

QUALIFICATION FILE

Optical Fiber Technician

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☒ Apprenticeship

☒ Upskilling ☐ Dual/Flexi Qualification ☒ For ToT ☒ For ToA

☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 4.0

Submitted By:

Telecom Sector Skill Council

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Section 1: Basic Details

1.	Qualification Name	Optical Fiber Technician																				
2.	Sector/s	Telecom																				
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: (2022/TEL/TSSC/07013, V4.0)	Qualification Name of existing/previous version: Optical Fiber Technician																			
4.	a. OEM Name b. Qualification Name (Wherever applicable)																					
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-04-TL-04077-2025-V2-TSSC	6. NCrF/NSQF Level: 4.0																			
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate																				
8.	Brief Description of the Qualification	An Optical Fiber Technician oversees the installation and commissioning of Optical Fiber Cables (OFCs) and ensures network reliability through proactive maintenance and timely fault rectification. The individual's responsibilities include periodic preventive maintenance, condition-based repairs, and effective fault management to maintain optimal uptime and service quality.																				
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>12th Grade Pass</td> <td></td> </tr> <tr> <td>2.</td> <td>Completed 2nd year of 3-year diploma after 10th in Electronics and Communication Engineering/ Electrical Engineering/ Telecommunication Engineering</td> <td></td> </tr> <tr> <td>3.</td> <td>10th Grade Pass</td> <td>3 years of experience in operations and maintenance of passive infrastructure</td> </tr> <tr> <td>4.</td> <td>Previous relevant Qualification of NSQF Level 3.0</td> <td>3 years of relevant experience in operations and maintenance of passive infrastructure</td> </tr> <tr> <td>5.</td> <td>Previous relevant Qualification of NSQF Level 3.5</td> <td>1.5 years of relevant experience in operations and maintenance of passive infrastructure</td> </tr> </tbody> </table>			S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1.	12th Grade Pass		2.	Completed 2nd year of 3-year diploma after 10 th in Electronics and Communication Engineering/ Electrical Engineering/ Telecommunication Engineering		3.	10th Grade Pass	3 years of experience in operations and maintenance of passive infrastructure	4.	Previous relevant Qualification of NSQF Level 3.0	3 years of relevant experience in operations and maintenance of passive infrastructure	5.	Previous relevant Qualification of NSQF Level 3.5	1.5 years of relevant experience in operations and maintenance of passive infrastructure
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																				
1.	12th Grade Pass																					
2.	Completed 2nd year of 3-year diploma after 10 th in Electronics and Communication Engineering/ Electrical Engineering/ Telecommunication Engineering																					
3.	10th Grade Pass	3 years of experience in operations and maintenance of passive infrastructure																				
4.	Previous relevant Qualification of NSQF Level 3.0	3 years of relevant experience in operations and maintenance of passive infrastructure																				
5.	Previous relevant Qualification of NSQF Level 3.5	1.5 years of relevant experience in operations and maintenance of passive infrastructure																				

		b. Age: NA																						
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	16	11. Common Cost Norm Category (I/II/III) (wherever applicable): I																					
12.	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA																						
13.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	☐ Offline ☐ Online ☒ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>OJT Mandatory (Hours)</th><th>OJT Recommended (Hours)</th><th>Total (Hours)</th></tr> </thead> <tbody> <tr> <td>Classroom (offline)</td><td>120</td><td>210</td><td>150</td><td></td><td>480</td></tr> <tr> <td>Online</td><td>120</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> (Refer Blended Learning Annexure for details)					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	120	210	150		480	Online	120				
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)																			
Classroom (offline)	120	210	150		480																			
Online	120																							
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/7422.0206																						
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	Optical Fiber Technician (NSQF Level 4) → Cluster In-Charge (NSQF Level 5)																						
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi																						
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																						
18.	Is the Job Role Amenable to Persons with Disability	☒ Yes ☐ No If "Yes", specify applicable type of Disability: Motor Impairment, Hearing Impairments, Speech and Language Disorders																						
19.	How Participation of Women will be Encouraged	Encouraging the participation of women in the role of Optical Fiber Technician in the telecom sector can be achieved through strategies that foster diversity, inclusivity, and gender equality. This can include offering targeted training and skill development programs for female candidates interested in these roles. Additionally, creating a workplace culture that is safe, respectful, and inclusive, and free from harassment or discrimination, is crucial for ensuring equal opportunities for women in the telecom sector.																						
20.	Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	☒ Yes ☐ No NOS: TEL/N9111																						
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☐ No Colleges ☒ Yes ☐ No																						
22.	Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Mr. Praveen Sirohi Email: ceo@tsscindia.com Website: www.tsscindia.com Contact No.: 0124-4148029																						

23.	Final Approval Date by NSQC: 08-05-2025	24. Validity Duration: 3 years	25. Next Review Date: 30-04-2028
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NSQC Approved

