



Maldives National Skills Development Authority



National Competency Standard for Tug Operator

Standard Code: TRA-09L3-V1-24

Qualification Name: National Certificate III in Tug Operator

FOREWORD

The pivotal role of the Maldives National Skills Development Authority (MNSDA) in meticulously implementing and expanding Technical and Vocational Education & Training (TVET) exemplifies the steadfast commitment of the Maldives to build a skilled and resilient workforce. This commitment is evident from the strategic formulation of National Standards and the establishment of a comprehensive framework for training and certification.

Under the Higher Education and Training Act 7/2021, the MNSDA assumes an instrumental role, reflecting the government's unwavering dedication to streamlining TVET policies and procedures. This includes the establishment of a robust system for accrediting and registering both Institution Based Training (IBT) and Employer Based Training (EBT) providers. The MNSDA's active involvement in conducting the National Apprenticeship Program (NAP), National Trade Testing and Certification (NTTC), and the issuance of National Certificates reflects a comprehensive approach to ensure elevated quality standards and competency within the workforce.

The National Competency Standards (NCS) revised through the Maldives Enhancing Employability and Resilience of Youth (MEERY) project accentuates the commitment to updating and sustaining contemporary skill sets aligned precisely with industry demands. Deliberate efforts to revise existing NCS, coupled with the development of curriculum, teaching materials, resource books, and logbooks, attest to our dedication to ensuring the ongoing relevance and currency of the TVET system in the Maldives.

The active engagement of Technical Panels and Employment Sector Councils in the NCS development and approval process, coupled with alignment to the Maldives National Qualification Framework (MNQF) and accreditation by the Maldives Qualifications Authority (MQA), certifies that the TVET system not only remains highly responsive but also ensures the quality standards demanded by industries. This approach enables the system to effectively meet the diverse needs of industries and adapt to the evolving economic landscape.

The collaborative development of the National Certificate III in Tug Operator by the MNSDA, MEERY, and the Maldives Institute of Technology exemplifies the practical implementation of TVET initiatives. This training package represents a critical stride towards addressing the requisite skills while fostering opportunities to integrate sustainable economic development within the TVET framework.



Dr. Zahra Mohamed

Chief Executive Officer

Maldives National Skills Development Authority

EMPLOYMENT SECTOR COUNCILS

| # | Name | Designation | Organisation |
|----|------------------------|-------------------------------------|--|
| 01 | Ahmed Shameem | Director General | Ministry of Transport and Civil Aviation |
| 02 | Mohamed Jamshad | Colonel | Maldives National Defence Force |
| 03 | Ahmed Shujau | Chief Inspector of Police | Maldives Police Services |
| 04 | Aishath Neesha Khaleel | General Manager | Maldives Ports Limited |
| 05 | Mohamed Zaid | Head of Center for Maritime Studies | MNU / Maritime Center |
| 06 | Asiyath Haneef | Training Manager at Maldivian | Maldivian |
| 07 | Ahmed Shahid | Maritime Expert | - |
| 08 | Ismail Fariq | Chief Sales Officer | Maldives Transport and Construction Company |
| 09 | Fathimath Haula | Programme Officer | Maldives National Skills Development Authority |

National Occupational Standard has been endorsed by:



Aishath Neesha Khaleel
Chair person
Transport Sector Council

Maldives National Skills Development Authority
Umar Zahir Office Building, 5th Floor,
OrchidMaa Hingun, Hulhumale', Republic of Maldives.

Date of Endorsement:26.02.2025

TECHNICAL SUPPORT

| # | Name | Designation | Organisation |
|----|------|-------------|--------------|
| 01 | | | |
| 02 | | | |

| TECHNICAL PANEL MEMBERS | | | |
|-------------------------|-----------------|--|------------------------|
| # | Name | Designation | Organisation |
| 01 | Hussain Rasheed | Director- Maritime Operations | MNDF |
| 02 | Hassan Zareer | Harbour Master | Maldives Ports Limited |
| 03 | Mohamed Ziyau | Deputy Direcor - Training and Development Department | MNDF Coast Guard |

| VERSION | DEVELOPER | DATE | STANDARD CODE |
|---------|----------------------------------|------------|----------------|
| V1 | Maldives Institute of Technology | 01.07.2024 | TRA-09L3-V1-24 |

Standard Development Process

The development of the “National Certificate III in Tug Operator” Standard involved a comprehensive study of transportation occupations in Maldivian workplaces, with a focus on marine enterprises. Job descriptions and international occupational trends were analysed to draft an initial Occupational Standard. This draft will undergo further refinement through a Technical Panel (TP) from Maldivian workplaces, ensuring incorporation of competencies and edits. The TP will provide technical input, suggesting changes to the standard, until a final draft is agreed upon. The approved Final Draft will then be submitted to the Construction Employment Sector Council for endorsement and validation. A brief report detailing the compilation process will accompany the Standard for the Council's review, and any recommended changes will be addressed before final endorsement.

