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What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Introduction

Qualifications Pack: Ship and Yard Planning Supervisor *(Electives – Dry Bulk Cargo/ Containerized Cargo)* *(Options – Agency Operations/ Container Tracking and Vessel Planning)*

SECTOR: LOGISTICS

SUB-SECTOR: Ports Terminals, Container Freight Stations (CFS) and Inland

Container Depots (ICD)

OCCUPATION: Port operation and management

REFERENCE ID: LSC/Q3501

ALIGNED TO: NCO – 2015 – 1324.02 and ISCO – 08 – 1324

Brief Job Description: The individual allocates and supervises resources for storage and movement of cargo in port terminal yard, while ensuring compliance to statutory requirements/documentation to ensure smooth operations.

Electives

Elective 1: Dry Bulk Cargo

This unit is about supervision of cargo handling and storage operations for dry bulk cargo

Elective 2: Containerized Cargo

This unit is about supervision of cargo handling and storage operations for containerized cargo including reefer cargo

Options

Option 1: Agency Operations

This unit is about developing relations with key accounts and developing new business with existing and new customers

Option 2: Container Tracking and Vessel Planning

This unit is about reporting on position of different containers across the globe and making berthing and terminal plans for vessels docking for the week

Personal Attributes:

The job holder should plan and budget for activities. S/he should have digital/computer skills and mathematical aptitude to estimate yard space requirement, and quantity estimation. S/he should have English and Vernacular language proficiency, demonstrable in spoken, written and oral communication

Qualifications Pack Code	LSC/Q3501		
Job Role	Ship and yard planning supervisor		
Credits(NSQF)	TBD	Version number	1.0
Sector	Logistics	Drafted on	30/06/2018
Sub-sector	Port terminals, CFS and ICDs	Last reviewed on	04/05/2019
Occupation	Port Operation and Management	Next review date	04/05/2022
NSQC Clearance on	DD/MM/YYYY		
Effective from	DD/MM/YYYY		

Job Role	Ship and yard planning supervisor
Role Description	The individual would be responsible for cargo planning, storage and movement in the yard at port terminal for optimal utilisation. S/He will also be responsible for resource allocation and required statutory documentation to ensure smooth operations.
NSQF	5
Minimum Educational Qualifications	Graduate (or) Diploma/ Class XII with relevant experience (or) Class X with relevant experience
Maximum Educational Qualifications	-
Prerequisite License or Training	Not Applicable for License. Should be proficient and cleared Level 4
Minimum Job Entry Age	21 years
Experience	Diploma/ Class XII with 3 years of experience in Warehouse and EXIM/ Ports, ICD& CFS operations (or) Class X with 5 years of experience in Warehouse and EXIM/ Ports, ICD & CFS operations
Applicable National Occupational Standards (NOS)	<p>Compulsory:</p> <ol style="list-style-type: none"> LSC/N3501 Allocate resources and streamline operations at yard LSC/N3502 Yard planning and cargo handling LSC/N3504 Handle hazardous goods LSC/N0321 Documentation related to port clearance and cargo LSC/N9904 Maintain and monitor integrity and ethics in operations LSC/N9905 Follow and monitor health, safety and security procedures <p>Electives (mandatory to select one):</p> <p>Elective 1: Dry Bulk Cargo</p> <ol style="list-style-type: none"> LSC/N3505 Handle dry bulk cargo

	<p>Elective 2: Containerized Cargo 2.1 LSC/N3506 Handle container cargo</p> <p>Options (Not mandatory):</p> <p>Option 1: Agency Operations 1.1 LSC/N9701 Business development and stakeholder relations</p> <p>Option 2: Container Tracking and Vessel Planning 2.1 LSC/N3508 Track containers globally and plan for vessel docking</p>
Performance Criteria	As described in the relevant OS units

Definitions

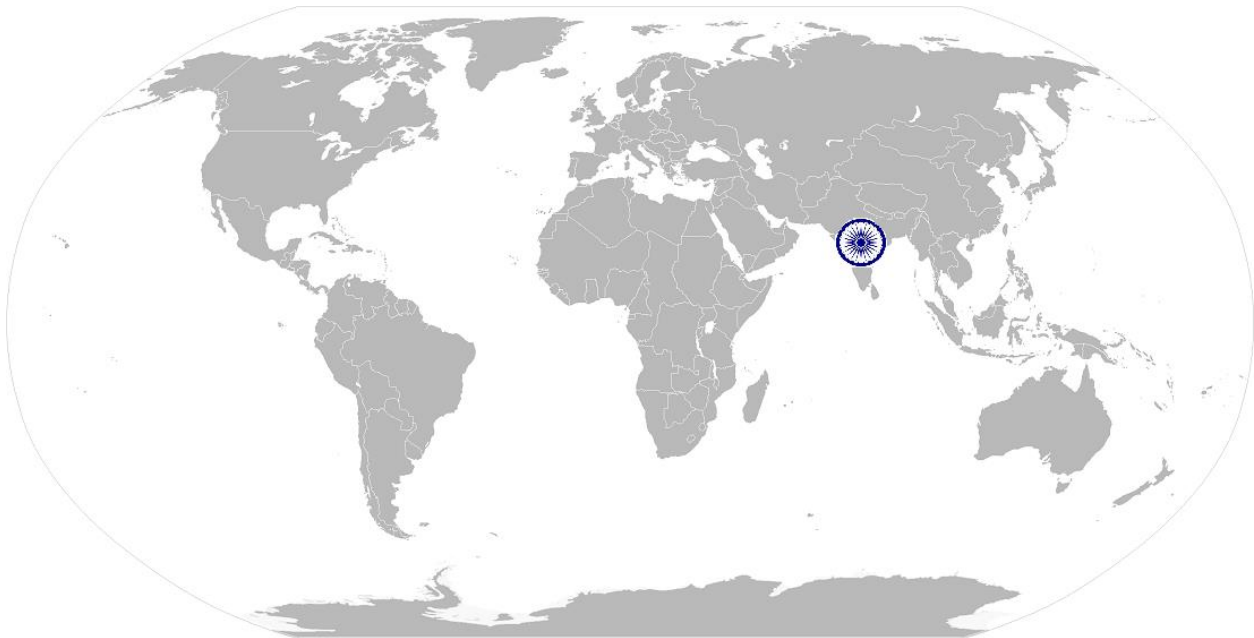
Keywords /Terms	Description
Core Skills/Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the NOS, these include communication related skills that are applicable to most job roles.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of NOS.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
National Occupational Standards (NOS)	NOS are Occupational Standards which apply uniquely in the Indian context
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select atleast one elective for the successful completion of a QP with Electives
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. there may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Organisational Context	Organisational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
Qualifications Pack(QP)	Qualifications Pack comprises the set of NOS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Scope	Scope is the set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a

	critical impact on the quality of performance required.
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-Sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Sub-functions	Sub-functions are sub-activities essential to fulfil the achieving the objectives of the function.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.

Acronyms

Keywords /Terms	Description
CFS	Container Freight Station
DG	Directorate General
ERP	Enterprise Resource Planning
EXIM	Export Import
GPS	Global Positioning System
GSU	Grab Ship Unloader
HAZCHEM	Hazardous Chemicals
HR	Human Resources
ICD	Inland Container Depot
IMDG	International Maritime Dangerous Goods
IMSBC	International Maritime Solid Bulk Cargo
JIT	Just In Time
MHE	Material Handling Equipment
NSQF	National Skills Qualifications Framework
OSHA	Occupational Safety and Health Administration
OH&S	Occupational Health and Safety
OS	Occupational Standards
PGA	Partner Government Agencies
PPE	Personal Protective Equipment
QP	Qualifications Pack
RFID	Radio-Frequency Identification
SLA	Service Level Agreement
SOP	Standard Operating Procedures
TAT	Turn Around Time
VHF	Very High Frequency

National Occupational Standard



Overview

This unit is about allocating resources and streamlining operations at a port terminal yard

LSC/N3501

Allocate resources and streamline operations at yard

National Occupational Standard

Unit Code	LSC/N3501
Unit Title (Task)	Allocate resources and streamline operations at yard
Description	This unit is about allocating resources for cargo movement, supervision of operations and streamlining operations at yard
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Prepare work plan and allocate resources • Monitor daily operations • Yard Inspection • Resolve escalated issues <p>Range: Stationery, Radio-Frequency Identification (RFID) scanner, bar code scanner, plastic bags, markers, Personal Protective Equipment (PPEs), Enterprise Resource Planning (ERP), computer, printers, Global Positioning System (GPS) tracker, Material Handling Equipment (MHEs), etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Prepare work plan and allocate resources	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. obtain details of vessel docking plans, cargo and container movement plans, etc.</p> <p>PC2. develop daily work plan factoring in priority cases, time bound requirements, special handling requirements, etc.</p> <p>PC3. get the work plan approved by the yard manager or Container Freight Station (CFS)/ Inland Container Depot (ICD) manager and allocate tasks to subordinates</p> <p>PC4. budget and allocate the requisite MHE for tasks at hand</p>
Monitor daily operations	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC5. inspect yard for markings/demarcation, storage and cleanliness as per safety norms</p> <p>PC6. monitor cargo loading, unloading and movement operations</p> <p>PC7. engage resources in alternate operation when there is a delay of planned operations</p> <p>PC8. allocate additional and ad-hoc manpower and equipment during exigency</p> <p>PC9. escalate issues regarding MHE operations, transporter delays, vessel delays, accidents, damages, etc. to manager</p> <p>PC10. provide corrective and preventive action plans based on accident and damage reports</p> <p>PC11. liaise with port officials, customs officials and external stakeholders</p>
Yard inspection	<p>To be competent, the user/ individual must be able to:</p> <p>PC12. conduct periodic inspection of the yard for cleanliness, usage of PPEs and</p>

LSC/N3501

Allocate resources and streamline operations at yard

	<p>adherence to SOP and regulations</p> <p>PC13. ensure cargo bays are clearly marked and segregated, containers and cargo are stored as per prescribed norms</p> <p>PC14. check for parking and positioning of equipment as per SOP</p> <p>PC15. ensure all necessary precautions for storage of hazardous cargo are complied with and emergency services are available</p> <p>PC16. submit inspection report highlighting any deviation from SOP</p>
<p>Resolve escalated issues</p>	<p>To be competent, the user/ individual must be able to:</p> <p>PC17. review escalated issues and identify root cause for providing corrective action</p> <p>PC18. provide technical guidance to the team for execution</p> <p>PC19. escalate the issues to manager when external or additional help is required</p> <p>PC20. coordinate with other departments, transporters, freight operators, port authorities, shipping companies and others to resolve escalations if required</p>
<p>Knowledge and understanding (K)</p>	
<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. organizational and security procedures</p> <p>KA2. documentation and reporting as per organization's mandate</p> <p>KA3. escalation matrix for reporting identified problems</p> <p>KA4. risk and impact of not following defined procedures/work instructions</p> <p>KA5. coding system followed to label cargo</p> <p>KA6. IT system and ERP system of the organization</p>
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. yard operations and its technicalities</p> <p>KB2. different type of cranes and MHEs – their capacities, constraints and usage</p> <p>KB3. use of rope, flags and other manual equipment</p> <p>KB4. vessel layout and loading and unloading activities</p> <p>KB5. different type of vessels, cargo, container sizes and their handling</p> <p>KB6. handling of hazardous and non-hazardous cargo – International Maritime Dangerous Goods (IMDG) code</p> <p>KB7. stuffing and de-stuffing norms with respect to different cargo and its special characteristics</p>
<p>Skills (S)</p>	
<p>A. Core skills/ generic skills</p>	<p>Reading skills</p> <p>The user/individual on the job needs to know how to read:</p> <p>SA1. written instructions</p> <p>SA2. shipping manifest, Bill of lading shipping bills and related documents</p> <p>SA3. ERP and computer generated reports</p> <p>SA4. cargo stowage plans and vessel plans</p> <p>SA5. Standard Operating Procedures (SOPs) and safety regulation manuals</p> <p>Writing skills</p>

LSC/N3501

Allocate resources and streamline operations at yard


	<p>The user/individual on the job needs to know how to write:</p> <p>SA6. work-orders and instructions</p> <p>SA7. checklist of activities, delays, undelivered items, contacts, etc</p> <p>SA8. daily reports</p>	
	<p>Oral communication (listening and speaking skills)</p> <p>The user/individual on the job needs to know how to:</p> <p>SA9. communicate with customers, fireght operators, transporters, shipping companies, other supervisors and port authorities</p> <p>SA10. communicate with cargo equipment operators and ground staff over Very High Frequency (VHF) radio</p> <p>SA11. guide cargo handlers for smooth operations</p>	
B. Professional skills	<p>Decision making</p> <p>The user/individual on the job needs to know how to:</p> <p>SB1. decide on required workforce and equipment for performing a particular task</p> <p>SB2. assess the environmental condition and type of cargo to assess if it is safe for operations</p> <p>SB3. resolve a problem quickly internally</p> <p>SB4. prioritise shipments</p> <p>SB5. decide on deployment of alternate resources when required</p>	
	<p>Plan and organize</p> <p>The user/individual on the job needs to know how to:</p> <p>SB6. plan and estimate the co-ordination required for resolving a query.</p> <p>SB7. maintain punctuality</p> <p>SB8. respond to the client in a timely manner</p> <p>SB9. prioritize and execute tasks based on client requirements</p> <p>SB10. make work plans and resource allocation plans</p> <p>SB11. make checks on execution of work plans</p> <p>SB12. be a team player and achieve joint goals</p>	
	<p>Customer centricity</p> <p>The user/individual on the job needs to know how to:</p> <p>SB13. adhere to the customer timelines</p> <p>SB14. address the urgency regarding shipments and activities</p>	
	<p>Problem solving</p> <p>The user/individual on the job needs to know how to:</p> <p>SB15. make adjustment to working requirements for difficult weathers and hazardous goods</p> <p>SB16. identify trends/common causes for delays, damages, etc.</p> <p>SB17. co-ordinate and handle major issues with different departments</p> <p>SB18. identify bottlenecks and operational problems and suggest remedial action</p>	

