

**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Transport and Logistics Operations

registered by Organising Field 11, Services, publishes the following Qualification and Unit Standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification and Unit Standards. The full Qualification and Unit Standards can be accessed via the SAQA web-site at www.saqqa.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification and Unit Standards should reach SAQA at the address below and **no later 13 August 2007**. All correspondence should be marked **Standards Setting – Transport and Logistics Operations** addressed to

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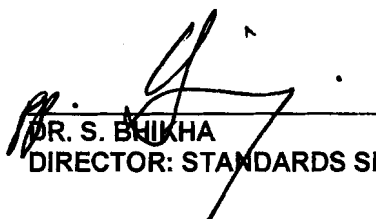
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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:**National Certificate: Ports and Harbours**

SAQA QUAL ID	QUALIFICATION TITLE		
58759	National Certificate: Ports and Harbours		
ORIGINATOR	PROVIDER		
SGB Transport and Logistics Operations			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National Certificate	11 - Services	Transport, Operations and Logistics	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	149	Level 5	Regular-Unit Stds Based

PURPOSE OF THE QUALIFICATION

Purpose:

Shipping is a global business of great importance to international trade. The utilization of modern management principles, concepts for improving efficiency and sound management practices are increasingly required in the shipping industry. Many of the middle and upper level executives in shipping have a background in functional or technical areas and have limited management training. This qualification will offer re-skilling and up-skilling of such people operating in a port environment.

Learners will acquire the necessary knowledge and skills to manage the operations of ports or sea terminals to international standards.

The qualifying learner will be able to:

- Establish and maintain sound working relations with all relevant role-players in the marine transport industry.
- Apply local and international law, conventions and policies related to maritime operations and ports.
- Apply knowledge of maritime and port economics to oversee the organisational activities in a port or harbour.
- Apply financial and administrative management in a port or harbour environment.

Rationale:

This National Certificate at NQF level 5 resulted from an identified industry and employer need and represents a step in the established sub-field learning pathway. It will contribute to sustainable and professional management of ports and terminals to ensure South Africa's economic growth and prosperity.

This qualification has been generated to ensure South Africa's compliance with international competitive trends in the ports and harbours industry. A new port training strategy was the subject of a United Nations Conference on Trade and Development (UNCTAD) held in Porto during May 2002. Three South African delegates were in attendance. A plan of action for the implementation of the new Port Management Programme (PMP) was established at the conference for three represented linguistic groups, being French, Portuguese and English. This qualification provides for implementation of that programme in South Africa.

To date all training of managers for South African ports was outsourced to Belgium and the Netherlands. Furthermore, there is a need for an NQF compliant qualification that will provide the South African authorities with the opportunity to present this education and training locally. The typical learners for this qualification will include:

- Terminal operators.
- Supervisors.
- Middle Manager.
- Stevedore operators.
- Ships' agents.
- Clearing and forwarding agents.
- Deck officers.
- Master Mariners.
- Port managers.
- Harbour masters.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED IN PLACE

It is assumed that learners are competent in:

- Communication in English at NQF Level 4 or equivalent.
- Mathematical literacy at NQF Level 4 or equivalent.
- Computer literacy at NQF Level 3 or equivalent.

Recognition of Prior Learning:

This Qualification and all the fundamental, core and elective Unit Standards associated with it can be achieved by any learner through the recognition of prior learning, which includes learning outcomes achieved through formal, informal and non-formal learning and work experience. The qualification can be obtained in whole or in part through RPL.

Access to the Qualification:

Access is open to learners with an FETC or equivalent NQF level 4 qualification.

QUALIFICATION RULES

- All fundamental Unit Standard credits totalling 25 are compulsory.
- All Core Unit Standard credits totalling 112 are compulsory.
- Learners are to choose Unit Standards totalling a maximum of 12 credits.

The total credits for this qualification is 149.