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory **Pr.**-Practical **OJT**-On the Job Training **Man.**-Mandatory **Rec.**-Recommended **Proj.**-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Coordinate Installation and Commissioning of Optical Fiber Cables (OFCs)	TEL/N4137, v3.0	Core	4.0	6	30	80	70	-	180	30	50	-	20	100	25
2.	Undertake Condition based Maintenance and Planned Repair Activities	TEL/N6403, v4.0	Core	4.0	4	20	60	40	-	120	30	50	-	20	100	25
3.	Perform Corrective Maintenance/Restoration of Optical Fiber Faults	TEL/N6404, v4.0	Core	4.0	4	30	50	40	-	120	30	50	-	20	100	25
4.	Follow sustainability practices in telecom cabling operations	TEL/N9111, v1.0	Core	4.0	1	10	20	-	-	30	30	50	-	20	100	15
5.	Employability Skills (30 Hours)	DGT/VSQ/N 0101, v1.0	Non-Core	2.0	1	30	-	-	-	30	20	30	-	-	50	10
Duration (in Hours) / Total Marks					16	120	210	150	-	480	140	230	-	80	450	100

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: - % (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) <i>(as per NCVET guidelines)</i>	Educational Qualification: Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields. Industry & Training Experience: Minimum 6 years of experience after Graduation in Optical Fiber Domain. Certification: "Trainer" mapped to the Qualification Pack "MEP/Q2601, v3.0". Minimum accepted score is 80% aggregate.
2.	Master Trainer's Qualification and experience in the relevant sector (in years) <i>(as per NCVET guidelines)</i>	Educational Qualification: Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields. Industry & Training Experience: Minimum 8 years of experience after Graduation in Optical Fiber Domain. Certification: "Master Trainer" mapped to the Qualification Pack "MEP/Q2602, v3.0". Minimum accepted score is 90% aggregate.
3.	Tools and Equipment Required for Training	☐ Yes ☐ No <i>(If "Yes", details to be provided in Annexure)</i>
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	NA

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Educational Qualification: Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields. Industry & Training Experience: Minimum 6 years of experience after Graduation in Optical Fiber Domain. Certification: "Assessor" mapped to the Qualification Pack "MEP/Q2701, v3.0". Minimum accepted score is 80% aggregate.
2.	Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Educational Qualification: Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields. Industry & Training Experience: Minimum 6 years of experience after Graduation in Optical Fiber Domain. Certification: "Assessor" mapped to the Qualification Pack "MEP/Q2701, v3.0". Minimum accepted score is 80% aggregate.
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) <i>(as per NCVET guidelines)</i>	Educational Qualification: Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields. Industry & Training Experience: Minimum 8 years of experience after Graduation in Optical Fiber Domain.

		Certification: "Lead Assessor" mapped to the Qualification Pack "MEP/Q2702, v3.0" Minimum accepted score is 90% aggregate.
4.	Assessment Mode (<i>Specify the assessment mode</i>)	Offline/Online
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No (<i>details to be provided in Annexure-if it is different for Assessment</i>)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): NA
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): NA
3.	Government /Industry initiatives/ requirement (Yes/No): NA
4.	Number of Industry validation provided: 21
5.	Estimated nos. of persons to be trained and employed: 21790
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: <i>approved</i> If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf level/NSQF descriptors (<i>Mandatory</i>)	<i>Annexure 1</i>
2.	Annexure: List of tools and equipment relevant for qualification (<i>Mandatory, except in case of online course</i>)	<i>Annexure 2</i>
3.	Annexure: Detailed Assessment Criteria (<i>Mandatory</i>)	<i>Annexure 6</i>
4.	Annexure: Assessment Strategy (<i>Mandatory</i>)	<i>Annexure 7</i>
5.	Annexure: Blended Learning (<i>Mandatory, in case selected Mode of delivery is "Blended Learning"</i>)	<i>NA</i>
6.	Annexure: Multiple Entry-Exit Details (<i>Mandatory, in case qualification has multiple Entry-Exit</i>)	<i>NA</i>
7.	Annexure: Acronym and Glossary (<i>Optional</i>)	<i>Annexure 8</i>
8.	Supporting Document: Model Curriculum (<i>Mandatory – Public view</i>)	<i>Attached</i>

9.	Supporting Document: Career Progression (Mandatory - Public view)	Attached
10.	Supporting Document: Occupational Map (Mandatory)	Attached
11.	Supporting Document: Assessment SOP (Mandatory)	Attached
12.	Any other document you wish to submit:	NO

Annexure 1: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional Theoretical Knowledge/Process	Coordinate Installation and Commissioning of Optical Fiber Cables (OFCs) - Inspect the route plan - Coordinate cable laying and pulling - Use multi-fiber splicing and termination techniques - Test and validate cable effectiveness - Adhere to applicable health and safety guidelines - Report and record installation activities Undertake Condition based Maintenance and Planned Repair Activities - Obtain maintenance schedule and patrol assigned route - Carry out maintenance testing of dark/spare OFCs - Repair OFCs as per plan - Carry out equipment maintenance at Points of Presence (POPs) - Record and report fiber test results Perform Corrective Maintenance/Restoration of Optical Fiber Faults - Handle fault notifications - Rectify faults at POPs - Document and report the status	An Optical Fiber Technician at NSQF Level 4 installs, maintains, and restores optical fiber networks. Responsibilities include inspecting routes, coordinating cable laying, splicing, testing, and troubleshooting faults to ensure seamless connectivity. They conduct preventive and corrective maintenance using advanced tools, repair OFCs, and document activities to minimize downtime. Sustainability is key, requiring waste management, resource optimization, and regulatory compliance. With expertise in fiber installation, splicing, and maintenance, this role ensures efficiency, reliability, and environmental responsibility in telecom operations.	4.0

