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**REPUBLIC OF KENYA**

**NATIONAL OCCUPATIONAL STANDARDS**

**FOR**

**AIR CARGO OPERATOR**

**LEVEL 5**



TVET CDACC

P.O. BOX 15745-00100

NAIROBI

First published 2019

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# FOREWORD

The provision of quality education and training is fundamental to the Government’s overall strategy for social economic development. Quality education and training will contribute to achievement Kenya’s development blue print and sustainable development goals.

Reforms in the education sector are necessary for the achievement of Kenya Vision 2030 and meeting the provisions of the Constitution of Kenya 2010. The education sector had to be aligned to the Constitution and this resulted to the formulation of the Policy Framework for Reforming Education and Training. A key feature of this policy is the radical change in the design and delivery of the TVET training. This policy document requires that training in TVET be competency based, curriculum development be industry led, certification be based on demonstration of competence and mode of delivery allows for multiple entry and exit in TVET programmes.

These reforms demand that Industry takes a leading role in curriculum development to ensure the curriculum addresses its competence needs. It is against this background that these Occupational Standards were developed for the purpose of developing a competency-based curriculum for Air Cargo Operations Level 5. These Occupational Standards will also be the bases for assessment of an individual for competence certification.

It is my conviction that these Occupational Standards will play a great role towards development of competent human resource for the Aviation Sector’s growth and sustainable development.

**PRINCIPAL SECRETARY, VOCATIONAL AND TECHNICAL TRAINING**

**MINISTRY OF EDUCATION**

# PREFACE

Kenya Vision 2030 aims to transform the country into a newly industrializing, “middle-income country providing a high-quality life to all its citizens by the year 2030”. Kenya intends to create a globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through life-long education and training. TVET has a responsibility of facilitating the process of inculcating knowledge, skills and attitudes necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency Based Education and Training (CBET).

The Technical and Vocational Education and Training Act No. 29 of 2013 on Reforming Education and Training in Kenya, emphasized the need to reform curriculum development, assessment and certification. This called for shift to CBET to address the mismatch between skills acquired through training and skills needed by industry as well as increase the global competitiveness of Kenyan labour force.

The TVET Curriculum Development, Assessment and Certification Council (TVET CDACC), in conjunction with Logistics Sector Skills Advisory Committee (SSAC), have developed these Occupational Standards for Air Cargo technician. These occupational standards will be the bases for development of competency-based curriculum for Air Cargo Operations Level 5. These Standards will also be the bases for assessment of an individual for competence certification.

The occupational standards are designed and organized with clear performance criteria for each element of a unit of competency. These standards also outline the required knowledge and skills as well as evidence guide.

I am grateful to the Council Members, Council Secretariat, Logistics SSAC, expert workers and all those who participated in the development of these occupational standards.

**Prof. CHARLES M. M. ONDIEKI, PhD, FIET (K), Con. Eng. Tech.**

**CHAIRMAN, TVET CDACC**

# ACKNOWLEDGMENT

These Occupational Standards were developed through combined effort of various stakeholders from private and public organizations. I am sincerely thankful to the management of these organizations for allowing their staff to participate in this course. I wish to acknowledge the invaluable contribution of industry players who provided inputs towards the development of these Standards.

I thank TVET Curriculum Development, Assessment and Certification Council (TVET CDACC) for providing guidance on the development of these Standards. My gratitude goes to the Logistics Sector Skills Advisory Committee (SSAC) members for their contribution to the development of these Standards. I thank all the individuals and organizations who participated in the validation of these Standards.

I acknowledge all other institutions which in one way or another contributed to the development of these Standards.

**CHAIRMAN**

**LOGISTICS SECTOR SKILLS ADVISORY COMMITTEE**

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# ACRONYMS

AC Air Cargo

LOG Logistics

BC Basic Competency

CDACC Curriculum Development, Assessment and Certification Council

CR Core Competency

IT Information Technology

ICT Information Communication Technology

HIV Human Immunodeficiency Virus

AIDS Acquired Immune Deficiency Syndrome

KNQA Kenya National Qualifications Authority

OS Occupational Standards

OSHA Occupation Safety and Health Act

OSHS Occupation Safety and Health Standards

PPE Personal Protective Equipment

SSAC Sector Skills Advisory Committee

TVET Technical and Vocational Education and Training

GO Government Organization

NGO Non-Government Organizations

CPR Cardiopulmonary Resuscitation

SOPs Standard Operating Procedures

# KEY TO UNIT CODE

LOG/OS/AC/BC/01/5/A

Industry or sector

Occupational Standards

Occupational area

Type of competency

Competency number

Competency level

Version Control

# 

# OVERVIEW

Air Cargo Operator Level 5 consists of competencies that an individual must achieve to perform cargo operations at the airport in effective manner and cost saving. It entails performing cargo operations, handling air cargo, carrying out airport marketing, handling special freight, providing air cargo security, performing cargo stowage and performing cargo automation.

This qualification consists of the following basic and core competencies:

**BASIC COMPETENCIES**

|  |  |
| --- | --- |
| **Unit of Competency Code** | **Unit Title** |
| LOG/OS/AC/BC/01/5/A | Demonstrate communication skills |
| LOG/OS/AC/BC/02/5/A | Demonstrate numeracy skills |
| LOG/OS/AC/BC/03/5/A | Demonstrate digital literacy |
| LOG/OS/AC/BC/04/5/A | Demonstrate entrepreneurial skills |
| LOG/OS/AC/BC/05/5/A | Demonstrate employability skills |
| LOG/OS/AC/BC/06/5/A | Demonstrate environmental literacy |
| LOG/OS/AC/BC/07/5/A | Demonstrate occupational safety and health practices |

**COMMON COMPETENCY**

|  |  |
| --- | --- |
| **Unit Code** | **Unit Title** |
| LOG/OS/AC/CC/01/5/A | Airport operations |

**CORE COMPETENCIES**

|  |  |
| --- | --- |
| **Unit Code** | **Unit Title** |
| LOG/OS/AC/CR/01/5/A | Perform cargo operations |
| LOG/OS/AC/CR/02/5/A | Handle air cargo |
| LOG/OS/AC/CR/03/5/A | Carry out airport marketing |
| LOG/OS/AC/CR/04/5/A | Manage special freight |
| LOG/OS/AC/CR/05/5/A | Secure air cargo |
| LOG/OS/AC/CR/06/5/A | Manage stowage of cargo |
| LOG/OS/AC/CR/07/5/A | Develop cargo automation |

# BASIC UNITS OF COMPETENCY

# DEMONSTRATE COMMUNICATION SKILLS

**UNIT CODE:** LOG/OS/AC/BC/01/5/A

**UNIT DESCRIPTION**

This unit covers the competencies required to demonstrate communication skills. It involves meeting communication needs of clients and colleagues, contributing to the development of communication strategies, conducting workplace interviews, facilitating group discussions and representing the organisation

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Meet communication needs of clients and colleagues | 1. Specific communication needs of clients and colleagues are identified and met based on workplace requirements 2. Different communication approaches are identified and applied according to clients’ needs 3. Conflict is identified and addressed as per the standards of the organization |
| 1. Contribute to the development of communication strategies | 1. Strategies for internal and external dissemination of information are developed, promoted, implemented and reviewed as per organizations’ strategic plan 2. Channels of communication are established and reviewed based on the workplace needs 3. Communication training needs are identified and provided according to SOPs 4. Work related network and relationship are maintained based on workplace requirements 5. Negotiation and conflict resolution strategies are maintained as per the workplace procedures |
| 1. Conduct workplace interviews | 1. ***Communication strategies*** are identified and employed in ***interview situations*** based on workplace requirements 2. Records of interviews are made and maintained in accordance with organizational procedures 3. Effective questioning, listening and nonverbal communication techniques are used based on needs |
| 1. Facilitate group discussions | 1. Mechanisms to enhance ***effective group interaction*** are identified and implemented according to workplace requirements 2. Strategies to encourage group participation are identified and used as per organizations’ procedures 3. Meeting’s objectives and agenda are set and followed based on workplace requirements 4. Relevant information is provided and feedback obtained according to set protocols 5. Evaluation of group communication strategies is undertaken in accordance with workplace guidelines 6. Specific communication needs of individuals are identified and addressed as per individual needs |
| 1. Represent the organization | 1. Relevant presentation are researched and presented based on internal or external communication forums requirements Presentation is delivered in a clear and sequential manner as per the predetermined time 2. Presentation is made as per appropriate media 3. Difference views are respected based on workplace procedures 4. Written communication is done as per organizational standards 5. Inquiries are responded according to organizational standard |