With the endorsement from the Construction Employment Sector Council, the finalised National Occupational Standard for Tug Operator will be submitted to the Maldives Qualification Authority (MQA) for final approval. Upon receiving MQA approval, the standard will be officially published on the Maldives National Skills Development Authority (MNSDA) website. This publication will enable training providers in the Maldives to utilise the standard for delivering the Tug Operator program, ensuring its widespread implementation across the country

Description of “Tug Operator”

The "Tug Operator" standard serves as a foundational guideline designed to enhance essential skills within the maritime industry. This program is dedicated to equipping individuals with fundamental competencies crucial for proficient operation of tugboats, ensuring the safe and efficient movement of vessels within harbours and open waters. Participants will gain practical insights into tugboat equipment operation, navigation principles, and adherence to maritime regulations, emphasising safety and precision in towage operations.

The certification acts as an entry point for professionals venturing into the maritime sector, providing a robust foundation in the essential skills required to handle various maritime environments and challenges.

Proposed Qualification Titles

Following are the recommended titles by the selected internal expert team of MIT for the National Certificate III in Tug Operator.

1. Nil

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

Upon successful completion of the National certificate III in Tug Operator, students can work in the following jobs.

1. *Assistant Tug Operator*
2. *Tugboat Maintenance Technician*
3. *Port Operations Coordinator*

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) |
| Standard Number - Occupation with in an industry sector | Two digits 01-99 |
| Common Competency | CM |
| Core Competency | CC |
| Unit Number - Occupation within a Standard | Three digits 01-99 |
| MNQF level of qualification | L1, L2, L3, L4 etc. |
| Version Number | V1, V2 etc. |
| Separator | - |
| Year of Last Review of standard, qualification | Two digits responding to the year of last review, example 23 for the year 2023 |
| Qualification Code | Refers to Standard code in cover page |

| 1. Endorsement Application for Qualification 01 | | |
|--|---|---|
| 2. NATIONAL CERTIFICATE III IN TUG OPERATOR | | |
| 3. Qualification code: TRA-09L3-V1-24 | | Total Number of Credits: 73 |
| 4. Purpose of the qualification This qualification aims to equip individuals with the essential skills and knowledge required for the safe and efficient operation of tugboats in harbours and open waters. It enhances maritime professionals' proficiency in tugboat equipment operation, navigation principles, and maritime regulations, emphasising safety, effective communication, and emergency response. Additionally, it prepares individuals to meet regional environmental and regulatory conditions, in the Maldives. | | |
| 5. Regulations for the qualification | | National Certificate III in the occupation of Tug Operator 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 |
| 6. Schedule of Units | | |
| Unit No. | Unit Title | Code |
| Common Competencies | | |
| 01 | Apply work ethics and optimise professionalism | TRA-07-CM01-V1-25 |
| 02 | Utilise emerging technologies for communication and collaboration | TRA-09-CM01-V1-25 |
| Core Competencies | | |
| 03 | Practice personal safety and social responsibilities | TRA-09-CC01-V1-25 |
| 04 | Apply basic fire prevention and firefighting skills | TRA-09-CC02-V1-25 |
| 05 | Apply elementary first aid skills | TRA-09-CC03-V1-25 |
| 06 | Perform navigation and chart works | TRA-09-CC04-V1-25 |
| 07 | Operate electronic navigation equipment | TRA-09-CC05-V1-25 |
| 08 | Operate radio communication system | TRA-09-CC06-V1-25 |
| 09 | Comply with maritime regulations | TRA-09-CC07-V1-25 |
| 10 | Apply meteorological knowledge and skills | TRA-09-CC08-V1-25 |
| 11 | Understand basic fundamentals of tug operations | TRA-09-CC09-V1-25 |
| 12 | Operate and maintain tugboat machinery, equipment and controls | TRA-09-CC10 -V1-25 |
| 13 | Manage emergency response and safety protocols | TRA-09-CC11-V1-25 |
| 14 | Manoeuvre and handling of tugboats | TRA-09-CC12-V1-25 |
| 15 | Conduct towage operations and procedures | TRA-09-CC13-V1-25 |
| 16 | Perform routine maintenance of tugboat machinery | TRA-09-CC14-V1-25 |

| | | |
|---|---|--|
| 17 | Report and document logbook maintenance | TRA-09-CC15-V1-25 |
| 18 | Work on board a tugboat | TRA-09-CC16-V1-25 |
| 7. Accreditation requirements | | The training provider should have a workshop or similar training facility to provide the trainees the hands-on experience related to this qualification and make arrangements for providing industrial experience. |
| 8. Recommended sequencing of units | | As appearing under the section 06 |