	Follow sustainability practices in telecom cabling operations - Identify recyclable, reusable, and hazardous materials - Follow waste management, recycling, and disposal protocols - Optimize material and energy usage in cabling work - Comply with environmental and regulatory standards		
Professional and Technical Skills/ Expertise/ Professional Knowledge	- Know the procedures for optical fiber installation, splicing, termination, and testing. - Know the principles of optical fiber communication, signal transmission, and loss characteristics. - Know the applicable health, safety, and environmental guidelines for telecom operations. - Know the types of fiber optic cables, connectors, and splicing techniques used in telecom networks. - Know the procedures for handling, routing, and securing fiber cables to prevent damage. - Know how to interpret as-built diagrams, route plans, and network layouts for installation and maintenance. - Know how to operate OTDR, power meters, fusion splicers, and other fiber testing tools. - Know how to identify, troubleshoot, and rectify faults in optical fiber networks, including POP equipment failures. - Know how to perform condition-based and planned maintenance of fiber optic infrastructure. - Know how to document fiber test results, maintain OTDR registers, and update installation records. - Know how to implement waste management, recycling, and sustainability practices in telecom cabling. - Understand the importance of network availability, service level agreements (SLAs), and preventive maintenance.	An Optical Fiber Technician requires a combination of theoretical knowledge and hands-on expertise to install, maintain, and restore fiber optic networks. Responsibilities include inspecting route plans, coordinating cable laying, performing splicing and termination, and conducting fiber testing using OTDR, power meters, and other advanced tools. The role also involves fault detection, corrective maintenance at Points of Presence (POPs), and ensuring network reliability through condition-based and planned repairs. Technicians must adhere to health, safety, and environmental regulations while implementing sustainability practices such as waste management, recycling, and energy optimization. They play a crucial role in maintaining service level agreements (SLAs), minimizing downtime, and ensuring compliance with industry standards. By demonstrating technical efficiency, problem-solving skills, and regulatory adherence, this role aligns with NSQF Level 4, emphasizing autonomy and specialized expertise in fiber optic network operations.	4.0

	- Understand industry best practices for fiber optic installation, maintenance, and restoration. - Understand regulatory and compliance requirements for telecom cabling operations.		
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	- Select appropriate tools, equipment, and testing instruments for fiber optic installation, maintenance, and fault rectification. - Define work priorities, resource requirements, and timelines to ensure adherence to SLAs and minimize downtime. - Demonstrate problem-solving skills to troubleshoot network faults, interpret OTDR traces, and perform corrective actions effectively. - Apply critical thinking to analyze fiber test results, optimize splicing techniques, and ensure network stability. - Develop an entrepreneurial mindset by identifying opportunities in fiber optic services, preventive maintenance, and infrastructure upgrades. - Ensure compliance with health, safety, and environmental standards while following best practices in telecom operations. - Communicate effectively with team members, supervisors, and clients to coordinate installation, maintenance, and fault restoration tasks. - Adapt to new technologies, evolving industry standards, and emerging best practices in fiber optic cabling and network management.	Employment readiness and entrepreneurship skills for an Optical Fiber Technician focus on technical expertise, fault management, and professional growth. Technicians must select appropriate tools, analyze fiber test results, and implement systematic approaches for installation, maintenance, and fault rectification. They should ensure network stability, adhere to safety protocols, and optimize workflows for efficient fiber optic operations. Understanding regulatory compliance, sustainability practices, and emerging technologies is essential for maintaining industry standards. By defining troubleshooting strategies, enhancing problem-solving skills, and fostering an entrepreneurial mindset, technicians can advance their careers and contribute to innovation in the telecom sector. Therefore, this role is classified at Level 4.	4.0
Broad Learning Outcomes/Core Skill	The Broad Learning Outcomes/Core Skill are: - Interpret technical documents, route plans, and as-built diagrams for accurate installation and maintenance of optical fiber networks. - Apply advanced fiber optic testing techniques, including OTDR, power meter, and light source analysis, to diagnose and rectify faults. - Execute fiber splicing, termination, and jointing	The Optical Fiber Technician role at NSQF Level 4 requires a hands-on approach with expertise in fiber optic installation, maintenance, and fault rectification. Technicians must perform routine and non-routine tasks, including fiber splicing, termination, testing, and troubleshooting while ensuring compliance with health, safety, and environmental regulations. They should demonstrate problem-solving skills, effective communication, and teamwork to enhance network	4.0