LSC/N3501

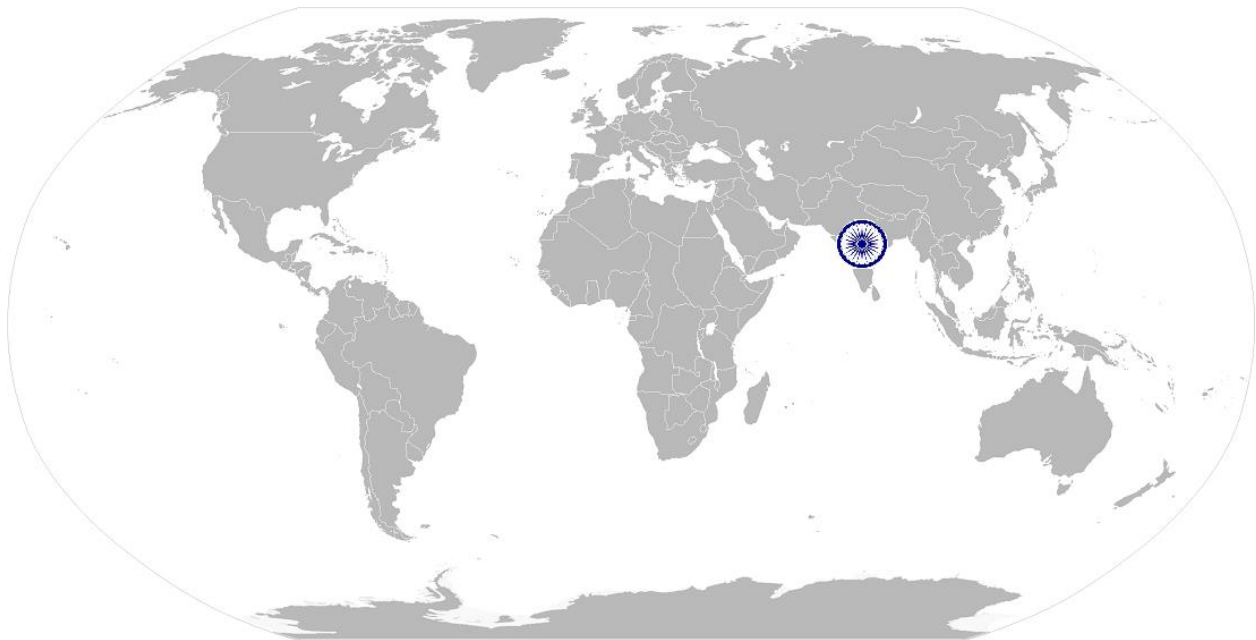
Allocate resources and streamline operations at yard

	Analytical thinking
	The user/individual on the job needs to know how to: SB19. assess the resource requirement for a particular task at hand SB20. assess and prepare for backup resources in case of delays SB21. plan for cargo movement so that the resources and storage space is optimally utilised
	Critical thinking
	The user/individual on the job needs to know and understand how to: SB22. resolve issues in a quick and cost effective manner SB23. develop work plans factoring in external factors SB24. Check that all security measures and safety protocols are followed at all times

NOS Version Control

NOS Code	 LSC/N3501		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, ICD and CFS	Last reviewed on	28/03/2019
Occupation	Port Operations and Management (cargo handling, yard planning, vessel planning)	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about planning the container and cargo storage in the yard and overseeing movement operations

LSC/N3502

Yard planning and cargo handling

National Occupational Standard

Unit Code	LSC/N3502
Unit Title (Task)	Yard planning and cargo handling
Description	This unit is about yard planning for cargo storage, supervision of movement of cargo and preparing reports
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Review yard utilisation and plan for storage requirement • Prepare for cargo movement • Supervise cargo movement • Report and Document <p>Range: Stationery, Standard Operating Procedures (SOP), Radio-Frequency Identification (RFID) scanner, bar code scanner, markers, Personal Protective Equipment (PPEs), Enterprise Resource Planning (ERP), computer, display board, printer, Material Handling Equipment (MHEs), etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Review yard utilisation and plan for storage requirement	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. check yard space utilization data in terms of open and closed yards, dry bulk cargo vs container, and assess available storage capacity</p> <p>PC2. review ageing of cargo and containers in yard, identify reasons for delay, and enable timely movement</p> <p>PC3. identify and finalise bays for storage of incoming cargo considering the various demarcations and precautions to be taken particularly for hazardous and dry bulk cargo</p> <p>PC4. plan for yard traffic and material movement routes considering terminal layout, container and cargo type, and available equipment</p> <p>PC5. prepare goods storage plans based on vessel berthing plan and get it approved by the terminal manager</p> <p>PC6. escalate issues to terminal manager if required</p>
Prepare for cargo movement	<p>To be competent, the user/ individual must be able to:</p> <p>PC7. obtain vessel information related to docking schedule, berth, bays and containers to be unloaded/ loaded</p> <p>PC8. obtain information regarding movement of containers/ cargo from port terminals to Container Freight Station/ Inland Container Depot (CFS/ ICD) or client</p> <p>PC9. communicate and finalise cargo movement plan with lifting supervisors, vessel supervisors, cargo equipment handlers, and manual cargo handlers</p> <p>PC10. ensure that all equipment and workforce are ready for operations at the time of vessel docking / transport arrival</p>

LSC/N3502

Yard planning and cargo handling

<p>Supervise cargo movement</p>	<p>PC11. ensure all necessary precautions are taken and adequate PPEs are used</p> <p>To be competent, the user/ individual must be able to:</p> <p>PC12. coordinate with vessel docking supervisor/ transport supervisor and vessel officer and get a go-ahead for cargo/ container loading/ unloading</p> <p>PC13. coordinate with cargo surveyor for receiving 'safe and secured' go-ahead before loading/ unloading</p> <p>PC14. address the queries of shipping lines and agents regarding cargo operations and storage</p> <p>PC15. check that all cargo handling activities executed are as per schedule and SOP</p> <p>PC16. document damages to cargo/ container during loading/ unloading</p> <p>PC17. provide guidance and resolve/escalate any issues faced in loading/ unloading</p> <p>PC18. check that all cargo is stored at the planned/allocated storage location in the yard</p>
<p>Report and Document</p>	<p>To be competent, the user/ individual must be able to:</p> <p>PC19. obtain 'safe and secured' go-ahead from the cargo surveyor upon completion of loading/ unloading activities</p> <p>PC20. collect counter signature from transporter for actuals received or dispatched</p> <p>PC21. check consignments received against order and delivery documentation to confirm that the quality, quantity and condition of the cargo is acceptable, identifying and referring any discrepancies</p> <p>PC22. maintain records relating to the receipt / storage / despatch of cargo, ensuring that these are up to date and complete</p> <p>PC23. check if receipt and delivery are documented in ERP</p> <p>PC24. prepare daily report highlighting the cargo storage and movement, plan vs actual performance, cargo ageing, details of accidents and damages if any</p>
<p>Knowledge and understanding (K)</p>	
<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. organizational procedures</p> <p>KA2. documentation and reporting as per organization's mandate</p> <p>KA3. security procedures to be followed</p> <p>KA4. escalation matrix for reporting identified problems</p> <p>KA5. risk and impact of not following defined procedures/work instructions</p> <p>KA6. coding system followed to label cargo</p> <p>KA7. IT system and ERP system of the organization</p>
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. basics of operations in a port terminal, ICD and CFS</p> <p>KB2. use of various cargo handling equipment</p> <p>KB3. use of rope, flags and other manual equipment</p> <p>KB4. vessel layout and loading and unloading activities</p>

LSC/N3502

Yard planning and cargo handling

	<p>KB5. procedures of tank cleaning, cargo movement</p> <p>KB6. requirements regarding handling of cargo</p> <p>KB7. different type of vessels and cargo and container sizes</p> <p>KB8. different type of cranes and MHEs – their capacities, constraints and usage</p> <p>KB9. handling of hazardous and non-hazardous cargo - – International Maritime Dangerous Goods (IMDG) code</p> <p>KB10. marking of material and people movement areas</p> <p>KB11. stuffing and de-stuffing norms with respect to different cargo</p> <p>KB12. special characteristics and handling requirements of shipments, if any</p>
Skills (S)	
C. Core skills/ generic skills	Reading skills
	<p>The user/individual on the job needs to know how to read:</p> <p>SA1. written instructions</p> <p>SA2. shiping manifest, Bill of lading shipping bills and related documents</p> <p>SA3. ERP and computer generated reports</p> <p>SA4. cargo stowage plans and vessel plans</p> <p>SA5. SOPs and safety regulation manuals</p>
	Writing skills
	<p>The user/individual on the job needs to know how to write:</p> <p>SA6. work-orders and instructions</p> <p>SA7. checklist of activities, delays, undelivered items, contacts, etc</p> <p>SA8. daily reports</p>
	Oral communication (listening and speaking skills)
	<p>The user/individual on the job needs to know how to:</p> <p>SA9. communicate with customers, fireght operators, transporters, shipping companies, other supervisors and port authorities</p> <p>SA10. communicate with cargo equipment operators and ground staff over VHF radio</p> <p>SA11. guide cargo handlers for smooth operations</p>
D. Professional skills	Decision making
	<p>The user/individual on the job needs to know how to:</p> <p>SB1. decide on required workforce and equipment for performing a particular task</p> <p>SB2. assess the environmental condition and type of cargo to assess if it is safe for operations</p> <p>SB3. resolve a problem quickly internally</p> <p>SB4. prioritise shipments</p> <p>SB5. decide on deployment of alternate resources when required</p>
	Plan and organize
<p>The user/individual on the job needs to know how to:</p>	

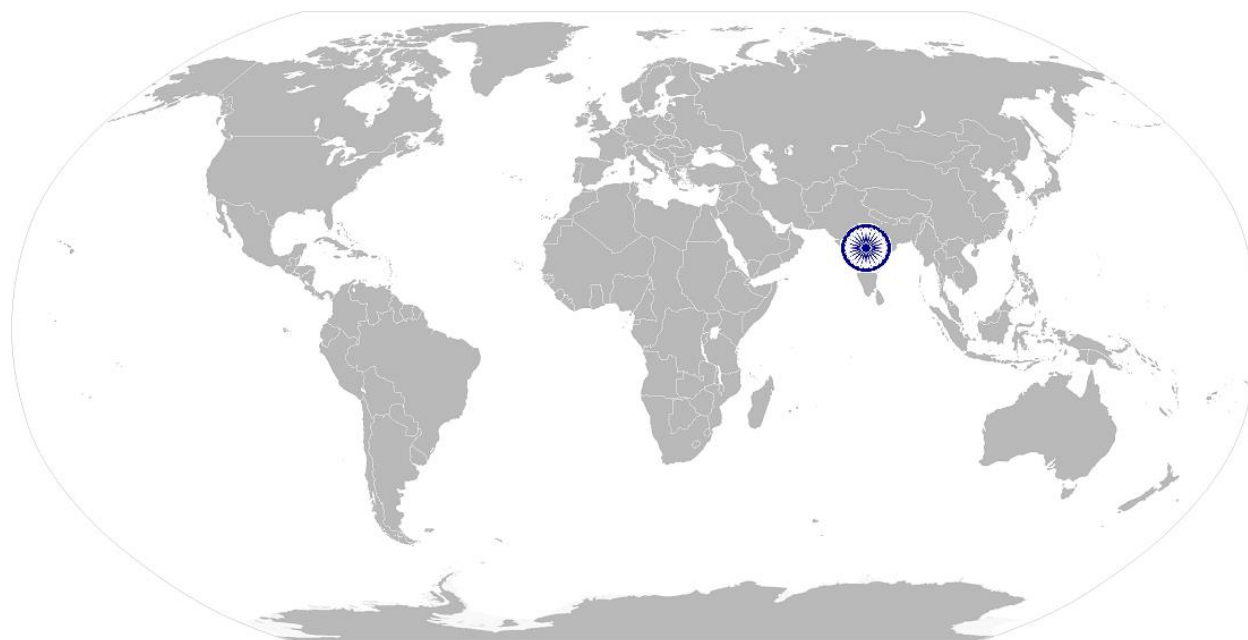
LSC/N3502
Yard planning and cargo handling

	SB6. plan and estimate the co-ordination required for resolving a query.
	SB7. maintain punctuality
	SB8. respond to the client in a timely manner
	SB9. prioritize and execute tasks based on client requirements
	SB10. make work plans and resource allocation plans
	SB11. make checks on execution of work plans
	SB12. be a team player and achieve joint goals
	Customer centricity
The user/individual on the job needs to know how to:	
SB13. adhere to the customer timelines	
SB14. address the urgency regarding shipments and activities	
Problem solving	
The user/individual on the job needs to know how to:	
SB15. make adjustment to working requirements for difficult weathers and hazardous goods	
SB16. identify trends/common causes for delays, damages, etc.	
SB17. co-ordinate and handle major issues with different departments	
SB18. identify bottlenecks and operational problems and suggest remedial action	
Analytical thinking	
The user/individual on the job needs to know how to:	
SB19. assess the resource requirement for a particular task at hand	
SB20. assess and prepare for backup resources in case of delays	
SB21. plan for cargo movement so that the resources and storage space is optimally utilised	
Critical thinking	
The user/individual on the job needs to know and understand how to:	
SB22. resolve issues in a quick and cost effective manner	
SB23. develop work plans factoring in external factors	
SB24. check that all security measures and safety protocols are followed at all times	

NOS Version Control

NOS Code	LSC/N3502		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, CFS and ICDs	Last reviewed on	28/03/2019
Occupation	Port operation and management (cargo handling, yard planning)	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about handling hazardous cargo at port terminals, CFS and ICD