EXIT LEVEL OUTCOMES

1. Communicate with internal and external role-players to ensure optimal participation and performance required to oversee port operations.
2. Apply legal, regulatory and statutory requirements within the port and harbour environment.
3. Explain maritime economics and international trade in relation to the role and function of ports and harbours in the South African context.
4. Explain port economics in relation to the nature and characteristics of port operations in the South African context.

5. Apply management principles, concepts and methods to oversee port operations.
6. Oversee the financial and administrative requirements of a section/division/organisation in the ports and harbours environment.

ASSOCIATED ASSESSMENT CRITERIA

Assessment Criteria for Exit Level Outcomes 1:

- 1.1 Appropriate tools and information systems are used to manage communication and information in terms of organisational resources.
- 1.2 Communication theory is applied in leading discussions, making presentations and chairing meetings related to internal and external stakeholders.
- 1.3 Written and oral communication techniques are used with stakeholders of ports and harbours.
- 1.4 Information is collated and analysed to develop conclusions and communicate recommendations in performing an oversight role in ports operations.
- 1.5 Service levels to a range of ports and harbours customers are measured and monitored according to organisational procedures.
- 1.6 Leadership strategies are applied and institutional accountability enhanced to deal with managing a variety of ports and harbours role-players and stakeholders.

Assessment Criteria for Exit Level Outcomes 2:

- 2.1 The National Ports Act and related port rules are applied in the context of South African ports and harbours.
- 2.2 South African Maritime Safety Association (SAMSA), Maritime Pollution (MARPOL) and International Ship and Port Facility Security Code (ISPS) requirements are applied in the port or harbour and approaches.
- 2.3 The principles, rules and regulations of the Public Finance Management Act (PFMA) are applied in relation to the required accounting systems and accountability.
- 2.4 The Labour Relations Act (LRA) is interpreted and implemented in accordance with the provisions related to various bodies and role-players.

Assessment Criteria for Exit Level Outcomes 3:

- 3.1 The demand and supply of ports and terminals is explained in terms of the comparative advantages/disadvantages of South African ports to competitors.
- 3.2 Port productivity and pricing practices are analysed in relation to international best practice.
- 3.3 International trade is explained in relation to the maritime economics and the role and function of ports and terminals.
- 3.4 Risk regions of trade are identified and tariffs and non tariff barriers are explained in terms of South African product groups and services.
- 3.5 The maritime transport industry and the role of the National Ports Authority is explained in the context of South Africa.
- 3.6 The internal and external functions of a port are described in relation to the services rendered.

Assessment Criteria for Exit Level Outcomes 4:

- 4.1 The layout and operations of ports/harbours and terminals are analysed in relation to the terminal or port type and infrastructure.
- 4.2 The operational processes are described in terms of the import/export logistical flow.
- 4.3 Vessel classification and registration are described in relation to the purpose of vessel types.
- 4.4 The nature of the different cargoes handled by vessels as well as the specialised cargo handling equipment used are described in terms of safety regulations.

Assessment Criteria for Exit Level Outcomes 5:

- 5.1 Port/harbour or terminal related problems are defined and investigated in terms of organisational procedures.
- 5.2 Possible solutions are generated by using a range of problem-solving techniques and evaluated against the established criteria in order to determine suitability.
- 5.3 The optimum solution is implemented according to organisational constraints and evaluated against the criteria.
- 5.4 The implementation of an organisation's code of ethics is evaluated and a plan to improve commitment and compliance is developed in the context of port operations.
- 5.5 Potential risks to ports/harbours and terminals are identified and their impact are determined in relation to port operations.
- 5.6 Port/terminal continuity plans are developed, implemented and evaluated in consultation with all relevant stakeholders according to organisational procedures and policies.

