









Multimodal Transport Planner

QP Code: LSC/Q6501

Version: 1.0

NSQF Level: 5.5

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LSC/Q6501: Multimodal Transport Planner

Brief Job Description

Multimodal Transport Planner is responsible for planning the transport of a shipment using various modes of transport like railways, maritime routes, and roads. S/he is responsible for restructuring and reconfiguring the logistics strategies, optimize freight operational plans to increase cost efficiency, improve customer service effectiveness and enhance environmental sustainability.

Personal Attributes

The individual must have attention to detail and problem-solving skills, possess the ability to work collaboratively with diverse professionals to deliver projects successfully. The individual should have appropriate analytical and communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. LSC/N6501: Perform Freight Analysis
- 2. LSC/N6502: Building Multimodal Network
- 3. LSC/N6503: Transportation and Route Optimization through Multimodal Network
- 4. LSC/N6504: Tracking and Tracing
- 5. LSC/N6505: Manage contingencies in transport
- 6. LSC/N6506: Risk Management in transportation
- 7. LSC/N9911: Follow health, safety, security procedures and maintain integrity, ethics at workplace
- 8. DGT/VSQ/N0103: Employability Skills (90 Hours)

Qualification Pack (QP) Parameters

Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Transport Management
Country	India









NSQF Level	5.5
Credits	21
Aligned to NCO/ISCO/ISIC Code	NCO-2015/1324
Minimum Educational Qualification & Experience	UG in any field (Completed UG Degree) with 3 Years of experience relevant experience OR Completed 3 year diploma after 10th with 6 Years of experience relevant experience OR 2-year Diploma after 12th grade (in any field) with 4 Years of experience (4.5 years relevant experience) OR 12th grade Pass with 7 Years of experience (7.5 years relevant experience) OR Previous relevant Qualification of NSQF Level (5) with 3 Years of experience relevant experience
Minimum Level of Education for Training in School	
Pre-Requisite License or Training	NA
Minimum Job Entry Age	23 Years
Last Reviewed On	NA
Next Review Date	31/01/2027
NSQC Approval Date	31/01/2024
Version	1.0
Reference code on NQR	QG-5.5-TW-02038-2024-V1-LSSC
NQR Version	1.0









LSC/N6501: Perform Freight Analysis

Description

This OS is about performing freight analysis.

Scope

The scope covers the following:

- Gather data for analysis.
- Evaluate & Analyse Data

Elements and Performance Criteria

Gather data for analysis

To be competent, the user/individual on the job must be able to:

- **PC1.** Procure full details of the shipment like item description, value, restrictions import, export, transport, weight, dimensions, handling instructions, purpose, etc.
- **PC2.** Collect transit details like origin, destination, clearance hub, incoterms, port of clearance, expected date of shipment etc.
- **PC3.** Check with the customer (shipper/ receiver) if there are any additional requirements on transport and the budget allocated.
- **PC4.** Gather details of transporters currently available and their cost, transit time, mode, VAS, etc.
- **PC5.** Collect data on the newest improvements in transportation and BDP of leading market players.
- **PC6.** Gather data on dwelling times and demurrage fees involved in all modes of transportation.
- **PC7.** Coordinate with stakeholders and collect the following information:
 - Regularity of similar shipments
 - Requirement of setting up a standard route/ network.
 - Possible bottlenecks
 - Issues faced in the past.
- **PC8.** Research the documentation requirements and the preparation time.
- **PC9.** Gather details on the restrictions/ approvals involved in each mode of transport and TAT for procuring the same.
- **PC10.** Confirm the availability of existing transport routes, operators and options currently followed for such shipments.
- **PC11.** Collect data on the availability of multimodal terminals with transhipment, loading/ unloading facilities, where the mode of transport can be changed.
- **PC12.** Check the pre-haul and post-haul costs.
- **PC13.** Collect data separately about operating costs in a single mode of transport for rail, road, air and inland waterways.
- **PC14.** Check on the approximate transit time taken if a single mode of transport is used for rail, road, air and inland waterways.









- **PC15.** Calculate the amount of coordination and intervention required for each leg of transportation.
- **PC16.** Research the connecting hubs and routes for each mode of transport and each service provider.
- **PC17.** Check the availability of direct booking software and the tracking number generation for each mode.
- **PC18.** Check the FOIS portal for freight rates for rail transportation and the process of issuing the Railway Receipt and eT-TRR.
- **PC19.** Collect data about rates from direct carrier portals.

Evaluate & Analyse Data

To be competent, the user/individual on the job must be able to:

- **PC20.** Procure quotes from several vendors and explore options according to the time constraints.
- **PC21.** Analyse the collected data and prepare the list of requirements and limitations.
- **PC22.** Prepare a table with multimodal and intermodal transport costs, transit time, documentation, facilitation etc., with pros & cons.
- **PC23.** Compare the transit time, cost, demurrage, transhipment cost, documentation, transit network data and guotes received from vendors.
- **PC24.** Compare the difference in cost and services if booked directly with a carrier with that of transport service providers.
- **PC25.** Check for the USPs from different carriers and analyse the tracking methods; devices used by them are of the latest technology like Radio frequency identification (RFID)-based tracking methods; and Internet of Things (IoT) telematics device-based tracking methods.
- **PC26.** Coordinate with docking/transhipment terminals to know about space bookings, demurrage, facilities offered like forklift, crane etc. rental charges and restrictions if any.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Multimodal Transportation of Goods Act, 1993
- **KU2.** UNCTAD/ICC rules
- KU3. Preparation of CTD combined transport document
- **KU4.** What is Unimodal Transport
- **KU5.** Concept of Multimodal Transport
- **KU6.** Types of Multimodal Transport and its Elements.
- **KU7.** Various equipment/ MHE used for loading/ unloading.
- **KU8.** Advantages and Disadvantages of using Multimodal Transport
- **KU9.** Challenges and factors that affect the flow of shipment.
- **KU10.** Rules and regulations involved in all types of transport.
- **KU11.** Documentation for different kinds of goods and transportation methods.
- **KU12.** Geographical knowledge and usage of maps and route plotting.
- **KU13.** Advanced computer knowledge and data analysis









Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. How to register in transporter portalsGS2. Create contracts with service providersGS3. Negotiating for cost and time optimisation
- **GS4.** Vendor coordination and follow-up
- **GS5.** Restrictions for transporting dangerous goods
- **GS6.** Customs regulations for import and export
- GS7. Cross-check the data at various master data levels and ensure sanity
- **GS8.** Draw inferences and conclusions based on the analysis
- **GS9.** Identify common trends as per analysis and implement the same
- **GS10.** Perform work-related calculations
- **GS11.** Plan and prioritise tasks to ensure timely completion