**RANGE**

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Communication strategies may include but not limited to: | * Language switch * Comprehension check * Repetition * Asking confirmation * Paraphrase * Clarification request * Translation * Restructuring * Approximation * Generalization |
| 1. Effective group interaction may include but not limited to: | * Identifying and evaluating what is occurring within an interaction in a non-judgmental way * Using active listening * Making decision about appropriate words, behavior * Putting together response which is culturally appropriate * Expressing an individual perspective * Expressing own philosophy, ideology and background and exploring impact with relevance to communication * Openness and flexibility in communication |
| 1. Interview situations may include but not limited to: | * Establishing rapport * Eliciting facts and information * Facilitating resolution of issues * Developing action plans * Diffusing potentially difficult situations |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Active listening
* Giving/receiving feedback
* Interpretation of information
* Role boundaries setting
* Negotiation
* Communication

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Communication process
* Dynamics of groups and different styles of group leadership
* Communication skills relevant to client groups
* Flexibility in communication

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   1. Met communication needs of clients and colleagues 2. Contributed to the development of communication strategies 3. Conducted interviews 4. Facilitated group discussions 5. Represented the organization |
| 1. Resource Implications | The following resources should be provided:   1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2. Materials relevant to the proposed activity or tasks |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Observation 2. Oral questioning 3. Written test 4. Portfolio of Evidence 5. Interview 6. Third party report |
| 1. Context of Assessment | Competency may be assessed:   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# DEMONSTRATE NUMERACY SKILLS

**UNIT CODE:** LOG/OS/AC/BC/02/5/A

**UNIT DESCRIPTION**

This unit covers the competencies required to demonstrate numeracy skills. it involves calculating with whole numbers and familiar fractions, decimals, and percentages for work estimating, measuring, and calculating with routine metric measurements for work, using routine maps and plans for work, interpreting, drawing and constructing 2D and 3D shapes for work, interpreting routine tables, graphs and charts for work, collecting data and constructing routine tables and graphs for work and using basic functions of calculator.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range.*** |
| 1. Calculate with whole numbers and familiar fractions, decimals and percentages for work | 1. Mathematical information that may be partly embedded in routine workplace tasks and texts is selected and interpreted as per SOPs 2. Whole numbers and routine or familiar fractions, decimals and percentages including familiar rates are interpreted and comprehended as per SOPs 3. Calculations which may involve a number of steps are performed as per SOPs 4. Calculations done with whole numbers and routine or familiar fractions, decimals and percentages as per SOPs 5. Conversion between equivalent forms of fractions, decimals and percentages is done as per SOPs 6. Order of operations is applied to solve multi-step calculations as per SOPs 7. Problem solving strategies are appropriately applied as per SOPs 8. Estimations are made to check reasonableness of problem solving process, outcome and its appropriateness to the context and task as per SOPs 9. Formal and informal mathematical language and symbolism are used to communicate the result of the task as per SOPs. |
| 1. Estimate, measure, and calculate with routine metric measurements for work | 1. Measurement information in workplace tasks and texts are selected and interpreted in accordance with workplace requirements 2. Appropriate routine measuring equipment are identified and selected in accordance with workplace requirements 3. Measurements are estimated and made using correct units as per measurement manuals. 4. Estimations and calculations done as per routine measurements 5. Conversions performed routinely as per metric units 6. Problem solving processes are used to undertake the tasks as per workplace procedures. 7. Estimations are made to check reasonableness of problem solving process, outcome and its appropriateness to the context and task as per workplace procedures 8. Information is recorded using mathematical language and symbols appropriate to discuss the task as per workplace procedures. |
| 1. Use routine maps and plans for work | 1. Features are identified in routine maps and plans as per SOPs 2. Symbols and keys in routine maps and plans are clearly explained as per SOPs 3. Orientation of map to North is identified and interpreted as per SOPs 4. Understanding of direction and location is clearly demonstrated as per SOPs 5. Simple scale is applied to estimate length of objects, or distance to location or object as per SOPs 6. Directions are given and received using both formal and informal language as per SOPs |
| 1. Interpret, draw and construct 2D and 3D shapes for work | 1. Two dimensional shapes and routine three dimensional shapes identified in everyday objects and in different orientations in accordance with job specifications 2. The use and application of shapes elaborately explained as per SOPs 3. Formal and informal mathematical language and symbols used to describe and compare the features of two dimensional shapes and routine three dimensional shapes as per workplace procedures. 4. Common angles identified in accordance with SOPs 5. Common angles in everyday objects are appropriately estimated as per SOPs 6. Formal and informal mathematical language are used to describe and compare common angles as per workplace procedures. 7. Common geometric instruments used to draw two dimensional shapes as per SOPs 8. Routine three dimensional objects constructed from given nets as per SOPs. |
| 1. Interpret routine tables, graphs and charts for work | 1. Routine tables, graphs and charts identified in predominately familiar texts and contexts as per tables and graph manuals 2. Common types of graphs and their different uses identified as per SOPs 3. Features of tables, graphs and charts identified as per workplace procedures 4. Information in routine tables, graphs and charts located and interpreted as per workplace procedures 5. Calculations are perform to interpret information as per SOPs 6. How statistics can inform and persuade interpretations is explained as per SOPs 7. Misleading statistical information is identified as per workplace procedures. 8. Information relevant to the workplace is discussed as per workplace procedures. |
| 1. Collect data and construct routine tables and graphs for work | 1. Features of common tables and graphs identified as per SOPs 2. Uses of ***different tables and graphs*** identified as per job specifications 3. Data and variables to be collected are determined as per workplace procedures. 4. The audience is determined as per the workplace procedures 5. Method of data collection is select as per job requirement 6. Data is collected as per SOPs 7. Information is collated in a table as per SOPs 8. Suitable scale and axes determined as per job specifications 9. Graph to present information is drafted and drawn as per SOPs 10. Data checked to ensure that it meets the expected results and context as per workplace procedures 11. Information is reported or discussed using formal and informal mathematical language as per workplace procedures |
| 1. Use basic functions of calculator | * 1. Keys are identified and used for ***basic functions on a calculator*** as per SOPs   2. Calculation is done using whole numbers, money and routine decimals and percentages as per SOPs   3. Calculation done with routine fractions and percentages as per SOPs   4. Order of operations is applied to solve multi-step calculations as per SOPs   5. Results are interpreted, displayed and recorded as per workplace procedures   6. Estimations are made to check reasonableness of problem solving process, outcome and its appropriateness to the context and task as per workplace procedures   7. Formal and informal mathematical language and appropriate symbolism and conventions used to communicate the result of the task as per workplace procedures. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Use basic functions of calculator may include but not limited to: | * Addition * Multiplication * Calculate ratios * Conversion of ratios into percentages |
| 1. Different tables and graphs may include but not limited to: | * Bar Graphs * Flow Charts * Pie Charts * Pictograph * Line Graphs * Time Series Graphs * Stem and Leaf Plot * Histogram * Dot Plot * Scatter plot |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Measuring
* Logical thinking
* Computing
* Drawing of graphs
* Applying mathematical formulas
* Analytical

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Types of common shapes
* Differentiation between two dimensional shapes / objects
* Formulae for calculating area and volume
* Types and purpose of measuring instruments
* Units of measurement and abbreviations
* Fundamental operations (addition, subtraction, division, multiplication)
* Rounding techniques
* Types of fractions
* Different types of tables and graphs
* Meaning of graphs, such as increasing, decreasing, and constant value
* Preparation of basic data, tables & graphs

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   1. Calculated correctly with whole numbers and routine or familiar fractions, decimals and percentages 2. Estimated, measured and calculated with routine metric measurements 3. Applied simple scale to estimate length of objects or distance to location or object 4. Used formal and informal mathematical language to describe and compare common angles 5. Used common geometric instruments to draw two dimensional shapes 6. Collected data and constructed routine tables and graphs 7. Used basic functions of calculator correctly |
| 1. Resource Implications | The following resources should be provided:   1. Access to relevant workplace or appropriately simulated environment where assessment can take place 2. Materials relevant to the proposed activity or tasks |
| 1. Methods of Assessment | Competency may be assessed through:   1. Observation 2. Oral questioning 3. Written test 4. Portfolio of Evidence 5. Interview 6. Third party report |
| 1. Context of Assessment | Competency may be assessed in:   1. On the job 2. Off the job 3. Industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# DEMONSTRATE DIGITAL LITERACY

**UNIT CODE:** LOG/OS/AC/BC/03/5/A

**UNIT DESCRIPTION**

This unit covers the competencies required to demonstrate digital literacy. It involves identifying appropriate computer software and hardware, applying security measures to data, hardware, software in automated environment, applying computer software in solving tasks, applying internet and email in communication at workplace, applying desktop publishing in official assignment and preparing presentation packages**.**