Assessment Criteria for Exit Level Outcomes 6:

- 6.1 Ships disbursements are calculated and recorded in accordance with statutory requirements and port operations.
- 6.2 Expenses/overdue accounts generated during vessels port stays are monitored and allocated/recovered according to port or terminal procedures.
- 6.3 Vessel working documentation, operational ship documentation and cargo documentation is monitored and administered according to statutory requirements and organizational procedures.
- 6.4 Container control documentation is monitored and administered in relation to the principals and depots.
- 6.5 Business unit budget needs are analysed, presented and justified with reference to management expenses and economic viability.
- 6.6 Actual expenses and revenue are monitored and controlled against projected expenses and revenue.

Integrated Assessment:

Integrated assessment at the level of the Qualification provides an opportunity for learners to show that they are able to integrate concepts, ideas and actions across Unit Standards to achieve competence that is grounded and coherent in relation to the purpose of the Qualification. Integrated assessment should show how already demonstrated competence in individual areas can be linked and applied for the achievement of a holistic outcome as described in the exit level outcomes.

Integrated assessment must judge the quality of the observable performance, and also the quality of the thinking that lies behind it. Assessment tools must encourage learners to give an account of the thinking and decision-making that underpin their demonstrated performance. Some assessment practices will demand practical evidence while others may be more theoretical, depending on the type of outcomes to be assessed. The ratio between action and interpretation is not fixed, but varies according to the demands of the particular exit level outcome of the Qualification.

While the generic components of this Qualification at NQF Level 5 can be assessed through occupational contexts and activities relating to Port management, care must be taken in both the learning programme and the assessment to ensure that these foundational skills are portable. The primary aim of this Qualification is to ensure that learners have a sound knowledge and skills base to prepare them for further learning, whatever career path they may choose. Learners must be able to transfer generic skills across a number of different contexts, and apply them within a number of learning areas.

A broad range of task-orientated and theoretical assessment tools may be used, with the distinction between practical knowledge and disciplinary knowledge maintained so that each takes its rightful place.

INTERNATIONAL COMPARABILITY

A new port training strategy was the subject of a United Nations Conference on Trade and Development (UNCTAD) held in Porto during May 2002 and attended by 65 countries. Three South African delegates were in attendance, where a plan of action for the implementation of the new Port Management Programme (PMP) was established for three represented linguistic groups, being French, Portuguese and English.

This programme represents international best practice for the management of ports and harbours. It has been developed in consultation with all the internationally relevant maritime transport organisations and representatives of all the countries involved in international maritime trade. The Port Management Programme comprises the following 4 modules:

- Module 1: International trade and transport.
- Module 2: Organisation of a port system.
- Module 3: The functioning of a port system.
- Module 4: Future challenges of the port.

This qualification is fully aligned with the PMP and its four modules.

Another benchmark for the training and development of port managers in developing countries is the Port Reform Toolkit. This has been developed by the Public-Private Infrastructure Advisory Facility (PPIAF) and the World Bank. This learning programme comprises the following 8 modules:

- Module 1: Framework for Port Reform.
- Module 2: The Evolution of Ports in a Competitive World.
- Module 3: Alternate Port Management Structures and Ownership Models.
- Module 4: Legal Tools for Port Reform.
- Module 5: Financial Implications of Port Reform.
- Module 6: Port Regulation.
- Module 7: Labour Reform and Related Social Issues.
- Module 8: Implementing Port Reform.

This National Certificate in Ports and Harbours Level 5 was designed to meet the requirements of both the UNCTAD Port Management Programme and the Port Reform Toolkit. The competencies identified for this qualification has been pegged at NQF level 5 representing the first level of management in the ports and harbours environment.

The unit standards in this qualification have been generated to ensure that they cover the nature and scope of the modules of these programmes that form the basis for best practice in the maritime industry. The following unit standards in this qualification represent all the port and harbour environment learning identified by the international maritime transport community in the modules referred to above:

- Understand the maritime industry.
- Apply regulations, codes and statutory reporting in the port environment.
- Describe the role of the port authority in maritime transport.
- Describe port terminal operations.
- Explain the economics of ports and harbours.
- Demonstrate an understanding of the international trade environment.
- Understand the basics of Ships Design and Cargo operations.
- Work with container control administration.