LSC/N3504

Handle hazardous goods

National Occupational Standard

Unit Code	LSC/N3504
Unit Title (Task)	Handle hazardous goods
Description	The unit is about handling hazardous cargo at port terminals, CFS and ICDs
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Identify and segregate hazardous cargo • Oversee that adequate precautions are taken while handling hazardous goods • Inspect and review storage of hazardous cargo <p>Range: Stationery, Standard Operating Procedures (SOP), Radio-Frequency Identification (RFID) scanner, bar code scanner, markers, Personal Protective Equipment (PPEs), Enterprise Resource Planning (ERP), computer, display board, printer, Material Handling Equipment (MHEs), etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Identify and segregate hazardous goods	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. read and interpret different cargo labels associated with different class and types of hazardous goods</p> <p>PC2. check for permissible limits and available documentation for hazardous goods as per approvals and acceptable specifications</p> <p>PC3. check IMDG code to identify the precautions and permissible limits for handling</p> <p>PC4. ensure that the port and yard terminal if the port is equipped to handle the identified class of hazardous goods</p> <p>PC5. check if all the necessary precautions, PPEs and emergency response teams are in position prior to loading/unloading of cargo</p> <p>PC6. check that the allocated storage bay in the yard is adequately separated and precautions with respect to heat, light, temperature control, etc. are taken</p> <p>PC7. provide instructions for segregation of hazard goods as per classification</p> <p>PC8. use separate teams for handling different classes of hazardous goods</p>
Oversee that adequate precautions are taken while handling hazardous goods	<p>To be competent, the user/ individual must be able to:</p> <p>PC9. check if appropriate PPEs, MHEs and other equipment are being used to prevent contamination or exposure</p> <p>PC10. check if all PPEs and equipment are functional and contamination proof</p> <p>PC11. ensure all precautions are taken as per SOP while handling hazardous cargo</p> <p>PC12. confirm emergency response action with the emergency team and cargo handling team prior to operations</p> <p>PC13. inspect containers for damages, leakage, exposure and labels</p> <p>PC14. check if cargo movement via conveyors, dump trucks is spillage free</p> <p>PC15. ensure clear and obstacle free movement of cargo from vessel to yard and</p>

LSC/N3504

Handle hazardous goods

	<p>yard to transport</p> <p>PC16. ensure that all required precautions and segregation for cargo storage are undertaken</p> <p>PC17. report closure of exercise highlighting handling losses, storage location and coordinates, etc.</p>
<p>Inspect and review storage of hazardous goods</p>	<p>To be competent, the user/ individual must be able to:</p> <p>PC18. periodically inspect yard space to check if adequate segregation and precautions are taken for storage of hazardous goods</p> <p>PC19. report to manager in case of any leakage, damages, exceptions in handling precautions and segregation</p> <p>PC20. document and file inspection reports</p>
<p>Knowledge and understanding (K)</p>	
<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. organizational procedures</p> <p>KA2. documentation and reporting as per organization's mandate</p> <p>KA3. security procedures to be followed</p> <p>KA4. escalation matrix for reporting identified problems</p> <p>KA5. risk and impact of not following defined procedures/work instructions</p> <p>KA6. coding system followed to label cargo</p> <p>KA7. IT system and ERP system of the organization</p>
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. basics of operations in a port terminal, Inland Container Depot (ICD) and Container Freight Station (CFS)</p> <p>KB2. different type of vessels and cargo and container sizes</p> <p>KB3. vessel layout and loading and unloading activities</p> <p>KB4. use of rope, flags and other manual equipment</p> <p>KB5. different type of cranes and MHEs – their capacities, constraints and usage</p> <p>KB6. identifying dangerous goods/hazardous substances using labels, International Maritime Dangerous Goods (IMDG) Code markings, Hazardous Chemicals (HAZCHEM) signs and other relevant identification criteria</p> <p>KB7. handling of hazardous and non-hazardous cargo</p> <p>KB8. identifying job and site hazards, and planning work to minimise risks</p> <p>KB9. selecting and using the right PPE equipment as per the industry standards</p> <p>KB10. procedures of tank cleaning, cargo movement</p> <p>KB11. marking of material and people movement areas</p> <p>KB12. stuffing and de-stuffing norms with respect to different cargo</p> <p>KB13. special characteristics and handling requirements of shipments, if any</p> <p>KB14. usage of electronic communication equipment</p>
<p>Skills (S)</p>	
<p>C. Core skills/</p>	<p>Reading skills</p>

LSC/N3504

Handle hazardous goods

generic skills	The user/individual on the job needs to know how to read: SA1. written instructions SA2. shipping manifest, Bill of lading shipping bills and related documents SA3. ERP and computer generated reports SA4. cargo stowage plans and vessel plans SA5. SOPs and safety regulation manuals
	Writing skills
	The user/individual on the job needs to know how to write: SA6. work-orders and instructions SA7. checklist of activities, delays, undelivered items, contacts, etc SA8. daily reports
	Oral communication (listening and speaking skills)
	The user/individual on the job needs to know how to: SA9. communicate with customers, freight operators, transporters, shipping companies, other supervisors and port authorities SA10. communicate with cargo equipment operators and ground staff over VHF radio SA11. guide cargo handlers for smooth operations
D. Professional skills	Decision making
	The user/individual on the job needs to know how to: SB1. decide on required workforce and equipment for performing a particular task SB2. assess the environmental condition and type of cargo to assess if it is safe for operations SB3. resolve a problem quickly internally SB4. prioritise shipments SB5. decide on deployment of alternate resources when required
	Plan and organize
	The user/individual on the job needs to know how to: SB6. plan and co-ordinate resolution of queries SB7. maintain punctuality SB8. respond to the client in a timely manner SB9. prioritize and execute tasks based on client requirements SB10. make work plans and resource allocation plans SB11. make checks on execution of work plans SB12. be a team player and achieve joint goals
	Customer centricity
	The user/individual on the job needs to know how to: SB13. adhere to the customer timelines SB14. address the urgency regarding shipments and activities
	Problem solving
	The user/individual on the job needs to know how to:

LSC/N3504

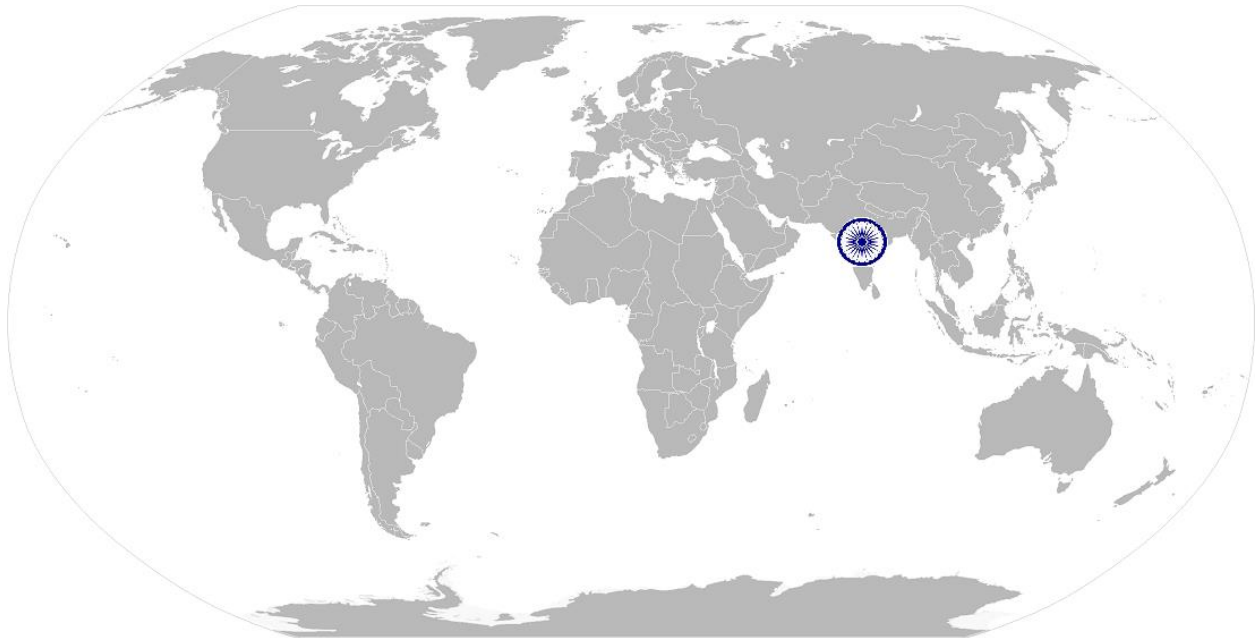
Handle hazardous goods

	SB15. make adjustment to working requirements for difficult weathers and hazardous goods
	SB16. identify trends/common causes for delays, damages, etc.
	SB17. co-ordinate and handle major issues with different departments
	SB18. identify bottlenecks and operational problems and suggest remedial action
	Analytical thinking
The user/individual on the job needs to know how to:	
SB19. assess the resource requirement for a particular task at hand	
SB20. assess and prepare for backup resources in case of delays	
SB21. plan for cargo movement so that the resources and storage space is optimally utilised	
Critical thinking	
The user/individual on the job needs to know and understand how to:	
SB22. resolve issues in a quick and cost-effective manner	
SB23. develop work plans factoring in external factors	
SB24. check that all security measures and safety protocols are followed at all times	

NOS Version Control

NOS Code	LSC/N3504		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, CFS and ICDs	Last reviewed on	28/03/2019
Occupation	Port operation and management (cargo handling)	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about reviewing port and cargo documentation, documenting regulatory compliances and coordinating for the same

LSC/N0321

Review port and cargo documentation and regulatory compliances

National Occupational Standard

Unit Code	LSC/N0321
Unit Title (Task)	Review port and cargo documentation and regulatory compliances
Description	This unit is about reviewing port and cargo documentation, documenting regulatory compliances and coordinating for same
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Review port and cargo documentation • Coordinate and perform customer service <p>Range: Instructional material, Standard Operating Procedure (SOP), safety guidelines, safety signs, computer, projector etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Review port and cargo documentation	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. coordinate with shipping liners, vessel operators, freight transporters, importers and exporters as well as the port authorities to obtain requisite cargo documents</p> <p>PC2. review documentation of transport vehicles and their certificates for fitness for operation, presence of requisite license, etc.</p> <p>PC3. review cargo documents like bill of lading, shipping bills, PGA (Participative Government Agencies) clearances, etc. for compliance to regulations and standards</p> <p>PC4. prepare and review storage plans and yard layout to check for compliances particularly regarding hazardous and reefer cargo</p> <p>PC5. review fitness certificates and related documents regarding operations of various Material Handling Equipment (MHEs), cranes and terminal equipment</p> <p>PC6. review and approve gate entry and exit passes for transporters, vehicles</p> <p>PC7. prepare and review compliance reports regarding yard and terminal layout, fitness of equipment and personnel, various incidents, cargo handling, etc.</p>
Coordinate and perform customer service	<p>To be competent, the user/ individual must be able to:</p> <p>PC8. respond and resolve queries raised by port and custom authorities, custom brokers, shipping liners, clients, transporters regarding status of different shipments</p> <p>PC9. coordinate between the vessel, shipper/ importer, agents and port authorities to ensure that all compliances and requirements are met</p>
knowledge and understanding (k)	

LSC/N0321

Review port and cargo documentation and regulatory compliances

<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. organizational procedures KA2. documentation and reporting as per organization's mandate KA3. security procedures to be followed KA4. escalation matrix for reporting identified problems KA5. risk and impact of not following defined procedures/work instructions KA6. coding system followed to label cargo KA7. it system and ERP system of the organization</p>
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. basics of operations in a port terminal, ICD and CFS KB2. use of various cargo handling equipment KB3. vessel layout and loading and unloading activities KB4. yard layout and yard planning KB5. procedures of cargo movement and related compliances KB6. requirements regarding handling of cargo KB7. different type of vessels and cargo and container sizes KB8. different type of cranes and MHEs – their capacities, constraints and usage KB9. handling of hazardous and non-hazardous cargo KB10. marking of material and people movement areas KB11. stuffing and de-stuffing norms with respect to different cargo KB12. special characteristics and handling requirements of shipments, if any</p>
<p>skills (s)</p>	
<p>A. Core skills/ generic skills</p>	<p>Reading skills</p> <p>The user/individual on the job needs to know how to read:</p> <p>SA1. written instructions SA2. shipping manifest, bill of lading shipping bills and related documents SA3. Enterprise Resource Planning (ERP) and computer generated reports SA4. cargo stowage plans and vessel plans SA5. SOP, safety regulation and compliance manuals and reports</p> <p>Writing skills</p> <p>The user/individual on the job needs to know how to write:</p> <p>SA6. work-orders and instructions SA7. various reports and letters</p> <p>Oral communication (listening and speaking skills)</p> <p>The user/individual on the job needs to know how to:</p> <p>SA8. communicate with customers, fireght operators, transporters, shipping companies, other supervisors and port authorities SA9. communicate with cargo equipment operators and ground staff over vhf radio SA10. guide cargo handlers for smooth operations</p>
<p>B. Professional skills</p>	<p>Decision making</p>

LSC/N0321

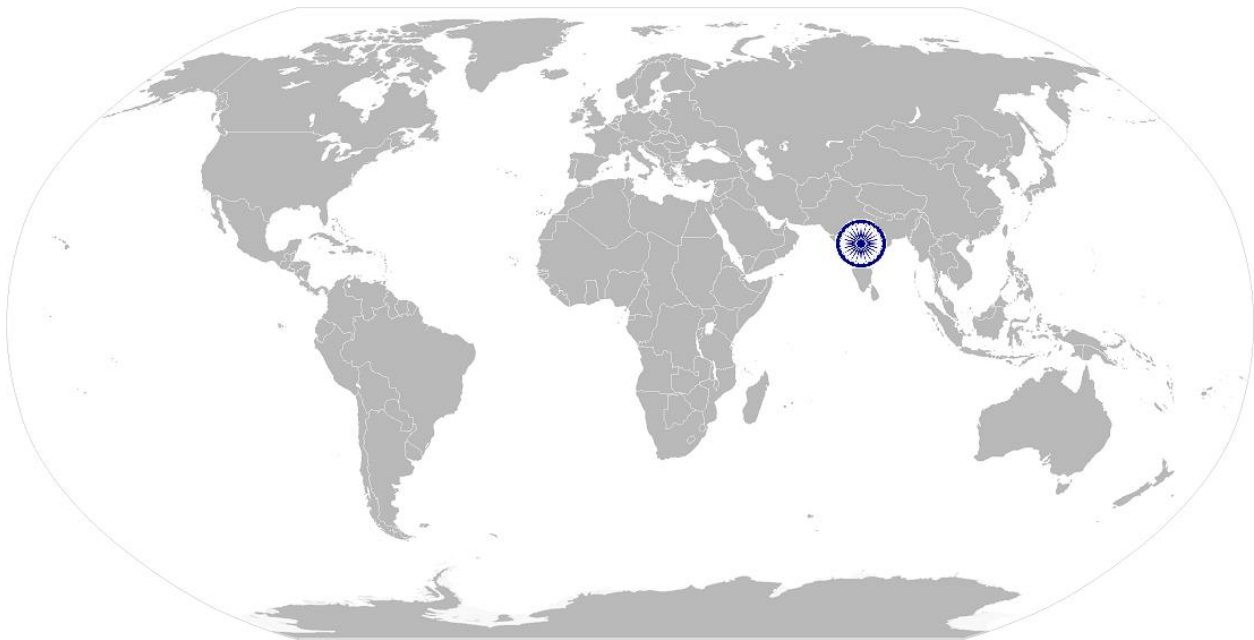
Review port and cargo documentation and regulatory compliances