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Identify appropriate computer software and hardware | 1. Concepts of ICT are determined in accordance with computer equipment 2. Classifications of computers are determined in accordance with manufacturers specification 3. ***Appropriate computer software*** is identified according to manufacturer’s specification 4. ***Appropriate computer hardware*** is identified according to manufacturer’s specification 5. Functions and commands ofoperating system are determined in accordance withmanufacturer’s specification |
| 1. Apply security measures to data, hardware, software in automated environment | 1. ***Data security and privacy are classified*** in accordance with the prevailing technology 2. ***Security threats*** areidentified, **and *control measures*** are applied in accordance with laws governing protection of ICT 3. Computer threats and crimes are detected in accordance with Information security management guidelines 4. Protection against computer crimes is undertaken in accordance with laws governing protection of ICT |
| 1. Apply computer software in solving tasks | 1. ***Word processing concepts***are applied in resolving workplace tasks, report writing and documentation as per job requirements 2. ***Word processing utilities*** are applied in accordance with workplace procedures 3. Worksheet layout is prepared in accordance with work procedures 4. Worksheet is build and data manipulated in the worksheet in accordance with workplace procedures 5. Continuous data manipulated on worksheet is undertaken in accordance with work requirements 6. Database design and manipulation is undertaken in accordance with office procedures 7. Data sorting, indexing, storage, retrieval and security is provided in accordance with workplace procedures |
| 1. Apply internet and email in communication at workplace | 1. Electronic mail addresses are opened and applied in workplace communication in accordance with office policy 2. Office internet functions are defined and executed in accordance with office procedures 3. ***Network configuration*** is determined in accordance with office operations procedures 4. Official World Wide Web is installed and managed according to workplace procedures |
| 1. Apply desktop publishing in official assignments | 1. Desktop publishing functions and tools are identified in accordance with manufactures specifications 2. Desktop publishing tools are developed in accordance with work requirements 3. Desktop publishing tools are applied in accordance with workplace requirements 4. Typeset work is enhanced in accordance with workplace standards |
| 1. Prepare presentation packages | 1. Types of presentation packages are identified in accordance with office requirements 2. Slides are created and formulated in accordance with workplace procedures 3. Slides are edited and run in accordance with work procedures 4. Slides and handouts are printed according to work requirements |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Appropriate computer hardware may include but not limited to: | * Computer case * Monitor * keyboard * mouse |
| 1. Data security and privacy may include but not limited to: | * Confidentiality of data * Cloud computing * Integrity -but-curious data surfing |
| 1. Security and control measures may include but not limited to: | * Counter measures against cyber terrorism * Risk reduction * Cyber threat issues * Risk management * Pass wording |
| 1. Security threats may include but not limited to: | * Cyber terrorism * Hacking |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Analytical skills
* Interpretation
* Typing
* Communication
* Basic ICT skills

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Software concept
* Functions of computer software and hardware
* Data security and privacy
* Computer security threats and control measures
* Technology underlying cyber-attacks and networks
* Cyber terrorism
* Computer crimes
* Detection and protection of computer crimes
* Laws governing protection of ICT
* Microsoft suite

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Identified and controlled security threats 2. Detected and protected computer crimes 3. Applied word processing in office tasks 4. Designed, prepared work sheet and applied data to the cells in accordance to workplace procedures 5. Opened electronic mail for office communication as per workplace procedure 6. Installed internet and World Wide Web for office tasks in accordance with office procedures 7. Integrated emerging issues in computer ICT applications 8. Applied laws governing protection of ICT |
| 1. Resource Implications | The following resources should be provided:   1. Tablets 2. Laptops 3. Desktop computers 4. Calculators 5. Internet 6. Smart phones 7. Operation Manuals |
| 1. Methods of Assessment | Competency may be assessed through:   1. Written Test 2. Observation 3. Practical assignment 4. Interview/Oral Questioning |
| 1. Context of Assessment | Competency may be assessed in:   1. Off the job 2. On the job setting 3. Industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

**DEMONSTRATE ENTREPRENEURIAL SKILLS**

**UNIT CODE :** LOG/OS/AC/BC/04/5/A

**UNIT DESCRIPTION**

This unit covers the competencies required to demonstrate understanding of entrepreneurship. It involves demonstrating understanding of an entrepreneur, entrepreneurship, and self-employment, identifying entrepreneurship opportunities, creating entrepreneurial awareness, applying entrepreneurial motivation, developing business innovative strategies and developing business plan.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT** | **PERFORMANCE CRITERIA** |
| 1. Demonstrate understanding of an Entrepreneur | 1. Entrepreneurs and Businesspersons are distinguished as per principles of entrepreneurship 2. ***Types of entrepreneurs*** are identified as per principles of entrepreneurship 3. Ways of becoming an Entrepreneur are identified as per principles of Entrepreneurship 4. ***Characteristics of Entrepreneurs*** are identified as per principles of Entrepreneurship 5. Factors affecting Entrepreneurship development are explored as per principles of Entrepreneurship |
| 1. Demonstrate understanding of Entrepreneurship and self-employment | 1. Entrepreneurship and self-employment are distinguished as per principles of entrepreneurship 2. Importance of self-employment is analysed based on business procedures and strategies 3. ***Requirements for entry into self-employment*** are identified according to business procedures and strategies 4. Role of an Entrepreneur in business is determined according to business procedures and strategies 5. Contributions of Entrepreneurs to National development are identified as per business procedures and strategies 6. Entrepreneurship culture in Kenya is explored as per business procedures and strategies 7. Born or made Entrepreneurs are distinguished as per entrepreneurial traits |
| 1. Identify Entrepreneurship opportunities | 1. Sources of business ideas are identified as per business procedures and strategies 2. Business ideas and opportunities are generated as per business procedures and strategies 3. Business life cycle is analysed as per business procedures and strategies 4. Legal aspects of business are identified as per procedures and strategies 5. Product demand is assessed as per market strategies 6. Types of ***business environment*** are identified and evaluated as per business procedures 7. Factors to consider when evaluating business environment are explored based on business procedure and strategies 8. Technology in business is incorporated as per best practice |
| 1. Create entrepreneurial awareness | 1. ***Forms of businesses*** are explored as per business procedures and strategies 2. Sources of business finance are identified as per business procedures and strategies 3. Factors in selecting source of business finance are identified as per business procedures and strategies 4. ***Governing policies*** on Small Scale Enterprises (SSEs) are determined as per business procedures and strategies 5. Problems of starting and operating SSEs are explored as per business procedures and strategies |
| 1. Apply entrepreneurial motivation | 1. ***Internal and external motivation*** factors are determined in accordance with motivational theories 2. Self-assessment is carried out as per entrepreneurial orientation 3. Effective communications are carried out in accordance with communication principles 4. Entrepreneurial motivation is applied as per motivational theories |
| 1. Develop innovative business strategies | 1. Business innovation strategies are determined in accordance with the organization strategies 2. Creativity in business development is demonstrated in accordance with business strategies 3. ***Innovative business strategies*** are developed as per business principles 4. Linkages with other entrepreneurs are created as per best practice 5. ICT is incorporated in business growth and development as per best practice |
| 1. Develop Business Plan | 1. Identified Business is described as per business procedures and strategies 2. Marketing plan is developed as per business plan format 3. Organizational/Management plan is prepared in accordance with business plan format 4. Production/operation plan in accordance with business plan format 5. Financial plan is prepared in accordance with the business plan format 6. Executive summary is prepared in accordance with business plan format 7. Business plan is presented as per best practice |

**RANGE**

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| 1. **Variable** | **Range** |
| 1. Types of entrepreneurs may include but not limited to: | * Innovators * Imitators * Craft * Opportunistic * Speculators |
| 1. Characteristics of Entrepreneurs may include but not limited to: | * Creative * Innovative * Planner * Risk taker * Networker * Confident * Flexible * Persistent * Patient * Independent * Future oriented * Goal oriented |
| 1. Requirements for entry into self-employment may include but not limited to | * Technical skills * Management skills * Entrepreneurial skills * Resources * Infrastructure |
| 1. Internal and external motivation may include but not limited to: | * Interest * Passion * Freedom * Prestige * Rewards * Punishment * Enabling environment * Government policies |
| 1. Business environment may include but not limited to: | * External * Internal * Intermediate |
| 1. Forms of businesses may include but not limited to: | * Sole proprietorship * Partnership * Limited companies * Cooperatives |
| 1. Governing policies may include but not limited to: | * Increasing scope for finance * Promoting cooperation between entrepreneurs and private sector * Reducing regulatory burden on entrepreneurs * Developing IT tools for entrepreneurs |
| 1. Innovative business strategies may include but not limited to: | * New products * New methods of production * New markets * New sources of supplies * Change in industrialization |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Analytical
* Management
* Problem-solving
* Root-cause analysis
* Communication