- Complete financial, statutory and operational shipping documentation.

This qualification also includes generic management competencies not included in the PMP or the PPIAF as the South African situation demands that the learners for whom this qualification has been designed are competent in the identified management competencies to be able to function effectively in their jobs. The competencies are included in the following unit standards:

- Monitor the level of service to a range of customers.
- Solve problems, make decisions and implement solutions.
- Apply the principles of ethics and professionalism in a business environment.
- Monitor, assess and manage risk.
- Apply the budget function in a business unit.
- Apply basic financial procedures to PFMA principles.
- Use appropriate tools and information systems to manage own information and communication.

It can be concluded that this National Certificate in Ports and Harbours, Level 5 closely resembles the international training needs as expressed by the UNCTAD programme and the Port Reform Kit. The difference lies in the additional outcomes listed above.

ARTICULATION OPTIONS

The qualification articulates vertically with the following:

- National Diploma: Transportation Management, Level 6, ID 983.
- National Diploma: Transport Economics, Level 6, ID 919.

Examples of horizontal articulation with this Qualification:

- ID 49398: National Certificate: Incident Management, NQF Level 5.
- National Certificate: Transportation Management, Level 5, ID 1187.

MODERATION OPTIONS

- Any institution offering learning that will enable achievement of this qualification must be accredited by the relevant ETQA.
- External Moderation of assessment will be overseen by the relevant ETQA at its discretion.
- The accredited Training Provider will oversee internal Moderation of assessment.
- Moderation should encompass achievement of competence described in both individual unit standards as well as the integrated competence described in the qualification.
- Moderation must also encompass achievement of the competencies described in the exit level outcomes described above.

CRITERIA FOR THE REGISTRATION OF ASSESSORS

- Assessors must be registered as assessors with a relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.
- Assessors must be in possession of a Management qualification or a related qualification in Transport and Logistics Operations at a minimum of NQF level 6.

UNIT STANDARDS

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	242810	Manage Expenditure against a budget	Level 4	6
Core	242829	Monitor the level of service to a range of customers	Level 4	5

	ID	UNIT STANDARD TITLE	LEVEL	CREDITS
Core	242817	Solve problems, make decisions and implement solutions	Level 4	8
Core	117638	Understand the basics of Ships Design and Cargo operations	Level 4	10
Core	123372	Use appropriate tools and information systems to manage own information and communication	Level 4	4
Core	117632	Work with container control administration.	Level 4	10
Core	244454	Analyse port terminal operations	Level 5	10
Core	114873	Apply basic financial procedures to PFMA principles	Level 5	3
Core	244459	Apply regulations, codes and statutory reporting in the ports and harbours environment	Level 5	8
Core	117683	Complete financial, statutory and operational shipping documentation	Level 5	8
Core	244455	Demonstrate an understanding of port and harbour economics	Level 5	6
Core	244456	Describe the role and function of a port authority in maritime transport	Level 5	6
Core	115833	Monitor, assess and manage risk	Level 5	6
Core	230078	Apply the principles of ethics to a business environment	Level 6	10
Core	118023	Demonstrate an understanding of the international trade environment	Level 6	12
Elective	120391	Apply leadership skills to relationship management	Level 4	8
Elective	114877	Formulate and implement an action plan to improve productivity within an organisational unit	Level 4	8
Elective	117655	Know and understand the basics of marine insurance	Level 4	8
Elective	15234	Apply efficient time management to the work of a department/division/section	Level 5	4
Elective	114278	Demonstrate and apply an understanding of the Labour Relations Act (Act 66 of 1995)	Level 5	12
Elective	15230	Monitor team members and measure effectiveness of performance	Level 5	4
Elective	13237	Optimise the quality assurance system	Level 5	6
Fundamental	120304	Analyse, interpret and communicate information	Level 5	9
Fundamental	244471	Understand the maritime transport industry	Level 5	8
Fundamental	12433	Use communication techniques effectively	Level 5	8



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UNIT STANDARD:**Analyse port terminal operations**

SAQA US ID		UNIT STANDARD TITLE	
244454		Analyse port terminal operations	
ORIGINATOR		PROVIDER	
SGB Transport and Logistics Operations			
FIELD		SUBFIELD	
11 - Services		Transport, Operations and Logistics	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	10

SPECIFIC OUTCOME 1

Describe the layout and operations of ports and terminals.