	processes using precision tools and industry best practices. • Ensure compliance with health, safety, and environmental regulations while handling fiber optics and telecom equipment. • Maintain accurate documentation, including test reports, maintenance logs, and installation records, for operational efficiency. • Optimize fiber optic installation and maintenance workflows by coordinating with teams and adhering to service level agreements. • Identify, segregate, and manage recyclable, reusable, and hazardous materials to promote sustainability in telecom operations. • Troubleshoot fiber optic faults at Points of Presence (POPs) and underground cable routes, ensuring minimal network downtime. • Implement best practices in preventive and corrective maintenance to enhance network reliability and performance. • Develop problem-solving, decision-making, and entrepreneurial skills to improve work efficiency and career growth in the telecom industry.	efficiency. Additionally, their role involves selecting appropriate tools, implementing safety measures, and adhering to sustainability practices. Working under supervision, they contribute to structured processes, aligning with NSQF Level 4, which focuses on applying technical knowledge in familiar work environments while developing expertise in optical fiber networks.	
Responsibility	The responsibilities are: • Inspect the route plan • Coordinate cable laying and pulling • Use multi-fiber splicing and termination techniques • Test and validate cable effectiveness • Adhere to applicable health and safety guidelines • Report and record installation activities • Obtain maintenance schedule and patrol assigned route • Carry out maintenance testing of dark/spare OFCs • Repair OFCs as per plan • Carry out equipment maintenance at Points of	An Optical Fiber Technician oversees the installation and commissioning of Optical Fiber Cables (OFCs) and ensures network reliability through proactive maintenance and timely fault rectification. The individual's responsibilities include periodic preventive maintenance, condition-based repairs, and effective fault management to maintain optimal uptime and service quality.	4.0

	Presence (POPs) - Record and report fiber test results - Handle fault notifications - Rectify faults at POPs - Document and report the status - Identify recyclable, reusable, and hazardous materials - Follow waste management, recycling, and disposal protocols - Optimize material and energy usage in cabling work - Comply with environmental and regulatory standards		
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Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	Tweezers	Pieces	5
2.	Splices	Pieces	5
3.	Projection System with PC/Laptop	Pieces	1
4.	OTDR	Pieces	2
5.	Fusion Splicer (Splicing machine)	Pieces	1
6.	Fiber Optic Test Source	Pieces	1
7.	Fiber Optic Stripper	Pieces	5
8.	Fiber Optic Power Meter	Pieces	1
9.	Connectors	Pieces	5
10.	Connector Crimper	Pieces	5
11.	Cleaver	Pieces	5
12.	Cable Splitter	Pieces	5
13.	Cable Jacket Stripper	Pieces	5
14.	Cable Cutter	Pieces	5

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard

2. Projector
3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker
7. Duster

Annexure 3: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1.	Ibus Network and infrastructure Pvt.Ltd.	TK Narayanan	Deputy General Manager Commercial	7th Floor Tower B, Vatika Towers Golf Crouse Road Sector 54 Gurugram ,Haryana India 122011		tk.narayanan@ibusnetworks.com	
2.	ICAI Computer & IT Skill Enhancement Institute (ICSE)	Er. Kamaljeet Kumar Sharma	Managing Director	#2266 (Site No. 24), Phase 7/Sector 61, S.A.S Nagar (Mohali) 160062, Punjab (India)		contact@icseinstitute.com kksmhl@gmail.com	
3.	JRS Global Networks Pvt.Ltd.	Arvind Yadav	Asst. Account Manager Telecom	A 22, Sector-65 Noida, UP-201307		account3@jrsgl.com	
4.	Expert Consultant & Coach for Telecom Fibre Optics, FTTx and Broadband	Dr. Anuj Shrivastava	Ex Executive Director Indian Telecom Services	Ghaziabad, UP		srianujkumar@gmail.com	
5.	Jio Platforms Limited (Jio)	Abhijay Singh Sisodia	Senior Manager	Office-101, Saffron, Nr.Centre Point, Panchwati 5 Rasta, Ambawadi, Ahmedabad-380006 Gujarat		abhijay.sisodia@ril.com	
6.	Vodafone India Shared Service Private Limited	Manmohan Sharma	Deputy General Manager	0-4th floor, Cluster D, Wing 3, EON Free Zone, Kharadi, Pune, Maharashtra 411014		manmohan.sharma@vodafone.com	