	The user/individual on the job needs to know how to: SB1. check if the cargo, vehicle or operation meets compliance SB2. decide on the appropriate response and documentation of different queries and events
	Plan and organize
	The user/individual on the job needs to know how to: SB3. plan and estimate the co-ordination required for resolving a query. SB4. maintain punctuality and respond in a timely manner SB5. prioritize and execute tasks based on client requirements SB6. make work plans and resource allocation plans SB7. make checks on execution of work plans SB8. be a team player and achieve joint goals
	Customer centricity
	The user/individual on the job needs to know how to: SB9. adhere to assigned timelines and compliance requirements SB10. address the urgency regarding shipments and activities
	Problem solving
	The user/individual on the job needs to know how to: SB11. identify trends/common causes for delays, damages, etc. SB12. co-ordinate and handle major issues with different departments SB13. provide suggestions for meeting compliance in different activities
	Analytical thinking
	The user/individual on the job needs to know how to: SB14. anticipate compliance requirements for different activities SB15. review yard plans to ensure storage yard meets compliance
	Critical thinking
The user/individual on the job needs to know and understand how to: SB16. ensure compliance in all documentation and operations SB17. check that all security measures and safety protocols are followed at all times	

NOS Version Control

NOS Code	LSC/N0321		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, CFS and ICDs	Last reviewed on	28/03/2019
Occupation	Documentation and reporting (including compliance)	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about maintaining integrity, ensuring data security, and professional and ethical practice

LSC/N9904

Maintain and monitor integrity and ethics in operations

National Occupational Standard

Unit Code	LSC/N9904
Unit Title (Task)	Maintain and monitor integrity and ethics in operations
Description	This unit is about maintaining integrity, ensuring data security, and following professional and ethical practices
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Maintain integrity and ensure data security • Professional and ethical practice • Ensure regulatory compliance <p>Range: Standard Operating Procedures (SOP), worksheets, computer, projector, printer, display board and markers</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Maintain integrity ensuring data security	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. refrain from indulging in corrupt practices</p> <p>PC2. avoid using company's funds, property or resources for undertaking personal activities</p> <p>PC3. protect customer's information and ensure it is not misused</p> <p>PC4. protect data and information related to business or commercial decisions</p>
Professional and ethical practice	<p>To be competent, the user/ individual must be able to:</p> <p>PC5. avoid acceptance of cash or kind from vendors for support or contract negotiations</p> <p>PC6. demonstrate and practice ethics in day-to-day processes and dealings with customers and colleagues</p> <p>PC7. avoid nepotism</p> <p>PC8. consult supervisor or senior management when in situations that may require differentiating between ethical and unethical</p> <p>PC9. report promptly all violations of code of ethics</p> <p>PC10. dress up and conduct in a professional manner</p> <p>PC11. communicate with clients and stakeholders in a soft and polite manner</p> <p>PC12. follow etiquettes in accordance to the place</p>
Ensure regulatory compliance	<p>To be competent, the user/ individual must be able to:</p> <p>PC13. check for regulatory documentation and compliances for the shop floor as per information from the supervisor</p> <p>PC14. perform activities considering the regulatory requirements</p> <p>PC15. use PPEs in accordance to regulatory requirements</p> <p>PC16. identify the different types of dangerous goods and handling methodologies</p> <p>PC17. follow the SOP for handling of different types of dangerous goods</p> <p>PC18. consult supervisor or senior management when in situations that may require differentiating between ethical and unethical</p>

LSC/N9904 Maintain and monitor integrity and ethics in operations

	PC19. promptly report all regulatory violations
Knowledge and understanding (K)	
A. Organizational context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: KA1. company's policies on use of language KA2. company's Human Resources policies KA3. company's code of ethics and business KA4. company's whistle blower policy KA5. company's rules related to sexual harassment KA6. company's reporting structure KA7. company's documentation policy
B. Technical knowledge	The user/individual on the job needs to know and understand: KB1. principles of code of ethics and business ethics KB2. different regulations and acts that are applicable for the sub-sector and logistics sector as a whole KB3. understand the documentary compliance required for different type of products
Skills (S)	
A. Core skills/ generic skills	Reading skills
	The individual on the job needs to know how to read: SA1. policy documents and work related documents SA2. emails letters and communications SA3. acts and regulations
	Writing skills
	The individual on the job needs to know and understand how to write: SA4. instructions, communications to internal staff SA5. emails and letters SA6. reports
	Oral communication (listening and speaking skills)
	The individual on the job needs to know how to: SA7. interact with internal and external stakeholders SA8. communicate with peers and subordinates
B. Professional skills	Decision making
	The individual on the job needs to know how to: SB1. take appropriate action in a vulnerable situation SB2. identify breaches and take necessary actions SB3. identify documentary requirement for a specific product or regulation and take necessary action
	Plan and organize
	The individual on the job needs to know how to: SB4. plan and organise steps/ actions as per company's guidelines, if any violation

LSC/N9904

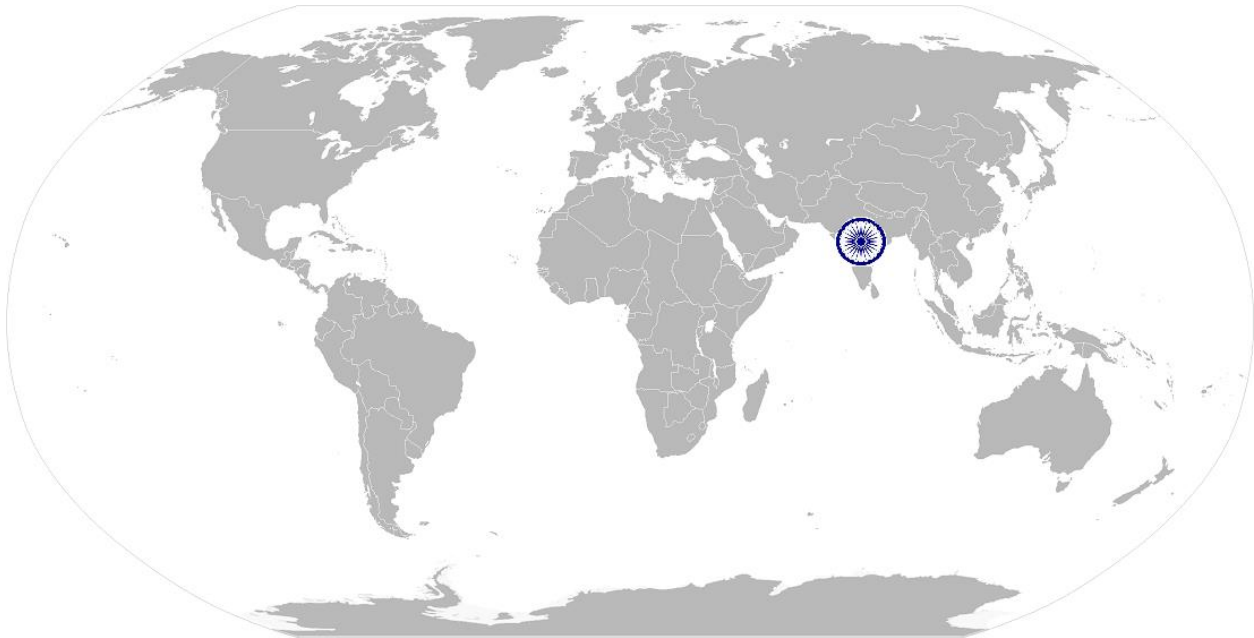
Maintain and monitor integrity and ethics in operations

	of code of ethics is noticed in the company
	SB5. plan and organise training sessions, sensitization sessions for work force
	SB6. plan review meetings to monitor compliance with ethics and regulations
	Customer centricity
	The individual on the job needs to know how to:
	SB7. prevent company and customer information leakage
	Problem Solving
	The individual on the job needs to know how to:
	SB8. provide proper advice or guidance to colleagues to deal with sensitive issue
	SB9. suggest solutions to supervisors and workers when in an ethical dilemma
SB10. identify conflict of interests and take necessary actions	
Analytical thinking	
The individual on the job needs to know how to:	
SB11. review reports to identify common trends of defaults	
SB12. conduct review to analyse the reasons for default	
Critical thinking	
The individual on the job needs to know how to:	
SB13. check that all regulatory compliances are adhered to	
SB14. check that any unethical behaviour gets captured before a damage or negative impact happens	

NOS Version Control

NOS Code	LSC/N9904		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Generic	Last reviewed on	28/03/2019
Occupation	Generic	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about ensuring compliance with health, safety and security procedures at the workplace.

LSC/N9905

Follow and monitor health, safety and security procedures

National Occupational Standard

Unit Code	LSC/N9905
Unit Title (Task)	Follow and monitor health, safety and security procedures
Description	This OS unit is about ensuring compliance with health, safety and security procedures at the workplace.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> Follow health, safety and security procedures Ensure compliance to health, safety and security <p>Range: Personal Protective Equipment (PPE), Material Handling Equipment (MHE), instructional material, safety guidelines, safety signs, computer, projector etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Follow health, safety and security procedures	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. make note of all safety processes in different location (cargo loading area, ramp operation area, etc.) with reference to area of operation</p> <p>PC2. wear all personal protective equipment (PPE) such as goggles, ear plugs, helmet, mask, shoes, etc. as applicable in the cargo movement area</p> <p>PC3. follow standard driving practice to ensure safety of life and material</p> <p>PC4. follow organizational protocol to deploy action in case of signs of any emergency situation or accident or breach of safety</p> <p>PC5. undertake periodical preventive health check ups</p> <p>PC6. follow necessary standard operating procedures (SOP) and precautions while handling dangerous and hazardous goods</p> <p>PC7. follow security procedures like green gate in port, customs area, factory security, etc.</p> <p>PC8. comply with data safety regulations of the organisation</p> <p>PC9. follow standard safety procedures while handling hazardous / fragile cargo and walk only on the designated pathway</p>
Ensure compliance to health, safety and security	<p>To be competent, the user/ individual must be able to:</p> <p>PC10. recognise unsafe conditions and safety practices at the workplace and report it to concerned authority</p> <p>PC11. inspect the activity area and equipment for appropriate and safe condition</p> <p>PC12. check if stacking is done at defined height and is not on the walk way</p> <p>PC13. check if walk way is free from grease/ oil</p> <p>PC14. check if emergency fire alarms, water sprinklers and smoke detectors are installed at all places</p> <p>PC15. participate in fire drills</p> <p>PC16. check if standard material handling procedure are being followed</p> <p>PC17. check if hold ladders, platforms and hand rails to be in a sound and safe condition</p>

LSC/N9905

Follow and monitor health, safety and security procedures

	<p>PC18. check if all the safety and security related tags, labels and signage are placed in the cargo</p> <p>PC19. check if loading instrument is certified and operational</p> <p>PC20. implement 5S at workplace</p> <p>PC21. check if cargo has passed security checks and report in case of any violation</p>
Knowledge and understanding (K)	
<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. health, safety and security policies and procedures</p> <p>KA2. Special instructions for hazardous cargo handling</p> <p>KA3. defined standard operating procedures</p> <p>KA4. risk and impact of not following defined procedures/work instructions with reference to health, safety and security operations</p> <p>KA5. escalation matrix for reporting identified problem</p>
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <p>KB1. basics of Occupational Safety and Health Administration (OSHA)</p> <p>KB2. 5S implementation and practice</p> <p>KB3. necessary security procedures for airport, customs area, etc.</p> <p>KB4. tools and equipment for material handling</p> <p>KB5. standard material handling procedures while handling cargo</p> <p>KB6. safety and security signage and their functions</p> <p>KB7. knowledge of security tags, labels and signage</p> <p>KB8. handling procedure for hazardous / fragile cargo</p> <p>KB9. security procedures for dangerous / hazardous goods</p> <p>KB10. Different PPE, their usage and purpose</p> <p>KB11. safe driving techniques</p>
Skills (S)	
<p>A. Core skills/ generic skills</p>	<p>Reading skills</p>
	<p>The user/individual on the job needs to know how to read:</p> <p>SA1. various procedures and standards related to health, safety and security</p> <p>SA2. various documents related to security and movement of cargo</p>
	<p>Writing skills</p>
	<p>The user/individual on the job needs to know how to:</p> <p>SA3. fill forms related to health, safety and security procedures</p>
	<p>Oral communication (listening and speaking skills)</p>
<p>The user/individual on the job needs to know and understand how to:</p> <p>SA4. communicate clearly with colleagues regarding safety procedures</p> <p>SA5. share experience and provide guidance to peers</p>	
<p>B. Professional skills</p>	<p>Decision making</p> <p>The user/individual on the job needs to know how to:</p> <p>SB1. make a judgment as to what actions to be taken to avoid any damage /</p>