Unit Details

| Unit No. | Unit Title | Code | Level | No. of credits | Credit hours | Contact hours |
|----------|---|--------------------|-------|----------------|--------------|---------------|
| 01 | Apply work ethics and optimise professionalism | TRA-07-CM01-V1-25 | III | 03 | 30 | 15 |
| 02 | Utilise emerging technologies for communication and collaboration | TRA-09-CM01-V1-25 | III | 03 | 30 | 15 |
| 03 | Practice personal safety and social responsibilities | TRA-09-CC01-V1-25 | III | 03 | 30 | 15 |
| 04 | Apply basic fire prevention and firefighting skills | TRA-09-CC02-V1-25 | III | 03 | 30 | 15 |
| 05 | Apply elementary first aid skills | TRA-09-CC03-V1-25 | III | 03 | 30 | 15 |
| 06 | Perform navigation and chart works | TRA-09-CC04-V1-25 | III | 04 | 40 | 20 |
| 07 | Operate electronic navigation equipment | TRA-09-CC05-V1-25 | III | 04 | 40 | 20 |
| 08 | Operate radio communication system | TRA-09-CC06-V1-25 | III | 04 | 40 | 20 |
| 09 | Comply with maritime regulations | TRA-09-CC07-V1-25 | III | 04 | 40 | 20 |
| 10 | Apply meteorological knowledge and skills | TRA-09-CC08-V1-25 | III | 03 | 30 | 15 |
| 11 | Understand basic fundamentals of tug operations | TRA-09-CC09-V1-25 | III | 04 | 40 | 20 |
| 12 | Operate and maintain tugboat machinery, equipment and controls | TRA-09-CC10 -V1-25 | III | 04 | 40 | 20 |
| 13 | Manage emergency response and safety protocols | TRA-09-CC11-V1-25 | III | 04 | 40 | 20 |
| 14 | Manoeuvre and handling of tugboats | TRA-09-CC12-V1-25 | III | 04 | 40 | 20 |
| 15 | Conduct towage operations and procedures | TRA-09-CC13-V1-25 | III | 04 | 40 | 20 |
| 16 | Perform routine maintenance of tugboat machinery | TRA-09-CC14-V1-25 | III | 04 | 40 | 20 |
| 17 | Report and document logbook maintenance | TRA-09-CC15-V1-25 | III | 03 | 30 | 15 |
| 18 | Work on board a tugboat | TRA-09-CC16-V1-25 | III | 12 | 120 | 25 |
| Total | | | | 73 | 730 | 330 |

Packaging of National Qualifications:

National Certificate III in Tug Operator 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

Qualification Code: TRA-09L3-V1-24

COMPETENCY BASED ASSESSMENT

The final assessment of the National Competency-Based Programmes conducted by the Maldives National Skills Development Authority (MNSDA) is a competency-based assessment.

The Competency-Based Assessment ensures that the students' performance meets the requirements specified in the National Competency Standards (NCS). This assessment approach is designed to verify that graduates are job-ready and meet established occupational competency requirements within their respective fields.

Eligibility for Final Assessment

To be eligible for the final Competency-Based Assessment, students must fulfil the following conditions:

- achieve a **minimum of 80%** attendance
- deemed competent in each of the units of the programme in the pre-assessment

Competency-Based Assessment Process

Upon submission of the Pre-assessment report by the training provider, MNSDA will check for all the necessary supporting documents and conduct Competency-Based Assessment through a National Assessor registered with MNSDA. It is important to note that any trainer involved in the training process is **not permitted** to conduct the assessment to maintain impartiality and integrity of the process.

The final Competency-Based Assessment conducted by MNSDA includes both:

- **Theory:** Evaluating students' knowledge and understanding of key theoretical aspects of the competency.
- **Practical:** Assessing hands-on skills and application of knowledge in real-world or simulated environments.

Once the assessment is completed, the National Assessor will send the Competency-Based Assessment Report to MNSDA.

Competency Status Requirement

For certification to be granted, the student must be officially declared "**Competent**" in each of the units of the programme by the National Assessor.

Conclusion

Competency-Based Assessment is a critical component in ensuring the quality and credibility of technical and vocational skills-based training. By adhering to the outlined procedure, MNSDA upholds the standards required to certify students who are fully prepared to meet industry demands.