7.	Teoco	Naman Khosla Abhijay Singh Sisodia	Technical Consultant	Infotech Center -6th floor, 14/2 Old Delhi Gurgaon Road, Dundahera, Gurgaon - 122016, India	naman.khosla@teoco.com	
8.	Global Logic	Rashid Muhammad	Associate Manager	Plot No.7, Oxygen Business Park SEZ, Tower, 3, Noida- Greater Noida Expy, Sector 144, Noida, Uttar Pradesh 201304	rashid.muhammad@globallogic.com	
9.	Mahendra Technical Institute	Mahendra Brmukh	Chairman and Managing Director	1st Floor, 3/B M B Classic, Telco Road, Near Kailash Dairy, Chinchwad Station, Pune - 411019 Maharashtra, India	info.mtipune@gmail.com	
10.	Amazon	Anshul Gupta	Program Manager	Bangalore	anshigu@amazon.com	
11.	Stealth Mode Startup Company	Avadh Gupta	Founder, Co- Founder & Investor	Pune	avadhmac@gmail.com	
12.	Ranitronics	Yakama Vijayasree Kumar	Founder & Technical Consultant	Villa 302, Namaha Rhythm, Road No. 1, Kavya Avenue, Bachupally, Hyderabad - 500090, Telangana	info@ranitronics.com	
13	Eco Works	Deepali Sinha Khetriwal	Founder & CEO	C-601, Kalpataru Regency Phase 1, Kalyani Nagar, Pune 411006	deepali@ecowork.international	
14	Himachal Futuristic Communications Limited (HFCL)	Amit Agarwal	VP PLM	8, Commercial Complex, Masjid Moth, Greater Kailash - 11, New Delhi - 110048, India	amit.agarwal@hfcl.com	
15	Tata Communication	Alka Asthana	Head of Regulatory Affairs	Next Gen Tower Outer Ring Road, GK-1, New Delhi - 110048	alka.asthanatelecom@gmail.com	
16	Reckitt Benckiser	Sachin Sharma	Demand Manager	Udyog Vihar, Phase V, Gurgaon, Haryana	sachin.sharma@rb.com	
17	Sycamore Informatics	Rahul Kumar Kaushik	Product Manager	No. 6, 2nd Floor, 2nd Main, Arekere, Off Bannerghatta Road, Bangalore 560076	rahul.kaushik@sycamoreinformatics.com	

18	Nokia	Saurabh Singh	Software Quality Engineer	L5 and L6 Building Manyata Embassy Business Park Outer Ring Road, Nagawara 560045		saurabh.9.singh@nokia.com	
19	Edge Telecom	Arun Singh	Senior Project Engineer	9th floor, ILD Trade Centre, 904, main, Badshahpur Sohna Rd Hwy, near Subhash Chowk, Gurugram, Haryana 122018		arun.singh@edgetelecom.org	
20	Conduent	Prince Jain	Sr. Business Analyst	Plot No. 20, Candor Tech Space, Noida 201304		prince.jain@conduent.com	
21	Artificial Intelligence Technologies	Rohit Kumar Sharma	Manager - Development	A-21, sector 4, Block A, Kailash Colony, Greater Kailash, New Delhi,		rohit.sharma@aituniversal.com	
22	Ecom Express.in	Shekhar Poswal	Senior QA L1	10 th Floor, Ambience Corporate Tower II, Ambience Island, Gurugram 122001		Shekhar.p@ecomexpress.in	
23	Paarminder Electronics Process Consultancy	Paarminder Singh	Consultant	New Delhi		singhpaarminder@gmail.com	
24	Senryaku Consulting	Udit Kaushik	Co-founder	Senryaku Management Private Limited Address: UTC031, DLF The Ultima, Sector 81, Gurugram, HR 122004		udit.kau@gmail.com	
25	Sopra Steria	Rikan Singh Tomar	Team Leader	Plot No. 20 & 21, Seaview Special Economic Zone, Building 4, Sector 135, Noida, Uttar Pradesh 201304		rikan.singh@soprasteria.com	

Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates	Women	People with Disability
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	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2025	6537	4576	327	164	327	164
2026	6537	4576	327	164	327	164
2027	8716	6100	408	204	408	204

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
4.0	Dec 2021 to March 2022	763	609	541									
4.0	April 2022 to March 2023	6525	6327	6123									
4.0	April 2023 to March 2024	6583	6418	6219									
4.0	April 2024 to March 2025	3564	1426	1324									

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

- 1.
- 2.

Content availability for previous versions of qualifications:

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available:

Annexure 5: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on:

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☒ Theory/ Lectures - Imparting theoretical and conceptual knowledge	LMS Portal- TSSC Telco Learning Portal will be utilized with online content/virtual lectures (Telcolearning.com)	100:100
2	☒ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	LMS Portal- TSSC Telco Learning Portal will be utilized with online content/virtual lectures (Telcolearning.com)	100:100
3	☐ Showing Practical Demonstrations to the learners		
4	☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training		
5	☐ Tutorials/ Assignments/ Drill/ Practice		
6	☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations		
7	☐ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training		

Annexure 6: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
TEL/N4137: Coordinate Installation and Commissioning of Optical Fiber Cables (OFCs)	<i>Inspect the route plan</i>	5	10	-	3
	PC1. obtain and review the OFC route plan from the planning team or supervisor	1	2	-	0.5
	PC2. verify the proposed route, ensuring compliance with manufacturer-specified bend ratios and industry standards	1	2	-	0.5
	PC3. identify dependencies and create an installation work plan	1	2	-	0.5
	PC4. determine required statutory permissions and liaise with relevant authorities to secure clearances	1	2	-	0.5
	PC5. ensure compatibility of ultra-low loss cables with project requirements	0.5	1	-	0.5
	PC6. select appropriate optical fiber mode (Single Mode or Multi Mode) based on the project location and network design	0.5	1	-	0.5
	<i>Coordinate cable laying and pulling</i>	10	15	-	6.5

