with <i>cleaning supplies</i> as per the standard procedures.
	1.2 Polish the vehicle as per the standard procedures.
	1.3 Dispose wastes as per environmental guidelines.
Maintain and service the vehicle.	2.1 Select and use tools and equipment as per the job requirement.
	2.2 Carry out <i>minor routine checks</i> as per the owner's manual.
	2.3 Carry out periodic maintenance as per owner's manual.
	2.4 Maintain log book and vehicle history records as per the standard procedures

RANGE STATEMENT		
Cleaning supplies may include	e but not limited to:	
Car shampoo	Air freshener	
Rags	 Polish 	
Anti corrosion agent	Water	

Tools and equipment may include:

- Vacuum cleaner
- Bucket
- Pressure gauge
- Broom/brush

- Hose
- Pressure Washer
- Hand tools
- Glass cleaner
- Tire inflating nozzle

Periodic maintenance may include but not limited to:

- Add distil water in the Battery
- Check Tire pressure
- Check Coolant level
- Check transmission fluid
- Clean/change air cleaner
- Greasing
- Check Brake fluid
- Check/change Engine Oil
- Check and adjust Fan belt
- Check fuel filter

Minor routine checks includes but not limited to:

- Blown bulbs
- Broken fan belt
- Blown fuse
- Broken mirrors
- Cleaning of battery/poles terminals

- Rear tail-light lens
- Punctured Tires
- Broken hose pipe
- Spared tires

ASSESSMENT GUIDE

Form of assessment

- Continuous assessment together with collected evidence of performance will be used.
- Evidence of the performance shall be based on practical demonstration.
- Knowledge can be assessed through written form of assessment.

Assessment context

 Competency may be assessed in the actual work place or in a simulated workplace setting.

Assessment condition

- The candidate shall have access to all required tools, equipment, materials and documents.
- The candidate must complete the assessment in an accepted time frame.

Critical aspects

- Demonstrate compliance with safety regulations applicable to work operations at all times.
- Identify minor vehicle faults and make adjustment/repairs as per job requirement following standard procedures.
- Carry out periodic services following standard procedures.

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
 OHS regulation Pollution control procedures. Minor maintenance procedures First Aid Fundamentals of vehicle operation such as electrical system, fuel system, cooling system, steering system, tires, brakes systems, suspension system, exhaust system. Lubricants and oils Positive Work Values 5 S (Sort, Systematize, Sweep, Standardize, Shine). 	 Identifying vehicle faults and irregularities. Maintain Log Book and Vehicle history book Communication skills. Handling of tools and materials. Disposal of waste materials House Keeping Conflict management

UNIT TITLE : Perform pre and post operation procedures of

vehicle

This unit covers the competencies required in performing procedures before and after operating **DESCRIPTOR**

vehicles.

CODE : 8322-U2-L2

ELEMEN COMPET			PERFORMANCE CRITERIA
opera		1.1	Perform <i>pre driving check</i> as per the standard procedures.
chec	k	1.2	Identify <i>faults</i> and take corrective actions as per job requirement.
		1.3	Perform walk around inspection as per the standard procedures.
		1.4	Maintain log book and vehicle document as per the standard procedures.
2. Perfo	orm cockpit	2.1	Perform starting/running check as per the starting procedures.
		2.2	Check operating condition of <i>instruments</i> (gauges, indicators) as per the standard procedures.
		2.3	Check system of vehicle control (SOVC) as per the standard procedures.
Perform post- operation procedures	3.1	Perform parking as per standard procedures.	
	3.2	Conduct walk around inspection as per the standard procedures.	
		3.3	Maintain vehicle log book as per the standard procedures.

RANGE STATEMENT

Pre- driving checks may include

- Exterior
- Interior
- Under bonnet

Faults may include:

- Fluid level
- Engine Oil level
- Engine oil condition
- Coolant Level
- Electrolyte Level
- Tyre/tire Pressure

- Loose fan belt
- Abnormal sound
- Blown fuse

System of Vehicle Control (SOVC) may include but not limited:

- Accelerator
- Brake
- Clutch

- Steering
- Gear
- Parking brake

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Assessment context

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Assessment condition

- The candidate shall have access to all required tools, equipment, materials and documents.
- The candidate must complete the assessment in an accepted time frame.

Critical aspects

- Maintain vehicle documents as per the relevant rules and regulations.
- Perform pre, cockpit and post operations as per the standard procedures

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
First AidSystem of vehicle control	Read and interpret owner's manual
(SOVC)	Communication skills.
 Instruments 	Perform pre- and post-operation
Petroleum , oil and lubricants (POL)	procedures on vehicle.Loading skills
Starting and shutdown	Positive work values
procedures. • Owner's manual.	House keeping
Vehicle Documentation	
Pre- and post-operation procedures.	

UNIT TITLE : Manage accident emergency procedures.