LSC/N9905

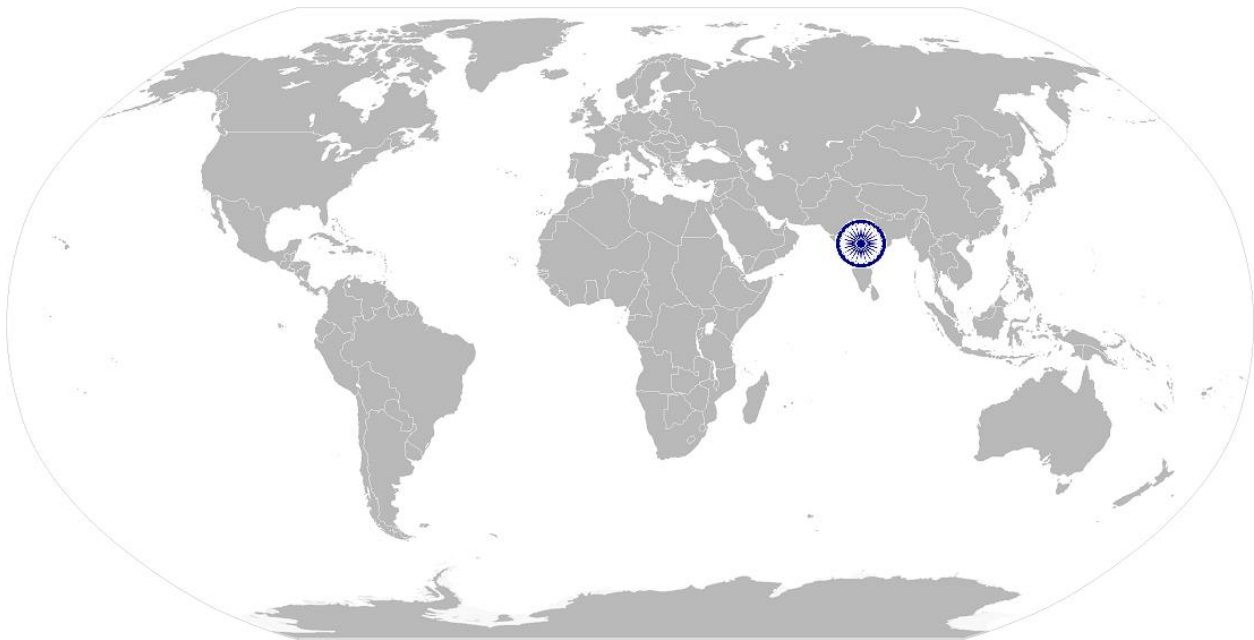
Follow and monitor health, safety and security procedures

	accident to personal health / cargo handled
	SB2. act objectively, rather than impulsively or emotionally when faced with difficult/stressful or emotional situations
	Plan and organize
	The user/individual on the job needs to know how to:
	SB3. plan clearance of cargo in manner that it does hamper the safety of the cargo and the loader/unloader
	SB4. prioritize and execute tasks within the schedule time limits
	SB5. Plan emergency drills, fire drills and inspections
	Customer centricity
	The user/individual on the job needs to know and understand how to:
	SB6. ensure safe and secure movement of packages, cargos etc.
Problem solving	
The user/individual on the job needs to know and understand how to:	
SB7. identify any threats on personal health, safety, security, etc. and take appropriate actions	
SB8. identify risks at the workplace and address them	
Analytical thinking	
The user/individual on the job needs to know and understand how to:	
SB9. analyse past mistakes and address them to avoid mishap in the future	
Critical thinking	
The user/individual on the job needs to know and understand how to:	
SB10. ensure right safety measures and procedures are in place	

NOS Version Control

NOS Code	LSC/N9905		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Generic	Last reviewed on	28/03/2019
Occupation	Generic	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about handling different types of dry bulk cargo

LSC/N3505

Handle dry bulk cargo

National Occupational Standard

Unit Code	LSC/N3505
Unit Title (Task)	Handle dry bulk cargo
Description	This unit is about supervision of dry bulk cargo loading/unloading and movement
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Loading/unloading of dry bulk cargo <p>Range: Personal Protective Equipment (PPE), Material Handling Equipment (MHE), instructional material, safety guidelines, safety signs, computer, projector etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Loading/unloading dry bulk cargo	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. obtain details of incoming cargo from port/ shipper into the Container Freight Station (CFS), Inland Container Depot (ICD) as per the cargo plan and allocate resources</p> <p>PC2. check the International Maritime Solid Bulk Cargo (IMSBC) code of the item to be loaded/unloaded is presented in the documentation and the vessel/yard has the appropriate safety systems in place</p> <p>PC3. identify and finalise bays for storage of incoming cargo considering the various demarcations and precautions to be taken based on cargo type</p> <p>PC4. discuss, finalise and communicate cargo movement plan with workforce and ensure all equipment are ready for operations at the time of vessel docking/transport arrival</p> <p>PC5. review the pre-operative checklist to ensure all equipment are functional and get a "OK" report from all operators and handlers</p> <p>PC6. review that the unloading area has been prepared for receipt of material and necessary precautions and PPEs have been taken</p> <p>PC7. supervise unloading/loading of dry bulk cargo using Grab Ship Unloader (GSU) crane, conveyor belts etc.</p> <p>PC8. ensure minimum spillage and wastage of dry bulk cargo during transfer operations and monitor the same</p> <p>PC9. check for compliance to IMDG, Directorate General (DG) shipping and other material handling guidelines while unloading hazardous/dangerous cargo</p> <p>PC10. ensure the yard space is cleaned post loading/unloading of cargo</p> <p>PC11. oversee movement of cargo from port terminal, CFS via rail and road lines and export via vessels</p>
Knowledge and understanding (K)	

LSC/N3505

Handle dry bulk cargo

<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. organizational procedures KA2. documentation and reporting as per organization's mandate KA3. security procedures to be followed KA4. escalation matrix for reporting identified problems KA5. risk and impact of not following defined procedures/work instructions KA6. coding system followed to label cargo KA7. IT system and ERP system of the organization
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. basics of operations in a port terminal, ICD and CFS KB2. use of various cargo handling equipment KB3. use of rope, flags and other manual equipment KB4. vessel layout and loading and unloading activities KB5. procedures of tank cleaning, cargo movement KB6. requirements regarding handling of cargo KB7. different type of vessels and cargo and container sizes KB8. different type of cranes and MHEs – their capacities, constraints and usage KB9. handling of hazardous and non-hazardous cargo KB10. marking of material and people movement areas KB11. stuffing and de-stuffing norms with respect to different cargo KB12. special characteristics and handling requirements of shipments, if any KB13. reefer controls for setting temperature and humidity KB14. ambient temperature and humidity requirement for different products
<p>Skills (S)</p>	
<p>C. Core skills/ generic skills</p>	<p>Reading skills</p> <p>The user/individual on the job needs to know how to read:</p> <ul style="list-style-type: none"> SA1. written instructions SA2. shipping manifest, Bill of lading shipping bills and related documents SA3. ERP and computer generated reports SA4. cargo stowage plans and vessel plans SA5. SOPs and safety regulation manuals <p>Writing skills</p> <p>The user/individual on the job needs to know how to write:</p> <ul style="list-style-type: none"> SA6. work-orders and instructions SA7. checklist of activities, delays, undelivered items, contacts, etc SA8. daily reports <p>Oral communication (listening and speaking skills)</p> <p>The user/individual on the job needs to know how to:</p> <ul style="list-style-type: none"> SA9. communicate with customers, fireght operators, transporters, shipping

LSC/N3505

Handle dry bulk cargo

	<p>companies, other supervisors and port authorities</p> <p>SA10. communicate with cargo equipment operators and ground staff over VHF radio</p> <p>SA11. guide cargo handlers for smooth operations</p>
D. Professional skills	<p>Decision making</p> <p>The user/individual on the job needs to know how to:</p> <p>SB1. decide on required workforce and equipment for performing a particular task</p> <p>SB2. assess the environmental condition and type of cargo to assess if it is safe for operations</p> <p>SB3. resolve a problem quickly internally</p> <p>SB4. prioritise shipments</p> <p>SB5. decide on deployment of alternate resources when required</p>
	<p>Plan and organize</p> <p>The user/individual on the job needs to know how to:</p> <p>SB6. plan and estimate the co-ordination required for resolving a query.</p> <p>SB7. maintain punctuality</p> <p>SB8. respond to the client in a timely manner</p> <p>SB9. prioritize and execute tasks based on client requirements</p> <p>SB10. make work plans and resource allocation plans</p> <p>SB11. make checks on execution of work plans</p> <p>SB12. be a team player and achieve joint goals</p>
	<p>Customer centricity</p> <p>The user/individual on the job needs to know how to:</p> <p>SB13. adhere to the customer timelines</p> <p>SB14. address the urgency regarding shipments and activities</p>
	<p>Problem solving</p> <p>The user/individual on the job needs to know how to:</p> <p>SB15. make adjustment to working requirements for difficult weathers and hazardous goods</p> <p>SB16. identify trends/common causes for delays, damages, etc.</p> <p>SB17. co-ordinate and handle major issues with different departments</p> <p>SB18. identify bottlenecks and operational problems and suggest remedial action</p>
	<p>Analytical thinking</p> <p>The user/individual on the job needs to know how to:</p> <p>SB19. assess the resource requirement for a particular task at hand</p> <p>SB20. assess and prepare for backup resources in case of delays</p> <p>SB21. plan for cargo movement so that the resources and storage space is optimally utilised</p>
	<p>Critical thinking</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB22. resolve issues in a quick and cost effective manner</p>

LSC/N3505

Handle dry bulk cargo

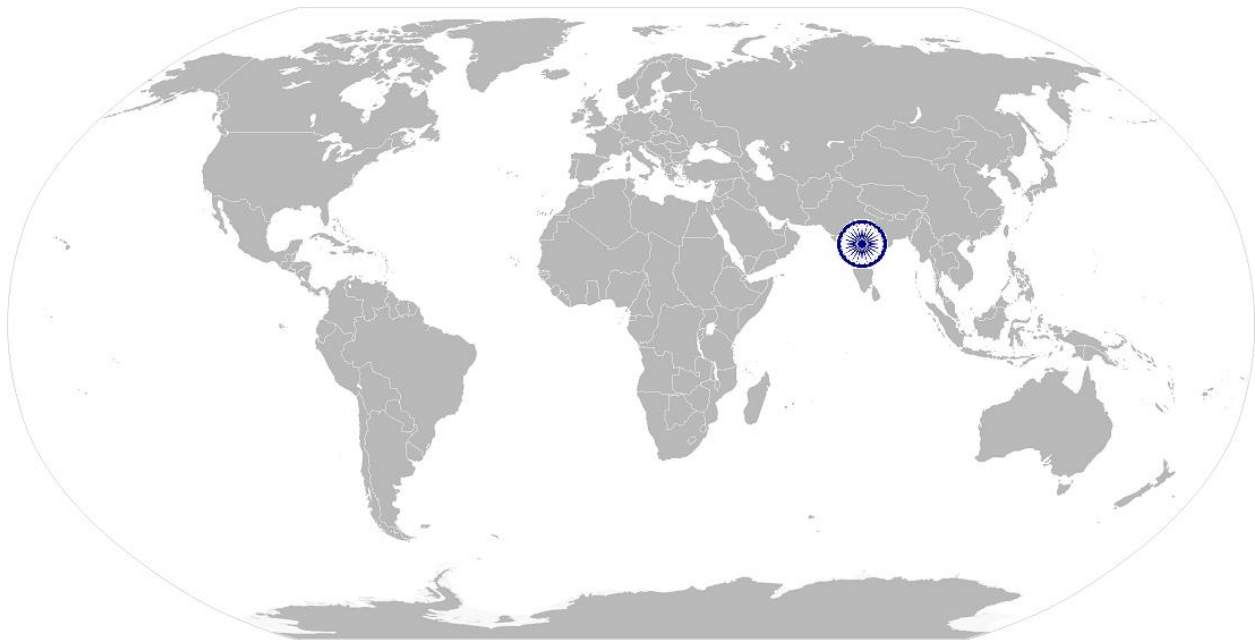
	SB23. develop work plans factoring in external factors
	SB24. check that all security measures and safety protocols are followed at all times

NOS Version Control

NOS Code	LSC/N3505		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, CFS and ICDs	Last reviewed on	28/03/2019
Occupation	Port operation and management (cargo handling)	Next review date	28/03/2022



National Occupational Standard



Overview

This unit is about handling different types of container cargo

LSC/N3506

Handle container cargo

National Occupational Standard

Unit Code	LSC/N3506
Unit Title (Task)	Handle container cargo
Description	This unit is about supervision of loading/unloading of containerised cargo
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Loading/unloading of container cargo • Loading/unloading of reefer cargo <p>Range: Personal Protective Equipment (PPE), Material Handling Equipment (MHE), instructional material, safety guidelines, safety signs, computer, projector etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Loading/unloading of container cargo	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. obtain details of incoming container cargo from port/ shipper into the Container Freight Station (CFS), Inland Container Depot (ICD) as per the cargo plan and allocate resources</p> <p>PC2. identify and finalise bays for storage of incoming container cargo considering the various demarcations and precautions to be taken based on cargo type</p> <p>PC3. discuss, finalise and communicate container movement plan with workforce and ensure all equipment are ready for operations at the time of vessel docking/transport arrival</p> <p>PC4. review the pre-operative checklist to ensure all equipment are functional and get a “OK” report from all operators and handlers</p> <p>PC5. review that the unloading area has been prepared for receipt of material and necessary precautions and PPEs have been taken</p> <p>PC6. check if the container units contain fumigants, where they are present and take necessary precautions</p> <p>PC7. supervise unloading/loading of container cargo using the appropriate crane</p> <p>PC8. on completion of cargo loading/ unloading signal the cargo handlers to stop operations</p>
Loading/unloading of reefer cargo	<p>To be competent, the user/ individual must be able to:</p> <p>PC9. prioritise reefer cargo movement and ensure they are loaded/unloaded within the defined timelines for maintaining reefer temperature</p> <p>PC10. take safe and secured go-ahead from the cargo surveyor</p> <p>PC11. ensure container power lines are disconnected before removal and ensure re-connection post loading/unloading</p> <p>PC12. check the correct temperature is being maintained in the container post unloading</p>
Knowledge and understanding (K)	

LSC/N3506

Handle container cargo

<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. organizational procedures KA2. documentation and reporting as per organization's mandate KA3. security procedures to be followed KA4. escalation matrix for reporting identified problems KA5. risk and impact of not following defined procedures/work instructions KA6. coding system followed to label cargo KA7. IT system and ERP system of the organization
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. basics of operations in a port terminal, ICD and CFS KB2. use of various cargo handling equipment KB3. use of rope, flags and other manual equipment KB4. vessel layout and loading and unloading activities KB5. procedures of tank cleaning, cargo movement KB6. requirements regarding handling of cargo KB7. different type of vessels and cargo and container sizes KB8. different type of cranes and MHEs – their capacities, constraints and usage KB9. handling of hazardous and non-hazardous cargo KB10. marking of material and people movement areas KB11. stuffing and de-stuffing norms with respect to different cargo KB12. special characteristics and handling requirements of shipments, if any KB13. reefer controls for setting temperature and humidity KB14. ambient temperature and humidity requirement for different products
<p>Skills (S)</p>	
<p>E. Core skills/ generic skills</p>	<p>Reading skills</p> <p>The user/individual on the job needs to know how to read:</p> <ul style="list-style-type: none"> SA1. written instructions SA2. shipping manifest, Bill of lading shipping bills and related documents SA3. ERP and computer generated reports SA4. cargo stowage plans and vessel plans SA5. SOPs and safety regulation manuals <p>Writing skills</p> <p>The user/individual on the job needs to know how to write:</p> <ul style="list-style-type: none"> SA6. work-orders and instructions SA7. checklist of activities, delays, undelivered items, contacts, etc SA8. daily reports <p>Oral communication (listening and speaking skills)</p> <p>The user/individual on the job needs to know how to:</p> <ul style="list-style-type: none"> SA9. communicate with customers, fireght operators, transporters, shipping