PC7.	arrange tools, including advanced cable-handling equipment, and spares for installation	1	2	-	1
PC8.	confirm placement of the cable drum at the site	1	2	-	0.5
PC9.	test cables on the drum for optical continuity	1	2	-	0.5
PC10.	supervise trenching to ensure it is carried out as per the route plan and site terrain	1	1	-	0.5
PC11.	ensure adherence to manufacturer-specified bend radii and manage tension during installation	1	1	-	0.5
PC12.	use specially designed dispensers for accurate duct placement in trenches	1	1	-	0.5
PC13.	check pipe/duct depths for compliance with laying standards and rectify collapsed or twisted ducts	1	1	-	0.5
PC14.	confirm ducts are clean and sealed with appropriate end plugs to prevent contamination	1	1	-	0.5
PC15.	oversee cable blowing/jetting using advanced blowing machines	0.5	1	-	0.5
PC16.	verify additional cable length (loop) is available at jointing locations for future use	0.5	1	-	0.5
PC17.	ensure proper uncoiling and alignment of PLB ducts	0.5	1	-	0.5
PC18.	confirm the use of protective materials such as GI or RCC pipes where necessary	0.5	1	-	0.5
	<i>Use multi-fiber splicing and termination techniques</i>	4	6	-	2.5
PC19.	verify availability and proper operation of advanced multi-joiner fusion splicers	1	2	-	0.5
PC20.	supervise multi-fiber splicing to ensure alignment and minimal signal loss	1	1	-	0.5
PC21.	use advanced protection sleeves and connectors during termination	0.5	1	-	0.5
PC22.	follow step-by-step splicing and termination techniques to ensure adherence to quality standards	0.5	1	-	0.5
PC23.	test for signal attenuation and ensure re-termination if required	1	1	-	0.5
	<i>Test and validate cable effectiveness</i>	5	8	-	3.5
PC24.	use advanced testing tools like OTDR, power meters, and light meters to validate installations	1	2	-	0.5
PC25.	identify and eliminate cross-fiber issues using power source and power meter tests	1	1	-	0.5
PC26.	ensure splice quality meets quality assurance standards	1	1	-	0.5
PC27.	perform final transmission loss tests and rectify issues exceeding manufacturer specifications	0.5	1	-	0.5
PC28.	check for proper backfilling, crowning, and installation of route/joint markers	0.5	1	-	0.5
PC29.	update as-built documentation with accurate joint locations and installed fiber routes	0.5	1	-	0.5
PC30.	ensure site cleanup and disposal of debris	0.5	1	-	0.5
	<i>Adhere to applicable health and safety guidelines</i>	4	6	-	2.5
PC31.	comply with site-specific risk controls, OHS guidelines, and environmental regulations	1	2	-	0.5
PC32.	use appropriate PPE, including helmets, knee pads, safety boots, and trench guards	1	1	-	0.5
PC33.	manage environmental hazards such as Earth Potential Rise (EPR) effectively	1	1	-	0.5

	PC34. adhere to emergency protocols for safety incidents	0.5	1	-	0.5
	PC35. ensure cleanliness and proper handling to avoid fiber contamination	0.5	1	-	0.5
	<i>Report and record installation activities</i>	2	5	-	2
	PC36. record cable ID/drum numbers for fault localization	0.5	2	-	0.5
	PC37. document test reports, including OTDR results, and share them with relevant teams	0.5	1	-	0.5
	PC38. obtain sign-off from project teams and update the network operations center (NOC) for integration	0.5	1	-	0.5
	PC39. maintain all installation documents for audits and inspections	0.5	1	-	0.5
Total Marks		30	50	-	20
TEL/N6403: Undertake Condition based Maintenance and Planned Repair Activities	<i>Obtain maintenance schedule and patrol assigned route</i>	10	16	-	7
	PC1. obtain as-built drawings from NOC/supervisors and identify the assigned maintenance route for Optical Fiber Cables (OFCs)	2	3	-	1
	PC2. conduct patrolling and surveillance of OFC routes per the maintenance plan	2	3	-	1
	PC3. monitor activities by third parties near the network to ensure the safety of OFCs	2	2	-	1
	PC4. coordinate with authorities regarding planned construction/activity in the vicinity of OFCs	1	2	-	1
	PC5. follow the applicable preventative maintenance measures and schedules to ensure the longevity and performance of OFCs	1	2	-	1
	PC6. perform sample checks of as-built drawings	1	2	-	1
	PC7. communicate any updates to as-built drawings to NOC/supervisors for documentation	1	2	-	1
	<i>Carry out maintenance testing of dark/spare OFCs</i>	5	10	-	3
	PC8. use advanced tools like Optical Time Domain Reflectometer (OTDR), Power Meter, Light Meter, and Visual Fault Locator (VFL) for maintenance testing	1	2	-	0.5
	PC9. perform OTDR and power meter tests on all dark/spare fibers as per required periodicity	1	2	-	0.5
	PC10. measure attenuation and loss to ensure adherence to network performance standards	1	2	-	1
	PC11. interpret OTDR results to identify transmission losses and reflection points	1	2	-	0.5
	PC12. advise the planning team on route strengthening based on test results	1	2	-	0.5
	<i>Repair OFCs as per plan</i>	6	10	-	4
	PC13. arrange outage in coordination with the Network Operation Centre (NOC) before repair activities	1	2	-	1
	PC14. use advanced multi-joiner fusion splicers to minimize signal loss during repair work	1	2	-	0.5
	PC15. complete planned repair activities within defined timelines	1	2	-	0.5
	PC16. conduct optical tests on spare fibers to confirm the effectiveness of repairs	1	2	-	1
	PC17. follow necessary precautions when testing active fibers to prevent disruptions	1	1	-	0.5
	PC18. escalate delays and unresolved issues as per organizational procedures	1	1	-	0.5
	<i>Carry out equipment maintenance at Points of Presence (POPs)</i>	5	8	-	4