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Decision making
* Business communication
* Change management
* Competition
* Risk
* Net working
* Time management
* Leadership
* Factors affecting entrepreneurship development
* Principles of Entrepreneurship
* Features and benefits of common operational practices, e. g., continuous improvement (kaizen), waste elimination,
* Conflict resolution
* Health, safety and environment (HSE) principles and requirements
* Customer care strategies
* Basic financial management
* Business strategic planning
* Impact of change on individuals, groups and industries
* Government and regulatory processes
* Local and international market trends
* Product promotion strategies
* Market and feasibility studies
* Government and regulatory processes
* Local and international business environment
* Relevant developments in other industries
* Regional/ County business expansion strategies

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Distinguished entrepreneurs and business persons correctly 2. Identified ways of becoming an entrepreneur appropriately 3. Explored factors affecting entrepreneurship development appropriately 4. Analysed importance of self-employment accurately 5. Identified requirements for entry into self-employment correctly 6. Identified sources of business ideas correctly 7. GeneratedBusiness ideas and opportunities correctly 8. Analysed business life cycle accurately 9. Identified legal aspects of business correctly 10. Assessed product demand accurately 11. Determined Internal and external motivation factors appropriately 12. Carried out communications effectively 13. Identified sources of business finance correctly 14. Determined Governing policy on small scale enterprise appropriately 15. Explored problems of starting and operating SSEs effectively 16. Developed Marketing, Organizational/Management, Production/Operation and Financial plans correctly 17. Prepared executive summary correctly 18. Determined business innovative strategies appropriately 19. Presented business plan effectively |
| 1. Resource Implications | The following resources should be provided:   1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place |
| 1. Methods of Assessment | Competency may be assessed through:   1. Written tests 2. Oral questions 3. Third party report 4. Interviews 5. Portfolio |
| 1. Context of Assessment | Competency may be assessed:   1. On-the-job 2. Off-the –job 3. During Industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

DEMONSTRATE EMPLOYABILITY SKILLS

**UNIT CODE:** LOG/OS/AC/BC/05/5/A

**Unit Description**

This unit covers competencies required to demonstrate employability skills. It involves conducting self-management, demonstrating interpersonal communication, critical safe work habits, leading small teams, planning and organizing work, maintaining professional growth and development, demonstrating workplace learning, problem solving skills and managing workplace ethics.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range*** |
| 1. Conduct self-management | 1. Personal vision, mission and goals are formulated based on potential and in relation to organization objectives 2. Emotional intelligence is demonstrated as per workplace requirements. 3. Individual performance is evaluated and monitored according to the agreed targets. 4. Assertiveness is developed and maintained based on the requirements of the job. 5. Accountability and responsibility for own actions are demonstrated based on workplace instructions. 6. Self-esteem and a positive self-image are developed and maintained based on values. 7. Time management, attendance and punctuality are observed as per the organization policy. 8. Goals are managed as per the organization’s objective 9. Self-strengths and weaknesses are identified based on personal objectives |
| 1. Demonstrate interpersonal communication | 1. Writing skills are demonstrated as per communication policy 2. Negotiation and persuasion skills are demonstrated as per communication policy 3. Internal and external stakeholders’ needs are identified and interpreted as per the communication policy 4. Communication networks are established based on workplace policy 5. Information is shared as per communication policy |
| 1. Demonstrate critical safe work habits | 1. Stress is managed in accordance with workplace policy. 2. Punctuality and time consciousness is demonstrated in line with workplace policy. 3. Personal objectives are integrated with organization goals based on organization’s strategic plan. 4. ***Resources*** are utilized in accordance with workplace policy. 5. Work priorities are set in accordance to workplace goals and objectives. 6. Leisure time is recognized and utilized in line with personal objectives. 7. ***Drugs and substances of abuse*** are identified and avoided based on workplace policy. 8. HIV and AIDS prevention awareness is demonstrated in line with workplace policy. 9. Safety consciousness is demonstrated in the workplace based on organization safety policy. 10. ***Emerging issues*** are identified and dealt with in accordance with organization policy. |
| 1. Lead small teams | 1. Performance targets for the ***team*** are set based on organization’s objectives 2. Duties are assigned in accordance with the organization policy. 3. ***Forms of communication*** in a team are established according to organization’s policy. 4. Team performance is evaluated based on set targets as per workplace policy. 5. Conflicts are resolved between team members in line with organization policy. 6. Gender related issues are identified and mainstreamed in accordance workplace policy. 7. Human rights and fundamental freedoms are identified and respected as Constitution of Kenya 2010. 8. Healthy relationships are developed and maintained in line with workplace. |
| 1. Plan and organize work | 1. Task requirements are identified as per the workplace objectives 2. Task is interpreted in accordance with safety (OHS ), environmental requirements and quality requirements 3. Work activity is organized with other involved personnel as per the SOPs 4. Resources are mobilized, allocated and utilized to meet project goals and deliverables. 5. Work activities are monitored and evaluated in line with organization procedures. 6. Job planning is documented in accordance with workplace requirements. 7. Time is managed achieve workplace set goals and objectives. |
| 1. Maintain professional growth and development | 1. Personal training needs are identified and assessed in line with the requirements of the job. 2. ***Training and career opportunities*** are identified and utilized based on job requirements. 3. Resources for training are mobilized and allocated based organizations and individual skills needs. 4. Licensees and certifications relevant to job and career are obtained and renewed as per policy. 5. Work priorities and personal commitments are balanced and managed based on requirements of the job and personal objectives. 6. Recognitions are sought as proof of career advancement in line with professional requirements. |
| 1. Demonstrate workplace learning | 1. Learning opportunities are sought and managed based on job requirement and organization policy. 2. Improvement in performance is demonstrated based on courses attended. 3. Application of learning is demonstrated in both technical and non-technical aspects based on requirements of the job 4. Time and effort is invested in learning new skills based on job requirements 5. Initiative is taken to create more effective and efficient processes and procedures in line with workplace policy. 6. New systems are developed and maintained in accordance with the requirements of the job. 7. Awareness of personal role in workplace ***innovation*** is demonstrated based on requirements of the job. |
| 1. Demonstrate problem solving skills | 1. Creative, innovative and practical solutions are developed based on the problem 2. Independence and initiative in identifying and solving problems is demonstrated based on requirements of the job. 3. Team problems are solved as per the workplace guidelines 4. Problem solving strategies are applied as per the workplace guidelines 5. Problems are analyzed and assumptions tested as per the context of data and circumstances |
| 1. Demonstrate workplace ethics | 1. Policies and guidelines are observed as per the workplace requirements 2. Self-worth and professionalism is exercised in line with personal goals and organizational policies 3. Code of conduct is observed as per the workplace requirements 4. Integrity is demonstrated as per legal requirement |

**RANGE**

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Range** | **Variable** |
| 1. Drug and substance abuse may include but not limited to: | Commonly abused   * Alcohol * Tobacco * Miraa * Over-the-counter drugs * Cocaine * Bhang * Glue |
| 1. Feedback may include but not limited to: | * Verbal * Written * Informal * Formal |
| 1. Relationships may include but not limited to: | * Man/Woman * Trainer/trainee * Employee/employer * Client/service provider * Husband/wife * Boy/girl * Parent/child * Sibling relationships |
| 1. Forms of communication may include but not limited to: | * Written * Visual * Verbal * Non verbal * Formal and informal |
| 1. Team may include but not limited to: | * Small work group * Staff in a section/department * Inter-agency group |
| 1. Personal growth may include but not limited to: | |  | | --- | | * Growth in the job * Career mobility * Gains and exposure the job gives * Net workings * Benefits that accrue to the individual as a result of noteworthy performance | |
| 1. Personal objectives may include but not limited to: | * Long term * Short term * Broad * Specific |
| 1. Trainings and career opportunities may include but not limited to | * Participation in training programs * Technical * Supervisory * Managerial * Continuing Education * Serving as Resource Persons in conferences and workshops |
| 1. Resource may include but not limited to: | * Human * Financial * Hardware * Software |
| 1. Innovation may include but not limited to: | * New ideas * Original ideas * Different ideas * Methods/procedures * Processes * New tools |
| 1. Emerging issues may include but not limited to: | * Terrorism * Social media * National cohesion * Open offices |
| 1. Range of media for learning may include but not limited to: | * Mentoring * peer support and networking * IT and courses |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Critical thinking
* Observation
* Organizing
* Negotiation
* Monitoring
* Evaluation
* Record keeping
* Problem solving
* Decision Making
* Resource utilization
* Resource mobilization

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Work values and ethics
* Company policies
* Company operations, procedures and standards
* Occupational Health and safety procedures
* Fundamental rights at work
* Personal hygiene practices
* Workplace communication
* Concept of time
* Time management
* Decision making
* Types of resources
* Work planning
* Resources and allocating resources
* Organizing work
* Monitoring and evaluation
* Record keeping
* Workplace problems and how to deal with them
* Gender mainstreaming
* HIV and AIDS
* Drug and substance abuse
* Leadership
* Safe work habits
* Professional growth and development
* Technology in the workplace
* Emerging issues
* Social media
* Terrorism
* National cohesion