LSC/N3506

Handle container cargo

	<p>companies, other supervisors and port authorities</p> <p>SA10. communicate with cargo equipment operators and ground staff over VHF radio</p> <p>SA11. guide cargo handlers for smooth operations</p>
F. Professional skills	<p>Decision making</p> <p>The user/individual on the job needs to know how to:</p> <p>SB1. decide on required workforce and equipment for performing a particular task</p> <p>SB2. assess the environmental condition and type of cargo to assess if it is safe for operations</p> <p>SB3. resolve a problem quickly internally</p> <p>SB4. prioritise shipments</p> <p>SB5. decide on deployment of alternate resources when required</p>
	<p>Plan and organize</p> <p>The user/individual on the job needs to know how to:</p> <p>SB6. plan and estimate the co-ordination required for resolving a query.</p> <p>SB7. maintain punctuality</p> <p>SB8. respond to the client in a timely manner</p> <p>SB9. prioritize and execute tasks based on client requirements</p> <p>SB10. make work plans and resource allocation plans</p> <p>SB11. make checks on execution of work plans</p> <p>SB12. be a team player and achieve joint goals</p>
	<p>Customer centricity</p> <p>The user/individual on the job needs to know how to:</p> <p>SB13. adhere to the customer timelines</p> <p>SB14. address the urgency regarding shipments and activities</p>
	<p>Problem solving</p> <p>The user/individual on the job needs to know how to:</p> <p>SB15. make adjustment to working requirements for difficult weathers and hazardous goods</p> <p>SB16. identify trends/common causes for delays, damages, etc.</p> <p>SB17. co-ordinate and handle major issues with different departments</p> <p>SB18. identify bottlenecks and operational problems and suggest remedial action</p>
	<p>Analytical thinking</p> <p>The user/individual on the job needs to know how to:</p> <p>SB19. assess the resource requirement for a particular task at hand</p> <p>SB20. assess and prepare for backup resources in case of delays</p> <p>SB21. plan for cargo movement so that the resources and storage space is optimally utilised</p>
	<p>Critical thinking</p> <p>The user/individual on the job needs to know and understand how to:</p> <p>SB22. resolve issues in a quick and cost effective manner</p>

LSC/N3506

Handle container cargo

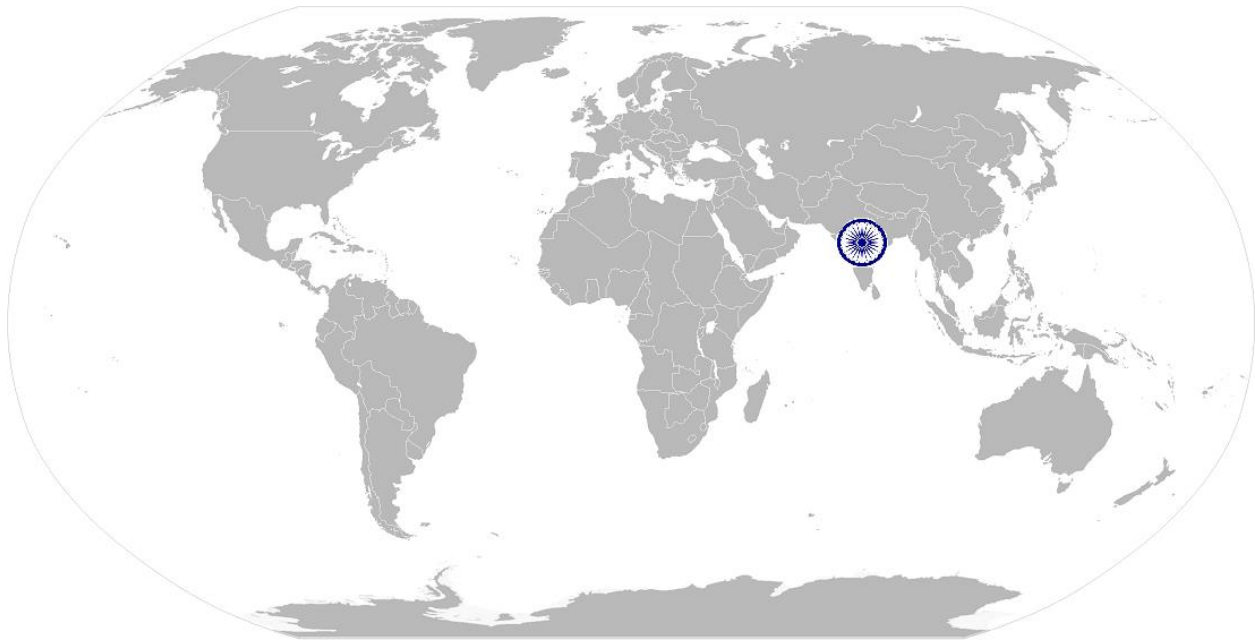
	SB23. develop work plans factoring in external factors
	SB24. check that all security measures and safety protocols are followed at all times

NOS Version Control

NOS Code	LSC/N3506		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, CFS and ICDs	Last reviewed on	28/03/2019
Occupation	Port operation and management (cargo handling)	Next review date	28/03/2022



National Occupational Standard



Overview

This unit is about generating new business and maintaining relations with all stakeholders

LSC/N9701

Business development and stakeholder relations

National Occupational Standard

Unit Code	LSC/N9701
Unit Title (Task)	Business development and stakeholder relations
Description	This OS unit is about generating new business and maintaining relation with all stakeholders
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Generate new business prospects • Maintain customer relations • Coordinate with government officials, vendors and contractors <p>Range: Instructional material, safety guidelines, safety signs, computer, projector etc.</p>
Performance Criteria(PC) w.r.t. the scope	
Element	Performance Criteria
Generate new business prospects	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. obtain a list of existing clients and new prospects from the company's sales database.</p> <p>PC2. prepare sales targets and relationship strategies</p> <p>PC3. prioritize the clients for contacting, based on the previous relationship building calls made to each of them</p> <p>PC4. call clients and prospects to seek meeting</p> <p>PC5. meet client to offer new services and take feedback for current services</p> <p>PC6. identify client's business need and offer customized and bundled solutions</p> <p>PC7. negotiate on costs, close the deal and collect organizational and payment details of the client</p> <p>PC8. take client's feedback before leaving</p> <p>PC9. update information into (Enterprise Resource Planning) ERP, inform the relevant departments on sale closure</p>
Maintain customer relations	<p>To be competent, the user/ individual must be able to:</p> <p>PC10. regularly interact with the client over phone, emails or personal visits</p> <p>PC11. address the query raised by the customers effectively and timely</p> <p>PC12. take appropriate actions on escalations raised by customers</p> <p>PC13. handle customer grievances</p> <p>PC14. quickly respond to the clients for their e-mails, voice-messages, calls, etc.</p> <p>PC15. provide regular information to clients regarding new offerings, discounts, customised solutions, etc.</p>
Co-ordinate with government officials, vendors and contractors	<p>To be competent, the user/ individual must be able to:</p> <p>PC16. liaise with customs, other Govt. departments, Participative Government Agencies (PGAs) etc. and build professional relations with them</p> <p>PC17. analyse and manage claim requests</p> <p>PC18. co-ordinate with marketing agencies for publicity of services of the company</p>

LSC/N9701

Business development and stakeholder relations

	<p>PC19. negotiate with carriers, warehouse and transport operators, custom brokers, insurance company representatives, vendors, etc. for services, preferential rates, service level agreements (SLA), payment period, etc.</p> <p>PC20. co-ordinate with labour contractor and local vendors for sufficient workforce, carrier vehicle availability as per work demand</p>
<p>Knowledge and understanding (K)</p>	
<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <p>KA1. vision, mission and values of the company</p> <p>KA2. company's reporting structure to support and expedite project activities</p> <p>KA3. company's policy and work instructions on quality standards as well as documentation policy</p> <p>KA4. importance of the individual's role in the workflow</p> <p>KA5. company's policy on business ethics and code of conduct</p> <p>KA6. business and performance of the company</p> <p>KA7. knowledge repository and various projects done by the company</p> <p>KA8. occupational health and safety standards, handling of special and dangerous goods, etc.</p> <p>KA9. procedures for dealing with loss or damage to goods</p> <p>KA10. value of items handled and implications of damage/loss of the same</p> <p>KA11. risk and impact of not following defined work, safety and security procedures</p> <p>KA12. company policy defined Turn Around Time (TAT) and output metrics for daily operations</p> <p>KA13. Just In Time (JIT) mode of inventory management</p> <p>KA14. coding system followed to label items</p> <p>KA15. the IT system and ERP system of the organization</p>
<p>B. Technical knowledge</p>	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. process flow of service operation, value chain and basic supply chain value map within the sub sector</p> <p>KB2. state/country taxes and routing</p> <p>KB3. local and global geographical knowledge</p> <p>KB4. use of enterprise resource planning software (ERP)</p> <p>KB5. use of tools for documentation: MS excel and MS Word, etc.</p> <p>KB6. basics of statistical and quantitative analysis tools</p> <p>KB7. use of spreadsheets to tabulate and analyze the data</p> <p>KB8. structure and implications of fees and charges involved in transportation, warehousing, etc.</p> <p>KB9. transit rules and regulations</p> <p>KB10. significance of team coordination to achieve revenue and productivity targets of the organisation</p> <p>KB11. customer relationship management</p> <p>KB12. about contract management and Service Level Agreement (SLA)</p>

LSC/N9701

Business development and stakeholder relations

	KB13. factors for evaluation of performance of vendors
Skills (S)	
A. Core skills/ generic skills	Reading skills
	The user/ individual on the job needs to know how to read: SA1. company quality policy, work instructions and customer requirement SA2. transit rules and trade policies SA3. regulatory requirement associated with custom clearance SA4. e-mails, invoices, letters, notes, memos, agreement reports, etc.
	Writing skills
	The user/ individual on the job needs to know how to: SA5. write e-mails and letters to government officials, customers, vendors, etc. SA6. note information about vendors on factors like quality of service, on-time order completion, cooperation etc
	Oral communication (listening and speaking skills)
The user/ individual on the job needs to know how to: SA7. listen and understand the requirements of the client SA8. communicate with clients, government officials and other external stakeholders by using various communication channels SA9. exchange information with other managers, supervisory and operational staff at all levels SA10. carefully listen to vendor concerns and issues	
B. Professional skills	Decision making
	The user/ individual on the job needs to know how to: SB1. decide corrective measures to improve customer ratings SB2. decide actions to be taken on escalations raised by the customer SB3. decide appropriate action for poor performance and lack of cooperation by vendor/ 3PL SB4. identify and prioritise on select clients and prospects for generating business
	Plan and organize
	The user/ individual on the job needs to know how to: SB5. liaison with customers, government officials, vendors and staff to ensure that smooth functioning of service centre/office SB6. plan and organise review meetings with vendors, contractors SB7. organise projects/ training plans for performance improvement
	Customer centricity
The user/ individual on the job needs to know how to: SB8. take prompt action on queries raised by the customer SB9. address customer requirement and offer customised or bundled solutions SB10. suggest ideas and solutions to increase customer loyalty and satisfaction	
	Problem solving

LSC/N9701

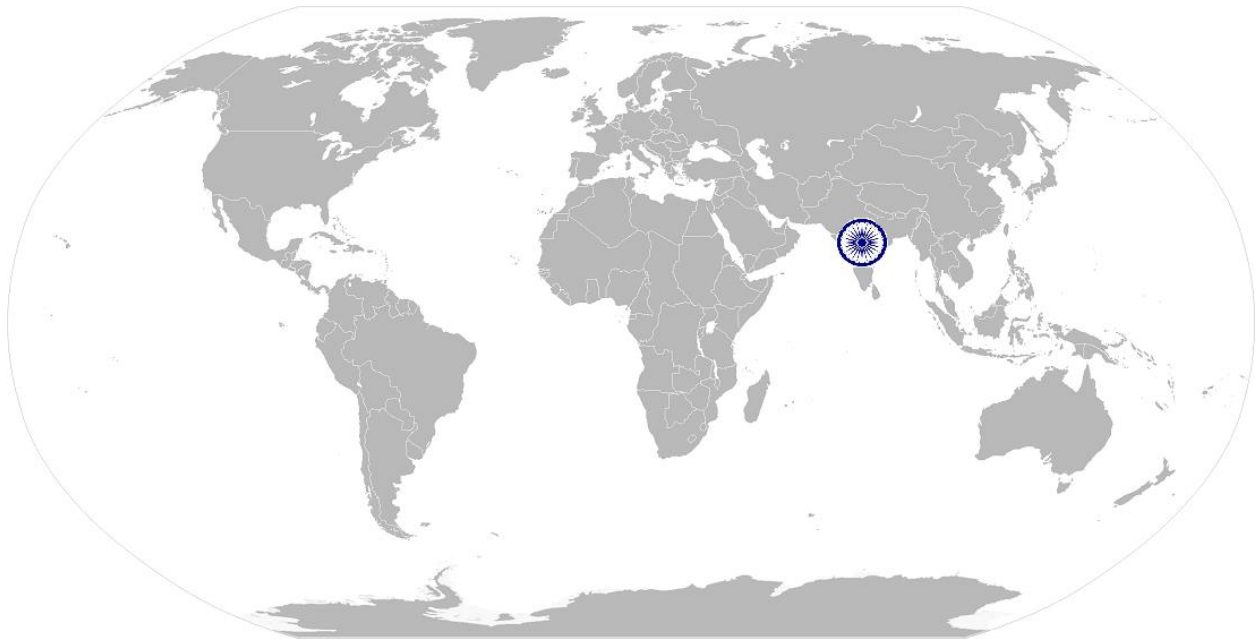
Business development and stakeholder relations

	The user/ individual on the job needs to know how to: SB11. resolve the queries raised by customers as well as government officials SB12. address the queries raised by vendors, contractors and other external stakeholders
	Analytical thinking
	The user/ individual on the job needs to know and how to: SB13. identify the factors that helped improve customer satisfaction SB14. identify commonly preferred bundles and customisations SB15. analyse reasons for customer dis-satisfaction SB16. identify areas that are crucial for performance improvement
	Critical thinking
	The user/ individual on the job needs to know how to: SB17. improve work processes by adopting best practices SB18. act upon constructively on any problems as identified SB19. handle personality clashes effectively