	PC19. perform periodic maintenance (monthly, quarterly, half-yearly) of equipment at POPs	1	2	-	1
	PC20. maintain co-located electronic equipment and test alarms in coordination with NOC	1	2	-	1
	PC21. ensure active fibers remain undisturbed during maintenance activities	1	2	-	1
	PC22. conduct planned repairs on joints and terminations in coordination with NCC for link margin improvement	1	1	-	0.5
	PC23. raise maintenance requests for third-party elements through the NOC	1	1	-	0.5
	<i>Record and report fiber test results</i>	<i>4</i>	<i>6</i>	-	<i>2</i>
	PC24. maintain OFC/OTDR registers with records of all fiber tests conducted	1	2	-	0.5
	PC25. maintain asset registers and track diesel oil usage at respective sites	1	2	-	0.5
	PC26. dispatch OTDR test results to supervisors for network planning and monitoring	1	1	-	0.5
	PC27. ensure all documents are available for inspection by appropriate authorities	1	1	-	0.5
	Total Marks	30	50	-	20
TEL/N6404: Perform Corrective Maintenance/Restoration of Optical Fiber Faults	<i>Handle fault notifications</i>	<i>6</i>	<i>10</i>	-	<i>4</i>
	PC1. interpret fault notifications after obtaining them from the Network Operation Center (NOC)/supervisors	2	3	-	1
	PC2. determine Turn Around Time (TAT) for rectification per Service Level Agreements (SLAs)	2	3	-	1
	PC3. access and interpret the latest as-built drawings for fault location analysis	1	2	-	1
	PC4. verify necessary tools and safety gear before heading to the fault location	1	2	-	1
	<i>Rectify faults at POPs</i>	<i>18</i>	<i>30</i>	-	<i>12</i>
	PC5. use advanced test equipment (OTDR, power meter, light sources, precision cutters, etc.) for fiber testing and troubleshooting	2	3	-	1
	PC6. identify fault location using OTDR traces, signal loss patterns, dispersion and Wavelength Division Multiplexing (WDM) analysis	2	3	-	1
	PC7. interpret as-built drawings to locate physical sites and underground cable routes	2	3	-	1
	PC8. coordinate excavation, cable pulling (if required), and preparation of jointing pits	2	3	-	1
	PC9. conduct fiber splicing using proper techniques and advanced protection sleeves/connectors	2	3	-	1
	PC10. analyze OTDR and power meter test results to assess splicing effectiveness	1	2	-	1
	PC11. secure fiber joints with appropriate reinforcements like couplers, sleeves, and Fiber Reinforced Plastic (FRP)	2	3	-	1
	PC12. evaluate the need for additional duct protection (e.g., RCC pipes, chambering) based on site conditions	1	2	-	1
	PC13. oversee back-filling of trenches, ensuring structural integrity and adherence to environmental safety standards	1	2	-	1
	PC14. verify fault rectification by performing final OTDR tests and confirming network stability	1	2	-	1
	PC15. monitor and supervise activities to ensure adherence to SLAs and minimize downtime	1	2	-	1

