









# Supply Chain Sustainability Specialist

QP Code: LSC/Q2901

Version: 1.0

NSQF Level: 6

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### LSC/Q2901: Supply Chain Sustainability Specialist

### **Brief Job Description**

Supply chain sustainability specialist is responsible for developing sustainable solutions across various functions in the supply chain. S/He will analyse and create SOPs to be followed for sustainability. The supply chain sustainability specialist will ensure the successful implementation of these processes with measurable results.

#### **Personal Attributes**

The individual must be attentive and a multi-tasker with problem-solving skills. S/he must be compassionate, observant and considerate of social and sustainable causes. S/he must possess good communication & interpersonal skills and should be Team-spirited, with Integrity and accountability. S/he must be able to pay attention to details, respect confidentiality and be open to learning new things.

### **Applicable National Occupational Standards (NOS)**

### **Compulsory NOS:**

- 1. LSC/N2901: Analyse the opportunities
- 2. LSC/N2902: Develop Sustainable Practices as per UN SDGs (Sustainable Development Goals)
- 3. LSC/N2903: Implement Sustainability in Transportation as per SDG 13 & 11
- 4. LSC/N2904: Implement Sustainability in Warehouse as per SDG 7 & 11
- 5. LSC/N2905: Implement Sustainable Practices as per SDGs and Measure Results
- 6. LSC/N9911: Follow health, safety, security procedures and maintain integrity, ethics at workplace
- 7. DGT/VSQ/N0103: Employability Skills (90 Hours)

### **Qualification Pack (QP) Parameters**

Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Sustainability
Country	India









NSQF Level	6
Credits	20
Aligned to NCO/ISCO/ISIC Code	NCO-2015/1324
Minimum Educational Qualification & Experience	Post Graduate (Completed 2-year PG program (Supply chain/ Environmental studies) with 1 Year of experience in supply chain OR Completed 3 year UG degree (Supply chain/ Environmental studies) with 2 Years of experience in supply chain OR 2-year Diploma after 12th grade (in any field) with 3 Years of experience in supply chain OR Previous relevant Qualification of NSQF Level (5) with 3 Years of experience in supply chain
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	23 Years
Last Reviewed On	NA
Next Review Date	15/03/2027
NSQC Approval Date	15/03/2024
Version	1.0
Reference code on NQR	QG-06-TW-02189-2024-V1-LSC
NQR Version	1.0









### LSC/N2901: Analyse the opportunities

### **Description**

This NOS is about collecting data and analysing the opportunities for implementing sustainability.

### Scope

The scope covers the following:

- · Research and collect data
- Analyse the opportunities

#### **Elements and Performance Criteria**

#### Research and collect data

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

- **PC1.** Collect data about the products and services used in the day-to-day operations of the company from internal and external stakeholders.
- **PC2.** Check whether the existing practices comply with applicable environmental, waste management and disposal regulations.
- **PC3.** Collect info on the recyclable, non-recyclable, non-biodegradable and hazardous waste products in daily operations.
- **PC4.** Gather information about the usage of different materials, natural resources including water, the pattern of electricity and fuel consumption.
- **PC5.** Collect information about materials that environmentally friendly substitutes can replace.
- **PC6.** Detect the business processes where sustainability could be integrated e.g. Returns Management, shipping etc.
- **PC7.** Differentiate the indicators of conventional management practices that lead to unutilised or waste of resources.
- **PC8.** Collect data on existing inventory control management.
- **PC9.** Explore the subsidies and benefits offered by the government and different organisations for investments in sustainability/ greening factors. E.g. setting up solar energy plants.

### Analyse the opportunities

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

- **PC10.** Evaluate information obtained from other departments and stakeholders.
- **PC11.** Perform materiality analysis of the products/ services acquired and used frequently.
- **PC12.** Analyse material audit reports to identify excessive consumption of material and water.
- **PC13.** Calculate the carbon footprint/emissions from the source of the products.
- **PC14.** Identify processes where material utilisation can be optimised.
- **PC15.** Conduct a cost-benefit analysis based on the factors that will undergo a change in the process of sustainability implementation.
- **PC16.** Discuss with Management the budget for the journey towards Sustainability and build a list of social innovation solutions.









- **PC17.** Communicate with industries and customers to understand and analyse various strategies, demands, and limitations in the market.
- **PC18.** Analyse energy/electricity consumption data and identify high energy/electricity consumption areas.
- **PC19.** Categorise processes where energy/electricity utilisation can be optimised and recommend the potential of using renewable energy.
- **PC20.** Identify the non-recyclable/non-degradable raw materials used in manufacturing the product/service.
- **PC21.** Measure the emissions/carbon footprints currently generated by the company using ISO-approved methods.
- **PC22.** Monitor material and water conservation processes for any process gaps.
- **PC23.** Perform risk management analysis based on factors that might be affected during the transition, like client expectations & requirements, stakeholder interests, and efficient usage of resources.
- **PC24.** Check the possibilities of implementing sustainability on the entire product life cycle involving design, production, distribution, consumer use, post-use recovery, and reuse.
- **PC25.** Analyse the inventory control and procurement methods currently followed and the scope of reducing the same. The results may be shorter lead times, reduced transportation costs, improved overall operational efficiency and significant sustainability.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Parameters of Global Sustainability.
- **KU2.** Significance of CO2 emissions and its impact on Global warming.
- **KU3.** Knowledge about material footprint per capita and material footprint per GDP.
- **KU4.** Stay updated about the initiatives taken by the Government and various organisations for sustainability.
- **KU5.** Legislative requirements and organisational procedures for waste management and disposal.
- **KU6.** Organisational procedures for safe handling of equipment and machine operations.
- **KU7.** Knowledge of Organisational Reporting protocol and documentation is required.
- **KU8.** Parameters and data required for material and energy audit.
- **KU9.** Latest methods of energy and material conservation.
- **KU10.** Knowledge of Environment-friendly materials available to replace conventional materials.
- **KU11.** Methods of reducing energy consumptions.
- **KU12.** Renewable energy sources that can be deployed in the workplace.
- **KU13.** Methods of optimum utilisation of waste and best practices for waste disposal.
- **KU14.** Methods of treating wastewater and recycling of water.
- **KU15.** Knowledge on Statutory documents and requirements relevant to safety and hygiene.
- KU16. UN Sustainable Development Goals (SDGs).
- **KU17.** Circular economy in logistics sector.
- **KU18.** Green logistics and conventional logistics and initiatives taken by Government.