SPECIFIC OUTCOME 2

Analyse the operations of container terminals.

SPECIFIC OUTCOME 3

Analyse the operation of car terminals.

SPECIFIC OUTCOME 4

Analyse the operation of multi-purpose terminals.

SPECIFIC OUTCOME 5

Analyse the operations of bulk-loading terminals.



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UNIT STANDARD:***Demonstrate an understanding of port and harbour economics***

SAQA US ID	UNIT STANDARD TITLE		
244455	Demonstrate an understanding of port and harbour economics		
ORIGINATOR	PROVIDER		
SGB Transport and Logistics Operations			
FIELD	SUBFIELD		
11 - Services	Transport, Operations and Logistics		
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	6

SPECIFIC OUTCOME 1

Explain the demand for ports and terminals.

SPECIFIC OUTCOME 2

Explain the supply of ports and terminals.

SPECIFIC OUTCOME 3

Measure port productivity using best practice.

SPECIFIC OUTCOME 4

Understand the pricing of port services.

SPECIFIC OUTCOME 5

Determine port performance and best practice benchmarks.



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UNIT STANDARD:*Describe the role and function of a port authority in maritime transport*

SAQA US ID		UNIT STANDARD TITLE	
244456		Describe the role and function of a port authority in maritime transport	
ORIGINATOR		PROVIDER	
SGB Transport and Logistics Operations			
FIELD		SUBFIELD	
11 - Services		Transport, Operations and Logistics	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	6

SPECIFIC OUTCOME 1

Explain the maritime transport industry.

SPECIFIC OUTCOME 2

Analyse different types of maritime ports.

SPECIFIC OUTCOME 3

Explain the role of the National Ports Authority (NPA).

SPECIFIC OUTCOME 4

Describe the external functions of a maritime port.

SPECIFIC OUTCOME 5

Describe the internal functions of a maritime port.



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UNIT STANDARD:

Apply regulations, codes and statutory reporting in the ports and harbours environment

SAQA US ID		UNIT STANDARD TITLE	
244459		Apply regulations, codes and statutory reporting in the ports and harbours environment	
ORIGINATOR		PROVIDER	
SGB Transport and Logistics Operations			
FIELD		SUBFIELD	
11 - Services		Transport, Operations and Logistics	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	8

SPECIFIC OUTCOME 1

Understand the National Ports Act.

SPECIFIC OUTCOME 2

Apply port rules.

SPECIFIC OUTCOME 3

Understand the South African Maritime Safety Authority (SAMSA) requirements for port operations.

SPECIFIC OUTCOME 4

Apply the Maritime Pollution (MARPOL) requirements in terms of the port and approaches.

SPECIFIC OUTCOME 5

Apply the International Ship and Port Facility Security (ISPS) Code.



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UNIT STANDARD:***Understand the maritime transport industry***

SAQA US ID		UNIT STANDARD TITLE	
244471		Understand the maritime transport industry	
ORIGINATOR		PROVIDER	
SGB Transport and Logistics Operations			
FIELD		SUBFIELD	
11 - Services		Transport, Operations and Logistics	
ABET BAND	UNIT STANDARD TYPE	NQF LEVEL	CREDITS
Undefined	Regular	Level 5	8

SPECIFIC OUTCOME 1

Understand the nature of seaborne trade.

SPECIFIC OUTCOME 2

Explain the structure of the shipping industry.

SPECIFIC OUTCOME 3

Understand maritime geography in relation to ports and harbours.

SPECIFIC OUTCOME 4

Explain the economic impact of the shipping industry on city ports and harbours.