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Gather data for analysis	23	44	-	6
PC1. Procure full details of the shipment like item description, value, restrictions - import, export, transport, weight, dimensions, handling instructions, purpose, etc.	1	3	-	1
PC2. Collect transit details like origin, destination, clearance hub, incoterms, port of clearance, expected date of shipment etc.	1	3	-	-
PC3. Check with the customer (shipper/ receiver) if there are any additional requirements on transport and the budget allocated.	1	2	-	1
PC4. Gather details of transporters currently available and their cost, transit time, mode, VAS, etc.	1	3	-	1
PC5. Collect data on the newest improvements in transportation and BDP of leading market players.	1	3	-	-
PC6. Gather data on dwelling times and demurrage fees involved in all modes of transportation.	1	3	-	-
 PC7. Coordinate with stakeholders and collect the following information: Regularity of similar shipments Requirement of setting up a standard route/network. Possible bottlenecks Issues faced in the past. 	1	2	-	-
PC8. Research the documentation requirements and the preparation time.	2	3	-	-
PC9. Gather details on the restrictions/ approvals involved in each mode of transport and TAT for procuring the same.	2	2	-	-
PC10. Confirm the availability of existing transport routes, operators and options currently followed for such shipments.	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. Collect data on the availability of multimodal terminals with transhipment, loading/ unloading facilities, where the mode of transport can be changed.	2	2	-	-
PC12. Check the pre-haul and post-haul costs.	1	2	-	-
PC13. Collect data separately about operating costs in a single mode of transport for rail, road, air and inland waterways.	1	2	-	-
PC14. Check on the approximate transit time taken if a single mode of transport is used for rail, road, air and inland waterways.	1	2	-	1
PC15. Calculate the amount of coordination and intervention required for each leg of transportation.	2	2	-	-
PC16. Research the connecting hubs and routes for each mode of transport and each service provider.	1	2	-	1
PC17. Check the availability of direct booking software and the tracking number generation for each mode.	1	2	-	-
PC18. Check the FOIS portal for freight rates for rail transportation and the process of issuing the Railway Receipt and eT-TRR.	1	2	-	1
PC19. Collect data about rates from direct carrier portals.	1	2	-	-
Evaluate & Analyse Data	7	16	-	4
PC20. Procure quotes from several vendors and explore options according to the time constraints.	1	2	-	1
PC21. Analyse the collected data and prepare the list of requirements and limitations.	1	2	-	-
PC22. Prepare a table with multimodal and intermodal transport costs, transit time, documentation, facilitation etc., with pros & cons.	1	3	-	1
PC23. Compare the transit time, cost, demurrage, transhipment cost, documentation, transit network data and quotes received from vendors.	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. Compare the difference in cost and services if booked directly with a carrier with that of transport service providers.	1	2	-	1
PC25. Check for the USPs from different carriers and analyse the tracking methods; devices used by them are of the latest technology like Radio frequency identification (RFID)-based tracking methods; and Internet of Things (IoT) telematics device-based tracking methods.	1	3	-	-
PC26. Coordinate with docking/transhipment terminals to know about space bookings, demurrage, facilities offered like forklift, crane etc. rental charges and restrictions if any.	1	2	-	1
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N6501
NOS Name	Perform Freight Analysis
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Transport Management
NSQF Level	5.5
Credits	3
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









LSC/N6502: Building Multimodal Network

Description

This OS explains how to set up a successful multimodal network based on freight analysis.

Scope

The scope covers the following:

Creating Multimodal Network

Elements and Performance Criteria

Creating Multimodal Network

To be competent, the user/individual on the job must be able to:

- **PC1.** Prepare a map with the set of routes available with multimodal transport options and according to cost, transit time etc.
- **PC2.** Compare routes taking the factors of freight analysis into consideration.
- **PC3.** Prepare multiple route options according to the urgency, type of shipment and budget allotted.
- **PC4.** Research and finalise vendors for establishing pre- and post-haulage processes.
- **PC5.** Negotiate and plan for long-term contracts (LTC) with the airlines, transporters etc.
- **PC6.** Check the FOIS portal for freight registration and other services for rail transportation.
- **PC7.** Create separate plans for pre-haul, long-haul and end-haul transportation.
- **PC8.** Use cost-effective transport like rail and inland waterways for long-haul transportation.
- **PC9.** Give preference to vendors/ carriers who offer key aspects like low cost, high service levels & on-time deliveries, sustainability offerings, scalability and dedicated options, and technology first approach.
- **PC10.** Arrange and plan for the Facility Location for transhipment and the MHE and labour required for the same.
- **PC11.** Set Vendor KPIs, Payment methods while signing contracts. E.g., KPIs such as Delays, Rejections, Shortages, and Damages will be highlighted in the Vendor KPI dashboards.
- **PC12.** Prepare multiple route plans with location, network design, scheduling, transportation, fleet renewal, resource allocation, schedule recovery and routing.
- **PC13.** List the possible Tactical/strategic problems that may arise before finalising and create SOPs accordingly.
- **PC14.** Finalize carriers, who have multimodal transport options as a single carrier (single-contract mode) with proper escalation matrix.
- **PC15.** Decide docking methods to be followed based on the analysis done.
- **PC16.** Create route plans based on hub and spoke methods.
- **PC17.** Check on implementing CTD combined transport document across networks for a single shipment.









- **PC18.** Design multiple routes for multimodal transportation with different parameters like distance, transit time, cost, split transport, intermodal transport etc.
- **PC19.** Set up an end-to-end process for the routes designed, roght from pick up to delivery, for each leg of transportation (including stuffing, stowing, repacking, loading, labelling, storing between transhipment, safety and security of load, etc.)
- **PC20.** Do trial runs on each network designed and analyse efficiency based on parameters.
- **PC21.** Create routes and plan for reverse logistics for the movement of trackable transport assets related to their reuse, recall, repair, repackaging and recycling, and return of goods delivered or empty containers back to the transport asset owner.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** The concept of Travel Demand Management (TDM)
- **KU2.** Types of Multimodal Transport
- KU3. Knowledge of Intermodal, Combined Transport, Split bulk cargo and general cargo transport
- **KU4.** Unaccompanied combined transport (UCT)
- **KU5.** Transhipment process and regulations
- **KU6.** Various equipment/ MHE used for loading/ unloading
- **KU7.** Advantages and Disadvantages of using Multimodal Transport
- **KU8.** Challenges and factors that affect the flow of shipment
- **KU9.** Rules and regulations involved in all types of transport
- KU10. Documentation for types of goods and transportation method
- **KU11.** Geographical knowledge and usage of maps and route plotting
- KU12. Advanced computer knowledge and data analysis
- KU13. Hub and spoke method of connection
- KU14. Reverse logistics

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** How to register in transporter portals
- **GS2.** Create contracts with service providers
- **GS3.** Negotiating for cost and time optimisation
- **GS4.** Vendor coordination and follow-up
- **GS5.** Restrictions for transporting dangerous goods
- **GS6.** Customs regulations for import and export
- **GS7.** Cross-check the data at various master data levels and ensure sanity
- **GS8.** Draw inferences and conclusions based on the analysis
- **GS9.** Identify common trends as per analysis and implement the same
- **GS10.** Perform work-related calculations









GS11. Plan and prioritise tasks to ensure timely completion









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Creating Multimodal Network	30	60	-	10
PC1. Prepare a map with the set of routes available with multimodal transport options and according to cost, transit time etc.	1	3	-	-
PC2. Compare routes taking the factors of freight analysis into consideration.	1	2	-	-
PC3. Prepare multiple route options according to the urgency, type of shipment and budget allotted.	1	3	-	1
PC4. Research and finalise vendors for establishing pre- and post-haulage processes.	1	3	-	-
PC5. Negotiate and plan for long-term contracts (LTC) with the airlines, transporters etc.	2	2	-	-
PC6. Check the FOIS portal for freight registration and other services for rail transportation.	2	3	-	1
PC7. Create separate plans for pre-haul, long-haul and end-haul transportation.	2	3	-	-
PC8. Use cost-effective transport like rail and inland waterways for long-haul transportation.	1	3	-	1
PC9. Give preference to vendors/ carriers who offer key aspects like low cost, high service levels & ontime deliveries, sustainability offerings, scalability and dedicated options, and technology first approach.	1	3	-	-
PC10. Arrange and plan for the Facility Location for transhipment and the MHE and labour required for the same.	2	3	-	-
PC11. Set Vendor KPIs, Payment methods while signing contracts. E.g., KPIs such as Delays, Rejections, Shortages, and Damages will be highlighted in the Vendor KPI dashboards.	2	3	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. Prepare multiple route plans with location, network design, scheduling, transportation, fleet renewal, resource allocation, schedule recovery and routing.	2	3	-	-
PC13. List the possible Tactical/strategic problems that may arise before finalising and create SOPs accordingly.	2	3	-	1
PC14. Finalize carriers, who have multimodal transport options as a single carrier (single-contract mode) with proper escalation matrix.	2	3	-	1
PC15. Decide docking methods to be followed based on the analysis done.	1	3	-	-
PC16. Create route plans based on hub and spoke methods.	2	3	-	1
PC17. Check on implementing CTD – combined transport document across networks for a single shipment.	1	3	-	1
PC18. Design multiple routes for multimodal transportation with different parameters like distance, transit time, cost, split transport, intermodal transport etc.	1	3	-	-
PC19. Set up an end-to-end process for the routes designed, roght from pick up to delivery, for each leg of transportation (including stuffing, stowing, repacking, loading, labelling, storing between transhipment, safety and security of load, etc.)	1	3	-	1
PC20. Do trial runs on each network designed and analyse efficiency based on parameters.	1	2	-	-
PC21. Create routes and plan for reverse logistics for the movement of trackable transport assets related to their reuse, recall, repair, repackaging and recycling, and return of goods delivered or empty containers back to the transport asset owner.	1	3	-	1
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N6502
NOS Name	Building Multimodal Network
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Transport Management
NSQF Level	5.5
Credits	3
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