DESCRIPTOR: This Unit covers the competencies required to

respond to emergency incidents, follow-up support and assistance and communicate to concerned

agencies during emergency.

CODE : 8322-U3-L2

ELEMENTS OF COMPETENCE		PERFORMANCE CRITERIA
Respond to emergencies	1.1	Identify and assess emergency as per standard procedures.
	1.2	Prioritize and provide <i>actions</i> based on the criticality of the emergency situation.
	1.3	Fulfill responsibilities in accordance with emergency procedures and/or regulatory requirements.
Arrange follow- up support and assistance	2.1	Arrange medical assistance and support in accordance with workplace procedures.
	2.2	Apply first aid in accordance with medical procedure.
	2.3	Identify and provide passenger needs based on emergency situation.

RANGE STATEMENT

Emergency may include but not limited to:

Vehicle collision,
 Vehicle break down

Crime incidents
 Hit and run

Road and weather conditionsFireVeering off

Actions may include but not limited to:

- Transporting of injured passenger to the nearest hospitals
- Inform relevant authorities
- Providing assistance in controlling the accident site both prior to and following arrival of emergency services
- Providing first aid

Responsibilities, may include but not limited to:

- Reporting to concern agencies
- Informing victim's relatives
- Respond to investigation and authority inquiry

ASSESSMENT GUIDE

Form of assessment

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Assessment context

 Competency may be assessed in the actual work place or in a simulated workplace setting.

Assessment condition

- The candidate shall have access to all required tools, equipment, materials and documents.
- The candidate must complete the assessment in an accepted time frame.

Critical aspects

- Demonstrate compliance with safety regulations applicable to work operations at all times.
- Respond to emergency situations

- Arrange follow-up support and assistance.
- Apply first aid in accordance with medical procedure.

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
OHS Rules and regulations.	Handling injured person.
Emergency situations.	Transporting injured persons.
Procedure to be followed in the event of emergency	 Handling and use of fire extinguishers.
Problem that may arise during emergency situations.	Following emergency procedures.
First aid	Handling crime situations.
Driver's ethics	
Courtesy driving	

UNIT TITLE : Drive Light Vehicle.

DESCRIPTOR: This unit covers the competencies required to drive

light motor vehicle under different environment

conditions following traffic rules and regulations.

CODE : 8322-U4-L2

ELEMENTS OF COMPETENCE		PERFORMANCE CRITERIA
Observe traffic rules and regulations	1.1	Identify and follow traffic signs and road marking as per the Road Safety and Transport Regulations.
	1.2	Identify and follow traffic rules and regulations as per Road Safety and Transport Regulations.
2. Drive Vehicle	2.1	Move off, steer and stops LMV as per the standard procedures.
	2.2	Reverse (Straight, Zig Zag, uphill, downhill) LMV as per the standard procedures.
	2.3	Negotiate intersections and turns as per the standard procedures.
	2.4	Overtake the vehicle as per the standard procedures.
	2.1	Park (angle, parallel) the vehicle as per the standard procedures.
	2.2	Drive LMV on the highway, town and hills as per traffic rules following standard procedures.
	2.3	Drive LMV at night and in poor light condition as per the standard procedure.
	2.5	Drive a LMV on <i>difficult roads</i> as per the standard procedures.

3. Drive a four- wheel-drive (4WD) vehicle	3.1 3.2	Position 4WD as per the standard procedure. Drive LMV on 4WD as per the standard procedures.
	3.3	Disengage 4WD as per the standard procedure.
4. Tow and towed the vehicle	4.1	Tow the vehicle as per the standard procedures.
	4.2	Tow by another vehicle as per the standard procedures.

RANGE STATEMENT

Required documents may include but not limited to:

- Valid driving license
- Registration certificate
- Road worthiness certificate
- Insurance certificate
- Emission certificate

Difficult roads may include but not limited to:

- Snowy road
- Icy road
- Muddy road
- Off road (rough road)
- Bridges

- River crossing
- Sandy
- Foggy weather
- Rainy

ASSESSMENT GUIDE

Form of assessment

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- Knowledge can be assessed through written form of assessment.

Assessment context

 Competency may be assessed in the actual work place or in a simulated workplace setting.

Assessment condition

- The candidate shall have access to all required tools, equipment, materials and documents.
- The candidate must complete the assessment in an accepted time frame.

Critical aspects

- Demonstrate compliance with safety regulations applicable to work operations at all times.
- Drive light vehicle following rules and regulations

UNDERPINNING KNOWLEDGE	UNDERPINNING SKILLS
Traffic rules and regulations	Defensive driving
Documents of vehicle	Overtaking and passing safely
Grooming	Reaction to obstacles.
First aid	Courtesy to others
Search technique	Communication skills
Signaling, cornering and gear changing	Maintain proper distance and speed
System of vehicle control	Eco-driving
Cautionary signs	Lane changing technique
Informatory signs	Four wheel driving
Mandatory signs	Courtesy Driving
Road markings	
Mile post	



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