NOS Version Control

NOS Code	LSC/N9702		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Generic	Last reviewed on	28/03/2019
Occupation	Sales and marketing/ business development	Next review date	28/03/2022

National Occupational Standard



Overview

This unit is about tracking containers using smart supply chain and planning for vessel berthing

LSC/N3508 Track container globally and plan for vessel docking

National Occupational Standard

Unit Code	LSC/N3508
Unit Title (Task)	Track container globally and plan for vessel docking
Description	This OS unit is about about global container tracking and developing vessel berthing plans
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> Track position of consignments and containers globally Prepare vessel berthing plans <p>Range: Enterprise Resource Planning (ERP), Standard Operating Procedures (SOP), worksheets, computer, projector, stationery etc.</p>
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Track position of consignments and containers globally	<p>To be competent, the user/ individual must be able to:</p> <p>PC1. track position of container using smart supply chain and ERP by feeding in the container index number</p> <p>PC2. extract information regarding present location, shipper details, cargo content, estimated date of arrival at destination, etc.</p> <p>PC3. extract information related to health of the container – date of last servicing, ageing since then, number of cycles completed, accidents, damages, previous damage reports if any, etc.</p> <p>PC4. analyse the information to identify ailing containers that need to be put into servicing and repair</p> <p>PC5. prepare detailed report regarding containers and inform the manager on position and status of various containers</p>
Prepare vessel berthing plans	<p>To be competent, the user/ individual must be able to:</p> <p>PC6. obtain information regarding different vessels coming to the port</p> <p>PC7. take stock of available resources – both equipment and workforce as well as available berths</p> <p>PC8. obtain information regarding the discharge and loading of cargo to be done for each vessel</p> <p>PC9. estimate the time required for the vessel loading/ unloading operations</p> <p>PC10. prepare schedule for vessel docking factoring in berth availability, priority cargo, perishable cargo, resource availability, etc.</p> <p>PC11. communicate the vessel docking plan with details of cargo and berth to the manager</p> <p>PC12. obtain a sign off from the manager and communicate to the shipper, port authority, vessel and cargo handling supervisor</p> <p>PC13. communicate regarding amendments, delays, if any as and when required</p>

LSC/N3508 Track container globally and plan for vessel docking

Knowledge and understanding (K)	
<p>A. Organizational context (Knowledge of the company / organization and its processes)</p>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KA1. organizational procedures KA2. documentation and reporting as per organization's mandate KA3. security procedures to be followed KA4. escalation matrix for reporting identified problems KA5. risk and impact of not following defined procedures/work instructions KA6. coding system followed to label cargo KA7. IT system and ERP system of the organization
<p>B. Technical knowledge</p>	<p>The individual on the job needs to know and understand:</p> <ul style="list-style-type: none"> KB1. basics of operations in a port terminal, Container Freight Station (CFS) and Inland Container Depot (ICD) KB2. usage of ERP and IT tools related to container cargo tracking KB3. use of various cargo handling equipment KB4. vessel and yard layout and loading and unloading activities KB5. procedures of cargo movement KB6. requirements regarding handling of cargo KB7. different type of vessels and cargo and container sizes KB8. different type of cranes and Material Handling Equipment (MHEs) – their capacities, constraints and usage KB9. handling of hazardous and non-hazardous cargo KB10. marking of material and people movement areas KB11. stuffing and de-stuffing norms with respect to different cargo KB12. special characteristics and handling requirements of shipments, if any
Skills (S)	
<p>A. Core skills/ generic skills</p>	<p>Reading skills</p>
	<p>The user/individual on the job needs to know how to read:</p> <ul style="list-style-type: none"> SA1. written instructions SA2. shipping manifest, Bill of lading shipping bills and related documents SA3. ERP and computer generated reports SA4. cargo stowage plans and vessel plans SA5. SOPs and safety regulation manuals
	<p>Writing skills</p>
	<p>The user/individual on the job needs to know how to write:</p> <ul style="list-style-type: none"> SA6. work-orders and instructions SA7. checklist of activities, delays, undelivered items, contacts, etc SA8. daily reports
	<p>Oral communication (listening and speaking skills)</p>
	<p>The user/individual on the job needs to know how to:</p>

LSC/N3508

Track container globally and plan for vessel docking

	<p>SA9. communicate with customers, fireght operators, transporters, shipping companies, other supervisors and port authorities</p> <p>SA10. communicate with cargo equipment operators and ground staff over VHF radio</p> <p>SA11. guide cargo handlers for smooth operations</p>
<p>B. Professional skills</p>	<p>Decision making</p>
	<p>The user/individual on the job needs to know how to:</p> <p>SB1. decide on required workforce and equipment for performing a particular task</p> <p>SB2. assess the environmental condition and type of cargo to assess if it is safe for operations</p> <p>SB3. resolve a problem quickly internally</p> <p>SB4. prioritise shipments</p> <p>SB5. decide on deployment of alternate resources when required</p>
	<p>Plan and organize</p>
	<p>The user/individual on the job needs to know how to:</p> <p>SB6. plan and estimate the co-ordination required for resolving a query.</p> <p>SB7. maintain punctuality</p> <p>SB8. respond to the client in a timely manner</p> <p>SB9. prioritize and execute tasks based on client requirements</p> <p>SB10. make work plans and resource allocation plans</p> <p>SB11. make checks on execution of work plans</p> <p>SB12. be a team player and achieve joint goals</p>
	<p>Customer centricity</p>
	<p>The user/individual on the job needs to know how to:</p> <p>SB13. adhere to the customer timelines</p> <p>SB14. address the urgency regarding shipments and activities</p>
	<p>Problem solving</p>
	<p>The user/individual on the job needs to know how to:</p> <p>SB15. make adjustment to working requirements for difficult weathers and hazardous goods</p> <p>SB16. identify trends/common causes for delays, damages, etc.</p> <p>SB17. co-ordinate and handle major issues with different departments</p> <p>SB18. identify bottlenecks and operational problems and suggest remedial action</p>
	<p>Analytical thinking</p>
	<p>The user/individual on the job needs to know how to:</p> <p>SB19. assess the resource requirement for a particular task at hand</p> <p>SB20. assess and prepare for backup resources in case of delays</p> <p>SB21. plan for cargo movement so that the resources and stroage space is optimally utilised</p>
<p>Critical thinking</p>	

LSC/N3508 Track container globally and plan for vessel docking

	The user/individual on the job needs to know and understand how to: <ul style="list-style-type: none"> SB22. resolve issues in a quick and cost effective manner SB23. develop work plans factoring in external factors SB24. check that all security measures and safety protocols are followed at all times
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NOS Version Control

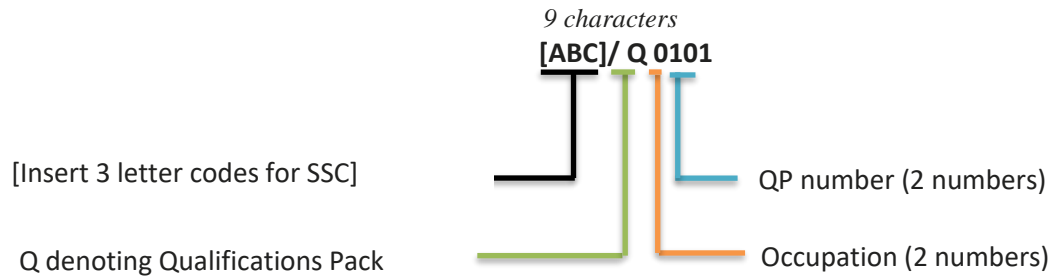
NOS Code	LSC/N3508		
Credits(NSQF)	TBD	Version number	1.0
Industry	Logistics	Drafted on	30/06/2018
Industry Sub-sector	Port terminals, CFS and ICDS	Last reviewed on	28/03/2019
Occupation	Port Operation (cargo handling, vessel planning)	Next review date	28/03/2022



Annexure

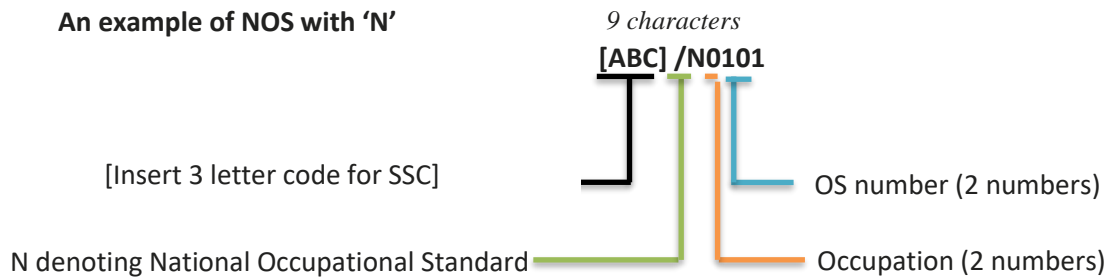
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



[Back to top...](#)

The following acronyms/codes have been used in the nomenclature above:

Sub-sector	Range of Occupation numbers
Warehousing	1 to 9
Land Transportation	10 to 14
EXIM/ Freight Forwarding/ Customs Clearance	21 to 23
Courier/Express	15 to 20
E-Commerce	24 to 30
Supply Chain	31 to 34
Port Terminals, ICD and CFS	35 to 41
Inland Waterways	42 to 46
Liquid Logistics	47 to 49
Air Cargo Operations	61 to 62
Rail Logistics	50 to 55
Cold Chain Logistics	86 to 94
Generic Occupations	95 to 99

Sequence	Description	Example
Three letters	Industry name	LSC
Slash	/	/
Next letter	Whether QP or NOS	Q / N
Next two numbers	Occupation code	01
Next two numbers	OS number	01

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Ship and yard planning supervisor

Qualification Pack LSC/Q3501

Sector Skill Council Logistics

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS
6. In case of unsuccessful completion the trainee make seek re-assessment on the Qualification Pack

Compulsory NOS					
Total Marks: 600				Marks Allocation	
Assessment Outcomes	Assessment Criteria for Outcomes	Total Marks	Out of	Theory	Skills Practical
LSC/N3501 Allocate resources and streamline operations at yard	PC1. obtain details of vessel docking plans, cargo and container movement plans, etc.	100	6	2	4
	PC2. develop daily work plan factoring in priority cases, time bound requirements, special handling requirements, etc.		6	2	4
	PC3. get the work plan approved by the yard manager or CFS/ICD manager and allocate tasks to subordinates		6	2	4
	PC4. budget and allocate the requisite MHE for tasks at hand		6	2	4
	PC5. inspect yard for markings/demarcation, storage and cleanliness as per safety norms		4	1	3
	PC6. monitor cargo loading, unloading and movement operations		4	1	3
	PC7. engage resources in alternate operation when there is a delay of planned operations		6	2	4

	PC8. allocate additional and ad-hoc manpower and equipment during exigency		6	2	4
	PC9. escalate issues regarding MHE operations, transporter delays, vessel delays, accidents, damages, etc. to manager		4	1	3
	PC10. provide corrective and preventive action plans based on accident and damage reports		6	2	4
	PC11. liaise with port officials, customs officials and external stakeholders		6	2	4
	PC12. conduct periodic inspection of the yard for cleanliness, usage of PPEs and adherence to SOP and regulations		6	2	4
	PC13. ensure cargo bays are clearly marked and segregated, containers and cargo are stored as per prescribed norms		4	1	3
	PC14. check for parking and positioning of equipment as per SOP		4	1	3
	PC15. ensure all necessary precautions for storage of hazardous cargo are complied with and emergency services are available		6	2	4
	PC16. submit inspection report highlighting any deviation from SOP		4	1	3
	PC17. review escalated issues and identify root cause for providing corrective action		4	1	3
	PC18. provide technical guidance to the team for execution		4	1	3
	PC19. escalate the issues to manager when external or additional help is required		4	1	3
	PC20. coordinate with other departments, transporters, freight operators, port authorities, shipping companies and others to resolve escalations if required		4	1	3
			100	30	70
LSC/N3502 Yard planning and cargo handling	PC1. check yard space utilization data in terms of open and closed yards, dry bulk cargo vs container, and assess available storage capacity	100	6	2	4
	PC2. review ageing of cargo and containers in yard, identify reasons for delay, and enable timely movement		6	2	4

PC3. identify and finalise bays for storage of incoming cargo considering the various demarcations and precautions to be taken particularly for hazardous and dry bulk cargo	6	2	4
PC4. plan for yard traffic and material movement routes considering terminal layout, container and cargo type, and available equipment	5	2	3
PC5. prepare goods storage plans based on vessel berthing plan and get it approved by the terminal manager	4	1	3
PC6. escalate issues to terminal manager if required	3	1	2
PC7. obtain vessel information related to docking schedule, berth, bays and containers to be unloaded/ loaded	4	1	3
PC8. obtain information regarding movement of containers/ cargo from port terminals to CFS/ ICD or client	4	1	3
PC9. communicate and finalise cargo movement plan with lifting supervisors, vessel supervisors, cargo equipment handlers, and manual cargo handlers	3	1	2
PC10. ensure that all equipment and workforce are ready for operations at the time of vessel docking / transport arrival	4	1	3
PC11. ensure all necessary precautions are taken and adequate PPEs are used	4	1	3
PC12. coordinate with vessel docking supervisor/ transport supervisor and vessel officer and get a go-ahead for cargo/ container loading/ unloading	3	1	2
PC13. coordinate with cargo surveyor for 'safe and secured' before loading/ unloading	4	1	3
PC14. address the queries of shipping lines and agents regarding cargo operations and storage	4	1	3
PC15. check that all cargo handling activities executed are as per schedule and SOP	4	1	3
PC16. document damages to cargo/ container during loading/ unloading	4	1	3
PC17. provide guidance and resolve/escalate any issues faced in loading/ unloading	6	2	4

	PC18. check that all cargo is stored at the planned/allocated storage location in the yard		4	1	3
	PC19. obtain 'safe and secured' go-ahead from the cargo surveyor upon completion of loading/ unloading activities		4	1	3
	PC20. collect counter signature from transporter for actuals received or dispatched		3	1	2
	PC21. check consignments received against order and delivery documentation to confirm that the quality, quantity and condition of the cargo is acceptable, identifying and referring any discrepancies		4	1	3
	PC22. maintain records relating to the receipt / storage / despatch of cargo, ensuring that these are up to date and complete		3	1	2
	PC23. check if receipt and delivery are documented in ERP		3	1	2
	PC24. prepare daily report highlighting the cargo storage and movement, plan vs actual performance, cargo ageing, details of accidents and damages if any		5	2	3
			100	30	70
LSC/N3504 Handle hazardous goods	PC1. read and interpret different cargo labels associated with different class and types of hazardous goods	100	6	2	4
	PC2. check for permissible limits and available documentation for hazardous goods as per approvals and acceptable specifications		6	2	4
	PC3. check IMDG code to identify the precautions and permissible limits for handling		6	2	4
	PC4. ensure that the port and yard terminal if the port is equipped to handle the identified class of hazardous goods		6	2	4
	PC5. check if all the necessary precautions, PPEs and emergency response teams are in position prior to loading/unloading of cargo		4	1	3
	PC6. check that the allocated storage bay in the yard is adequately separated and precautions with respect to heat, light, temperature control, etc. are taken		4	1	3

	PC7. provide instructions for segregation of hazard goods as per classification		4	1	3
	PC8. use separate teams for handling different classes of hazardous goods		6	2	4
	PC9. check if appropriate PPEs, MHEs and other equipment are being used to prevent contamination or exposure		4	1	3
	PC10. check if all PPEs and equipment are functional and contamination proof		6	2	4
	PC11. ensure all precautions are taken as per SOP while handling hazardous cargo		6	2	4
	PC12. confirm emergency response action with the emergency team and cargo handling team prior to operations		6	2	4
	PC13. inspect containers for damages, leakage, exposure and labels		6	2	4
	PC14. check if cargo movement via conveyors, dump trucks is spillage free		4	1	3
	PC15. ensure clear and obstacle free movement of cargo from vessel to yard and yard to transport		6	2	4
	PC16. ensure that all required precautions and segregations for cargo storage are undertaken		4	1	3
	PC17. report closure of exercise highlighting handling losses, storage location and coordinates, etc.		4	1	3
	PC18. periodically inspect yard space to check if adequate segregation and precautions are taken for storage of hazardous goods		4	1	3
	PC19. report to manager in case of any leakage, damages, exceptions in handling precautions and segregation		4	1	3
	PC20. document and file inspection reports		4	1	3
			100	30	70
LSC/N0321 Documentation related to port clearance and cargo	PC1. coordinate with shipping liners, vessel operators, freight transporters, importers and exporters as well as the port authorities to obtain requisite cargo documents	100	12	4	8
	PC2. review documentation of transport vehicles and their certificates		12	4	8

	for fitness for operation, presence of requisite license, etc.				
	PC3. review cargo documents like bill of lading, shipping bills, PGA (Participative Government Agencies) clearances, etc. for compliance to regulations and standards		12	4	8
	PC4. prepare and review storage plans and yard layout to check for compliances particularly regarding hazardous and reefer cargo		11	3	8
	PC5. review fitness certificates and related documents regarding operations of various MHEs, cranes and terminal equipment		11	3	8
	PC6. review and approve gate entry and exit passes for transporters, vehicles		11	3	8
	PC7. prepare and review compliance reports regarding yard and terminal layout, fitness of equipment and personnel, various incidents, cargo handling, etc		11	3	8
	PC8. respond and resolve queries raised by port and custom authorities, custom brokers, shipping liners, clients, transporters regarding status of different shipments		10	3	7
	PC9. coordinate between the vessel, shipper/ importer, agents and port authorities to ensure that all compliances and requirements are met		10	3	7
			100	30	70
LSC/N9904 Maintain and monitor integrity and ethics in operations	PC1. refrain from indulging in corrupt practices	100	5	2	3
	PC2. avoid using company's funds, property or resources for undertaking personal activities		5	2	3
	PC3. protect customer's information and ensure it is not misused		5	2	3
	PC4. protect data and information related to business or commercial decisions		5	2	3
	PC5. avoid acceptance of cash or kind from vendors for support or contract negotiations		5	2	3
	PC6. demonstrate and practice ethics in day-to-day processes and dealings with		5	2	3

	customers and colleagues				
	PC7. avoid nepotism		5	2	3
	PC8. consult supervisor or senior management when in situations that may require differentiating between ethical and unethical		6	2	4
	PC9. report promptly all violations of code of ethics		5	2	3
	PC10. dress up and conduct in a professional manner		5	2	3
	PC11. communicate with clients and stakeholders in a soft and polite manner		5	2	3
	PC12. follow etiquettes in accordance to the place		5	2	3
	PC13. check for regulatory documentation and compliances for the shop floor as per information from the supervisor		6	2	4
	PC14. perform activities considering the regulatory requirements		5	2	3
	PC15. use PPEs in accordance to regulatory requirements		6	3	3
	PC16. identify the different types of dangerous goods and handling methodologies		6	3	3
	PC17. follow the SOP for handling of different types of dangerous goods		6	2	4
	PC18. consult supervisor or senior management when in situations that may require differentiating between ethical and unethical		5	2	3
	PC19. promptly report all regulatory violations		5	2	3
			100	40	60
LSC/N9905 Follow and monitor health, safety and security procedure	PC1. make note of all safety processes in different location (cargo loading area, ramp operation area, etc.) with reference to area of operation	100	5	2	3
	PC2. wear all personal protective equipment (PPE) such as goggles, ear plugs, helmet, mask, shoes, etc. as applicable in the cargo movement area		5	2	3
	PC3. follow standard driving practice to ensure safety of life and material		5	2	3
	PC4. follow organizational protocol to deploy action in case of signs of any emergency situation or accident or breach		5	2	3

of safety				
PC5. undertake periodical preventive health check ups	5	2	3	
PC6. follow necessary standard operating procedures (SOP) and precautions while handling dangerous and hazardous goods	5	2	3	
PC7. follow security procedures like green gate in port, customs area, factory security, etc.	5	2	3	
PC8. comply with data safety regulations of the organisation	3	1	2	
PC9. follow standard safety procedures while handling hazardous / fragile cargo and walk only on the designated pathway	4	2	2	
PC10. recognise unsafe conditions and safety practices at the workplace and report it to concerned authority	3	1	2	
PC11. inspect the activity area and equipment for appropriate and safe condition	5	2	3	
PC12. check if stacking is done at defined height and is not on the walk way	5	2	3	
PC13. check if walk way is free from grease/ oil	5	2	3	
PC14. check if emergency fire alarms, water sprinklers and smoke detectors are installed at all places	5	2	3	
PC15. participate in fire drills	5	2	3	
PC16. check if standard material handling procedure are being followed	5	2	3	
PC17. check if hold ladders, platforms and hand rails to be in a sound and safe condition	5	2	3	
PC18. check if all the safety and security related tags, labels and signage are placed in the cargo	5	2	3	
PC19. check if loading instrument is certified and operational	5	2	3	
PC20. implement 5S at workplace	5	2	3	
PC21. check if cargo has passed security checks and report in case of any violation	5	2	3	
	100	40	60	

Electives					
Elective 1 - Handle Dry Bulk Cargo					
Total marks 100				Marks allocation	
Assessment outcome	Assessment criteria	Total marks	Out of	Theory	Practical
LSC/N3505 Handle dry bulk cargo	PC1. obtain details of incoming cargo from port/ shipper into the CFS, ICD as per the cargo plan and allocate resources	100	10	3	7
	PC2. check the IMSBC (International Maritime Solid Bulk Cargo) code of the item to be loaded/unloaded is presented in the documentation and the vessel/yard has the appropriate safety systems in place		10	3	7
	PC3. identify and finalise bays for storage of incoming cargo considering the various demarcations and precautions to be taken based on cargo type		10	3	7
	PC4. discuss, finalise and communicate cargo movement plan with workforce and ensure all equipment are ready for operations at the time of vessel docking/transport arrival		10	3	7
	PC5. review the pre-operative checklist to ensure all equipment are functional and get a "OK" report from all operators and handlers		10	3	7
	PC6. review that the unloading area has been prepared for receipt of material and necessary precautions and PPEs have been taken		10	3	7
	PC7. supervise unloading/loading of dry bulk cargo using GSU crane, conveyor belts etc.		9	3	6
	PC8. ensure minimum spillage and wastage of dry bulk cargo during transfer operations and monitor the same		8	2	6
	PC9. check for compliance to IMDG, DG shipping and other material handling guidelines while unloading hazardous/dangerous cargo		9	3	6
	PC10. ensure the yard space is cleaned post loading/unloading of cargo		7	2	5
	PC11. oversee movement of cargo from port terminal, CFS via rail and road lines and export via vessels		7	2	5
			100	30	70

Elective 2 - Handle Containerised Cargo					
Total marks 100				Marks allocation	
Assessment outcome	Assessment criteria	Total marks	Out of	Theory	Practical
LSC/N3506 Handle containerised cargo	PC1. obtain details of incoming container cargo from port/ shipper into the CFS, ICD as per the cargo plan and allocate resources	100	10	3	7
	PC2. identify and finalise bays for storage of incoming container cargo considering the various demarcations and precautions to be taken based on cargo type		10	3	7
	PC3. discuss, finalise and communicate container movement plan with workforce and ensure all equipment are ready for operations at the time of vessel docking/transport arrival		10	3	7
	PC4. review the pre-operative checklist to ensure all equipment are functional and get a "OK" report from all operators and handlers		10	3	7
	PC5. review that the unloading area has been prepared for receipt of material and necessary precautions and PPEs have been taken		9	3	6
	PC6. check if the container units contain fumigants, where they are present and take necessary precautions		7	2	5
	PC7. supervise unloading/loading of container cargo using the appropriate crane		9	3	6
	PC8. on completion of cargo loading/unloading signal the cargo handlers to stop operations		7	2	5
	PC9. prioritise reefer cargo movement and ensure they are loaded/unloaded within the defined timelines for maintaining reefer temperature		7	2	5
	PC10. take safe and secured go-ahead from the cargo surveyor		7	2	5
	PC11. ensure container power lines are disconnected before removal and ensure re-connection post loading/unloading		7	2	5
	PC12. check the correct temperature is being maintained in the container post unloading		7	2	5

			100	30	70
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Options					
Option 1 - Business Development and Stakeholder Relations					
Total marks 100				Marks allocation	
Assessment outcome	Assessment criteria	Total marks	Out of	Theory	Practical
LSC/N9702 Business development and stakeholder relations	PC1. obtain a list of existing clients and new prospects from the company's sales database.	100	6	2	4
	PC2. prepare sales targets and relationship strategies		6	2	4
	PC3. prioritize the clients for contacting, based on the previous relationship building calls made to each of them		6	2	4
	PC4. call clients and prospects to seek meeting		6	2	4
	PC5. meet client to offer new services and take feedback for current services		4	1	3
	PC6. identify client's business need and offer customized and bundled solutions		4	1	3
	PC7. negotiate on costs, close the deal and collect organizational and payment details of the client		6	2	4
	PC8. take client's feedback before leaving		6	2	4
	PC9. update information into ERP, inform the relevant departments on sale closure		4	1	3
	PC10. regularly interact with the client over phone, emails or personal visits		6	2	4
	PC11. address the query raised by the customers effectively and timely		6	2	4
	PC12. take appropriate actions on escalations raised by customers		6	2	4
	PC13. handle customer grievances		4	1	3
	PC14. quickly respond to the clients for their e-mails, voice-messages, calls, etc.		4	1	3
	PC15. provide regular information to clients regarding new offerings, discounts, customised solutions, etc.		6	2	4
	PC16. liaise with customs, other Govt. departments, PGAs, etc. and build professional relations with them		4	1	3
	PC17. analyse and manage claim requests		4	1	3

	PC18. co-ordinate with marketing agencies for publicity of services of the company		4	1	3
	PC19. negotiate with carriers, warehouse and transport operators, custom brokers, insurance company representatives, vendors, etc. for services, preferential rates, service level agreements (SLA), payment period, etc.		4	1	3
	PC20. co-ordinate with labour contractor and local vendors for sufficient workforce, carrier vehicle availability as per work demand		4	1	3
			100	30	70
Option 2 - Container Tracking and Vessel Planning					
Total marks 100				Marks allocation	
Assessment outcome	Assessment criteria	Total marks	Out of	Theory	Practical
LSC/N3508 Track containers globally and plan for vessel docking	PC1. track position of container using smart supply chain and ERP by feeding in the container index number	100	9	3	6
	PC2. extract information regarding present location, shipper details, cargo content, estimated date of arrival at destination, etc.		8	2	6
	PC3. extract information related to health of the container – date of last servicing, ageing since then, number of cycles completed, accidents, damages, previous damage reports if any, etc.		8	2	6
	PC4. analyse the information to identify ailing containers that need to be put into servicing and repair		9	3	6
	PC5. prepare detailed report regarding containers and inform the manager on position and status of various containers		9	3	6
	PC6. obtain information regarding different vessels coming to the port		8	2	6
	PC7. take stock of available resources – both equipment and workforce as well as available berths		9	3	6
	PC8. obtain information regarding the discharge and loading of cargo to be done for each vessel		7	2	5
	PC9. estimate the time required for the vessel loading/ unloading operations		7	2	5
	PC10. prepare schedule for vessel docking factoring in berth availability, priority cargo,		7	2	5

	perishable cargo, resource availability, etc.			
	PC11. communicate the vessel docking plan with details of cargo and berth to the manager	7	2	5
	PC12. obtain a sign off from the manager and communicate to the shipper, port authority, vessel and cargo handling supervisor	6	2	4
	PC13. communicate regarding amendments, delays, if any as and when required	6	2	4
		100	30	70

Annexure: Trainer qualification and equipment requirement

Trainer Qualification –

- Diploma/XII pass with 7 years of experience with minimum 3 years as supervisor (or)
- Graduate with 5 years of experience with minimum 3 years as supervisor
- Experience in cargo operations at ports or related fields having detailed knowledge of port operations, cargo handling, crane operations, cargo documentation, ERP related reporting and data management activities and supervisory skills
- The person should have communication skills involving reading, writing and oral in English and vernacular language

Training equipment - Teaching board, Computer, Projector, Video Player or TV, Ms Office, MIS, Inventory models, stationery, PPEs, MHEs like GSU, RMQC, RTG, Reach stacker, pallet truck, barcode scanner, packing devices, vessel/container tracking IT software, and packing material