LSC/N6503: Transportation and Route Optimization through Multimodal Network

Description

This OS is about Routing a shipment through Multimodal transportation

Scope

The scope covers the following:

• Booking and transportation

Elements and Performance Criteria

Booking and transportation

To be competent, the user/individual on the job must be able to:

- **PC1.** Collect complete data of the shipment, including weight, value, type, dimensions, urgency, incoterms, documentation, date of arrival/ transport, origin, destination etc.
- **PC2.** Prepare route plans with the networks set up, depending upon the transit time and budget allotted for the shipment.
- **PC3.** Check space availability and the cost for different modes of transport.
- **PC4.** Collect information about current situations, contingencies like congestion in ports, weather conditions etc. which might affect transit.
- **PC5.** Decide on aspects like nearest hubs. It is not necessary that major hubs or gateways be used at all times.
- **PC6.** Discuss with the consignee/ stakeholders about the available route options with ETA, cost and other possible hurdles.
- **PC7.** Once the route is finalised, book space for each mode of transport using the concerned transport provider's software.
- **PC8.** Plan Alternative and additional Transport Corridors according to Customer Needs.
- **PC9.** Ensure that Infrastructure and Equipment at transit or connecting point are available.
- **PC10.** Confirm that the Operation of cargo / Transshipment at the Transit point is handled according to the customs process.
- **PC11.** Make sure that the goods are packed per the transit, transporter, customs etc. requirements and the transit documents, like the Airway bill are fixed properly on the package.
- **PC12.** Ensure that the rules and regulations of transhipment according to the ports, transiting hubs, and customs are met while transporting and handling the cargo.
- **PC13.** Assess the risks of Political situations, Port Congestion, Strikes, Riot, Backlog of common carriers, unforeseen costs from special handling etc.
- **PC14.** Select the Strongest Agents in the planned Corridors.
- **PC15.** Prepare transport documents according to the carriers, e.g., contract of carriage, bill of lading etc.
- **PC16.** Ensure that tracking devices are added to the shipment and tracking is possible during the entire transit.









- **PC17.** Confirm that proper repacking and consolidation happens when switching between modes of transport.
- **PC18.** Organize manpower and storage space across disparate facilities.

Route optimization

To be competent, the user/individual on the job must be able to:

- **PC19.** Use navigational tools integrated with data from weather stations, satellites etc. for analyzing real-time traffic.
- **PC20.** Analyse the demand patterns, wait times and historical records to improve efficiency.
- **PC21.** Integrate existing transport management systems with AI-powered monitoring tools that identify potential dangers, such as accidents or obstructions, and send automated alerts with alternatives for prompt action.
- **PC22.** Ensure cost efficiency by optimising the route and reducing the distance a shipment travels, resulting in less fuel consumption and reduced maintenance costs.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** The concept of Travel Demand Management (TDM)
- **KU2.** Types of Multimodal Transport
- **KU3.** Knowledge of Intermodal and Combined Transport, Split bulk cargo and general cargo transport
- **KU4.** Unaccompanied combined transport (UCT)
- **KU5.** Transhipment process and regulations
- KU6. Various equipment/ MHE used for loading/ unloading
- **KU7.** Advantages and Disadvantages of using Multimodal Transport
- **KU8.** Challenges and factors that affect the flow of shipment
- **KU9.** Rules and regulations involved in all types of transport
- **KU10.** Documentation for types of goods and transportation method
- **KU11.** Geographical knowledge and usage of maps and route plotting
- **KU12.** Advanced computer knowledge and data analysis

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** How to register in transporter portals
- **GS2.** Create contracts with service providers
- **GS3.** Negotiating for cost and time optimisation
- **GS4.** Vendor coordination and follow-up
- **GS5.** Restrictions for transporting dangerous goods.
- **GS6.** Customs regulations for import and export
- **GS7.** Cross-check the data at various master data levels and ensure sanity









- **GS8.** Draw inferences and conclusions based on the analysis
- **GS9.** Identify common trends as per analysis and implement the same
- **GS10.** Perform work-related calculations
- **GS11.** Plan and prioritise tasks to ensure timely completion









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Booking and transportation	26	52	-	8
PC1. Collect complete data of the shipment, including weight, value, type, dimensions, urgency, incoterms, documentation, date of arrival/ transport, origin, destination etc.	1	3	-	1
PC2. Prepare route plans with the networks set up, depending upon the transit time and budget allotted for the shipment.	1	3	-	-
PC3. Check space availability and the cost for different modes of transport.	1	3	-	1
PC4. Collect information about current situations, contingencies like congestion in ports, weather conditions etc. which might affect transit.	1	3	-	-
PC5. Decide on aspects like nearest hubs. It is not necessary that major hubs or gateways be used at all times.	1	3	-	1
PC6. Discuss with the consignee/ stakeholders about the available route options with ETA, cost and other possible hurdles.	2	3	-	-
PC7. Once the route is finalised, book space for each mode of transport using the concerned transport provider's software.	1	3	-	1
PC8. Plan Alternative and additional Transport Corridors according to Customer Needs.	1	3	-	-
PC9. Ensure that Infrastructure and Equipment at transit or connecting point are available.	1	3	-	1
PC10. Confirm that the Operation of cargo / Transshipment at the Transit point is handled according to the customs process.	2	3	-	-
PC11. Make sure that the goods are packed per the transit, transporter, customs etc. requirements and the transit documents, like the Airway bill are fixed properly on the package.	1	3	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. Ensure that the rules and regulations of transhipment according to the ports, transiting hubs, and customs are met while transporting and handling the cargo.	2	3	-	-
PC13. Assess the risks of Political situations, Port Congestion, Strikes, Riot, Backlog of common carriers, unforeseen costs from special handling etc.	2	3	-	1
PC14. Select the Strongest Agents in the planned Corridors.	1	3	-	-
PC15. Prepare transport documents according to the carriers, e.g., contract of carriage, bill of lading etc.	2	3	-	1
PC16. Ensure that tracking devices are added to the shipment and tracking is possible during the entire transit.	2	3	-	-
PC17. Confirm that proper repacking and consolidation happens when switching between modes of transport.	2	2	-	-
PC18. Organize manpower and storage space across disparate facilities.	2	2	-	-
Route optimization	4	8	-	2
PC19. Use navigational tools integrated with data from weather stations, satellites etc. for analyzing real-time traffic.	1	2	-	1
PC20. Analyse the demand patterns, wait times and historical records to improve efficiency.	1	2	-	-
PC21. Integrate existing transport management systems with Al-powered monitoring tools that identify potential dangers, such as accidents or obstructions, and send automated alerts with alternatives for prompt action.	1	2	-	1
PC22. Ensure cost efficiency by optimising the route and reducing the distance a shipment travels, resulting in less fuel consumption and reduced maintenance costs.	1	2	-	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N6503
NOS Name	Transportation and Route Optimization through Multimodal Network
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Transport Management
NSQF Level	5.5
Credits	2
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









LSC/N6504: Tracking and Tracing

Description

This OS is about Tracking and Tracing a shipment sent through Multimodal transportation.

Scope

The scope covers the following:

Tracking and Tracing

Elements and Performance Criteria

Tracking and Tracing

To be competent, the user/individual on the job must be able to:

- **PC1.** Consolidate all the data of the shipment like the various carriers, routes, modes of transport, contact information of the carriers and stakeholders, ETA etc.
- **PC2.** Collect complete tracking identifiers listed below from carriers:
 - Transport contract identifiers such as waybills or consignment notes.
 - Transport means identifiers (e.g., IMO vessel number or truck license plate).
 - Transport equipment identifiers (e.g., shipping container/ULD/rail car IDs).
 - Transport movement identifiers (e.g., voyage number or flight); and
 - Identifier of all cargo carried by a transporter means for a specific transport movement (i.e., manifest).
- **PC3.** Check the current status of the consignment using online tracking tools and match it with the master-level identifiers.
- **PC4.** Check whether the status is getting updated at regular intervals.
- **PC5.** Confirm whether the consignment is progressing as scheduled, and the event milestones are reached.
- **PC6.** Check whether the physical handling of the shipment is happening as per the process.
- **PC7.** If the consignment is delayed, coordinate with the carrier, check the below, and document the same:
 - · Reason for delay?
 - Whether the issue can be resolved?
 - When will the shipment move?
 - Will the ETA get impacted?
- **PC8.** If the status of the shipment is not updated in the tracking system, raise a complaint with the carrier about the same.
- **PC9.** Check for the last transit point updated and contact the concerned hub directly to know the status.
- **PC10.** Regularly follow up with the concerned department of transportation/ carrier/ handler/ driver etc., for the current status of the shipment and match that with the same of online tracking.
- **PC11.** In case of a tracking device fixed in the consignment, check for its status online at regular intervals.
- **PC12.** Monitor the shipment on both master level and unit level and check whether the status of both matches.









PC13. Keep all the stakeholders informed about the status of the shipment and additional information about any changes in the transit time, exigencies etc.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Tracking technology and methods used by the carriers
- KU2. Real-time tracking devices and methods used
- **KU3.** The importance of tracing in increasing efficiency
- **KU4.** Knowledge of intermodal and combined transport, split bulk cargo and general cargo transport
- **KU5.** Unaccompanied combined transport (UCT)
- **KU6.** Transhipment process and regulations
- KU7. Various equipment/ MHE used for loading/ unloading
- **KU8.** Advantages and disadvantages of using multimodal transport
- **KU9.** Challenges and factors that affect the flow of shipment
- **KU10.** Rules and regulations involved in all types of transport
- **KU11.** Documentation for types of goods and transportation method
- **KU12.** Geographical knowledge and usage of maps, route plotting
- **KU13.** Records to be maintained and the importance of the same
- **KU14.** Security procedures to be followed and escalation matrix for reporting identified problems
- **KU15.** Chain of command for notifying problems
- KU16. Knowledge of how the company deals with issues while transporting consignments
- **KU17.** Knowledge of transit rules and regulations
- **KU18.** Implications of poor performance such as delayed pick-up, improper documentation and high error rate
- **KU19.** End-to-end understanding of all activities that will be done
- **KU20.** Nature of the products transported and the variances in their characteristics
- **KU21.** Detailed understanding of the tracking systems
- **KU22.** Ability to accurately estimate travel time required
- **KU23.** Understanding of common problems and solutions for the same

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** How to register in transporter portals
- **GS2.** Create contracts with service providers
- **GS3.** Negotiating for cost and time optimisation
- **GS4.** Vendor coordination and follow-up
- **GS5.** Restrictions for transporting dangerous goods









- **GS6.** Customs regulations for import and export
- **GS7.** Cross-check the data at various master data levels and ensure sanity
- **GS8.** Draw inferences and conclusions based on the analysis
- **GS9.** Identify common trends as per analysis and implement the same
- **GS10.** Perform work-related calculations
- **GS11.** Plan and prioritise tasks to ensure timely completion









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Tracking and Tracing	30	60	-	10
PC1. Consolidate all the data of the shipment like the various carriers, routes, modes of transport, contact information of the carriers and stakeholders, ETA etc.	3	4	-	1
 Collect complete tracking identifiers listed below from carriers: Transport contract identifiers such as waybills or consignment notes. Transport means identifiers (e.g., IMO vessel number or truck license plate). Transport equipment identifiers (e.g., shipping container/ULD/rail car IDs). Transport movement identifiers (e.g., voyage number or flight); and Identifier of all cargo carried by a transporter means for a specific transport movement (i.e., manifest). 	2	5	-	1
PC3. Check the current status of the consignment using online tracking tools and match it with the master-level identifiers.	2	4	-	1
PC4. Check whether the status is getting updated at regular intervals.	2	5	-	-
PC5. Confirm whether the consignment is progressing as scheduled, and the event milestones are reached.	2	5	-	1
PC6. Check whether the physical handling of the shipment is happening as per the process.	2	5	-	-
 PC7. If the consignment is delayed, coordinate with the carrier, check the below, and document the same: Reason for delay? Whether the issue can be resolved? When will the shipment move? Will the ETA get impacted? 	3	5	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC8. If the status of the shipment is not updated in the tracking system, raise a complaint with the carrier about the same.	2	5	-	1
PC9. Check for the last transit point updated and contact the concerned hub directly to know the status.	3	5	-	1
PC10. Regularly follow up with the concerned department of transportation/ carrier/ handler/ driver etc., for the current status of the shipment and match that with the same of online tracking.	2	4	-	-
PC11. In case of a tracking device fixed in the consignment, check for its status online at regular intervals.	2	5	-	1
PC12. Monitor the shipment on both master level and unit level and check whether the status of both matches.	2	4	-	1
PC13. Keep all the stakeholders informed about the status of the shipment and additional information about any changes in the transit time, exigencies etc.	3	4	-	1
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N6504
NOS Name	Tracking and Tracing
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Transport Management
NSQF Level	5.5
Credits	3
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









LSC/N6505: Manage contingencies in transport

Description

This OS is about Managing contingencies that arise while sending shipments through Multimodal transportation.

Scope

The scope covers the following:

- · Damaged shipment
- Lost shipment
- Transit Delay

Elements and Performance Criteria

Damaged shipment

To be competent, the user/individual on the job must be able to:

- **PC1.** If the shipment is reported as damaged by the carrier during transit, collect the photos and inform the carrier to examine the extent of damage.
- **PC2.** In case of tertiary damage, i.e., only the outer packing is damaged, coordinate with the carrier/ stakeholder to repack the shipment for further transit and record the incident accordingly.
- **PC3.** In the scenario of the primary or secondary packing being damaged and the contents of the shipment being intact, coordinate with the shipper/ consignee on the next steps and whether the shipment will be accepted with repacking.
- **PC4.** If the shipper/ consignee is not fine with further connecting the repacked shipment, coordinate with the carrier for having the shipment returned to origin or stored till further instruction.
- **PC5.** If the complete shipment is damaged, including the contents, coordinate with the stakeholders/ shipper/ consignee for further instructions/ repair/ return/ scrap etc.
- **PC6.** File for insurance or claim according to the SOP signed with carrier and perform root cause analysis if required

Lost shipment

To be competent, the user/individual on the job must be able to:

- **PC7.** If the shipment status is not updated for more than 24 hours, the lost shipment process must be followed.
- **PC8.** Initiate the searching process and check with the last updated hub for status updates.
- **PC9.** Once the shipment status is received, coordinate with the carrier for the status to be updated in tracking software.
- **PC10.** Collect information about the tracking device used and check data on its direct interface.
- **PC11.** Check manually with the direct transporter like driver, loader etc. for the status of shipment and whether the tracking device is faulty or needs to be charged, replaced etc.









- **PC12.** If the shipment has left a transit hub and has not reached the next hub/ station, track it with transport equipment identifiers (e.g., shipping container number/ULD/rail car IDs). If the status is available, wait for the container/ ULD to reach the next station and coordinate with them for the individual status of the shipment.
- **PC13.** If the shipment is still untraceable with the master tracking IDs, start the manual searching process of individually coordinating with the ground-level staff like drivers, loaders, cargo handlers at transshipment hubs etc.
- **PC14.** Check for CCTV footage, lost and found hub, unlabeled shipments, etc., as per the SOP set up with the carriers.
- **PC15.** Check with the consignee whether the shipment is delivered or reached the destination without the tracking details being updated.
- **PC16.** Register complaints according to the carrier's SOP and the contracts signed with them.
- **PC17.** In case of the shipment declared as lost, File for insurance or claim according to the SOP signed with carrier and perform root cause analysis if required.

Transit Delay

To be competent, the user/individual on the job must be able to:

- **PC18.** Consider a shipment under transit delay if it does not move as scheduled, and eventually, the ETA is affected or postponed.
- **PC19.** If the shipment deviates from the route assigned or is found to be travelling past the destination, follow the steps mentioned below.
- **PC20.** Investigate with the carrier why the shipment has not moved as planned and if the reason is found due to negligence by carrier/ handler, e.g., lack of loaders/ MHE, space constraints due to failed bookings, infrastructure failures etc.
- **PC21.** Escalate the situation according to the SOP/ matrix received from the carrier and file for a claim if required.
- **PC22.** Ensure that the shipment is connected through the next possible connection.
- **PC23.** If the shipment is stuck for customs clearance, check with the CHA or the carrier coordinating with the reason for the hold and if any additional paperwork is required for clearance.
- **PC24.** In the case of the shipment being delayed due to uncontrollable scenarios from the customs end, like physical inspection, congestion at the port, change of officers, revision of acts etc., keep the shipper, consignee and other stakeholders informed.
- **PC25.** Plan for the next connection according to the anticipated clearance date and inform the next carrier.
- **PC26.** If the transit is delayed due to unforeseen circumstances like natural disasters, War/ like operations, technical failures/ vehicle breakdowns/ epidemics, strikes, government directions or force majeure, etc., check with the current carrier/ handler for safe storage of the shipment and the cost for the same.
- **PC27.** If the delay is more than anticipated and the situation remains unclear, coordinate with the shipper, consignee/ stakeholders etc., for the next plan of action.
- **PC28.** If the shipment is delayed due to Accidents, road construction, inclement weather enroute, road debris, rush-hour congestion etc., check with the carrier on next plan for compensating the loss of transit time and update the stakeholders accordingly.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:









- **KU1.** Tracking technology and methods used by the carriers
- **KU2.** Real-time tracking devices and methods used
- **KU3.** The importance of tracing in increasing efficiency
- **KU4.** Knowledge of intermodal and combined transport, split bulk cargo and general cargo transport
- **KU5.** Unaccompanied combined transport (UCT)
- **KU6.** Transhipment process and regulations
- **KU7.** Various equipment/ MHE used for loading/ unloading
- KU8. Advantages and disadvantages of using multimodal transport
- **KU9.** Challenges and factors that affect the flow of shipment
- **KU10.** Rules and regulations involved in all types of transport
- **KU11.** Documentation for types of goods and transportation method
- **KU12.** Geographical knowledge and usage of maps and route plotting
- **KU13.** Records to be maintained and the importance of the same
- **KU14.** Security procedures to be followed and escalation matrix for reporting identified problems
- **KU15.** Chain of command for notifying problems
- KU16. Knowledge of how the company deals with issues while transporting consignments
- **KU17.** Knowledge of transit rules and regulations
- **KU18.** Implications of poor performance such as delayed pick-up, improper documentation and high error rate
- KU19. End-to-end understanding of all activities that will be done
- **KU20.** Nature of the products transported and the variances in their characteristics
- **KU21.** Detailed understanding of the tracking systems
- **KU22.** Ability to accurately estimate travel time required
- **KU23.** Understanding of common problems and solutions for the same

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** How to register in transporter portals
- **GS2.** Create contracts with service providers
- **GS3.** Negotiating for cost and time optimisation
- **GS4.** Vendor coordination and follow-up
- **GS5.** Restrictions for transporting dangerous goods
- **GS6.** Customs regulations for import and export
- **GS7.** Cross-check the data at various master data levels and ensure sanity
- **GS8.** Draw inferences and conclusions based on the analysis
- **GS9.** Identify common trends as per analysis and implement the same
- **GS10.** Perform work-related calculations
- **GS11.** Plan and prioritise tasks to ensure timely completion









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Damaged shipment	6	12	-	3
PC1. If the shipment is reported as damaged by the carrier during transit, collect the photos and inform the carrier to examine the extent of damage.	1	2	-	1
PC2. In case of tertiary damage, i.e., only the outer packing is damaged, coordinate with the carrier/ stakeholder to repack the shipment for further transit and record the incident accordingly.	1	2	-	-
PC3. In the scenario of the primary or secondary packing being damaged and the contents of the shipment being intact, coordinate with the shipper/consignee on the next steps and whether the shipment will be accepted with repacking.	1	2	-	-
PC4. If the shipper/ consignee is not fine with further connecting the repacked shipment, coordinate with the carrier for having the shipment returned to origin or stored till further instruction.	1	2	-	1
PC5. If the complete shipment is damaged, including the contents, coordinate with the stakeholders/ shipper/ consignee for further instructions/ repair/ return/ scrap etc.	1	2	-	-
PC6. File for insurance or claim according to the SOP signed with carrier and perform root cause analysis if required	1	2	-	1
Lost shipment	12	24	-	5
PC7. If the shipment status is not updated for more than 24 hours, the lost shipment process must be followed.	1	2	-	1
PC8. Initiate the searching process and check with the last updated hub for status updates.	1	3	-	-
PC9. Once the shipment status is received, coordinate with the carrier for the status to be updated in tracking software.	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. Collect information about the tracking device used and check data on its direct interface.	1	2	-	1
PC11. Check manually with the direct transporter like driver, loader etc. for the status of shipment and whether the tracking device is faulty or needs to be charged, replaced etc.	1	3	-	-
PC12. If the shipment has left a transit hub and has not reached the next hub/ station, track it with transport equipment identifiers (e.g., shipping container number/ULD/rail car IDs). If the status is available, wait for the container/ ULD to reach the next station and coordinate with them for the individual status of the shipment.	1	2	-	1
PC13. If the shipment is still untraceable with the master tracking IDs, start the manual searching process of individually coordinating with the ground-level staff like drivers, loaders, cargo handlers at transshipment hubs etc.	1	2	-	-
PC14. Check for CCTV footage, lost and found hub, unlabeled shipments, etc., as per the SOP set up with the carriers.	1	2	-	1
PC15. Check with the consignee whether the shipment is delivered or reached the destination without the tracking details being updated.	1	2	-	-
PC16. Register complaints according to the carrier's SOP and the contracts signed with them.	2	2	-	-
PC17. In case of the shipment declared as lost, File for insurance or claim according to the SOP signed with carrier and perform root cause analysis if required.	1	2	-	1
Transit Delay	12	24	-	2
PC18. Consider a shipment under transit delay if it does not move as scheduled, and eventually, the ETA is affected or postponed.	1	2	-	-
PC19. If the shipment deviates from the route assigned or is found to be travelling past the destination, follow the steps mentioned below.	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC20. Investigate with the carrier why the shipment has not moved as planned and if the reason is found due to negligence by carrier/ handler, e.g., lack of loaders/ MHE, space constraints due to failed bookings, infrastructure failures etc.	1	2	-	1
PC21. Escalate the situation according to the SOP/ matrix received from the carrier and file for a claim if required.	1	2	-	-
PC22. Ensure that the shipment is connected through the next possible connection.	1	2	-	-
PC23. If the shipment is stuck for customs clearance, check with the CHA or the carrier coordinating with the reason for the hold and if any additional paperwork is required for clearance.	1	2	-	1
PC24. In the case of the shipment being delayed due to uncontrollable scenarios from the customs end, like physical inspection, congestion at the port, change of officers, revision of acts etc., keep the shipper, consignee and other stakeholders informed.	1	2	-	-
PC25. Plan for the next connection according to the anticipated clearance date and inform the next carrier.	1	2	-	-
PC26. If the transit is delayed due to unforeseen circumstances like natural disasters, War/ like operations, technical failures/ vehicle breakdowns/ epidemics, strikes, government directions or force majeure, etc., check with the current carrier/ handler for safe storage of the shipment and the cost for the same.	1	2	-	-
PC27. If the delay is more than anticipated and the situation remains unclear, coordinate with the shipper, consignee/ stakeholders etc., for the next plan of action.	2	3	-	-
PC28. If the shipment is delayed due to Accidents, road construction, inclement weather enroute, road debris, rush-hour congestion etc., check with the carrier on next plan for compensating the loss of transit time and update the stakeholders accordingly.	1	3	-	-









Assessment Criteria for Outcomes	Theory	Practical	Project	Viva
	Marks	Marks	Marks	Marks
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N6505
NOS Name	Manage contingencies in transport
Sector	Logistics
Sub-Sector	Generic
Occupation	Transport Management
NSQF Level	5.5
Credits	3
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









LSC/N6506: Risk Management in transportation

Description

This OS explains how to perform freight spend & risk analysis and risk management.

Scope

The scope covers the following:

- Perform freight spend & risk analysis.
- Risk management

Elements and Performance Criteria

Perform freight spend & risk analysis

To be competent, the user/individual on the job must be able to:

- **PC1.** Perform spending analysis with all forward and reverse costs considered.
- **PC2.** Populate data from different software like TMS, fuel purchasing systems, truckload carrier accounting systems, customs, bill of lading data, and any others.
- **PC3.** Collect trucking spot freight rates, contracted freight trends, current truck equipment orders, and outbound and inbound data.
- **PC4.** Compare findings to industry trends.
- **PC5.** Prepare a scorecard and use the same for easy comparison of carrier performances based on different factors.
- **PC6.** Substantiate findings using facts-based analysis and quantification of exposures.
- **PC7.** Assess the effectiveness of business monitoring procedures and processes.
- **PC8.** Shift from stagnant or point-in-time reviews to focused implementation of ongoing monitoring.
- **PC9.** Analyse company stock and location data for optimal routing.
- **PC10.** Identify ways to optimise "less than truckload" shipments. Inefficient truck utilisation leads to revenue leaks.
- **PC11.** The capacity of freight vessels and trains should be utilised at least at a rate of over 70% per trip in order to maintain profitability.
- **PC12.** Identify high-risk business areas, products, freight carriers, business lines, and geographies to focus efforts.
- **PC13.** Analyse overall freight expenses to identify anomalies.
- **PC14.** Utilise available infrastructure to the maximum.
- **PC15.** Collate data from tracing and analyse the same for patterns on transit time, delays and service failures.

Risk Management

To be competent, the user/individual on the job must be able to:

PC16. Allocate full capacities to orders, and plan transportation itineraries and frequency.









- **PC17.** Provide insights to the management by developing a deeper understanding of freight expenses to identify opportunities for improvement with (efficiency and control environment).
- **PC18.** Use a route optimisation solution to optimise delivery routes around changing traffic conditions.
- **PC19.** Use a transportation planning solution that integrates supply chain planning and shipping execution to assess real-time risk across the supply chain.
- **PC20.** Integrate a shipment planning window with TMS that covers projection for several days forward and order management, procurement, and supply chain optimisation solutions.
- **PC21.** Use technologies like weatheroptics to forecast and enhance the solutions for risks related to weather conditions. This allows rerouting of vehicles to minimize the impact of weather hazards.
- **PC22.** Choose carriers with better vehicle maintenance and safety records, which reduces the risk of transit delays due to vehicle breakdowns.
- **PC23.** Integrate digital freight markets and brokerages into TMS, which will help optimise cost and analyse the quotes.
- **PC24.** Choose vendors with APIs for posting loads, booking, tendering, and tracking. Carriers using digital fleet management and TMS solutions with highly automated material handling reduce the risk of lost shipments.
- **PC25.** Identify alternate ports and CFS/ ICDs, which decrease the risk of delay. Build agility into processes so that switch ports are available if needed.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Tracking technology and methods used by the carriers.
- **KU2.** Real-time tracking devices and methods used.
- **KU3.** The importance of tracing in increasing efficiency.
- **KU4.** Knowledge of Intermodal and Combined Transport, Split bulk cargo and general cargo transport.
- **KU5.** Unaccompanied combined transport (UCT).
- **KU6.** Transshipment process and regulations.
- **KU7.** Various equipment/ MHE used for loading/ unloading.
- **KU8.** Advantages and Disadvantages of using Multimodal Transport.
- **KU9.** Challenges and factors that affect the flow of shipment.
- **KU10.** Rules and regulations involved in all types of transport.
- **KU11.** Documentation for types of goods and transportation method.
- **KU12.** Geographical knowledge and usage of maps and route plotting.
- **KU13.** Records to be maintained and the importance of the same.
- **KU14.** Security procedures to be followed and escalation matrix for reporting identified problems.
- **KU15.** Chain of command for reporting problems.
- **KU16.** Knowledge of how the company deals with issues while transporting consignments.
- **KU17.** Knowledge of transit rules and regulations.









- **KU18.** Implications of poor performance such as delayed pick-up, improper documentation and high error rate.
- **KU19.** End-to-end understanding of all activities that will be done.
- KU20. Nature of the products transported and the variances in their characteristics.
- **KU21.** Detailed understanding of the tracking systems.
- **KU22.** Ability to accurately estimate travel time required.
- **KU23.** Understanding of common problems and solutions for the same.

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** How to register in transporter portals.
- **GS2.** Create contracts with service providers.
- **GS3.** Negotiating for cost and time optimisation.
- **GS4.** Vendor coordination and follow-up.
- **GS5.** Restrictions for transporting dangerous goods.
- **GS6.** Customs regulations for import and export.
- **GS7.** Cross-check the data at various master data levels and ensure sanity.
- **GS8.** Draw inferences and conclusions based on the analysis.
- **GS9.** Identify common trends as per analysis and implement the same.
- **GS10.** Perform work-related calculations.
- **GS11.** Plan and prioritise tasks to ensure timely completion.









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Perform freight spend & risk analysis	17	34	-	6
PC1. Perform spending analysis with all forward and reverse costs considered.	1	2	-	-
PC2. Populate data from different software like TMS, fuel purchasing systems, truckload carrier accounting systems, customs, bill of lading data, and any others.	1	3	-	-
PC3. Collect trucking spot freight rates, contracted freight trends, current truck equipment orders, and outbound and inbound data.	2	2	-	1
PC4. Compare findings to industry trends.	1	2	-	-
PC5. Prepare a scorecard and use the same for easy comparison of carrier performances based on different factors.	1	3	-	-
PC6. Substantiate findings using facts-based analysis and quantification of exposures.	1	2	-	-
PC7. Assess the effectiveness of business monitoring procedures and processes.	1	2	-	-
PC8. Shift from stagnant or point-in-time reviews to focused implementation of ongoing monitoring.	1	2	-	1
PC9. Analyse company stock and location data for optimal routing.	1	3	-	1
PC10. Identify ways to optimise "less than truckload" shipments. Inefficient truck utilisation leads to revenue leaks.	1	2	-	1
PC11. The capacity of freight vessels and trains should be utilised at least at a rate of over 70% per trip in order to maintain profitability.	1	2	-	-
PC12. Identify high-risk business areas, products, freight carriers, business lines, and geographies to focus efforts.	2	3	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. Analyse overall freight expenses to identify anomalies.	1	2	-	-
PC14. Utilise available infrastructure to the maximum.	1	2	-	-
PC15. Collate data from tracing and analyse the same for patterns on transit time, delays and service failures.	1	2	-	1
Risk Management	13	26	-	4
PC16. Allocate full capacities to orders, and plan transportation itineraries and frequency.	1	2	-	1
PC17. Provide insights to the management by developing a deeper understanding of freight expenses to identify opportunities for improvement with (efficiency and control environment).	1	2	-	1
PC18. Use a route optimisation solution to optimise delivery routes around changing traffic conditions.	1	3	-	-
PC19. Use a transportation planning solution that integrates supply chain planning and shipping execution to assess real-time risk across the supply chain.	1	2	-	1
PC20. Integrate a shipment planning window with TMS that covers projection for several days forward and order management, procurement, and supply chain optimisation solutions.	1	3	-	1
PC21. Use technologies like weatheroptics to forecast and enhance the solutions for risks related to weather conditions. This allows rerouting of vehicles to minimize the impact of weather hazards.	2	3	-	-
PC22. Choose carriers with better vehicle maintenance and safety records, which reduces the risk of transit delays due to vehicle breakdowns.	1	2	-	-
PC23. Integrate digital freight markets and brokerages into TMS, which will help optimise cost and analyse the quotes.	2	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC24. Choose vendors with APIs for posting loads, booking, tendering, and tracking. Carriers using digital fleet management and TMS solutions with highly automated material handling reduce the risk of lost shipments.	1	3	-	-
PC25. Identify alternate ports and CFS/ ICDs, which decrease the risk of delay. Build agility into processes so that switch ports are available if needed.	2	4	-	-
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N6506
NOS Name	Risk Management in transportation
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Transport Management
NSQF Level	5.5
Credits	2
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









LSC/N9911: Follow health, safety, security procedures and maintain integrity, ethics at workplace

Description

This unit deals in detail with application of health, safety, security procedures at workplace and maintaining integrity, ensuring data security, professional and ethical practice.

Scope

The scope covers the following:

- Follow health, safety and security measures during all activities
- Maintain a healthy and hygienic workplace
- Handle emergency situations
- Maintain integrity and ensure data security
- Professional and ethical practice
- Ensure regulatory compliance

Elements and Performance Criteria

Follow health, safety and security measures during all activities

To be competent, the user/individual on the job must be able to:

- **PC1.** Comply with safety regulations and procedures to avoid fire hazards, biohazards, etc.
- **PC2.** Wear all safety equipment including protective gear, helmets etc., in relevant bay areas.
- **PC3.** Follow organisation procedures concerning documentation.
- **PC4.** Recognise unsafe workplace conditions and safety practices and report them to concerned authorities.

Maintain a healthy and hygienic workplace

To be competent, the user/individual on the job must be able to:

- **PC5.** Ensure that the work area and supplies are organised and cleaned regularly.
- **PC6.** Comply with data safety regulations of the organisation and follow clear worktable area policy.
- **PC7.** Maintain personal hygiene and wash hands regularly using soap and water or alcohol-based sanitizer.
- **PC8.** Undertake periodical preventive health check-ups.
- **PC9.** Participate in fire drills and follow 5S at workplace.

Handle emergency situations

To be competent, the user/individual on the job must be able to:

- **PC10.** Act immediately during emergencies and move to safety.
- **PC11.** Provide first aid to affected victims e.g., in case of bleeding, burns, choking, electric shock, poisoning etc.
- **PC12.** In case of fire, follow fire safety practices taught during fire drills.
- **PC13.** Follow procedures to rescue victims of fire without endangering self.









Maintain integrity and ensure data security

To be competent, the user/individual on the job must be able to:

- **PC14.** Refrain from indulging in corrupt practices.
- **PC15.** Protect customers' information and ensure acquired information is not used for personal advantage.
- **PC16.** Protect data and information related to business or commercial decisions.

Professional and ethical practice

To be competent, the user/individual on the job must be able to:

- **PC17.** Sensitize the workforce towards ethical behaviour in the workplace and performing jobs with integrity.
- **PC18.** Conduct regular reviews, check reports for unethical behaviour and corrupt practices and promptly report all violations of the code of ethics.
- **PC19.** Consult senior management when in an ethical dilemma.

Ensure regulatory compliance

To be competent, the user/individual on the job must be able to:

- **PC20.** Check that documentation concerning operations is up to date and in accordance with the regulations.
- **PC21.** Coordinate with regulatory authorities and assist in inspections and clearances.
- **PC22.** Report any issues with regulatory compliance.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Company's policies on the use of language, Human Resources policies, code of ethics and business
- **KU2.** Company's whistle-blower policy and rules related to sexual harassment
- **KU3.** Company's reporting structure and documentation policy
- **KU4.** Principles of code of ethics and business ethics
- **KU5.** Different regulations and acts that are applicable for the sub-sector and logistics sector as a whole
- **KU6.** The documentary compliance required for different type of products for Health Safety and Environment (HSE) practices
- **KU7.** Relevant Occupational Health and Safety (OHS) regulations
- **KU8.** Enterprise /site emergency procedures and techniques
- **KU9.** Procedures for recording, reporting and maintenance of workplace safety and hygiene
- **KU10.** Health and safety hazards commonly present in the work environment and related precautions
- **KU11.** Possible causes of risk, hazard or accident in the workplace
- **KU12.** Where to find all the general health and safety equipment in the workplace
- **KU13.** Various dangers associated with the use of electrical equipment
- **KU14.** Preventative and remedial actions to be taken in the case of exposure to toxic materials
- **KU15.** Importance of using protective clothing/equipment while working









- KU16. Various causes of fire and precautionary activities to prevent the fire accident
- **KU17.** Different methods of extinguishing fire and techniques of using the different fire extinguishers
- **KU18.** Rescue techniques applied during a fire hazard and safe lifting and carrying practices
- **KU19.** Various types of safety signs and their meaning
- **KU20.** Appropriate basic first aid treatment relevant to the condition e.g., shock, electrical shock, bleeding, breaks to bones, minor burns, resuscitation, poisoning, eye injuries

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** Read policy documents, work-related documents, various acts and regulations
- **GS2.** Write instructions, communications to internal staff, emails and letters, and reports
- **GS3.** Interact with internal and external stakeholders
- **GS4.** Communicate with peers and subordinates
- **GS5.** Take appropriate action in a vulnerable situation
- **GS6.** Identify breaches and take necessary actions
- **GS7.** Identify the documentary requirement for a specific product or regulation and take necessary action
- **GS8.** Plan and organise steps/ actions as per the company's guidelines, if any violation of the code of ethics is noticed in the company
- **GS9.** Plan and organise training sessions and sensitisation sessions for workforce
- **GS10.** Plan review meetings to monitor compliance with ethics and regulations
- **GS11.** Prevent company and customer information leakage
- **GS12.** Provide proper advice or guidance to colleagues to deal with sensitive issues
- **GS13.** Suggest solutions to managers and workers when in an ethical dilemma
- **GS14.** Identify conflict of interests and take necessary actions
- **GS15.** Review reports to identify common trends of defaults
- **GS16.** Conduct a review to analyse the reasons for the default
- **GS17.** Check that all regulatory compliances are adhered to
- **GS18.** Check that any unethical behaviour gets captured before damage or negative impact happens
- GS19. Write Health and safety compliance report
- **GS20.** Interpret general health and safety guidelines
- **GS21.** Communicate general health and safety guidelines to co-workers
- **GS22.** Decide on the corrective action to be taken in case of any potential hazards









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Follow health, safety and security measures during all activities	6	10	-	2
PC1. Comply with safety regulations and procedures to avoid fire hazards, biohazards, etc.	1	2	-	-
PC2. Wear all safety equipment including protective gear, helmets etc., in relevant bay areas.	2	3	-	1
PC3. Follow organisation procedures concerning documentation.	1	2	-	-
PC4. Recognise unsafe workplace conditions and safety practices and report them to concerned authorities.	2	3	-	1
Maintain a healthy and hygienic workplace	5	14	-	3
PC5. Ensure that the work area and supplies are organised and cleaned regularly.	1	3	-	1
PC6. Comply with data safety regulations of the organisation and follow clear worktable area policy.	1	3	-	-
PC7. Maintain personal hygiene and wash hands regularly using soap and water or alcohol-based sanitizer.	1	2	-	1
PC8. Undertake periodical preventive health check-ups.	1	3	-	1
PC9. Participate in fire drills and follow 5S at workplace.	1	3	-	-
Handle emergency situations	6	9	-	2
PC10. Act immediately during emergencies and move to safety.	2	2	-	1
PC11. Provide first aid to affected victims e.g., in case of bleeding, burns, choking, electric shock, poisoning etc.	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. In case of fire, follow fire safety practices taught during fire drills.	2	3	-	-
PC13. Follow procedures to rescue victims of fire without endangering self.	1	2	-	1
Maintain integrity and ensure data security	4	8	-	-
PC14. Refrain from indulging in corrupt practices.	2	3	-	-
PC15. Protect customers' information and ensure acquired information is not used for personal advantage.	1	2	-	-
PC16. Protect data and information related to business or commercial decisions.	1	3	-	-
Professional and ethical practice	4	8	-	1
PC17. Sensitize the workforce towards ethical behaviour in the workplace and performing jobs with integrity.	1	2	-	-
PC18. Conduct regular reviews, check reports for unethical behaviour and corrupt practices and promptly report all violations of the code of ethics.	2	4	-	1
PC19. Consult senior management when in an ethical dilemma.	1	2	-	-
Ensure regulatory compliance	5	11	-	2
PC20. Check that documentation concerning operations is up to date and in accordance with the regulations.	1	3	-	-
PC21. Coordinate with regulatory authorities and assist in inspections and clearances.	2	4	-	1
PC22. Report any issues with regulatory compliance.	2	4	-	1
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	LSC/N9911
NOS Name	Follow health, safety, security procedures and maintain integrity, ethics at workplace
Sector	Logistics
Sub-Sector	Generic
Occupation	Generic
NSQF Level	6
Credits	1
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024









DGT/VSQ/N0103: Employability Skills (90 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

- **PC1.** understand the significance of employability skills in meeting the current job market requirement and future of work
- **PC2.** identify and explore learning and employability relevant portals
- **PC3.** research about the different industries, job market trends, latest skills required and the available opportunities

Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

- **PC4.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- **PC5.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

PC6. recognize the significance of 21st Century Skills for employment









- **PC7.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life
- **PC8.** adopt a continuous learning mindset for personal and professional development *Basic English Skills*

To be competent, the user/individual on the job must be able to:

- **PC9.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC10.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- **PC11.** write short messages, notes, letters, e-mails etc. in English

Career Development & Goal Setting

To be competent, the user/individual on the job must be able to:

- **PC12.** identify career goals based on the skills, interests, knowledge, and personal attributes
- PC13. prepare a career development plan with short- and long-term goals

Communication Skills

To be competent, the user/individual on the job must be able to:

- **PC14.** follow verbal and non-verbal communication etiquette while communicating in professional and public settings
- **PC15.** use active listening techniques for effective communication
- **PC16.** communicate in writing using appropriate style and format based on formal or informal requirements
- **PC17.** work collaboratively with others in a team

Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

- PC18. communicate and behave appropriately with all genders and PwD
- **PC19.** escalate any issues related to sexual harassment at workplace according to POSH Act

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- **PC20.** identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.
- **PC21.** carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook
- **PC22.** identify common components of salary and compute income, expenses, taxes, investments
- **PC23.** identify relevant rights and laws and use legal aids to fight against legal exploitation *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- **PC24.** operate digital devices and use their features and applications securely and safely
- **PC25.** carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.
- **PC26.** display responsible online behaviour while using various social media platforms









- PC27. create a personal email account, send and process received messages as per requirement
- **PC28.** carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications
- **PC29.** utilize virtual collaboration tools to work effectively

Entrepreneurship

To be competent, the user/individual on the job must be able to:

- **PC30.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC31.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC32.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

Customer Service

To be competent, the user/individual on the job must be able to:

- PC33. identify different types of customers and ways to communicate with them
- PC34. identify and respond to customer requests and needs in a professional manner
- **PC35.** use appropriate tools to collect customer feedback
- **PC36.** follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

- **PC37.** create a professional Curriculum vitae (Résumé)
- **PC38.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- **PC39.** apply to identified job openings using offline /online methods as per requirement
- **PC40.** answer questions politely, with clarity and confidence, during recruitment and selection
- **PC41.** identify apprenticeship opportunities and register for it as per guidelines and requirements

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** need for employability skills and different learning and employability related portals
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- **KU6.** importance of career development and setting long- and short-term goals
- **KU7.** about effective communication
- **KU8.** POSH Act
- **KU9.** Gender sensitivity and inclusivity
- **KU10.** different types of financial institutes, products, and services









- **KU11.** components of salary and how to compute income and expenditure
- **KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13. different legal rights and laws
- **KU14.** different types of digital devices and the procedure to operate them safely and securely
- KU15. how to create and operate an e-mail account
- **KU16.** use applications such as word processors, spreadsheets etc.
- **KU17.** how to identify business opportunities
- **KU18.** types and needs of customers
- **KU19.** how to apply for a job and prepare for an interview
- **KU20.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** read and write different types of documents/instructions/correspondence in English and other languages
- GS2. communicate effectively using appropriate language in formal and informal settings
- **GS3.** behave politely and appropriately with all to maintain effective work relationship
- **GS4.** how to work in a virtual mode, using various technological platforms
- **GS5.** perform calculations efficiently
- **GS6.** solve problems effectively
- **GS7.** pay attention to details
- **GS8.** manage time efficiently
- GS9. maintain hygiene and sanitization to avoid infection









Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
PC1. understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	-
PC2. identify and explore learning and employability relevant portals	-	-	-	-
PC3. research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
PC4. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC5. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	1	3	-	-
PC6. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC7. practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
PC8. adopt a continuous learning mindset for personal and professional development	-	-	-	-
Basic English Skills	3	4	-	-
PC9. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC11. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-
PC12. identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
PC13. prepare a career development plan with short- and long-term goals	-	-	-	-
Communication Skills	2	2	-	-
PC14. follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
PC15. use active listening techniques for effective communication	-	-	-	-
PC16. communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
PC17. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	1	-	-
PC18. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC19. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
PC20. identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
PC21. carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC22. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC23. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	5	-	-
PC24. operate digital devices and use their features and applications securely and safely	-	-	-	-
PC25. carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
PC26. display responsible online behaviour while using various social media platforms	-	-	-	-
PC27. create a personal email account, send and process received messages as per requirement	-	-	-	-
PC28. carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
PC29. utilize virtual collaboration tools to work effectively	-	-	-	-
Entrepreneurship	2	3	-	-
PC30. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC31. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC32. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
PC33. identify different types of customers and ways to communicate with them	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC34. identify and respond to customer requests and needs in a professional manner	-	-	-	-
PC35. use appropriate tools to collect customer feedback	-	-	-	-
PC36. follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
PC37. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC38. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC39. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC40. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC41. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-









National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0103
NOS Name	Employability Skills (90 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	5
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 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% for NSQF level 4 & above job roles and 50% for NSQF level 1 to 3 job roles.
- 6. In case of unsuccessful completion, the trainee may seek re-assessment on the Qualification Pack.

Minimum Aggregate Passing % at QP Level: 70









(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
LSC/N6501.Perform Freight Analysis	30	60	-	10	100	20
LSC/N6502.Building Multimodal Network	30	60	-	10	100	20
LSC/N6503.Transportation and Route Optimization through Multimodal Network	30	60	-	10	100	10
LSC/N6504.Tracking and Tracing	30	60	-	10	100	20
LSC/N6505.Manage contingencies in transport	30	60	-	10	100	10
LSC/N6506.Risk Management in transportation	30	60	-	10	100	10
LSC/N9911.Follow health, safety, security procedures and maintain integrity, ethics at workplace	30	60	-	10	100	5
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	5
Total	230	450	-	70	750	100









Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
TAT	Turn Around Time
UNCTAD	United Nations Conference on Trade and Development
BDP	Best Demonstrated Practices
VAS	Value Added Services
FOIS	Freight Operations Information System
eT-TR	Electronic Transmission of Railway Receipt
RFID	Radio Frequency Identification
IoT	Internet of Things
USP	Unique Selling Point
ICC	International Chamber of Commerce
MHE	Material Handling Equipment
KPI	Key Performance Indicator
SOP	Standard Operating Procedure
ETA	Estimated Time of Arrival
Al	Artificial Intelligence
IMO	International Maritime Organization
ULD	Unit Load Device
CCTV	Closed Circuit Television
СНА	Customs House Agent
TMS	Transportation Management System
API	Application Programming Interface









CFS	Container Freight Station
ICD	Inland Container Depot









Glossary

Sector	Sector is a conglomeration of different business operations having similar business 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.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
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.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a 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 quality of performance required.









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
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 at least 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.