**KU19.** Knowledge of Automation systems like AI, Block Chain and IoT-based systems, etc.

### **Generic Skills (GS)**

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

- **GS1.** Data, report management and analytical skills.
- **GS2.** Communicate with team members and colleagues on the significance of greening and sustainability.
- **GS3.** Take timely decisions with a systematic course of action and respond.
- **GS4.** Work constructively and collaboratively with others.
- **GS5.** How to rightly delegate tasks to improve efficiencies.
- **GS6.** Critical and socially responsible thinking.
- **GS7.** Ability to identify or procure needed resources to implement sustainability programs or projects.
- **GS8.** Write grant applications, rebate applications, or project proposals to secure funding for sustainability projects.
- **GS9.** Effective coordination with team members and stakeholders.
- **GS10.** Advanced knowledge of relevant computer applications and system evaluations.
- **GS11.** Complex problem solving and decision-making skills.
- **GS12.** Ability to set up processes and create SOPs.









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Research and collect data	9	20	-	3
<b>PC1.</b> Collect data about the products and services used in the day-to-day operations of the company from internal and external stakeholders.	1	2	-	-
<b>PC2.</b> Check whether the existing practices comply with applicable environmental, waste management and disposal regulations.	1	2	-	-
<b>PC3.</b> Collect info on the recyclable, non-recyclable, non-biodegradable and hazardous waste products in daily operations.	1	2	-	1
<b>PC4.</b> Gather information about the usage of different materials, natural resources including water, the pattern of electricity and fuel consumption.	1	2	-	-
<b>PC5.</b> Collect information about materials that environmentally friendly substitutes can replace.	1	2	-	-
<b>PC6.</b> Detect the business processes where sustainability could be integrated e.g. Returns Management, shipping etc.	1	3	-	-
<b>PC7.</b> Differentiate the indicators of conventional management practices that lead to unutilised or waste of resources.	1	3	-	1
<b>PC8.</b> Collect data on existing inventory control management.	1	2	-	-
<b>PC9.</b> Explore the subsidies and benefits offered by the government and different organisations for investments in sustainability/ greening factors. E.g. setting up solar energy plants.	1	2	-	1
Analyse the opportunities	21	40	-	7
<b>PC10.</b> Evaluate information obtained from other departments and stakeholders.	1	2	-	-
<b>PC11.</b> Perform materiality analysis of the products/ services acquired and used frequently.	1	2	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Analyse material audit reports to identify excessive consumption of material and water.	1	3	-	1
<b>PC13.</b> Calculate the carbon footprint/emissions from the source of the products.	2	2	-	1
<b>PC14.</b> Identify processes where material utilisation can be optimised.	1	2	-	-
<b>PC15.</b> Conduct a cost-benefit analysis based on the factors that will undergo a change in the process of sustainability implementation.	2	3	-	1
<b>PC16.</b> Discuss with Management the budget for the journey towards Sustainability and build a list of social innovation solutions.	1	2	-	-
<b>PC17.</b> Communicate with industries and customers to understand and analyse various strategies, demands, and limitations in the market.	1	2	-	-
<b>PC18.</b> Analyse energy/electricity consumption data and identify high energy/electricity consumption areas.	1	3	-	1
<b>PC19.</b> Categorise processes where energy/electricity utilisation can be optimised and recommend the potential of using renewable energy.	1	3	-	-
<b>PC20.</b> Identify the non-recyclable/non-degradable raw materials used in manufacturing the product/service.	1	2	-	-
<b>PC21.</b> Measure the emissions/carbon footprints currently generated by the company using ISO-approved methods.	1	3	-	1
<b>PC22.</b> Monitor material and water conservation processes for any process gaps.	1	2	-	-
<b>PC23.</b> Perform risk management analysis based on factors that might be affected during the transition, like client expectations & requirements, stakeholder interests, and efficient usage of resources.	2	3	-	1
<b>PC24.</b> Check the possibilities of implementing sustainability on the entire product life cycle involving design, production, distribution, consumer use, post-use recovery, and reuse.	2	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC25.</b> Analyse the inventory control and procurement methods currently followed and the scope of reducing the same. The results may be shorter lead times, reduced transportation costs, improved overall operational efficiency and significant sustainability.	2	3	-	-
NOS Total	30	60	-	10









## **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2901
NOS Name	Analyse the opportunities
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Sustainability
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024









# LSC/N2902: Develop Sustainable Practices as per UN SDGs (Sustainable Development Goals)

### **Description**

This NOS is about planning sustainable solutions and developing sustainable practices.

### Scope

The scope covers the following:

- Planning sustainable solutions
- Develop sustainable practices

#### **Elements and Performance Criteria**

### Planning sustainable solutions

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

- **PC1.** Create a flowchart with the sustainable practices to be implemented.
- **PC2.** Propose digitisation of monitoring, reporting and measurement processes from the ground.
- **PC3.** Recommend digital platforms wherever possible for validation of the reports.
- **PC4.** Create a ground plan to reduce/negate emissions/carbon footprints currently generated by the company.
- **PC5.** List sustainable business practices that can be listed on sustainability indices.
- **PC6.** Construct a plan/ SOP for collecting, segregating and disposing of recyclable, non-recyclable and hazardous waste.
- **PC7.** Compare the sustainability practices followed by Industry peers for benchmarking & calibration.
- **PC8.** Propose methods of lean manufacturing.
- **PC9.** Suggest management to support stakeholders/ vendors who follow sustainable practices.
- **PC10.** Perform cost-benefit analysis for the new investments containing factors like long-term benefits, capex, opex expenditures etc.

#### Develop sustainable practices

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

- **PC11.** Develop processes to maintain and have zero wastage/ emission or net-positive water footprint by implementing ways to conserve and reuse water. E.g., installing automated/sensor-enabled water faucets, installing low-flow faucets and toilets, fixing leaks promptly, optimising water-intensive processes, installing sewage water treatment plants, rainwater harvesting etc.
- **PC12.** Build various solutions to recycle/reuse/reduce the non-recyclable/non-degradable materials.
- **PC13.** Analyse the essential ingredients/ practices that make a facility highly energy efficient. E.g., switching off electrical equipment and appliances when not in use, using LED lights with sensors, changing over to intelligent appliances, etc.
- **PC14.** Use a combination of direct, indirect, industrywide, and global strategies.









- **PC15.** Propose management to invest and set up alternate/ renewable energy sources like solar, wind, etc.
- **PC16.** Ensure that the activities/ processes are within the budget allotted.
- **PC17.** Decide on indicators to report on and choose the relevant stakeholders.
- **PC18.** Map the changes that the company would undergo and get approval from management before implementation.
- **PC19.** Devise sustainability practices, right from decisions involving designing, strategy, tactics, goals, processes, trade-offs and outcomes in all levels of supply chain management.
- **PC20.** Develop an energy management system containing scheduled shutdowns, regular maintenance and optimisation of air compressors, HVAC, lighting system, etc.
- **PC21.** Ensure that an SOP is created for all the set processes.
- **PC22.** Conduct awareness programs among staff and stakeholders explaining the expected results and how these sustainability practices create an impact.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Parameters of global sustainability.
- **KU2.** Significance of CO2 emissions and its impact on global warming.
- KU3. Knowledge about material footprint per capita and material footprint per GDP.
- **KU4.** Stay updated about the initiatives taken by the government and various organisations for sustainability.
- **KU5.** Legislative requirements and organisational procedures for waste management and disposal.
- **KU6.** Organisational procedures for safe handling of equipment and machine operations.
- **KU7.** Knowledge of organisational reporting protocol and documentation.
- **KU8.** Parameters and data required for material and energy audit.
- **KU9.** Latest methods of energy and material conservation.
- **KU10.** Knowledge of environment-friendly materials available to replace conventional materials.
- **KU11.** Methods of reducing energy consumptions.
- **KU12.** Renewable energy sources that can be deployed in the workplace.
- **KU13.** Methods of optimum utilisation of waste and best practices for waste disposal.
- **KU14.** Methods of treating wastewater and recycling of water.
- **KU15.** Knowledge on statutory documents and requirements relevant to safety and hygiene.
- KU16. UN Sustainable Development Goals (SDGs).
- **KU17.** Circular economy in logistics sector.
- **KU18.** Green logistics and conventional logistics and initiatives taken by government.
- **KU19.** Knowledge of Automation systems like Al, Block Chain and IoT-based systems etc.

### **Generic Skills (GS)**

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









- **GS1.** Data, report management and analytical skills.
- **GS2.** Communicate with team members and colleagues on the significance of greening and sustainability.
- **GS3.** Take timely decisions with a systematic course of action and respond.
- **GS4.** Work constructively and collaboratively with others.
- **GS5.** How to rightly delegate tasks to improve efficiencies.
- **GS6.** Critical and socially responsible thinking.
- **GS7.** Ability to identify or procure needed resources to implement sustainability programs or projects.
- **GS8.** Write grant applications, rebate applications, or project proposals to secure funding for sustainability projects.
- **GS9.** Effective Coordination with team members and stakeholders.
- **GS10.** Advanced knowledge of relevant computer applications and system evaluations.
- **GS11.** Complex problem solving and decision-making skills.
- **GS12.** Ability to set up processes and create SOPs.









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Planning sustainable solutions	12	26	-	4
<b>PC1.</b> Create a flowchart with the sustainable practices to be implemented.	1	2	-	-
<b>PC2.</b> Propose digitisation of monitoring, reporting and measurement processes from the ground.	1	2	-	-
<b>PC3.</b> Recommend digital platforms wherever possible for validation of the reports.	1	2	-	1
<b>PC4.</b> Create a ground plan to reduce/negate emissions/carbon footprints currently generated by the company.	2	3	-	1
<b>PC5.</b> List sustainable business practices that can be listed on sustainability indices.	1	3	-	-
<b>PC6.</b> Construct a plan/ SOP for collecting, segregating and disposing of recyclable, non-recyclable and hazardous waste.	2	3	-	1
<b>PC7.</b> Compare the sustainability practices followed by Industry peers for benchmarking & calibration.	1	2	-	-
PC8. Propose methods of lean manufacturing.	1	3	-	-
<b>PC9.</b> Suggest management to support stakeholders/ vendors who follow sustainable practices.	1	3	-	-
<b>PC10.</b> Perform cost-benefit analysis for the new investments containing factors like long-term benefits, capex, opex expenditures etc.	1	3	-	1
Develop sustainable practices	18	34	-	6
<b>PC11.</b> Develop processes to maintain and have zero wastage/ emission or net-positive water footprint by implementing ways to conserve and reuse water. E.g., installing automated/sensor-enabled water faucets, installing low-flow faucets and toilets, fixing leaks promptly, optimising water-intensive processes, installing sewage water treatment plants, rainwater harvesting etc.	2	3	-	1









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Build various solutions to recycle/reuse/reduce the non-recyclable/non-degradable materials.	1	2	-	-
<b>PC13.</b> Analyse the essential ingredients/ practices that make a facility highly energy efficient. E.g., switching off electrical equipment and appliances when not in use, using LED lights with sensors, changing over to intelligent appliances, etc.	2	3	-	1
<b>PC14.</b> Use a combination of direct, indirect, industrywide, and global strategies.	2	3	-	1
<b>PC15.</b> Propose management to invest and set up alternate/ renewable energy sources like solar, wind, etc.	1	3	-	-
<b>PC16.</b> Ensure that the activities/ processes are within the budget allotted.	1	3	-	-
<b>PC17.</b> Decide on indicators to report on and choose the relevant stakeholders.	1	2	-	-
<b>PC18.</b> Map the changes that the company would undergo and get approval from management before implementation.	2	3	-	1
<b>PC19.</b> Devise sustainability practices, right from decisions involving designing, strategy, tactics, goals, processes, trade-offs and outcomes in all levels of supply chain management.	2	3	-	1
<b>PC20.</b> Develop an energy management system containing scheduled shutdowns, regular maintenance and optimisation of air compressors, HVAC, lighting system, etc.	1	3	-	-
<b>PC21.</b> Ensure that an SOP is created for all the set processes.	1	3	-	-
<b>PC22.</b> Conduct awareness programs among staff and stakeholders explaining the expected results and how these sustainability practices create an impact.	2	3	-	1
NOS Total	30	60	-	10









## **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2902
NOS Name	Develop Sustainable Practices as per UN SDGs (Sustainable Development Goals)
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Sustainability
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024









# LSC/N2903: Implement Sustainability in Transportation as per SDG 13 & 11

### **Description**

This NOS is about implementing sustainability in transportation.

### Scope

The scope covers the following:

• Sustainable freight transport

### **Elements and Performance Criteria**

### Sustainable Freight Transport

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

- **PC1.** Implement the usage of vehicles that run on alternate fuels.
- **PC2.** Give preference to vendors who provide eco-friendly road transport options like EV, LNG, CNG, GH2 etc.
- **PC3.** Coordinate with stakeholders in choosing a sustainable transit option using multimodal transport and its impact on factors like transit time.
- **PC4.** Plan for effective space utilisation by exploring options like consolidated shipping, maximizing loading efficiency, etc.
- **PC5.** Build transportation networks using rail and inland waterways for the long haul due to their lower GNG emissions.
- **PC6.** Minimise waste space and energy by ensuring the containers and transport are packed to maximum capacity.
- **PC7.** Use an effective transport management system for route planning, integrated with trip management, forecasting and demand planning.
- **PC8.** Recommend ethical sourcing and procuring materials, parts locally in order to reduce transportation costs and carbon emissions.
- **PC9.** Propose adapting to new technologies and tools like scanners, sensors etc. which help save resources, e.g. enable paperless transactions, auto cut off.
- **PC10.** Ensure that the fuel efficiency practices are followed by the drivers and end users.
- **PC11.** Suggest re-designing of transport packaging and containers for modularity and optimal fit.
- **PC12.** Explore alternative solutions like logistics pooling, which are sustainable in the longer run e.g. asset sharing and open warehouses.
- **PC13.** Analyse and optimise last mile deliveries with customer coordination.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

**KU1.** Parameters of global sustainability.









- **KU2.** Significance of CO2 emissions and its impact on global warming.
- **KU3.** Knowledge about material footprint per capita and material footprint per GDP.
- **KU4.** Stay updated about the initiatives taken by the government and various organisations for sustainability.
- **KU5.** Legislative requirements and organisational procedures for waste management and disposal.
- **KU6.** Organisational procedures for safe handling of equipment and machine operations.
- **KU7.** Knowledge of organisational reporting protocol and documentation.
- **KU8.** Parameters and data required for material and energy audit.
- **KU9.** Latest methods of energy and material conservation.
- **KU10.** Knowledge of environment-friendly materials available to replace conventional materials.
- **KU11.** Methods of reducing energy consumptions.
- **KU12.** Renewable energy sources that can be deployed in the workplace.
- **KU13.** Methods of optimum utilisation of waste and best practices for waste disposal.
- **KU14.** Methods of treating wastewater and recycling of water.
- **KU15.** Knowledge on statutory documents and requirements relevant to safety and hygiene.
- KU16. UN Sustainable Development Goals (SDGs).
- **KU17.** Circular economy in logistics sector.
- **KU18.** Green logistics and conventional logistics and initiatives taken by government.
- **KU19.** Knowledge of Automation systems like AI, Block Chain and IoT-based systems etc.

### **Generic Skills (GS)**

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

- **GS1.** Data, report management and analytical skills.
- **GS2.** Communicate with team members and colleagues on the significance of greening and sustainability.
- **GS3.** Take timely decisions with a systematic course of action and respond.
- **GS4.** Work constructively and collaboratively with others.
- **GS5.** How to rightly delegate tasks to improve efficiencies.
- **GS6.** Critical and socially responsible thinking.
- **GS7.** Ability to identify or procure needed resources to implement sustainability programs or projects.
- **GS8.** Write grant applications, rebate applications, or project proposals to secure funding for sustainability projects.
- **GS9.** Effective coordination with team members and stakeholders.
- **GS10.** Advanced knowledge of relevant computer applications and system evaluations.
- **GS11.** Complex problem solving and decision-making skills.
- **GS12.** Ability to set up processes and create SOPs.









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Sustainable Freight Transport	30	60	-	10
<b>PC1.</b> Implement the usage of vehicles that run on alternate fuels.	2	5	-	1
<b>PC2.</b> Give preference to vendors who provide ecofriendly road transport options like EV, LNG, CNG, GH2 etc.	2	4	-	-
<b>PC3.</b> Coordinate with stakeholders in choosing a sustainable transit option using multimodal transport and its impact on factors like transit time.	2	5	-	1
<b>PC4.</b> Plan for effective space utilisation by exploring options like consolidated shipping, maximizing loading efficiency, etc.	2	4	-	1
<b>PC5.</b> Build transportation networks using rail and inland waterways for the long haul due to their lower GNG emissions.	3	5	-	1
<b>PC6.</b> Minimise waste space and energy by ensuring the containers and transport are packed to maximum capacity.	2	4	-	1
<b>PC7.</b> Use an effective transport management system for route planning, integrated with trip management, forecasting and demand planning.	3	5	-	1
<b>PC8.</b> Recommend ethical sourcing and procuring materials, parts locally in order to reduce transportation costs and carbon emissions.	2	4	-	-
<b>PC9.</b> Propose adapting to new technologies and tools like scanners, sensors etc. which help save resources, e.g. enable paperless transactions, auto cut off.	2	5	-	1
<b>PC10.</b> Ensure that the fuel efficiency practices are followed by the drivers and end users.	3	5	-	1
<b>PC11.</b> Suggest re-designing of transport packaging and containers for modularity and optimal fit.	2	4	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Explore alternative solutions like logistics pooling, which are sustainable in the longer run e.g. asset sharing and open warehouses.	2	5	-	1
<b>PC13.</b> Analyse and optimise last mile deliveries with customer coordination.	3	5	-	1
NOS Total	30	60	-	10









## **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2903
NOS Name	Implement Sustainability in Transportation as per SDG 13 & 11
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Sustainability
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024









### LSC/N2904: Implement Sustainability in Warehouse as per SDG 7 & 11

### **Description**

This NOS is about implementing sustainability in warehouse.

### Scope

The scope covers the following:

- Sustainable packing
- Sustainability solutions for the warehouse.

#### **Elements and Performance Criteria**

### Sustainable packing

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

- **PC1.** Calculate the packing waste created during the entire process from loading to delivery to the seller/end user.
- **PC2.** Suggest management for designing/customising sustainable packing.
- **PC3.** According to the product, select suitable sustainable packing materials, e.g. paper honeycomb core, paper tapes, corrugated boards, etc.
- **PC4.** Choose the layers/ fillers that are biodegradable or recyclable, e.g. mycelium fillers.
- **PC5.** Avoid using SUP (Single-Use Plastics), e.g., shrink wraps.
- **PC6.** Prevent overuse of packing materials (over wrapping/re-wrapping of pallets); this will increase waste & carbon footprint.
- **PC7.** Follow the disposing/ recycling instructions printed on the cartons.
- **PC8.** Avoid space and voids to a maximum by using the right size of tertiary packing.

### Sustainability solutions for the warehouse

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

- **PC9.** Use machinery and equipment like MHE that runs on electric or alternative clean energy.
- **PC10.** Implement storage systems that are compact and automated.
- **PC11.** Enhance the current warehouse design and layout according to the processes for optimal utilisation and for reducing material handling distances.
- **PC12.** Use sustainable climate control options for temperature maintenance, e.g. hydronic heating, ice-powered air conditioners, sensor-controlled ventilation systems, etc.
- PC13. Implement RRR Reduce, Reuse, Recycle.
- PC14. Ensure the proper mechanism is followed to treat wastewater in the unit.
- **PC15.** Propose building upward extension instead of outward to reduce land use.
- **PC16.** Choose energy-efficient lighting and recommend installing Skylights, LEDs with sensors (Intelligent occupancy sensors, Motion sensors, Heat Maps), etc.
- **PC17.** Propose a warehouse location considering factors like being close to hubs and availability of public transportation etc.
- **PC18.** Ensure that Lighting Power Density (LPD) does not exceed the required.









- **PC19.** Recommend replacing smart appliances instead of traditional high power consuming standard devices, e.g., HVAC and refrigeration systems.
- **PC20.** Use efficient software and handheld devices to assign tasks instead of printing, e.g., using WMS to generate and set pick lists.
- **PC21.** Opt for devices and PPE which can be sanitised and reused.
- **PC22.** Ensure health & safety and material handling procedures are properly followed.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Parameters of global sustainability.
- **KU2.** Significance of CO2 emissions and its impact on global warming.
- **KU3.** Knowledge about material footprint per capita and material footprint per GDP.
- **KU4.** Stay updated about the initiatives taken by the government and various organisations for sustainability.
- **KU5.** Legislative requirements and organisational procedures for waste management and disposal.
- **KU6.** Organisational procedures for safe handling of equipment and machine operations.
- **KU7.** Knowledge of organisational reporting protocol and documentation.
- **KU8.** Parameters and data required for material and energy audit.
- **KU9.** Latest methods of energy and material conservation.
- **KU10.** Knowledge of environment-friendly materials available to replace conventional materials.
- **KU11.** Methods of reducing energy consumptions.
- **KU12.** Renewable energy sources that can be deployed in the workplace.
- **KU13.** Methods of optimum utilisation of waste and best practices for waste disposal.
- **KU14.** Methods of treating wastewater and recycling of water.
- **KU15.** Knowledge on statutory documents and requirements relevant to safety and hygiene.
- KU16. UN Sustainable Development Goals (SDGs).
- **KU17.** Circular economy in logistics sector.
- **KU18.** Green logistics and conventional logistics and initiatives taken by government.
- **KU19.** Knowledge of Automation systems like AI, Block Chain and IoT-based systems etc.

### **Generic Skills (GS)**

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

- **GS1.** Data, report management and analytical skills.
- **GS2.** Communicate with team members and colleagues on the significance of greening and sustainability.
- **GS3.** Take timely decisions with a systematic course of action and respond.
- **GS4.** Work constructively and collaboratively with others.
- **GS5.** How to rightly delegate tasks to improve efficiencies.









- **GS6.** Critical and socially responsible thinking.
- **GS7.** Ability to identify or procure needed resources to implement sustainability programs or projects.
- **GS8.** Write grant applications, rebate applications, or project proposals to secure funding for sustainability projects.
- **GS9.** Effective coordination with team members and stakeholders.
- **GS10.** Advanced knowledge of relevant computer applications and system evaluations.
- **GS11.** Complex problem solving and decision-making skills.
- **GS12.** Ability to set up processes and create SOPs.









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Sustainable packing	10	21	-	3
<b>PC1.</b> Calculate the packing waste created during the entire process from loading to delivery to the seller/end user.	1	3	-	1
<b>PC2.</b> Suggest management for designing/customising sustainable packing.	1	2	-	-
<b>PC3.</b> According to the product, select suitable sustainable packing materials, e.g. paper honeycomb core, paper tapes, corrugated boards, etc.	1	3	-	1
<b>PC4.</b> Choose the layers/ fillers that are biodegradable or recyclable, e.g. mycelium fillers.	1	2	-	-
<b>PC5.</b> Avoid using SUP (Single-Use Plastics), e.g., shrink wraps.	1	3	-	-
<b>PC6.</b> Prevent overuse of packing materials (over wrapping/re-wrapping of pallets); this will increase waste & carbon footprint.	2	3	-	1
<b>PC7.</b> Follow the disposing/ recycling instructions printed on the cartons.	2	3	-	-
<b>PC8.</b> Avoid space and voids to a maximum by using the right size of tertiary packing.	1	2	-	-
Sustainability solutions for the warehouse	20	39	-	7
<b>PC9.</b> Use machinery and equipment like MHE that runs on electric or alternative clean energy.	1	3	-	-
<b>PC10.</b> Implement storage systems that are compact and automated.	2	3	-	1
<b>PC11.</b> Enhance the current warehouse design and layout according to the processes for optimal utilisation and for reducing material handling distances.	1	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Use sustainable climate control options for temperature maintenance, e.g. hydronic heating, ice-powered air conditioners, sensor-controlled ventilation systems, etc.	2	3	-	-
PC13. Implement RRR - Reduce, Reuse, Recycle.	2	3	-	1
<b>PC14.</b> Ensure the proper mechanism is followed to treat wastewater in the unit.	1	3	-	1
<b>PC15.</b> Propose building upward extension instead of outward to reduce land use.	1	3	-	1
<b>PC16.</b> Choose energy-efficient lighting and recommend installing Skylights, LEDs with sensors (Intelligent occupancy sensors, Motion sensors, Heat Maps), etc.	1	2	-	-
<b>PC17.</b> Propose a warehouse location considering factors like being close to hubs and availability of public transportation etc.	2	2	-	1
<b>PC18.</b> Ensure that Lighting Power Density (LPD) does not exceed the required.	2	3	-	1
<b>PC19.</b> Recommend replacing smart appliances instead of traditional high power consuming standard devices, e.g., HVAC and refrigeration systems.	1	2	-	-
<b>PC20.</b> Use efficient software and handheld devices to assign tasks instead of printing, e.g., using WMS to generate and set pick lists.	2	3	-	1
<b>PC21.</b> Opt for devices and PPE which can be sanitised and reused.	1	3	-	-
<b>PC22.</b> Ensure health & safety and material handling procedures are properly followed.	1	3	-	-
NOS Total	30	60	-	10









## **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2904
NOS Name	Implement Sustainability in Warehouse as per SDG 7 & 11
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Sustainability
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024









# LSC/N2905: Implement Sustainable Practices as per SDGs and Measure Results

### **Description**

This NOS is about implementing sustainable practices and measuring results.

### Scope

The scope covers the following:

- Implement sustainable practices
- Build indicators
- Measure results

#### **Elements and Performance Criteria**

### Implement sustainable practices

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

- **PC1.** Follow the steps as per the roadmap developed for the business transition by measuring and monitoring according to indicators.
- **PC2.** Assign the tasks to respective stakeholders and determine the success indicators for the transition.
- **PC3.** Implement the introduction of revised processes and environment-friendly materials in a phased manner.
- **PC4.** Ensure a proper mechanism is followed while collecting, segregating and disposing of recyclable, non-recyclable and hazardous waste as per SOP.
- **PC5.** Implement the principle of Reduce, Reuse and Recycle (RRR) and align with the circular economy.
- **PC6.** Initiate planting trees around company premises and install indoor plants wherever feasible.
- **PC7.** Observe the gaps in transition and implement the learnings to take corrective actions.
- **PC8.** Ensure training and assist in implementing sustainable practices among staff and stakeholders.
- **PC9.** Let first-tier suppliers set long-term sustainability goals and include lower-tier suppliers in the overall sustainability strategy.
- **PC10.** Task a staff point person to extend the firm's sustainability program to first, lower-tier suppliers and to ensure compliance with SOP.

#### **Build indicators**

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

- **PC11.** Find measurement tools for sustainable business and measure the impact.
- **PC12.** Use the guidelines and standards in India and Internationally, e.g. ISO2600, BRSR.
- **PC13.** Chart the alignment with the sustainability indices and identify project success indicators.
- **PC14.** Devise a measurement matrix for the success and failure of the indicators.









**PC15.** Develop risk factors for the specific CSR/ Sustainability project's success and failure for the business.

#### Measure results

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

- **PC16.** List different CSR & sustainability reporting methodologies available in India and Internationally.
- **PC17.** Implement a reporting format accepted globally and per the company's requirements, e.g. GRI standards.
- **PC18.** Map the changes undergone by the company and evaluate the emission of pollutants.
- **PC19.** Build a monitoring system for calculating the impact of each sustainability factor and practice.

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Parameters of global sustainability.
- **KU2.** Significance of CO2 emissions and its impact on global warming.
- KU3. Knowledge about material footprint per capita and material footprint per GDP.
- **KU4.** Stay updated about the initiatives taken by the government and various organisations for sustainability.
- **KU5.** Legislative requirements and organisational procedures for waste management and disposal.
- **KU6.** Organisational procedures for safe handling of equipment and machine operations.
- **KU7.** Knowledge of organisational reporting protocol and documentation.
- **KU8.** Parameters and data required for material and energy audit.
- **KU9.** Latest methods of energy and material conservation.
- **KU10.** Knowledge of environment-friendly materials available to replace conventional materials.
- **KU11.** Methods of reducing energy consumptions.
- **KU12.** Renewable energy sources that can be deployed in the workplace.
- **KU13.** Methods of optimum utilisation of waste and best practices for waste disposal.
- **KU14.** Methods of treating wastewater and recycling of water.
- **KU15.** Knowledge on statutory documents and requirements relevant to safety and hygiene.
- **KU16.** UN Sustainable Development Goals (SDGs).
- **KU17.** Circular economy in logistics sector.
- **KU18.** Green logistics and conventional logistics and initiatives taken by government.
- **KU19.** Knowledge of Automation systems like AI, Block Chain and IoT-based systems etc.

#### **Generic Skills (GS)**

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

**GS1.** Data, report management and analytical skills.









- **GS2.** Communicate with team members and colleagues on the significance of greening and sustainability.
- **GS3.** Take timely decisions with a systematic course of action and respond.
- **GS4.** Work constructively and collaboratively with others.
- **GS5.** How to rightly delegate tasks to improve efficiencies.
- **GS6.** Critical and socially responsible thinking.
- **GS7.** Ability to identify or procure needed resources to implement sustainability programs or projects.
- **GS8.** Write grant applications, rebate applications, or project proposals to secure funding for sustainability projects.
- **GS9.** Effective coordination with team members and stakeholders.
- **GS10.** Advanced knowledge of relevant computer applications and system evaluations.
- **GS11.** Complex problem solving and decision-making skills.
- **GS12.** Ability to set up processes and create SOPs.









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Implement sustainable practices	14	30	-	5
<b>PC1.</b> Follow the steps as per the roadmap developed for the business transition by measuring and monitoring according to indicators.	1	3	-	-
<b>PC2.</b> Assign the tasks to respective stakeholders and determine the success indicators for the transition.	1	3	-	1
<b>PC3.</b> Implement the introduction of revised processes and environment-friendly materials in a phased manner.	2	3	-	1
<b>PC4.</b> Ensure a proper mechanism is followed while collecting, segregating and disposing of recyclable, non-recyclable and hazardous waste as per SOP.	1	3	-	-
<b>PC5.</b> Implement the principle of Reduce, Reuse and Recycle (RRR) and align with the circular economy.	2	3	-	1
<b>PC6.</b> Initiate planting trees around company premises and install indoor plants wherever feasible.	2	3	-	<u>-</u>
<b>PC7.</b> Observe the gaps in transition and implement the learnings to take corrective actions.	1	3	-	-
<b>PC8.</b> Ensure training and assist in implementing sustainable practices among staff and stakeholders.	2	3	-	1
<b>PC9.</b> Let first-tier suppliers set long-term sustainability goals and include lower-tier suppliers in the overall sustainability strategy.	1	3	-	-
<b>PC10.</b> Task a staff point person to extend the firm's sustainability program to first, lower-tier suppliers and to ensure compliance with SOP.	1	3	-	1
Build indicators	9	17	-	2
<b>PC11.</b> Find measurement tools for sustainable business and measure the impact.	2	3	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> Use the guidelines and standards in India and Internationally, e.g. ISO2600, BRSR.	1	3	-	-
<b>PC13.</b> Chart the alignment with the sustainability indices and identify project success indicators.	2	3	-	-
<b>PC14.</b> Devise a measurement matrix for the success and failure of the indicators.	2	4	-	1
<b>PC15.</b> Develop risk factors for the specific CSR/ Sustainability project's success and failure for the business.	2	4	-	1
Measure results	7	13	-	3
<b>PC16.</b> List different CSR & sustainability reporting methodologies available in India and Internationally.	1	3	-	-
<b>PC17.</b> Implement a reporting format accepted globally and per the company's requirements, e.g. GRI standards.	2	4	-	1
<b>PC18.</b> Map the changes undergone by the company and evaluate the emission of pollutants.	2	3	-	1
<b>PC19.</b> Build a monitoring system for calculating the impact of each sustainability factor and practice.	2	3	-	1
NOS Total	30	60	-	10









## **National Occupational Standards (NOS) Parameters**

NOS Code	LSC/N2905
NOS Name	Implement Sustainable Practices as per SDGs and Measure Results
Sector	Logistics
Sub-Sector	Supply Chain
Occupation	Sustainability
NSQF Level	6
Credits	3
Version	1.0
Last Reviewed Date	15/03/2024
Next Review Date	15/03/2027
NSQC Clearance Date	15/03/2024









# 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
<b>PC1.</b> Comply with safety regulations and procedures to avoid fire hazards, biohazards, etc.	1	2	-	-
<b>PC2.</b> Wear all safety equipment including protective gear, helmets etc., in relevant bay areas.	2	3	-	1
<b>PC3.</b> Follow organisation procedures concerning documentation.	1	2	-	-
<b>PC4.</b> 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
<b>PC5.</b> Ensure that the work area and supplies are organised and cleaned regularly.	1	3	-	1
<b>PC6.</b> Comply with data safety regulations of the organisation and follow clear worktable area policy.	1	3	-	-
<b>PC7.</b> Maintain personal hygiene and wash hands regularly using soap and water or alcohol-based sanitizer.	1	2	-	1
<b>PC8.</b> Undertake periodical preventive health check-ups.	1	3	-	1
<b>PC9.</b> Participate in fire drills and follow 5S at workplace.	1	3	-	-
Handle emergency situations	6	9	-	2
<b>PC10.</b> Act immediately during emergencies and move to safety.	2	2	-	1
<b>PC11.</b> 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
<b>PC12</b> . In case of fire, follow fire safety practices taught during fire drills.	2	3	-	-
<b>PC13.</b> 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	-	-
<b>PC15.</b> Protect customers' information and ensure acquired information is not used for personal advantage.	1	2	-	-
<b>PC16.</b> Protect data and information related to business or commercial decisions.	1	3	-	-
Professional and ethical practice	4	8	-	1
<b>PC17.</b> Sensitize the workforce towards ethical behaviour in the workplace and performing jobs with integrity.	1	2	-	-
<b>PC18.</b> Conduct regular reviews, check reports for unethical behaviour and corrupt practices and promptly report all violations of the code of ethics.	2	4	-	1
<b>PC19.</b> Consult senior management when in an ethical dilemma.	1	2	-	-
Ensure regulatory compliance	5	11	-	2
<b>PC20.</b> Check that documentation concerning operations is up to date and in accordance with the regulations.	1	3	-	-
<b>PC21.</b> 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	-	-
<b>PC1.</b> 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	-	-	-	-
<b>PC3.</b> research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC4.</b> 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	-	-
<b>PC6.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC7.</b> 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	-	-
<b>PC9.</b> 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
<b>PC10.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC11.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-
<b>PC12.</b> identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
<b>PC13.</b> prepare a career development plan with short- and long-term goals	-	-	-	-
Communication Skills	2	2	-	-
<b>PC14.</b> follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
<b>PC15.</b> use active listening techniques for effective communication	-	-	-	-
<b>PC16.</b> 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	-	-
<b>PC18.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC19.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
<b>PC20.</b> identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
<b>PC21.</b> 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
<b>PC22.</b> 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	-	-	-	-
<b>PC25.</b> 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.	-	-	-	-
<b>PC26.</b> display responsible online behaviour while using various social media platforms	-	-	-	-
<b>PC27.</b> create a personal email account, send and process received messages as per requirement	-	-	-	-
<b>PC28.</b> carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
<b>PC29.</b> utilize virtual collaboration tools to work effectively	-	-	-	-
Entrepreneurship	2	3	-	-
<b>PC30.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC31.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC32.</b> 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
<b>PC34.</b> identify and respond to customer requests and needs in a professional manner	-	-	-	-
<b>PC35.</b> use appropriate tools to collect customer feedback	-	-	-	-
<b>PC36.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
<b>PC37.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC38.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC39.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC40.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC41.</b> 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	31/08/2021
Next Review Date	31/08/2024
NSQC Clearance Date	31/08/2021

### 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/N2901.Analyse the opportunities	30	60	-	10	100	15
LSC/N2902.Develop Sustainable Practices as per UN SDGs (Sustainable Development Goals)	30	60	-	10	100	15
LSC/N2903.Implement Sustainability in Transportation as per SDG 13 & 11	30	60	-	10	100	15
LSC/N2904.Implement Sustainability in Warehouse as per SDG 7 & 11	30	60	-	10	100	15
LSC/N2905.Implement Sustainable Practices as per SDGs and Measure Results	30	60	-	10	100	15
LSC/N9911.Follow health, safety, security procedures and maintain integrity, ethics at workplace	30	60	-	10	100	15
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	10
Total	200	390	-	60	650	100









## **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training









# 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.