	PC16. escalate unresolved faults or significant delays following organizational policies	1	2	-	1
	<i>Document and report the status</i>	6	10	-	4
	PC17. ensure accurate cable marking and placement of route markers for future maintenance	2	2	-	1
	PC18. maintain comprehensive jointing records, including OTDR test reports and loss analysis	1	2	-	1
	PC19. update all relevant documents, including as-built diagrams and OTDR registers	1	2	-	1
	PC20. archive historical data for fault trends and preventive maintenance planning	1	2	-	0.5
	PC21. comply with industry standards for documentation and reporting	1	2	-	0.5
	Total Marks	30	50	-	20
TEL/N9111: Follow sustainability practices in telecom cabling operations	<i>Identify recyclable, reusable, and hazardous materials</i>	8	15	-	5
	PC1. identify different types of materials used in cabling operations, such as optical fiber, connectors, protective ducts, and joint enclosures	2	3	-	1
	PC2. segregate materials into recyclable (e.g., plastic ducts, fiber offcuts, packaging), reusable (e.g., spare connectors, splitters), and hazardous (e.g., lead-based cables, old batteries, chemical adhesives) categories	2	3	-	1
	PC3. follow workplace procedures for storing recyclable materials separately from hazardous and general waste	2	3	-	1
	PC4. label and store hazardous waste safely to prevent contamination or accidents during handling and disposal	1	3	-	1
	PC5. ensure all recyclable and hazardous waste is recorded in logs for traceability and compliance	1	3	-	1
	<i>Follow waste management, recycling, and disposal protocols</i>	6	15	-	5
	PC6. adhere to applicable SOPs for safe handling and disposal of non-recyclable and hazardous materials, such as fiber shards, cable sheaths, and chemical adhesives	2	3	-	1
	PC7. coordinate safe disposal of waste materials at designated collection points or through approved vendors, as per organizational policies and environmental guidelines	1	3	-	1
	PC8. reduce waste by minimizing excess material use and reusing components wherever possible	1	3	-	1
	PC9. maintain clean and organized work sites to prevent environmental contamination and promote workplace safety	1	3	-	1
	PC10. check for and report any issues related to improper waste disposal, unauthorized dumping, or environmental hazards to the relevant authority	1	3	-	1
	<i>Optimize material and energy usage in cabling work</i>	8	10	-	5
	PC11. plan cabling work to minimize material wastage by accurately measuring fiber optic lengths, ducts, and accessories before cutting or installing	2	2	-	1
	PC12. use energy-efficient tools and machinery where possible, ensuring minimal power consumption without compromising work efficiency	2	2	-	1
	PC13. ensure proper maintenance of cabling tools and equipment to reduce unnecessary repairs and replacements that contribute to waste	2	2	-	1

	PC14. optimize the use of trenching and ducting by following efficient layout designs to minimize excavation and reduce material consumption	1	2	-	1
	PC15. use and promote eco-friendly materials (such as low-impact protective coatings and biodegradable packaging) wherever feasible	1	2	-	1
	<i>Comply with environmental and regulatory standards</i>	8	10	-	5
	PC16. follow national and local environmental laws, regulations, and workplace policies related to telecom cabling operations	2	2	-	1
	PC17. maintain proper documentation of sustainability-related activities, including logs of disposed and recycled materials, to meet regulatory and audit requirements	2	2	-	1
	PC18. conduct periodic self-audits to verify compliance with environmental policies	2	2	-	1
	PC19. educate team members on best practices for sustainability, including waste segregation, material reuse, and responsible energy consumption	1	2	-	1
	PC20. report any violations of environmental policies, hazardous material spills, or unsafe disposal practices to the designated supervisor or regulatory body	1	2	-	1
	Total Marks	30	50	-	20
DGT/VSQ/N0101: Employability Skills (30 Hours)	<i>Introduction to Employability Skills</i>	1	1	-	-
	PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
	<i>Constitutional values – Citizenship</i>	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
	PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
	PC4. speak with others using some basic English phrases or sentences	-	-	-	-
	<i>Communication Skills</i>	1	1	-	-
	PC5. follow good manners while communicating with others	-	-	-	-
	PC6. work with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	1	-	-
	PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC8. report any issues related to sexual harassment	-	-	-	-
	<i>Financial and Legal Literacy</i>	3	4	-	-
	PC9. use various financial products and services safely and securely	-	-	-	-
	PC10. calculate income, expenses, savings etc.	-	-	-	-
	PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
	<i>Essential Digital Skills</i>	4	6	-	-
	PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
	PC13. use internet and social media platforms securely and safely	-	-	-	-
	<i>Entrepreneurship</i>	3	5	-	-

PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
Total Marks	20	30	-	-
Grand Total	170	280	-	100

Annexure 7: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

2. Testing Environment:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)

- Question papers created by the SME verified by the other subject Matter Experts
- Questions are mapped with NOS and PC
- Question papers are prepared considering that levels 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified & trainer must be ToT Certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Center photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos

5. Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch
- Random audit of any candidate

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored
- Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
- Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

The trainee will be tested for the acquired skill, knowledge and attitude through formative/ summative assessment at the end of the course and as this NOS and MC is adopted across sectors and qualifications, the respective AB can conduct the assessments as per their requirements.

Annexure 8: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)

NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training
TSSC	Telecom Sector Skill Council
TRAI	Telecom Regulatory Authority of India
LAN	Local Area Network
WAN	Wide Area Network
GI	Galvanized Iron
RCC	Reinforced Cement Concrete
PLB	Permanently Lubricated Duct
OTDR	Optical Time-Domain Reflectometer
OHS	Occupational Health and Safety
EPR	Earth Potential Rise
AT	Acceptance Testing
NOC	Network Operations Center
OFCs	Optical Fiber Cables
STMs	Synchronous Transport Modules
VFL	Visual Fault Locator
POPs	Points of Presence
NOC	Network Operation Center
TAT	Turn Around Time
SLAs	Service Level Agreements
KPIs	Key Performance Indicators
WDM	Wavelength Division Multiplexing
FRP	Fiber Reinforced Plastic

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf