

Qualification Pack



Cluster In-Charge

QP Code: TEL/Q4101

Version: 3.0

NSQF Level: 5

Telecom Sector Skill Council || 3rd Floor, Plot No 126, Sector - 44
Gurgaon - 122003

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TEL/Q4101: Cluster In-Charge

Brief Job Description

The individual in this job role is responsible for managing cell sites in the cluster by ensuring site hygiene, increasing site up-time, monitoring and certifying preventive and corrective maintenance developing healthy relations with landlord and vendors, handling issues and controlling operational expenses. The individual should ensure efficient and effective operations and maintenance of tower sites to meet company objective of delivering highest up-time along with cost and energy efficiency.

Personal Attributes

An individual in this job must have good communication and interpersonal skills in addition to being a team player, as the job requires coordination with technicians, vendors and other stakeholders. The individual must have a technical bend of mind, should be self-disciplined, action-orientated and possess analytical skills, problem solving ability and the ability to work under pressure. The individual should also stay updated about the latest developments and new technologies used in the telecom sector.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

1. [TEL/N4133: Maintain Cluster Telecom Site](#)
2. [TEL/N4136: Manage Issues and Operational Expenditures OPEX](#)
3. [TEL/N9103: Implement Effective Interaction at workplace](#)
4. [TEL/N9104: Manage Work, Resources and Safety at workplace](#)
5. [DGT/VSQ/N0102: Employability Skills \(60 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Telecom
Sub-Sector	Passive Infrastructure
Occupation	Operations and Maintenance - Passive Infrastructure
Country	India
NSQF Level	5

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Credits	18
Aligned to NCO/ISCO/ISIC Code	NCO-2015/31113.0901
Minimum Educational Qualification & Experience	<p>Completed 2nd year of UG (UG Diploma) (of 3-year/ 4-years UG)</p> <p>OR</p> <p>Pursuing 2nd year of UG (of 3-year/ 4-years UG and continuing education)</p> <p>OR</p> <p>Completed 2nd year diploma after 12th</p> <p>OR</p> <p>Pursuing 2nd year of 2-year diploma after 12th (with No Experience required)</p> <p>OR</p> <p>12th grade Pass (with 2 year of any combination of NTC/NAC/CITS or equivalent with No Experience required)</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level (4) with 3 Years of experience</p>
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	21 Years
Last Reviewed On	NA
Next Review Date	27/01/2025
NSQC Approval Date	27/01/2022
Version	3.0
Reference code on NQR	QG-05-TL-00452-2023-V1.1-TSSC
NQR Version	1.1

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TEL/N4133: Maintain Cluster Telecom Site

Description

This OS unit describes the knowledge, understanding and skills required for an individual to maintain the functionality of telecom sites by monitoring site hygiene and site up-time.

Scope

The scope covers the following :

- Maintain site hygiene
- Maintain site up-time

Elements and Performance Criteria

Maintain site hygiene

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

- PC1.** collect work requirements, tools, equipment and software required for maintenance of site
- PC2.** maintain quality and work standards in site conditions such as proper laying of cables, correct temperature and settings, site in auto mode, etc.
- PC3.** manage site cleanliness and hygiene of AC, DG, PIU, SMPS, battery bank and shelter, as per organization norms
- PC4.** analyse ways to secure team and assets to avoid pilferage and malpractice
- PC5.** resolve rent management, site lock issues with landlord
- PC6.** conduct periodic audit of sites to assess the condition of tower including civil, electrical and other infrastructure
- PC7.** conduct periodic compliance audit of technicians, vendors and the quality/quantity of spares

Maintain site up-time

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

- PC8.** create a Preventive Maintenance (PM) plan
- PC9.** design a robust site visit and Beat plan for technicians
- PC10.** monitor preventive maintenance of the site
- PC11.** perform health check on site like checking engine oil, voltage, loose connections, cable heating etc.
- PC12.** validate periodic maintenance check conducted by the vendor technicians
- PC13.** monitor site faults and ensure timely rectification
- PC14.** perform root cause analysis to devise solution for recurring faults
- PC15.** create fault analysis and up-time report for all sites of the cluster
- PC16.** implement various quality tools to reduce technical problems and minimize down-time
- PC17.** maintain zero breakdown delivery for cluster to optimize Operating Expenditure (OPEX)
- PC18.** communicate best practices to be followed by technicians for maintaining site up-time

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- PC19.** comply with organisational norms for usage of alternate energy sources, such as solar energy, for the site
- PC20.** implement energy conservation policies and reduce pollution using alternate fuels such as bio-fuels rather than diesel or petrol

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Operating Company (OPCO) policies and standards followed by the company to maintain sites
- KU2.** use of tools and mechanical equipment for site upkeep and maintenance
- KU3.** functional knowledge of all equipment used in repair and maintenance
- KU4.** asset layout as per company standards
- KU5.** system components used in site such as AC, DG, PIU, SMPS, etc.
- KU6.** importance of safety training for the individual
- KU7.** special tools and equipment used for system repairs
- KU8.** preventive maintenance norms as per the company
- KU9.** preparation and execution process of assigned site visit and Beat plan
- KU10.** technical structuring of equipment installed on site to check preventive maintenance and repair done on site
- KU11.** repair and maintenance guidelines of the company to verify standards of repair/maintenance done on site
- KU12.** usage and wastage of energy at sites w.r.t power & fuel consumption patterns
- KU13.** formats and checklists to verify preventive maintenance / repair of installed equipment
- KU14.** site up-time targets of the company to avoid penalties
- KU15.** types of recurring faults
- KU16.** quantum of spare components used
- KU17.** common reasons/incidences for site down-time
- KU18.** basics of applications such as MS Excel, CRM, etc.
- KU19.** alternate energy sources (such as solar and wind energy) and their advantages
- KU20.** alternate fuels (such as bio-fuel), their production and consumption for cluster sites
- KU21.** harmful effect (such as pollution) of using fuels such as petrol or diesel on the environment and ways to prevent it

Generic Skills (GS)

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

- GS1.** read and interpret official documents and emails
- GS2.** interact with internal and external stakeholders
- GS3.** maintain healthy relationship with the landlord
- GS4.** analyse problems using critical thinking to arrive at possible solution(s)



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- GS5.** read and interpret formats, schedules and checklists
- GS6.** resolve conflicts among team members

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain site hygiene</i>	7	16	-	4
PC1. collect work requirements, tools, equipment and software required for maintenance of site	1	2	-	-
PC2. maintain quality and work standards in site conditions such as proper laying of cables, correct temperature and settings, site in auto mode, etc.	1	3	-	1
PC3. manage site cleanliness and hygiene of AC, DG, PIU, SMPS, battery bank and shelter, as per organization norms	1	1	-	1
PC4. analyse ways to secure team and assets to avoid pilferage and malpractice	2	3	-	-
PC5. resolve rent management, site lock issues with landlord	-	2	-	-
PC6. conduct periodic audit of sites to assess the condition of tower including civil, electrical and other infrastructure	1	2	-	1
PC7. conduct periodic compliance audit of technicians, vendors and the quality/quantity of spares	1	3	-	1
<i>Maintain site up-time</i>	23	39	-	11
PC8. create a Preventive Maintenance (PM) plan	1	2	-	1
PC9. design a robust site visit and Beat plan for technicians	1	2	-	1
PC10. monitor preventive maintenance of the site	1	3	-	-
PC11. perform health check on site like checking engine oil, voltage, loose connections, cable heating etc.	2	4	-	1
PC12. validate periodic maintenance check conducted by the vendor technicians	2	1	-	1

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. monitor site faults and ensure timely rectification	1	4	-	1
PC14. perform root cause analysis to devise solution for recurring faults	4	4	-	1
PC15. create fault analysis and up-time report for all sites of the cluster	2	3	-	1
PC16. implement various quality tools to reduce technical problems and minimize down-time	2	3	-	1
PC17. maintain zero breakdown delivery for cluster to optimize Operating Expenditure (OPEX)	1	3	-	1
PC18. communicate best practices to be followed by technicians for maintaining site up-time	2	3	-	1
PC19. comply with organisational norms for usage of alternate energy sources, such as solar energy, for the site	2	4	-	-
PC20. implement energy conservation policies and reduce pollution using alternate fuels such as bio-fuels rather than diesel or petrol	2	3	-	1
NOS Total	30	55	-	15

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National Occupational Standards (NOS) Parameters

NOS Code	TEL/N4133
NOS Name	Maintain Cluster Telecom Site
Sector	Telecom
Sub-Sector	Passive Infrastructure
Occupation	Operations and Maintenance - Passive Infrastructure
NSQF Level	5
Credits	6
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

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TEL/N4136: Manage Issues and Operational Expenditures OPEX

Description

This OS unit describes the knowledge, understanding and skills required for an individual to identify and resolve issues, perform corrective maintenance activities and manage Operational Expenditures (OPEX).

Scope

The scope covers the following :

- Identify and resolve issues
- Perform corrective maintenance activities
- Manage Operational Expenditures (OPEX)

Elements and Performance Criteria

Identify and resolve issues

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

- PC1.** analyse training needs and performance of technicians
- PC2.** resolve issues escalated by tower technicians and provide relevant solution
- PC3.** track the number of sites being locked and follow up with estate team for resolution
- PC4.** maintain high level of landlord engagement to ensure 24*7 access to facilitate operational work at site
- PC5.** liaise with Electricity Board (EB) authorities to avoid disconnection
- PC6.** interact regularly with branch operation team and other site managers to ensure timely closure of issues
- PC7.** implement ways to provide support for site access and Radio Frequency Services (RFS) activities to the customer

Perform corrective maintenance activities

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

- PC8.** diagnose need for corrective maintenance based on system parameters and performance
- PC9.** prioritise corrective maintenance activities of all equipment as per the plan
- PC10.** maintain compliance on log card and corrective maintenance checklists/reports
- PC11.** instruct the team to use proper formats for escalating issues/faults at site on time
- PC12.** report faults/issues at site to manager/vendor for logging complaints
- PC13.** resolve reported faults through repair/replacements
- PC14.** troubleshoot DG/Battery bank/ SMPS /IPMS etc.
- PC15.** ensure that the technicians properly lock main gate/DG/Shelter etc. to avoid any thefts

Manage Operational Expenditures (OPEX)

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

- PC16.** maintain energy cost through site automation, diesel cost per tenant, alarm integration with Network Operation Centre (NOC), etc.

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- PC17.** advise manager about the scope for reducing security head count, minimising rental cost, etc.
- PC18.** manage vendors effectively to ensure that preventive maintenance and repair costs are within control
- PC19.** monitor timely creation of Service Request Number (SRN) of assets
- PC20.** track site wise penalty and implement plan for zero penalty

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** importance of maintaining error logs
- KU2.** lock site management process
- KU3.** significance of maintaining good relations with technicians and landlord
- KU4.** common issues of technicians, landlords and vendors
- KU5.** technical drawings and content
- KU6.** corrective maintenance norms as per the company
- KU7.** daily logs of fuel and energy consumption
- KU8.** repair and maintenance guidelines of the company
- KU9.** escalation matrix of the organisation to resolve any issue
- KU10.** functional knowledge of all equipment used in repair and maintenance
- KU11.** repair and maintenance guidelines of the company to save energy cost
- KU12.** repair and maintenance formats and checklists to save energy and costs of the organization
- KU13.** budget operating expenditure at the site
- KU14.** impact of OPEX on the company
- KU15.** use of high value spares in repair
- KU16.** site up-time targets of the company, to avoid penalties

Generic Skills (GS)

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

- GS1.** handle the team effectively and respectfully
- GS2.** resolve issues with patience considering all aspects
- GS3.** interact respectfully with stakeholders such as technicians, vendors and landlords
- GS4.** liaise with external stakeholders
- GS5.** read and interpret technical documents in different formats
- GS6.** prioritize activities based on timeline and criticality
- GS7.** emphasize on timely identification and rectification of faults
- GS8.** communicate with manager using appropriate means
- GS9.** read and interpret formats and checklists



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- GS10.** evaluate the information gathered from observation, experience, reasoning, or communication
- GS11.** work in a cost effective manner

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify and resolve issues</i>	10	15	-	4
PC1. analyse training needs and performance of technicians	1	2	-	-
PC2. resolve issues escalated by tower technicians and provide relevant solution	2	2	-	1
PC3. track the number of sites being locked and follow up with estate team for resolution	1	2	-	1
PC4. maintain high level of landlord engagement to ensure 24*7 access to facilitate operational work at site	2	2	-	1
PC5. liaise with Electricity Board (EB) authorities to avoid disconnection	1	2	-	-
PC6. interact regularly with branch operation team and other site managers to ensure timely closure of issues	2	3	-	1
PC7. implement ways to provide support for site access and Radio Frequency Services (RFS) activities to the customer	1	2	-	-
<i>Perform corrective maintenance activities</i>	16	25	-	4
PC8. diagnose need for corrective maintenance based on system parameters and performance	2	3	-	-
PC9. prioritise corrective maintenance activities of all equipment as per the plan	2	1	-	1
PC10. maintain compliance on log card and corrective maintenance checklists/reports	4	4	-	-
PC11. instruct the team to use proper formats for escalating issues/faults at site on time	1	4	-	1
PC12. report faults/issues at site to manager/vendor for logging complaints	2	3	-	1
PC13. resolve reported faults through repair/replacements	1	3	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. troubleshoot DG/Battery bank/ SMPS /IPMS etc.	2	3	-	-
PC15. ensure that the technicians properly lock main gate/DG/Shelter etc. to avoid any thefts	2	4	-	1
<i>Manage Operational Expenditures (OPEX)</i>	9	15	-	2
PC16. maintain energy cost through site automation, diesel cost per tenant, alarm integration with Network Operation Centre (NOC), etc.	2	4	-	1
PC17. advise manager about the scope for reducing security head count, minimising rental cost, etc.	3	4	-	-
PC18. manage vendors effectively to ensure that preventive maintenance and repair costs are within control	2	2	-	1
PC19. monitor timely creation of Service Request Number (SRN) of assets	1	3	-	-
PC20. track site wise penalty and implement plan for zero penalty	1	2	-	-
NOS Total	35	55	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	TEL/N4136
NOS Name	Manage Issues and Operational Expenditures OPEX
Sector	Telecom
Sub-Sector	Passive Infrastructure
Occupation	Operations and Maintenance - Passive Infrastructure
NSQF Level	5
Credits	7
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

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TEL/N9103: Implement Effective Interaction at workplace

Description

This OS unit is about communicating with superiors and colleagues as well as customers and other stakeholders in own or other work groups within as well as outside the organisation

Scope

The scope covers the following :

- Interact effectively with superiors
- Interact effectively with colleagues and customers
- Respect differences of gender and ability

Elements and Performance Criteria

Interact effectively with superiors

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

- PC1.** interpret work requirements from the superior and customers
- PC2.** report any unforeseen disruptions or delays to superiors and/or concerned person
- PC3.** achieve productivity and quality of work as per the company procedure

Interact effectively with colleagues and customers

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

- PC4.** explain the work requirements and the scope of work to the team
- PC5.** communicate information using different techniques such as face-to-face, telephonic and written means
- PC6.** co-ordinate with team to integrate work as per requirements
- PC7.** respect colleagues and customers and communicate taking care of their personal spaces
- PC8.** find solutions to work related difficulties with mutual agreement with colleagues and customers
- PC9.** resolve conflicts within the team at work to achieve smooth workflow
- PC10.** motivate team members to put organizational goals over individual goals
- PC11.** encourage the team to provide feedback on any issues facing them

Respect differences of gender and ability

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

- PC12.** ensure personal behaviour of self and team is conducted taking gender and disability of the person into consideration
- PC13.** demonstrate sensitivity towards gender and person with disability while communicating
- PC14.** list the different types of disabilities with their respective issues
- PC15.** provide help to PwD team members in overcoming any challenges faced in work
- PC16.** use inclusive language irrespective of the disability and the gender of the person
- PC17.** treat all colleagues and co-workers equally

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PC18. respect personal space of colleagues and co-workers

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** importance of effective and different means of communication and establishing good working relationships with colleagues and superiors
- KU2.** importance of helping colleagues with problems, in order to meet quality and time standards as a team
- KU3.** different methods of communication
- KU4.** different types of information that colleagues might need and the importance of providing this information in an appropriate manner
- KU5.** helping colleagues with problems, in order to meet quality and time standards as a team
- KU6.** organisation's policies and procedures for working with colleagues and superior
- KU7.** implications of own work on the work and schedule of others
- KU8.** importance of understanding consequences of gender based behaviour
- KU9.** gender based concepts, issues and legislation
- KU10.** organisation standards and guidelines to be followed for PwD and knowledge about laws, acts and provisions defined for PwD by the statutory bodies and the right way to use them including various medical conditions associated with PwD
- KU11.** health and safety requirements at workplace for PwD
- KU12.** rights and duties at workplace with respect to PwD
- KU13.** process of recruiting people for a particular job profile w.r.t PwD and gender
- KU14.** various government / private schemes and benefits available for PwD and information about various institutes working for PwD to enable in providing livelihood opportunities for PwD

Generic Skills (GS)

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

- GS1.** complete written work with attention to detail and read instructions/guidelines/procedures
- GS2.** listen effectively and orally communicate information
- GS3.** ask for clarification and advice from the concerned person
- GS4.** deliver consistent and reliable service to customers
- GS5.** check that the work meets customer requirements
- GS6.** practice and acceptance of gender and its concepts
- GS7.** develop empathy across genders and towards PwD
- GS8.** reflect on own gender identity, gender roles and PwD issues
- GS9.** engage and participate in discussions to end gender and disability discrimination
- GS10.** improve and modify work practices
- GS11.** maintain positive and effective relationships with colleagues and customers
- GS12.** evaluate the possible solution(s) to the problem

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact effectively with superiors</i>	2	9	-	1
PC1. interpret work requirements from the superior and customers	1	2	-	-
PC2. report any unforeseen disruptions or delays to superiors and/or concerned person	1	2	-	1
PC3. achieve productivity and quality of work as per the company procedure	-	5	-	-
<i>Interact effectively with colleagues and customers</i>	13	27	-	5
PC4. explain the work requirements and the scope of work to the team	2	3	-	-
PC5. communicate information using different techniques such as face-to-face, telephonic and written means	2	4	-	1
PC6. co-ordinate with team to integrate work as per requirements	-	4	-	1
PC7. respect colleagues and customers and communicate taking care of their personal spaces	-	3	-	-
PC8. find solutions to work related difficulties with mutual agreement with colleagues and customers	3	3	-	-
PC9. resolve conflicts within the team at work to achieve smooth workflow	-	4	-	1
PC10. motivate team members to put organizational goals over individual goals	3	4	-	1
PC11. encourage the team to provide feedback on any issues facing them	3	2	-	1
<i>Respect differences of gender and ability</i>	15	24	-	4
PC12. ensure personal behaviour of self and team is conducted taking gender and disability of the person into consideration	2	4	-	-

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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. demonstrate sensitivity towards gender and person with disability while communicating	2	3	-	1
PC14. list the different types of disabilities with their respective issues	2	3	-	1
PC15. provide help to PwD team members in overcoming any challenges faced in work	2	3	-	-
PC16. use inclusive language irrespective of the disability and the gender of the person	2	3	-	1
PC17. treat all colleagues and co-workers equally	2	3	-	-
PC18. respect personal space of colleagues and co-workers	3	5	-	1
NOS Total	30	60	-	10

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National Occupational Standards (NOS) Parameters

NOS Code	TEL/N9103
NOS Name	Implement Effective Interaction at workplace
Sector	Telecom
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	1
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

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TEL/N9104: Manage Work, Resources and Safety at workplace

Description

This OS unit is about planning work and implementing sustainable as well as healthy practices for safety and optimal use of resources

Scope

The scope covers the following :

- Manage learning and self-direction
- Develop critical thinking and problem solving
- Perform work as per quality standards
- Maintain safe and secure working environment
- Comply with material / energy / electricity conservation practices

Elements and Performance Criteria

Manage learning and self-direction

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

- PC1.** develop technical and personal skills to be updated with new technologies prevalent in the industry
- PC2.** train the team such that they are able to adapt latest products/services in their working environment
- PC3.** identify opportunities for team building workshops and motivational trainings

Develop critical thinking and problem solving

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

- PC4.** guide the team to be accountable for timely completion of tasks
- PC5.** analyse problems accurately to be able to correctly suggest suitable solutions to the concerned persons
- PC6.** train the team to estimate the cause of the problem and validate

Perform work as per quality standards

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

- PC7.** implement ways to keep immediate as well as team's work area clean and tidy
- PC8.** maintain efficiency and productivity while performing role/responsibility
- PC9.** supervise the team to ensure that the work is done as per the assigned and agreed requirements
- PC10.** create schedules and rosters for the team to ensure they understand individual work requirements

Maintain safe and secure working environment

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

- PC11.** identify organisation's health, safety, security policies and procedures

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- PC12.** instruct team to report any identified breaches in health, safety, and security policies and procedures to the designated person
- PC13.** manage hazards such as illness, accidents, fires or any other natural calamity safely, as per organisation's emergency procedures, within the limits of individual's authority
- PC14.** report any hazard outside the individual's authority to the relevant person in line with organisational procedures and warn others who may be affected

Material / energy / electricity conservation practices

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

- PC15.** implement ways to optimize usage of material including water in various tasks/activities/processes
- PC16.** supervise the team to ensure responsible use of resources
- PC17.** motivate the team to carry out routine cleaning of tools, machine and equipment
- PC18.** guide the team to optimize use of electricity/energy in various tasks/activities/processes
- PC19.** implement periodic checks of the functioning of the equipment/machine and rectify wherever required
- PC20.** guide the team to report malfunctioning and lapses in maintenance of equipment
- PC21.** implement ways to use electrical equipment and appliances properly

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** strategies pertinent to the field that can be used to pursue an advancement of skills
- KU2.** key performance indicators for the new tasks
- KU3.** feedback processes and formats
- KU4.** timelines and goals as well as their relevance to work allocated
- KU5.** importance of quality and timely delivery of the product/service
- KU6.** layout of the workstation and equipment used
- KU7.** escalation matrix and its importance, especially in case of emergencies
- KU8.** ways of time and cost management
- KU9.** rules/regulation for maintaining health and safety at workplace
- KU10.** meaning of hazard, different types of health and safety hazards found in the workplace, risks and threats based on the nature of work
- KU11.** procedures to report breaches in health, safety and security
- KU12.** ways of managing resources and material efficiently
- KU13.** ways to recognize common electrical problems and common practices of conserving electricity

Generic Skills (GS)

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

- GS1.** explore various pathways to expand one's own learning skills and abilities

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- GS2.** analyse feedback for improving one's way of working
- GS3.** interpret feedback from superiors in a constructive way
- GS4.** identify the root cause of problems
- GS5.** understand the problem by asking significant questions to clarify the various points of view on the problem
- GS6.** seek clarifications from superior about the job requirement
- GS7.** work in a team with full coordination of team members
- GS8.** read instructions/guidelines and Standard Operating Practices (SOP) documents
- GS9.** complete tasks efficiently and accurately within stipulated time
- GS10.** record data in statutory documents relevant to safety and hygiene
- GS11.** escalate/refer all anomalies to the concerned persons
- GS12.** identify the most suitable course of action for completing the task using provided resources

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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Manage learning and self-direction</i>	4	5	-	-
PC1. develop technical and personal skills to be updated with new technologies prevalent in the industry	2	1	-	-
PC2. train the team such that they are able to adapt latest products/services in their working environment	1	2	-	-
PC3. identify opportunities for team building workshops and motivational trainings	1	2	-	-
<i>Develop critical thinking and problem solving</i>	4	7	-	-
PC4. guide the team to be accountable for timely completion of tasks	2	3	-	-
PC5. analyse problems accurately to be able to correctly suggest suitable solutions to the concerned persons	1	2	-	-
PC6. train the team to estimate the cause of the problem and validate	1	2	-	-
<i>Perform work as per quality standards</i>	5	9	-	4
PC7. implement ways to keep immediate as well as team's work area clean and tidy	1	2	-	-
PC8. maintain efficiency and productivity while performing role/responsibility	1	2	-	2
PC9. supervise the team to ensure that the work is done as per the assigned and agreed requirements	1	2	-	1
PC10. create schedules and rosters for the team to ensure they understand individual work requirements	2	3	-	1
<i>Maintain safe and secure working environment</i>	12	13	-	2
PC11. identify organisation's health, safety, security policies and procedures	3	3	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. instruct team to report any identified breaches in health, safety, and security policies and procedures to the designated person	3	3	-	-
PC13. manage hazards such as illness, accidents, fires or any other natural calamity safely, as per organisation's emergency procedures, within the limits of individual's authority	3	4	-	1
PC14. report any hazard outside the individual's authority to the relevant person in line with organisational procedures and warn others who may be affected	3	3	-	1
<i>Material / energy / electricity conservation practices</i>	15	16	-	4
PC15. implement ways to optimize usage of material including water in various tasks/activities/processes	1	2	-	1
PC16. supervise the team to ensure responsible use of resources	2	2	-	1
PC17. motivate the team to carry out routine cleaning of tools, machine and equipment	2	2	-	1
PC18. guide the team to optimize use of electricity/energy in various tasks/activities/processes	3	4	-	-
PC19. implement periodic checks of the functioning of the equipment/machine and rectify wherever required	2	2	-	1
PC20. guide the team to report malfunctioning and lapses in maintenance of equipment	3	2	-	-
PC21. implement ways to use electrical equipment and appliances properly	2	2	-	-
NOS Total	40	50	-	10

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	TEL/N9104
NOS Name	Manage Work, Resources and Safety at workplace
Sector	Telecom
Sub-Sector	Generic
Occupation	Generic
NSQF Level	5
Credits	1
Version	2.0
Last Reviewed Date	NA
Next Review Date	27/01/2025
NSQC Clearance Date	27/01/2022

Qualification Pack

DGT/VSQ/N0102: Employability Skills (60 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.** identify employability skills required for jobs in various industries
- PC2.** identify and explore learning and employability portals

Constitutional values - Citizenship

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

- PC3.** 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.
- PC4.** follow environmentally sustainable practices

Becoming a Professional in the 21st Century

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

- PC5.** recognize the significance of 21st Century Skills for employment
- PC6.** 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

Basic English Skills

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

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- PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- PC9.** 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:

- PC10.** understand the difference between job and career
- PC11.** prepare a career development plan with short- and long-term goals, based on aptitude

Communication Skills

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

- PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- PC13.** work collaboratively with others in a team

Diversity & Inclusion

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

- PC14.** communicate and behave appropriately with all genders and PwD
- PC15.** 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:

- PC16.** select financial institutions, products and services as per requirement
- PC17.** carry out offline and online financial transactions, safely and securely
- PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- PC19.** 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:

- PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21.** use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22.** use basic features of word processor, spreadsheets, and presentations

Entrepreneurship

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

- PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC25.** 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:

- PC26.** identify different types of customers
- PC27.** identify and respond to customer requests and needs in a professional manner.

Qualification Pack

PC28. follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

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

PC29. create a professional Curriculum vitae (Résumé)

PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively

PC31. apply to identified job openings using offline /online methods as per requirement

PC32. answer questions politely, with clarity and confidence, during recruitment and selection

PC33. 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. 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 and use applications such as word processors, spreadsheets etc.

KU16. how to identify business opportunities

KU17. types and needs of customers

KU18. how to apply for a job and prepare for an interview

KU19. 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

GS2. communicate effectively using appropriate language in formal and informal settings



Qualification Pack

- GS3.** behave politely and appropriately with all
- GS4.** how to work in a virtual mode
- 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

Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. identify employability skills required for jobs in various industries	-	-	-	-
PC2. identify and explore learning and employability portals	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC3. 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.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	2	4	-	-
PC5. recognize the significance of 21st Century Skills for employment	-	-	-	-
PC6. 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	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development & Goal Setting</i>	1	2	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. understand the difference between job and career	-	-	-	-
PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
<i>Communication Skills</i>	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	2	-	-
PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	2	3	-	-
PC16. select financial institutions, products and services as per requirement	-	-	-	-
PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	3	4	-	-
PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-

Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Entrepreneurship</i>	2	3	-	-
PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	1	2	-	-
PC26. identify different types of customers	-	-	-	-
PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
PC28. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
PC31. apply to identified job openings using offline /online methods as per requirement	-	-	-	-
PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-

Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	NA
Next Review Date	29/03/2026
NSQC Clearance Date	29/03/2023

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Element/ 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 Element/ PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score the Recommended Pass % aggregate for the QP.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

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
TEL/N4133.Maintain Cluster Telecom Site	30	55	-	15	100	25
TEL/N4136.Manage Issues and Operational Expenditures OPEX	35	55	-	10	100	25
TEL/N9103.Implement Effective Interaction at workplace	30	60	-	10	100	20
TEL/N9104.Manage Work, Resources and Safety at workplace	40	50	-	10	100	20
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	10
Total	155	250	-	45	450	100

Qualification Pack

Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
ZOM	Zonal Operation Manager
O&M	Operations & Maintenance
PIU	Power Interface Unit
SMPS	Switch-Mode Power Supply
BTS	Base Transceiver Station
BSC	Base Station Controller
MSC	Mobile Switching Center
DG	Diesel Generator
EB	Electricity Board
NOC	Network operating centre
GBT	Ground based tower
RTP	Roof Top Tower

Qualification Pack

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.

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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.
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
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge
NOS (National Occupational Standards)	NOS are Occupational Standards which apply uniquely in the Indian context
Occupation	Occupation is a set of job roles under which role-holders perform similar/related set of functions in an industry

Qualification Pack

Occupational Standards	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Performance Criteria	Performance criteria are statements that together specify the standards of performance required when carrying out a task.
QP (Qualification Pack)	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Qualification Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack
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 has a critical impact on the quality of performance required
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities
Unit Code	Unit Code is a unique identifier for an OS unit, which can be denoted with either an "O"™ or an "N"™
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Vertical	Vertical may exist within a sub-sector representing different domain