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   1. Conducted self-management 2. Demonstrated interpersonal communication 3. Demonstrated critical safe work habits 4. Led small teams 5. Planned and organized work 6. Maintained professional growth and development 7. Demonstrated workplace learning 8. Demonstrated problem solving skills 9. Demonstrated workplace ethics |
| 1. Resource Implications | |  | | --- | | The following resources should be provided:   1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place | |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral questioning 2. Portfolio of evidence 3. Third Party Reports 4. Written tests |
| 1. Context of Assessment | Competency may be assessed:   1. On-the-job 2. Off-the –job 3. During Industrial attachment |
| 1. Guidance information for assessment | | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

**DEMONSTRATE ENVIRONMENTAL LITERACY**

**UNIT CODE:** LOG/OS/AC/BC/06/5/A

**UNIT DESCRIPTION**

This unit describes the competencies required to demonstrate understanding of environmental literacy. It involves controlling environmental hazard, controlling control environmental pollution, complying with workplace sustainable resource use, evaluating current practices in relation to resource usage, identifying environmental legislations/conventions for environmental concerns, implementing specific environmental programs and monitoring activities on environmental protection/programs.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Control environmental hazard | 1. ***Storage methods*** for environmentally***hazardous*** materials are strictly followed according to environmental regulations and OSHS. 2. ***Disposal methods*** of hazardous wastes are followed always according to environmental regulations and OSHS. 3. ***PPE*** is used according to OSHS. |
| 1. Control environmental Pollution control | 1. Environmental pollution ***control measures*** are compiled following standard protocol. 2. Procedures for solid waste management are observed according to Environmental Management and Coordination Act 1999 3. Methods for minimizing ***noise pollution*** is complied with based on Noise and Excessive Vibration Pollution and Control Regulations, 2009 |
| 1. Demonstrate sustainable resource use | 1. Methods for minimizing wastage are complied with. 2. Waste management procedures are employed following principles of 3Rs (Reduce, Reuse, Recycle) 3. Methods for economizing and reducing resource consumption are practiced as per the Environmental Management and Coordination Act 1999 |
| 1. Evaluate current practices in relation to resource usage | 1. Information on resource efficiency **systems and procedures** are collected and provided to the work group where appropriate. 2. Current resource usage is measured and recorded by members of the work group. 3. Current purchasing strategies are analyzed and recorded according to industry procedures. 4. Current work processes to access information and data is analyzed following enterprise protocol. |
| 1. Identify Environmental legislations/conventions for environmental concerns | 1. Environmental ***legislations/conventions*** and local ordinances are identified according to the different ***environmental aspects/impact*** 2. ***Industrial standard/environmental practices*** are described according to the different environmental concerns |
| 1. Implement specific environmental programs | 1. Programs/Activities are identified according to organizations policies and guidelines. 2. Individual roles/responsibilities are determined and performed based on the activities identified. 3. Problems/constraints encountered are resolved in accordance with organizations’ policies and guidelines 4. Stakeholders are consulted based on company guidelines |
| 1. Monitor activities on Environmental protection/Programs | 1. Activities are periodically monitored and evaluated according to the objectives of the environmental Program 2. Feedback from stakeholders are gathered and considered in proposing enhancements to the program based on consultations 3. Data gathered are analyzed based on evaluation requirements 4. Recommendations are submitted based on the findings 5. Management support systems are set/established to sustain and enhance the program 6. Environmental incidents are monitored and reported to concerned/proper authorities |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. PPE may include but not limited to: | * Mask * Gloves * Goggles * Safety hat * Overall * Hearing protector * Safety boots |
| 1. Environmental pollution control measures may include but not limited to: | * Methods for minimizing or stopping spread and ingestion of airborne particles * Methods for minimizing or stopping spread and ingestion of gases and fumes * Methods for minimizing or stopping spread and ingestion of liquid wastes |
| 1. Waste management procedures may include but not limited to: | * Sorting * Storing of items * Recycling of items * Disposal of items |
| 1. Resources may include but not limited to: | * Electric * Water * Fuel * Telecommunications * Supplies * Materials |
| 1. Workplace environmental hazards may include but not limited to: | * Biological hazards * Chemical and dust hazards * Physical hazards |
| 1. Organizational systems and procedures may include but not limited to: | * Supply chain, procurement and purchasing * Quality assurance * Making recommendations and seeking approvals |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Observation
* Measuring
* Writing
* Communication
* Analytical
* Monitoring
* Evaluation

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Storage methods of environmentally hazardous materials
* Disposal methods of hazardous wastes
* Usage of PPE Environmental regulations
* OSHS
* Types of pollution
* Environmental pollution control measures
* Different solid wastes
* Solid waste management
* Different noise pollution
* Methods of minimizing noise pollution
* Solid Waste Act
* Methods of minimizing wastage
* Waste management procedures
* Economizing of resource consumption
* 3Rs principle
* Types of resources
* Techniques in measuring current usage of resources
* Calculating current usage of resources
* Types of workplace environmental hazards
* Environmental regulations
* Environmental regulations applying to the enterprise.
* Measurement and recording of current resource usage
* Analysis current work processes to access information and data Analysis of data and information
* Identification of areas for improvement
* Resource consuming processes
* Determination of quantity and nature of resource consumed
* Analysis of resource flow of different parts of the resource flow process
* Use/conversion of resources
* Causes of low efficiency of use
* Increasing the efficiency of resource use
* Inspection of resource use plans
* Regulations/licensing requirements
* Determine benefit/cost for alternative resource sources
* Benefit/costs for different alternatives
* Components of proposals
* Criteria on ranking proposals
* Regulatory requirements
* Proposals for improving resource efficiency
* Implementation of resource efficiency plans
* Procedures in monitor implementation
* Adjustments of implementation plan
* Inspection of new resource usage

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Controlled environmental hazard 2. Controlled environmental pollution 3. Demonstrated sustainable resource use 4. Evaluated current practices in relation to resource usage 5. Demonstrated knowledge of environmental legislations and local ordinances according to the different environmental issues /concerns. 6. Described industrial standard environmental practices according to the different environmental issues/concerns. 7. Resolved problems/ constraints encountered based on management standard procedures 8. Implemented and monitored environmental practices on a periodic basis as per company guidelines 9. Recommended solutions for the improvement of the Program 10. Monitored and reported to proper authorities any environmental incidents |
| 1. Resource Implications | The following resources should be provided:   1. Workplace with storage facilities 2. Tools, materials and equipment relevant to the tasks (ex. Cleaning tools, cleaning materials, trash bags, etc.) 3. PPE 4. Manuals and references 5. Legislation, policies, procedures, protocols and local ordinances relating to environmental protection 6. Case studies/scenarios relating to environmental Protection |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Observation 2. Oral questioning 3. Written test 4. Interview/Third Party Reports 5. Portfolio of evidence |
| 1. Context of Assessment | Competency may be assessed:   1. On-the-job 2. Off-the –job 3. During Industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# DEMONSTRATE OCCUPATIONAL SAFETY AND HEALTH PRACTICES

**UNIT CODE:** LOG/OS/AC/BC/07/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to identify workplace hazards and risk, identify and implement appropriate control measures and implement OSH programs, procedures and policies/ guidelines

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range*** |
| 1. Identify workplace hazards and risk | 1. ***Hazards*** in the workplace are identified ***based their indicators*** 2. Risks and hazards are evaluated based on legal requirements. 3. ***OSH concerns*** raised by workers are addressed as per legal requirements. |
| 1. Control OSH hazards | 1. Hazard prevention ***and control measures*** are implemented as per legal requirement. 2. Risk assessment is conductedand a risk matrix developed based on likely impact. 3. ***Contingency measures***, including ***emergency procedures*** during workplace ***incidents and emergencies*** are recognized and established in accordance with organization procedures. |
| 1. Implement OSH programs | 1. Company OSH program are identified, evaluated and reviewed based on legal requirements. 2. Company OSH programs are implemented as per legal requirements. 3. Workers are capacity built on OSH standards and procedures as per legal requirements 4. ***OSH-related records*** are maintained as per legal requirements. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Hazards may include but are not limited to: | * Physical hazards * Biological hazards * Chemical hazards * Ergonomics * Psychological factors * Physiological factors * Safety hazards * Unsafe workers’ act |
| 1. Indicators may include but are not limited to: | * Increased of incidents of accidents, injuries * Increased occurrence of sickness or health complaints/ symptoms * Common complaints of workers related to OSH * High absenteeism for work-related reasons |
| 1. Evaluation and/or work environment measurements may include but are not limited to: | * Health Audit * Safety Audit * Work Safety and Health Evaluation * Work Environment Measurements of Physical and Chemical Hazards |
| 1. OSH issues and/or concerns may include but are not limited to: | * Workers’ experience/observance on presence of work hazards * Unsafe/unhealthy administrative arrangements (prolonged work hours, no break time, constant overtime, scheduling of tasks) * Reasons for compliance/non-compliance to use of PPEs or other OSH procedures/policies/guidelines |
| 1. Prevention and control measures may include but are not limited to: | * Eliminate the hazard * Isolate the hazard * Substitute the hazard with a safer alternative * Use administrative controls to reduce the risk * Use engineering controls to reduce the risk * Use personal protective equipment * Safety, Health and Work Environment Evaluation * Periodic and/or special medical examinations of workers |
| 1. Safety gears /PPE (Personal Protective Equipment’s) may include but are not limited to: | * Arm/Hand guard, gloves * Eye protection (goggles, shield) * Hearing protection (ear muffs, ear plugs) * Hair Net/cap/bonnet * Hard hat * Face protection (mask, shield) * Apron/Gown/coverall/jump suit * Anti-static suits * High-visibility reflective vest |
| 1. Appropriate risk controls | * Eliminate the hazard altogether * Isolate the hazard from anyone who could be harmed * Substitute the hazard with a safer alternative * Use administrative controls to reduce the risk * Use engineering controls to reduce the risk * Use personal protective equipment |
| 1. Contingency measures may include but are not limited to: | * Evacuation * Isolation * Decontamination * Emergency personnel |
| 1. Emergency procedures may include but are not limited to: | * Fire drill * Earthquake drill * Basic life support/CPR * First aid * Spillage control * Decontamination of chemical and toxic * Disaster preparedness/management * Set of fire-extinguisher |
| 1. Incidents and emergencies may include but are not limited to: | * Chemical spills * Equipment/vehicle accidents * Explosion * Fire * Gas leak * Injury to personnel * Structural collapse * Toxic and/or flammable vapors emission. |
| 1. OSH-related Records may include but are not limited to: | * Medical/Health records * Incident/accident reports * Sickness notifications/sick leave application * OSH-related trainings obtained |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Interpersonal
* Presentation
* Risk assessment
* Evaluation
* Critical thinking
* Problem solving
* Negotiation

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* General OSH Principles
* Occupational hazards/risks recognition
* OSH organizations providing services on OSH evaluation and/or work environment measurements (WEM)
* National OSH regulations; company OSH policies and protocols
* Systematic gathering of OSH issues and concerns
* General OSH principles
* National OSH regulations
* Company OSH and recording protocols, procedures and policies/guidelines
* Training and/or counseling methodologies and strategies

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Identified hazards in the workplace based their indicators 2. Evaluated workplace hazards based on legal requirements. 3. Addressed OSH concerns raised by workers as per legal requirements. 4. Implemented hazard prevention and control measures as per legal requirement. 5. Conducted risk assessment as per legal requirement. 6. Developed risk matrix based on likely impact. 7. Recognized and established contingency measures in accordance with organization procedures. 8. Identified, evaluated and reviewed company OSH program based on legal requirements. 9. Implemented company OSH programs as per legal requirements. 10. Capacity built workers on OSH standards and procedures as per legal requirements 11. Maintained OSH-related records as per legal requirements. |
| 1. Resource Implications | The following resources should be provided:   1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Observation 2. Oral questioning 3. Written test 4. Portfolio of Evidence 5. Interview 6. Third party report |
| 1. Context of Assessment | Competency may be assessed:   1. On-the-job 2. Off-the –job 3. During Industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# COMMON COMPETENCIES

# PERFORM AIRPORT OPERATIONS

**UNIT CODE:** LOG/OS/AC/CC/01/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to perform airport operations**.** It involves conducting airport security, performing terminal operations, undertaking emergencies control, performing navigation activities, performing air traffic control services and monitoring meteorological conditions.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Conduct Airport Security | 1. Airport security procedures are identified as per industry regulations 2. ***Airport security devices*** are identified as per industry regulations 3. Prohibited areas are identified as per the workplace procedures 4. Airport security procedures are followed as per industry regulations 5. Vulnerable areas are identified and mitigation measures put in place |
| 1. Perform Terminal operations | 1. Terminal requirements are identified as per industry demands and government regulations 2. ***Types of terminals*** are identified industry regulations 3. Terminal operating procedures are followed according to industry regulations 4. Terminal equipment requirements are identified as per the industry regulations 5. Security measures at the terminal are adhered to as per industry regulations and government procedures |
| 1. Undertake Emergencies control | * 1. Emergency situations are identified as per industry regulations   2. Airport emergencies plan is identified as per industry regulations   3. Methods of emergencies control are identified   4. Categorization of emergency based on the aircraft is identified   5. Rescue coordination facilities are identified according to industry regulations |
| 1. Perform Navigation activities | 1. Navigation requirements are identified as per industry regulations 2. Navigation aids are identified as per the SOPs 3. Geographical features are identified as per the regulatory procedures. 4. Navigation procedures are followed based on industry regulations 5. Contingency measures are identified as per the SOPs |
| 1. Perform Air Traffic Control Services | 1. Air traffic control requirements are identified 2. Categorisation of air space is done according to Industry Regulators 3. Type of ***Air traffic control Services*** are identified 4. Air Traffic control equipment are identified 5. Contingency measures are identified as per the SOPs |
| 1. Monitor Meteorological conditions | 1. Elements of weather are identified as per weather minima 2. ***Meteorological hazards*** are identified 3. Instruments used to measure weather elements are selected 4. Contingency procedures are followed to mitigate the effect of meteorological hazards |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Airport security devices may include but not limited to: | * Millimetre wave machine (Full Body Scanner) * Metal detectors * X-ray machine |
| 1. Types of terminals may include but not limited to: | * Dumb * Smart * Intelligent * Cargo terminal * Passenger terminal |
| 1. Air traffic control services may include but not limited to: | * Aerodrome control * Approach control * Area control |
| 1. Meteorological hazards may include but not limited to: | * Thunder storms * Wind shear * Turbulence * Icing * Cumulonimbus |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Planning
* Communication
* Decision making
* Interpersonal relations
* Time management

**Required knowledge**

The individual needs to demonstrate knowledge of:

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Conducted Airport Security 2. Performed Terminal operations 3. Undertook Emergencies control 4. Performed Navigation activities 5. Performed Air Traffic Control Services 6. Monitored Meteorological conditions |
| 1. Resource Implications | The following resources must be provided:   * 1. Cargo plan schedule. |
| 1. Methods of Assessment | Competency may be assessed through:   * 1. Observation   2. Written tests   3. Oral questioning   4. Third party report |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Work place attachment 4. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. |

# CORE UNITS OF COMPETENCY

# PERFORM CARGO OPERATIONS

**UNIT CODE:** LOG/OS/AC/CR/01/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to perform cargo operations**.** It involves preparing cargo plan, carrying out cargo operations, performing cargo voyage, managing cargo emergencies, preventing environment pollution and maintaining cargo records.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Prepare cargo plan | 1. ***Cargo*** properties and characteristics are identified based on the environment and aircraft operations. 2. Communication procedures are followed based on loading and off-loading arrangements. 3. ***Information*** and equipment are established as per organizational procedures. 4. Cargo plan is implemented according to organizational requirements. |
| 1. Carry out cargo operations | 1. Preparations for loading are monitored according to the cargo plan and organizational procedures. 2. Procedures and instructions are interpreted based on the documentation. 3. Communication is maintained as per work place procedures. 4. Cargo operations are carried out as per the work place procedures. 5. Cargo handling records are maintained according to organizational procedures and regulatory requirements. |
| 1. Perform cargo voyage | * 1. Cargo voyage plan is followed according to organizational and customer requirements and regulations.   2. Cargo stowage and security is managed as per the work place procedures.   3. Cargo conditions are monitored based on nature as per the organizational guidelines.   4. Hazards associated with cargo stowage are identified as per the work place guidelines.   5. Cargo voyage documents are maintained as per the work place procedures. |
| 1. Manage cargo emergencies | 1. Cargo Emergencies are identified as per work place procedures 2. Communications are established as per the work place procedures. 3. Procedures are implemented to mitigate emergency and protect persons and properties as per the SOPs. 4. Injured persons are provided with assistance as per the SOPs. 5. Cessation of emergency is communicated based on the affected personnel as per the SOPs. |
| 1. Prevent environment pollution | 1. Causes of environmental pollution are identified as per work place procedures 2. Procedures to prevent pollution are identified as per the work place requirements. 3. Measures to prevent pollution during normal and emergency situations are applied according to regulatory requirements and organizational procedures. |
| 1. Maintain cargo records | 1. Cargo records and documentation are identified as per work place procedures 2. Cargo reports and documents are maintained according to regulatory requirements and organizational procedures. 3. Cargo samples are documented and secured as per the work place procedures. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Cargo includes but not limited to: | * Chemicals and oils * Explosives * General cargo, break bulk, unitized or in containers * Hazardous or dangerous goods * Heavy lifts * Perishable * Prohibited and restricted |
| 1. Information include but not limited to: | * Automatic data-based (ADB) equipment * Bulk Cargo Codes |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Planning
* Communication
* Decision making
* Negotiation
* Interpersonal relations
* Time management

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Application of ventilation requirements for various cargo
* Confined space entry procedures
* Dangerous goods classification.
* Cargo management regulations
* Nature of cargo
* Cargo handling

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Implemented cargo plan 2. Demonstrated the ability to perform cargo operations 3. Monitored cargo voyage 4. Demonstrated the ability to manage cargo emergencies 5. Demonstrated the ability to prevent environment pollution 6. Demonstrated the ability to keep cargo records |
| 1. Resource Implications | The following resources must be provided:   * 1. Cargo plan schedule. |
| 1. Methods of Assessment | Competency may be assessed through:   * 1. Observation   2. Written tests   3. Oral questioning   4. Third party report |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Work place attachment 4. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. |

# HANDLE AIR CARGO

**UNIT CODE:** LOG/OS/AC/CR/02/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to handle air cargo**.** It involves identifying air cargo, managing cargo facilities, performing cargo loading/offloading, handling dangerous goods, processing cargo payments and performing cargo storage.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Identifying air cargo | 1. ***Air cargo*** is classified as per the SOPs. 2. Air cargo packing instructions are determined as per the organizational regulatory requirements. 3. Air cargo is marked, labelled and documented as per SOPs 4. Transportation of air cargo is established in accordance with workplace procedures and regulatory requirements. |
| 1. Manage cargo facilities | 1. ***Cargo facilities*** and activities are identified based on the type of cargo. 2. Hazards are identified as per work place guidelines. 3. Risks are assessed and controlled as per the work place procedures. 4. Storage facilities are identified as per organizational procedures. 5. Inventory records are established based on management system. |
| 1. Perform cargo loading /offloading | 1. Load characteristics are identified as per the SOPs. 2. Dangerous or hazardous goods are identified as per the organizational guidelines. 3. Cargo quality and quantity are established as per SOPs 4. Cargo is loaded/offloaded based on mass as per the workplace procedures. 5. Lifting aids and appliances are selected based on the loading procedures. 6. Cargo requiring special handling and/or documentation are identified as per the SOPs. 7. Safety procedures are followed as per SOPs |
| 1. Handle dangerous goods | 1. Dangerous goods are classified as per regulatory requirements 2. Dangerous goods are Package as per SOPs 3. Prepared dangerous goods documentation as per work place procedures 4. Safety measures are identified as per SOPs 5. Loading/off-loading dangerous goods is done as per regulatory requirements |
| 1. Process cargo payments | 1. Payment methods are identified as per company policies. 2. Cargo transportation charges are identified as per Organizational standards 3. Foreign exchange rates are interpreted in line with the prevailing market rates. 4. Cargo payments are processed as per organizational standards 5. Invoices are processed as per organizational standards 6. Cargo payment records are kept as per organizational standards |
| 1. Perform cargo storage | 1. ***Storage equipment*** is identified and selected. 2. ***Storage resources*** are determined and their availability secured. 3. Storage charges are established as per the workplace procedures 4. Cargo is identified and manuals interpreted based on packaging details 5. Cargo is sorted and stacked in accordance with national standards, safety codes, and site operating procedures. 6. Cargo is stored as per the organizational procedures. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Dangerous goods includes but not limited to: | * Fireworks * Ammunition * Gelignite * Radioactive * Flammable liquids and solids |
| 1. Hazards includes but not limited to: | * Gasses * Corrosive liquids |
| 1. Storage equipment includes but not limited to | * Cranes * Forklift trucks * Struts * Stud fittings * Tugs * Stackers * Elevating Transfer Vehicles (ETV) |
| 1. Storage resources includes but not limited to | * Unit load devices * Lashing ropes * Nets |
| 1. Cargo facilities includes but not limited to | * Mobile equipment * Complexed fixed stacking * Movement systems (ETV) * Containers * Cargo terminals |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Communication
* Analytical
* Decision making
* Planning
* Time management

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Accuracy and precision requirements
* Information management
* Cargo handling
* Industry Regulations requirements
* OHS policies

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Demonstrated ability to handle air cargo. 2. Demonstrated ability to operate cargo facilities. 3. Determined unit load devices. 4. Performed cargo loading. 5. Performed cargo offloading. 6. Demonstrated ability to handle dangerous goods 7. Processed cargo payments. 8. Stored air cargo. |
| 1. Resource Implications | The following resources must be provided:   1. Work plans 2. Schedules 3. Policy documents 4. Duty statements. |
| 1. Methods of Assessment | Competency may be accessed through:   1. Observation 2. Written tests 3. Oral questioning 4. Assignments |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Work place attachment   Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. Attitude is assessed alongside supervising aviation practices. |

# CARRY OUT AIRLINE MARKETING

**UNIT CODE:** LOG/OS/AC/CR/03/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to carry out airline marketing**.** It involves identifying air market segment, understanding freight rate, carrying out air market promotion, determining freight pricing and performing customer service.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Identify air market segment | 1. Types of market segments are identified as per workplace policy 2. Marketing plan is identified as per the workplace procedures 3. Market audience is identified as per the workplace procedures 4. Customer loyalty is established as per the organizational objectives. 5. Regular clients are determined based on the market performance. 6. Business clients are determined based on the market performance. 7. Market segment is selected as per organizational procedures |
| 1. Determine freight rate | 1. Aircraft unit and total cost for each ***resource*** item is identified as per the work place procedures. 2. General cargo rate is identified as per organisation policy 3. Warehousing charges are identified based on the organization’s standards 4. The air way bill is outlined as per Industry regulations |
| 1. Carry out air market promotion | 1. Promotional plan is established as per the work place objectives. 2. Promotional activities are carried out as per the organizational guidelines. 3. Marketing objectives are implemented based on target market. |
| 1. Determine freight pricing. | 1. Factors that affect freight pricing are identified workplace policy 2. Freight options are identified based on the customer needs. 3. Flight itineraries are identified as per the work place procedures. 4. ***Concession costs*** are identified as per the work place guidelines. 5. Taxes, fees and surcharges are established as per the SOPs. 6. Domestic freight charges and quote optimum are determined based on customer needs. |
| 1. Perform Customer Service | 1. Customers are received and attended to as per the workplace policy 2. Customers are identified as per work requirements 3. Customers’ needs are established as per SOPs 4. Customers records are maintained as workplace procedures |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Concession costs includes but not limited to: | * Airport Taxes. * Surcharges * Promotional costs * Sector fares |
| 1. Resource includes but not limited to: | * Human * Financial * Physical |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Analytical
* Problem solving
* Time management
* Budgeting

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Procedures for marketing and promotions
* Sales and marketing skills and practices
* Promotional activities
* Trade shows
* Advertising
* Public relations

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Identified air market segment 2. Understood freight rate 3. Was able to carry out air market promotion 4. Determined freight pricing. 5. Performed Customer Care service |
| 1. Resource Implications | The following resources must be provided:   1. Work plans and schedules, policy documents and duty statements. |
| 1. Methods of Assessment | Competency may be accessed through:   1. Observation 2. Written tests 3. Oral questioning 4. Assignments |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Work place attachment 4. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. Attitude is assessed alongside supervising aviation practices. |

# HANDLE SPECIAL FREIGHT

**UNIT CODE:** LOG/OS/AC/CR/04/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to handle special freight**.** It involves identifying special freight, monitoring special freight and maintaining special freight Documentation

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Identify special freight | 1. Special freight is classified as per client needs/ organizational standards/ government regulations 2. Time sensitive shipment is identified 3. Shipping insurance is identified based on organizational standards 4. Warehousing facility for special freight is identified 5. Special freight is organized according to organizational guidelines 6. Special transport services advices are identified as per the SOPs. 7. Documentation requirements prepared and processed in accordance with applicable regulatory requirements |
| 1. Monitor special freight | 1. Transit of ***special cargo*** and dangerous goods is monitored as per the SOPs. 2. Transport challenges for special cargo are identified as per the company procedures. 3. Planning logistics are identified as per the organizational guidelines. 4. Cargo tracking devices are identified as per the organizational guidelines. 5. Customers are informed of transport progress as per the organizational guidelines. |
| 1. Maintain special freight Documentation | 1. Special freight documents are identified and classified as workplace procedures 2. Documents are prepared in accordance with procedures and regulatory requirements. 3. Data is captured as per company procedural requirements. 4. Challenges are reported in accordance with regulatory requirements. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Special cargo includes but not limited to: | * Valuables * Bank notes * Dangerous goods * Perishables |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Communication
* Analytic
* Critical thinking.
* Organization.
* Time management.
* Interpersonal relations

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Air transport procedures
* Principles of international trade and commerce
* Principles of quality assurance and customer service standards, policies and procedures as they apply in the international freight forwarding industry
* Relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
* Information and documentation for international freight forwarding by air transport, including permits and authorizations

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Identified special freight transport services 2. Organized special freight 3. Monitored special freight 4. Demonstrated the ability to maintain special freight documentation. |
| 1. Resource Implications | The following resources must be provided:   * 1. Record book   2. Assignment instructions, work plans and schedules, policy documents and duty statements. |
| 1. Methods of Assessment | Competency may be accessed through:   1. Observation 2. Written tests 3. Oral questioning 4. Third party reports |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. Attitude is assessed alongside supervising aviation practices. |

# SECUREAIR CARGO

**UNIT CODE:** LOG/OS/AC/CR/05/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to secure air cargo. It involves preparing cargo packaging, managing lashing/unlashing of cargo, protecting cargo from adverse weather, managing packing/unpacking cargo, securing valuable cargo, general cargo and managing perishable cargo.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Prepare cargo containers | 1. The weight and size of cargo is identified 2. Work area is prepared and maintained in accordance with organizational operating procedures. 3. Equipment and fittings are selected as per the work place procedures. 4. Framework is created as per the SOPs 5. Container is determined as per as SOP’s. |
| 1. Manage lashing/unlashing of cargo | 1. Lashing/unlashing plan is interpreted as per the SOPs. 2. Lashing/unlashing points are identified based on the fitting equipment as per SOP’s. 3. Tie-down requirements are identified as per organizational procedures. 4. Tensioners are securely fastened as per SOPs. 5. Lashing/unlashing equipment are placed in designated storage areas as per SOPs. 6. Lashing/unlashing is carried out in accordance with organizational policies and procedures. |
| 1. Protect cargo from adverse weather | 1. Weather hazards are identified as per the meteorological conditions 2. Cargo is protected as per the work place operating procedures. 3. Mitigation measures are identified as per work place operating procedures. |
| 1. Manage cargo Packing/unpacking | 1. Cargo is identified as per the work place procedures. 2. Cargo discrepancies are identified and reported in accordance with enterprise procedures 3. Cargo packing materials are established as per SOPs 4. Cargo is sorted and stacked based on correct location, in accordance with standards and site operating procedures |
| 1. Secure valuable cargo/General cargo. | 1. ***Cargo is identified as per valuability as per SOPs.*** 2. ***Valuable cargo*** is identified as per the organizational procedures. 3. Valuable cargo is classified as per the organizational procedures. 4. Valuable cargo is packed as per the organizational procedures 5. Valuable cargo is marked/ labelled as per organizational procedures 6. Valuable cargo is stored as per organizational procedures 7. Valuable cargo is issued as per the organizational procedures. 8. Valuable cargo records are kept as per the organizational procedures. 9. Documentation is preserved as per the organizational procedures. |
| 1. Manage perishable cargo | 1. Perishable cargo is identified as per the work place procedures. 2. ***Perishable cargo*** equipment is determined as per the work place procedures. 3. Perishable cargo is packed as per the company procedures. 4. Perishable cargo is stored as per company procedures. 5. Perishable cargo is issued as per company procedures. 6. Documentation is preserved as per the organizational procedures. 7. Perishable cargo regulations are observed as per SOPs |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Valuable cargo includes but not limited to: | * Gold * Bank notes * Jewelleries * Diamonds * Ballot papers |
| 1. Perishable cargo include but not limited to: | * Vegetables * Vaccines * Pharmaceuticals * Human organs * Food stuffs |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Interpersonal relations
* Communication
* Decision making
* Critical thinking

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Regulation requirements
* Handling and safety requirements
* Relevant WHS/OHS and environmental procedures and regulations
* Procedures and policies for securing cargo or freight.
* Cargo handling procedures.

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| * 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Prepared cargo containers 2. Managed lash and unlash cargo 3. Demonstrated the ability to protect cargo from adverse weather 4. Managed cargo Packing/unpacking 5. Demonstrated the ability to secure valuable cargo 6. Managed perishable cargo |
| * 1. Resource Implications | The following resources must be provided:   * 1. Case studies   2. Policy documents |
| * 1. Methods of Assessment | Competency may be accessed through:   * 1. Observation   2. Written tests   3. Oral questioning   4. Third party report |
| * 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Work place attachment 4. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| * 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. Attitude is assessed alongside supervising aviation practices. |

# PERFORMCARGO STOWAGE

**UNIT CODE:** LOG/OS/AC/CR/06/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to perform cargo stowage**.** It involves observing cargo plan, preparing for cargo loading/offloading, monitoring loading/ unloading of cargo and monitoring cargo voyage

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Observe cargo plan | 1. ***Cargo plan*** is interpreted as per the work place procedures. 2. Types of cargo freight are identified as SOPs 3. Cargo loading/offloading tools and equipment are identified based on the cargo plan. 4. Cargo plan is assessed based on compatibility of cargo stowage as per the company procedures. |
| 1. Prepare cargo for loading/offloading | 1. Safety arrangements are identified and verified as per the organizational requirements. 2. Supplies for cargo protection and materials are reviewed as per the SOPs. 3. Cargo loading/offloading inspection documentation is carried out and as per the SOPs. 4. Preparations for loading/offloading are monitored according to stowage plan and organizational procedures. |
| 1. Monitor loading/ offloading of cargo | 1. Cargo handling is monitored based on as per SOPs. 2. Cargo is secured in accordance with cargo plan. 3. ***Cargo handling records*** are maintained according to organizational procedures. 4. Transfer of cargo is monitored as per the work place procedures. 5. Loading/offloading equipment are identified according to organizational procedures. |
| 1. Monitor cargo voyage | 1. Cargo voyage plan is implemented according to organizational and customer requirements. 2. Control systems and measures are adhered to as per the work place requirements. 3. Safety procedures are followed as per the organization guidelines. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Cargo plan includes but not limited to: | * Cargo weight * Correct description and stowage of hazardous and dangerous goods * Description of cargo to be loaded * Load/discharge port * Segregation of non-compatible cargo * Stowage of refrigerated containers |
| 1. Cargo handling records include but not limited to: | * Cargo gear register * Cargo receipts * Cargo securing manual * Logbook entries * Note of protest |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Time management
* Monitoring
* Coordination
* Decision making

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Customer Service
* Safety and Security
* Air Transportation
* Communications
* Cargo handling
* Record keeping

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Demonstrated ability to observe cargo plan 2. Prepared cargo for loading/offloading 3. Loaded/offloaded air cargo. 4. Monitored cargo voyage. |
| 1. Resource Implications | The following resources must be provided:   * 1. work plans and schedules   2. policy documents   3. duty statements. |
| 1. Methods of Assessment | Competency may be accessed through:   * 1. Observation   2. Written tests   3. Oral questioning   4. Assignments |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off the job 3. Work place attachment 4. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. Attitude is assessed alongside supervising aviation practices. |

# PERFORM CARGO AUTOMATION

**UNIT CODE:** LOG/OS/AC/CR/07/5/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to develop cargo automation**.** It involves administering cargo automation, handling cargo automation and processing cargo automation

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up **workplace function**. | **PERFORMANCE CRITERIA**  These are **assessable** statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| * 1. Administer cargo automation | 1. Automation systems are identified 2. Automation system are selected and installed as per the organizational objectives 3. Automation system is tested and evaluated as per the standard operating procedures 4. Automation system is approved as per organisation objectives. 5. Automation system is updated as per SOP’s |
| * 1. Handle cargo automation | 1. Cargo handling facilities and equipment are identified as per organisation requirements. 2. Automated container storage system is maintained as per work place procedures. 3. Cargo handling procedures are determined as per SOPs. 4. Handling information is received and disseminated as per work place police. |
| * 1. Process cargo automation | * 1. Cargo automation requirements are identified as per work place procedures   2. Cargo automation procedures are established as per SOP’s.   3. Alternative ***cargo automation system*** is established as per the organizational requirement. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Cargo automation system includes but not limited to: | * Automated storage and retrieval systems * Automated wrapping machines * Automated labelling machines |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Decision making.
* Time management.
* Adaptability.
* Communication skills

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Aviation knowledge.
* Meteorology
* Aeronautical fixed telecommunication network (AFTN)
* Radio Telephony
* Digital literacy

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Identified cargo automation systems 2. Identified Cargo handling facilities and equipment 3. Administered cargo automation 4. Handled cargo automation 5. Processed cargo automation |
| 1. Resource Implications | The following resources must be provided:   1. Case studies. 2. Computer |
| 1. Methods of Assessment | Competency may be accessed through:   1. Observation 2. Written tests 3. Oral questioning 4. Third party reports |
| 1. Context of Assessment | Competency may be assessed:   1. On-the- job 2. Off- the- job 3. Off the job assessment must be undertaken in a closely simulated workplace environment. |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job roles is recommended. Attitude is assessed alongside supervising aviation practices. |