

## QUALIFICATION FILE

### Optical Fiber Splicer

☒ 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: 3.0

Submitted By:

Telecom Sector Skill Council

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## Section 1: Basic Details

| 1.     | Qualification Name                                                                                                                                                             | Optical Fiber Splicer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|--------|--------------------------------------------------------------------|-----------------------------------------------------------|----|-----------------------------|--|----|----------------------------|--------------------------------------------------------------------------------------------|----|---------------------------------------------------|----------------------------------------------------------------------------------------------|
| 2.     | Sector/s                                                                                                                                                                       | Telecom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 3.     | Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options<br><input type="checkbox"/> OEM | NQR Code & version of existing/previous qualification:<br>(2022/TEL/TSSC/07001, V3.0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Qualification Name of existing/previous version:<br>Optical Fiber Splicer |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 4.     | a. OEM Name<br>b. Qualification Name<br>(Wherever applicable)                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 5.     | National Qualification Register (NQR) Code &Version<br>(Will be issued after NSQC approval)                                                                                    | QG-03-TL-04076-2025-V2-TSSC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6. NCrf/NSQF Level: 3.0                                                   |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 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 Splicer is responsible for splicing optical fibers with precision and testing their effectiveness using advanced tools. The individual is required to ensure high-quality connections and maintain accurate records for future reference.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 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>10<sup>th</sup> Grade Pass</td> <td></td> </tr> <tr> <td>2.</td> <td>8<sup>th</sup> Grade Pass</td> <td>3 years of relevant experience in the operations and maintenance of passive infrastructure</td> </tr> <tr> <td>3.</td> <td>Previous relevant Qualification of NSQF Level 2.5</td> <td>1.5 years of relevant experience in the operations and maintenance of passive infrastructure</td> </tr> </tbody> </table> b. Age: NA |                                                                           |  | S. No. | Academic/Skill Qualification (with Specialization - if applicable) | Required Experience (with Specialization - if applicable) | 1. | 10 <sup>th</sup> Grade Pass |  | 2. | 8 <sup>th</sup> Grade Pass | 3 years of relevant experience in the operations and maintenance of passive infrastructure | 3. | Previous relevant Qualification of NSQF Level 2.5 | 1.5 years of relevant experience in the operations and maintenance of passive infrastructure |
| S. No. | Academic/Skill Qualification (with Specialization - if applicable)                                                                                                             | Required Experience (with Specialization - if applicable)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 1.     | 10 <sup>th</sup> Grade Pass                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 2.     | 8 <sup>th</sup> Grade Pass                                                                                                                                                     | 3 years of relevant experience in the operations and maintenance of passive infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 3.     | Previous relevant Qualification of NSQF Level 2.5                                                                                                                              | 1.5 years of relevant experience in the operations and maintenance of passive infrastructure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                           |  |        |                                                                    |                                                           |    |                             |  |    |                            |                                                                                            |    |                                                   |                                                                                              |
| 10.    | Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrf))                                                                        | 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 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.                     | <b>Training Duration by Modes of Training Delivery</b> ( <i>Specify Total Duration as per selected training delivery modes and as per requirement of the qualification</i> ) | <input type="checkbox"/> Offline <input type="checkbox"/> Online <input checked="" type="checkbox"/> Blended<br><table border="1" data-bbox="952 167 2049 343"> <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>120</td> <td>150</td> <td></td> <td>390</td> </tr> <tr> <td>Online</td> <td>120</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i> |                                         | Training Delivery Modes | Theory (Hours) | Practical (Hours) | OJT Mandatory (Hours) | OJT Recommended (Hours) | Total (Hours) | Classroom (offline) | 120 | 120 | 150 |  | 390 | Online | 120 |  |  |  |  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------|----------------|-------------------|-----------------------|-------------------------|---------------|---------------------|-----|-----|-----|--|-----|--------|-----|--|--|--|--|
| Training Delivery Modes | Theory (Hours)                                                                                                                                                               | Practical (Hours)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | OJT Mandatory (Hours)                   | OJT Recommended (Hours) | Total (Hours)  |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| Classroom (offline)     | 120                                                                                                                                                                          | 120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 150                                     |                         | 390            |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| Online                  | 120                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 14.                     | <b>Aligned to NCO/ISCO Code/s</b> ( <i>if no code is available mention the same</i> )                                                                                        | NCO-2015/7422.0802                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 15.                     | <b>Progression path after attaining the qualification</b> ( <i>Please show Professional and Academic progression</i> )                                                       | <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">Optical Fiber Splicer (Level 3)</div> <div style="font-size: 2em;">→</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">Optical Fiber Technician (level 4)</div> </div>                                                                                                                                                                                                                                                                                 |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 16.                     | <b>Other Indian languages in which the Qualification &amp; Model Curriculum are being submitted</b>                                                                          | Hindi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 17.                     | <b>Is similar Qualification(s) available on NQR-if yes, justification for this qualification</b>                                                                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 18.                     | <b>Is the Job Role Amenable to Persons with Disability</b>                                                                                                                   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><b>If "Yes", specify applicable type of Disability:</b> <i>Motor Impairment, Hearing Impairments, Speech and Language Disorders</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 19.                     | <b>How Participation of Women will be Encouraged</b>                                                                                                                         | <p>Encouraging the participation of women in the role of Optical Fiber Splicer 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.</p>                                                                                               |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 20.                     | <b>Are Greening/ Environment Sustainability Aspects Covered</b> ( <i>Specify the NOS/Module which covers it</i> )                                                            | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><b>TEL/N6401</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 21.                     | <b>Is Qualification Suitable to be Offered in Schools/Colleges</b>                                                                                                           | Schools <input type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 22.                     | <b>Name and Contact Details of Submitting / Awarding Body SPOC</b> ( <i>In case of CS or MS, provide details of both Lead AB &amp; Supporting ABs</i> )                      | <b>Name:</b> Mr. Praveen Sirohi<br><b>Email:</b> <a href="mailto:ceo@tsscindia.com">ceo@tsscindia.com</a><br><b>Website:</b> <a href="http://www.tsscindia.com">www.tsscindia.com</a><br><b>Contact No.:</b> 0124-4148029                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |
| 23.                     | <b>Final Approval Date by NSQC:</b> 08-05-2025                                                                                                                               | <b>24. Validity Duration:</b> 3 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>25. Next Review Date:</b> 30-04-2028 |                         |                |                   |                       |                         |               |                     |     |     |     |  |     |        |     |  |  |  |  |

## 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.                                       | Splice Optical Fiber                       | TEL/N6400, v7.0                           | Core          | 3.0              | 5                   | 30                        | 60  | 60       | -        | 150   | 30               | 50  | -     | 20   | 100   | 45                            |
| 2.                                       | Test Effectiveness and Record Test Results | TEL/N6401, v4.0                           | Core          | 3.0              | 7                   | 60                        | 60  | 90       | -        | 210   | 30               | 50  | -     | 20   | 100   | 45                            |
| 3.                                       | Employability Skills (30 Hours)            | DGT/VSQ/N 0101, v1.0                      | Non-Core      | 2.0              | 1                   | 30                        | -   | -        | -        | 30    | 20               | 30  | -     | -    | 50    | 10                            |
| <b>Duration (in Hours) / Total Marks</b> |                                            |                                           |               |                  | 13                  | 120                       | 120 | 150      | -        | 390   | 80               | 130 | -     | 40   | 250   | 100                           |

### Assessment - Minimum Qualifying Percentage

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

**Minimum Pass Percentage – Aggregate at qualification level:** 50 % (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. | <b>Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b> | <p><b>Educational Qualification:</b> Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields.</p> <p><b>Industry &amp; Training Experience:</b> Minimum 5 years of experience of industry in the Optical Fiber Domain.</p> |
|----|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                  | <b>Certification:</b> “Trainer” mapped to the Qualification Pack “MEP/Q2601, v3.0”. Minimum accepted score is 80% aggregate.                                                                                                                                                                                                                                                                                                                  |
| 2. | <b>Master Trainer’s Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)</b> | <b>Educational Qualification:</b> Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields.<br><b>Industry &amp; Training Experience:</b> Minimum 7 years of industry experience in the Optical Fiber Domain.<br><b>Certification:</b> “Master Trainer” mapped to the Qualification Pack “MEP/Q2602, v3.0”. Minimum accepted score is 90% aggregate. |
| 3. | <b>Tools and Equipment Required for Training</b>                                                                 | <input type="checkbox"/> Yes <input type="checkbox"/> No (If “Yes”, details to be provided in Annexure)                                                                                                                                                                                                                                                                                                                                       |
| 4. | <b>In Case of Revised Qualification, Details of Any Upskilling Required for Trainer</b>                          | NA                                                                                                                                                                                                                                                                                                                                                                                                                                            |

### Section 4: Assessment Related

|    |                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>                | <b>Educational Qualification:</b> Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields.<br><b>Industry &amp; Training Experience:</b> Minimum 5 years of experience of industry in the Optical Fiber Domain.<br><b>Certification:</b> “Assessor” mapped to the Qualification Pack “MEP/Q2701, v3.0”. Minimum accepted score is 80% aggregate.   |
| 2. | <b>Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b>                 | <b>Educational Qualification:</b> Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields.<br><b>Industry &amp; Training Experience:</b> Minimum 5 years of experience of industry in the Optical Fiber Domain.<br><b>Certification:</b> “Assessor” mapped to the Qualification Pack “MEP/Q2701, v3.0”. Minimum accepted score is 80% aggregate.   |
| 3. | <b>Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)</b> | <b>Educational Qualification:</b> Graduate in any discipline, preferably Electronics and Communication /Telecom/ Information Technology/ Computer Science and other relevant fields.<br><b>Industry &amp; Training Experience:</b> Minimum 7 years of experience of industry in the Optical Fiber Domain.<br><b>Certification:</b> “Lead Assessor” mapped to the Qualification Pack “MEP/Q2702v3.0” Minimum accepted score is 90% aggregate. |
| 4. | <b>Assessment Mode (Specify the assessment mode)</b>                                                                  | Offline/Online                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 5. | <b>Tools and Equipment Required for Assessment</b>                                                                    | <input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment)                                                                                                                                                                                                                                                     |

## Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

|    |                                                                                                                    |
|----|--------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Latest Skill Gap Study (not older than 2 years) (Yes/No):</b> NA                                                |
| 2. | <b>Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):</b> NA                    |
| 3. | <b>Government /Industry initiatives/ requirement (Yes/No):</b> NA                                                  |
| 4. | <b>Number of Industry validation provided:</b> 21                                                                  |
| 5. | <b>Estimated nos. of persons to be trained and employed:</b> 14950                                                 |
| 6. | <b>Evidence of Concurrence/Consultation with Line Ministry/State Departments:</b> <i>approved</i><br>If "No", why: |

## Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

|     |                                                                                                                             |                   |
|-----|-----------------------------------------------------------------------------------------------------------------------------|-------------------|
| 1.  | <b>Annexure:</b> NCrF/NSQF level justification based on NCrF level/NSQF descriptors <i>(Mandatory)</i>                      | <i>Annexure 1</i> |
| 2.  | <b>Annexure:</b> List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i> | <i>Annexure 2</i> |
| 3.  | <b>Annexure:</b> Detailed Assessment Criteria <i>(Mandatory)</i>                                                            | <i>Annexure 6</i> |
| 4.  | <b>Annexure:</b> Assessment Strategy <i>(Mandatory)</i>                                                                     | <i>Annexure 7</i> |
| 5.  | <b>Annexure:</b> Blended Learning <i>(Mandatory, in case selected Mode of delivery is "Blended Learning")</i>               | NA                |
| 6.  | <b>Annexure:</b> Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>              | NA                |
| 7.  | <b>Annexure:</b> Acronym and Glossary <i>(Optional)</i>                                                                     | <i>Annexure 8</i> |
| 8.  | <b>Supporting Document:</b> Model Curriculum <i>(Mandatory – Public view)</i>                                               | <i>Attached</i>   |
| 9.  | <b>Supporting Document:</b> Career Progression <i>(Mandatory - Public view)</i>                                             | <i>Attached</i>   |
| 10. | <b>Supporting Document:</b> Occupational Map <i>(Mandatory)</i>                                                             | <i>Attached</i>   |
| 11. | <b>Supporting Document:</b> Assessment SOP <i>(Mandatory)</i>                                                               | <i>Attached</i>   |
| 12. | <b>Any other document you wish to submit:</b>                                                                               | 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 |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Professional Theoretical Knowledge/Process</b>                           | <b>Splice Fiber Optical</b> <ul style="list-style-type: none"> <li>• Check the availability of tools, spares, and advanced equipment</li> <li>• Prepare cables for splicing for new installations</li> <li>• Maintain and troubleshoot laid Optical Fiber Cables (OFCs)</li> <li>• Perform advanced splicing operations with automation and precision</li> <li>• Utilize advanced fiber testing tools and document results</li> <li>• Perform specialized splicing techniques for micro and nano fibers</li> </ul> <b>Test Effectiveness and Record Test Results</b> <ul style="list-style-type: none"> <li>• Test the effectiveness of the splice using advanced tools</li> <li>• Record test results for traceability and analysis</li> <li>• Follow health, safety, and sustainable practices during fiber splicing</li> </ul> | <p>An Optical Fiber Splicer at NSQF Level 3 combines technical proficiency with hands-on expertise in fiber optic cable splicing and maintenance. The role involves checking tool and equipment availability, preparing cables for new installations, and maintaining and troubleshooting laid Optical Fiber Cables (OFCs). Splicers perform advanced splicing operations with automation and precision, utilizing specialized techniques for micro and nano fibers. They also use advanced fiber testing tools to ensure splice effectiveness, document test results for traceability, and adhere to health, safety, and sustainability guidelines.</p> <p>With specialized skills in fiber splicing, testing, and troubleshooting, this role aligns with NSQF Level 3, ensuring efficiency, reliability, and adherence to industry standards in optical fiber networks.</p> | 3.0             |
| <b>Professional and Technical Skills/ Expertise/ Professional Knowledge</b> | <ul style="list-style-type: none"> <li>• Know how to check the availability of tools, spares, and advanced equipment required for fiber optic splicing.</li> <li>• Understand the procedures for preparing cables for splicing in new installations, ensuring proper alignment and connection.</li> <li>• Know how to maintain and troubleshoot laid Optical Fiber Cables (OFCs) to ensure network reliability and minimize downtime.</li> <li>• Understand advanced splicing operations, including the use of automated tools and precision techniques for seamless fiber connectivity.</li> <li>• Know how to utilize advanced fiber testing tools to assess</li> </ul>                                                                                                                                                         | <p>An Optical Fiber Splicer at NSQF Level 3 combines technical expertise with hands-on skills in fiber optic cable splicing and maintenance. The role includes checking the availability of tools, preparing cables for new installations, performing advanced splicing operations, and troubleshooting Optical Fiber Cables (OFCs) to ensure network efficiency and reliability.</p> <p>Splicers utilize advanced fiber testing tools to verify splice effectiveness, document test results for traceability, and implement specialized techniques for micro and nano fiber splicing. They adhere to strict health, safety, and sustainability protocols to maintain compliance with industry standards.</p> <p>With specialized skills in fiber splicing, testing, and troubleshooting, this role aligns with NSQF Level 3, ensuring</p>                                    | 3.0             |

|                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                             | <p>splice effectiveness and ensure optimal signal transmission.</p> <ul style="list-style-type: none"> <li>• Understand specialized splicing techniques for micro and nano fibers, enhancing connectivity in high-precision applications.</li> <li>• Know the importance of recording test results for traceability, quality assurance, and performance analysis.</li> <li>• Understand the critical health, safety, and sustainability practices required during fiber splicing to ensure compliance with industry standards.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | precision, efficiency, and adherence to best practices in optical fiber network operations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |
| <b>Employment Readiness &amp; Entrepreneurship Skills &amp; Mind-set/Professional Skill</b> | <ul style="list-style-type: none"> <li>• Select appropriate tools, spares, and advanced equipment required for efficient fiber optic splicing operations.</li> <li>• Identify potential faults in Optical Fiber Cables (OFCs) and implement effective troubleshooting techniques to ensure network reliability.</li> <li>• Develop precision and automation skills for performing advanced splicing operations, including micro and nano fiber splicing.</li> <li>• Implement systematic testing procedures using advanced fiber testing tools to evaluate splice effectiveness and ensure optimal signal transmission.</li> <li>• Design proper documentation processes for recording test results, ensuring traceability and quality assurance in fiber splicing projects.</li> <li>• Define health, safety, and sustainability practices to be followed during fiber splicing, ensuring compliance with industry regulations.</li> <li>• Evaluate the efficiency of splicing techniques and tools to improve overall fiber optic network performance and minimize downtime.</li> <li>• Demonstrate a problem-solving mindset and adaptability to work in diverse installation and maintenance environments, fostering both employment readiness and entrepreneurial opportunities.</li> </ul> | <p>Employment readiness and entrepreneurship skills for an Optical Fiber Splicer focus on technical expertise, problem-solving, and adherence to industry standards. Splicers must select appropriate tools and equipment, identify potential faults in Optical Fiber Cables (OFCs), and develop precision skills for advanced splicing operations. They should implement systematic testing procedures, design proper documentation processes, and define health, safety, and sustainability practices to ensure compliance.</p> <p>Understanding the importance of evaluating splicing techniques, optimizing network performance, and demonstrating adaptability in diverse environments is crucial for both employment readiness and entrepreneurial success. By establishing best practices and refining troubleshooting skills, splicers can advance their careers and contribute to innovation in fiber optic network installations.</p> <p>Therefore, this role is classified at Level 3.</p> | 3.0 |
| <b>Broad Learning Outcomes/Core Skill</b>                                                   | <ul style="list-style-type: none"> <li>• Demonstrate the ability to check and ensure the availability of tools, spares, and advanced equipment required for fiber</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The Optical Fiber Splicer role at NSQF Level 3 requires a hands-on approach with expertise in fiber splicing, cable preparation, and network maintenance. Splicers must perform routine and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.0 |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                       | <p>splicing.</p> <ul style="list-style-type: none"> <li>• Apply proper techniques for preparing cables for splicing in new installations, ensuring accurate alignment and connectivity.</li> <li>• Analyze and troubleshoot laid Optical Fiber Cables (OFCs) to identify faults and maintain network efficiency.</li> <li>• Execute advanced splicing operations with automation and precision for seamless fiber optic connectivity.</li> <li>• Operate and utilize advanced fiber testing tools to verify splice effectiveness and maintain optimal signal transmission.</li> <li>• Maintain accurate records of test results for traceability, quality control, and network performance evaluation.</li> <li>• Comply with health, safety, and environmental guidelines to ensure safe working conditions and sustainable fiber splicing practices.</li> <li>• Develop problem-solving and critical-thinking skills to handle challenges in fiber optic installations and maintenance.</li> <li>• Demonstrate adaptability and teamwork while working in diverse operational environments, ensuring efficiency and productivity.</li> </ul> | <p>non-routine tasks, including checking tools and equipment, preparing cables for splicing, executing advanced splicing operations, and troubleshooting Optical Fiber Cables (OFCs) to ensure seamless connectivity.</p> <p>They should demonstrate problem-solving skills, precision in fiber alignment, and adherence to health, safety, and environmental guidelines. Additionally, their role involves utilizing advanced fiber testing tools, maintaining proper documentation, and implementing sustainable practices. Working under supervision, they contribute to structured installation and maintenance processes, aligning with NSQF Level 3, which focuses on applying technical skills in familiar work environments while developing expertise in fiber optic splicing and network optimization.</p> |     |
| <b>Responsibility</b> | <p><b>The responsibilities are:</b></p> <ul style="list-style-type: none"> <li>• Check the availability of tools, spares, and advanced equipment</li> <li>• Prepare cables for splicing for new installations</li> <li>• Maintain and troubleshoot laid Optical Fiber Cables (OFCs)</li> <li>• Perform advanced splicing operations with automation and precision</li> <li>• Utilize advanced fiber testing tools and document results</li> <li>• Perform specialized splicing techniques for micro and nano fibers</li> <li>• Test the effectiveness of the splice using advanced</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>An Optical Fiber Splicer is responsible for splicing optical fibers with precision and testing their effectiveness using advanced tools. The individual is required to ensure high-quality connections and maintain accurate records for future reference.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3.0 |

|  |                                                                                                                                                                                           |  |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  | tools <ul style="list-style-type: none"> <li>Record test results for traceability and analysis</li> <li>Follow health, safety, and sustainable practices during fiber splicing</li> </ul> |  |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

## 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        | 2                                 |
| 2.     | Splices                                         | Pieces        | 2                                 |
| 3.     | Safety Gear (Hand gloves, Eye protective glass) | Pieces        | 2                                 |
| 4.     | OTDR                                            | Pieces        | 1                                 |
| 5.     | Mechanical Splicer                              | Pieces        | 2                                 |
| 6.     | Fusion Splicer (Splicing machine)               | Pieces        | 1                                 |
| 7.     | Fiber Optic Test Source                         | Pieces        | 1                                 |
| 8.     | Fiber Optic Stripper                            | Pieces        | 2                                 |
| 9.     | Fiber Optic Power Meter                         | Pieces        | 1                                 |
| 10.    | Connectors                                      | Pieces        | 2                                 |
| 11.    | Connector Crimper                               | Pieces        | 1                                 |
| 12.    | Cleaver                                         | Pieces        | 1                                 |
| 13.    | Cable Jacket Stripper                           | Pieces        | 1                                 |
| 14.    | Cable Cutter                                    | Pieces        | 1                                 |

### Classroom Aids

The aids required to conduct sessions in the classroom are:

- Whiteboard
- Projector
- Computer/Laptop
- Chairs
- Tables
- Whiteboard marker
- 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                       |                  | <a href="mailto:tk.narayanan@ibusnetworks.com">tk.narayanan@ibusnetworks.com</a>                                                   |                                 |
| 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)                              |                  | <a href="mailto:contact@icseinstitute.com">contact@icseinstitute.com</a><br><a href="mailto:kksmhl@gmail.com">kksmhl@gmail.com</a> |                                 |
| 3.    | JRS Global Networks Pvt.Ltd.                                           | Arvind Yadav                             | Asst. Account Manager Telecom                 | A 22, Sector-65 Noida, UP-201307                                                                                 |                  | <a href="mailto:account3@jrsgl.com">account3@jrsgl.com</a>                                                                         |                                 |
| 4.    | Expert Consultant & Coach for Telecom Fibre Optics, FTTx and Broadband | Dr. Anuj Shrivastava                     | Ex Executive Director Indian Telecom Services | Ghaziabad, UP                                                                                                    |                  | <a href="mailto:srianujkumar@gmail.com">srianujkumar@gmail.com</a>                                                                 |                                 |
| 5.    | Jio Platforms Limited (Jio)                                            | Abhijay Singh Sisodia                    | Senior Manager                                | Office-101, Saffron, Nr.Centre Point, Panchwati 5 Rasta, Ambawadi, Ahmedabad-380006 Gujarat                      |                  | <a href="mailto:abhijay.sisodia@ril.com">abhijay.sisodia@ril.com</a>                                                               |                                 |
| 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                                 |                  | <a href="mailto:manmohan.sharma@vodafone.com">manmohan.sharma@vodafone.com</a>                                                     |                                 |
| 7.    | Teoco                                                                  | Naman Khosla<br>Abhijay Singh<br>Sisodia | Technical Consultant                          | Infotech Center -6th floor, 14/2 Old Delhi Gurgaon Road, Dundahera, Gurgaon - 122016, India                      |                  | <a href="mailto:naman.khosla@teoco.com">naman.khosla@teoco.com</a>                                                                 |                                 |
| 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 |                  | <a href="mailto:rashid.muhammad@globallogic.com">rashid.muhammad@globallogic.com</a>                                               |                                 |

|     |                                                   |                         |                                |                                                                                                                 |                                                                                                  |  |
|-----|---------------------------------------------------|-------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--|
| 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 | <a href="mailto:info.mtipune@gmail.com">info.mtipune@gmail.com</a>                               |  |
| 10. | Amazon                                            | Anshul Gupta            | Program Manager                | Bangalore                                                                                                       | <a href="mailto:anshigu@amazon.com">anshigu@amazon.com</a>                                       |  |
| 11. | Stealth Mode Startup Company                      | Avadh Gupta             | Founder, Co-Founder & Investor | Pune                                                                                                            | <a href="mailto:avadhmac@gmail.com">avadhmac@gmail.com</a>                                       |  |
| 12. | Ranitronics                                       | Yakama Vijayasree Kumar | Founder & Technical Consultant | Villa 302, Namaha Rhythm, Road No. 1, Kavya Avenue, Bachupally, Hyderabad – 500090, Telangana                   | <a href="mailto:info@ranitronics.com">info@ranitronics.com</a>                                   |  |
| 13  | Eco Works                                         | Deepali Sinha Khatriwal | Founder & CEO                  | C-601, Kalpataru Regency Phase 1, Kalyani Nagar, Pune 411006                                                    | <a href="mailto:deepali@ecowork.international">deepali@ecowork.international</a>                 |  |
| 14  | Himachal Futuristic Communications Limited (HFCL) | Amit Agarwal            | VP PLM                         | 8, Commercial Complex, Masjid Moth, Greater Kailash - 11, New Delhi - 110048, India                             | <a href="mailto:amit.agarwal@hfcl.com">amit.agarwal@hfcl.com</a>                                 |  |
| 15  | Tata Communication                                | Alka Asthana            | Head of Regulatory Affairs     | Next Gen Tower Outer Ring Road, GK-1, New Delhi – 110048                                                        | <a href="mailto:alka.asthanatelecom@gmail.com">alka.asthanatelecom@gmail.com</a>                 |  |
| 16  | Reckitt Benckiser                                 | Sachin Sharma           | Demand Manager                 | Udyog Vihar, Phase V, Gurgaon, Haryana                                                                          | <a href="mailto:sachin.sharma@rb.com">sachin.sharma@rb.com</a>                                   |  |
| 17  | Sycamore Informatics                              | Rahul Kumar Kaushik     | Product Manager                | No. 6, 2nd Floor, 2nd Main, Arekere, Off Bannerghatta Road, Bangalore 560076                                    | <a href="mailto:rahul.kaushik@sycamoreinformatics.com">rahul.kaushik@sycamoreinformatics.com</a> |  |
| 18  | Nokia                                             | Saurabh Singh           | Software Quality Engineer      | L5 and L6 Building Manyata Embassy Business Park Outer Ring Road, Nagawara 560045                               | <a href="mailto:saurabh.9.singh@nokia.com">saurabh.9.singh@nokia.com</a>                         |  |
| 19  | Edge Telecom                                      | Arun Singh              | Senior Project Engineer        | 9th floor, ILD Trade Centre, 904, main, Badshahpur Sohna Rd Hwy, near Subhash Chowk,                            | <a href="mailto:arun.singh@edgetelecom.org">arun.singh@edgetelecom.org</a>                       |  |

|    |                                            |                    |                       |                                                                                                        |  |                                                                                  |  |
|----|--------------------------------------------|--------------------|-----------------------|--------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------|--|
|    |                                            |                    |                       | Gurugram, Haryana<br>122018                                                                            |  |                                                                                  |  |
| 20 | Conduent                                   | Prince Jain        | Sr. Business Analyst  | Plot No. 20, Candor Tech Space, Noida 201304                                                           |  | <a href="mailto:prince.jain@conduent.com">prince.jain@conduent.com</a>           |  |
| 21 | Artificial Intelligence Technologies       | Rohit Kumar Sharma | Manager – Development | A-21, sector 4, Block A, Kailash Colony, Greater Kailash, New Delhi,                                   |  | <a href="mailto:rohit.sharma@aituniversal.com">rohit.sharma@aituniversal.com</a> |  |
| 22 | Ecom Express.in                            | Shekhar Poswal     | Senior QA L1          | 10 <sup>th</sup> 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<br>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 |                                    |
|------|----------------------|------------------------------------|----------------------|------------------------------------|------------------------|------------------------------------|
|      | Estimated Training # | Estimated Employment Opportunities | Estimated Training # | Estimated Employment Opportunities | Estimated Training #   | Estimated Employment Opportunities |
| 2025 | 4485                 | 3140                               | 225                  | 113                                | 225                    | 113                                |
| 2026 | 4485                 | 3140                               | 225                  | 113                                | 225                    | 113                                |
| 2027 | 5980                 | 4186                               | 299                  | 150                                | 299                    | 150                                |

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 |

|     |                          |      |      |      |  |  |  |  |  |  |  |  |  |
|-----|--------------------------|------|------|------|--|--|--|--|--|--|--|--|--|
| 3.0 | Dec 2021 to March 2022   | 205  | 201  | 26   |  |  |  |  |  |  |  |  |  |
| 3.0 | April 2022 to March 2023 | 5630 | 5591 | 5467 |  |  |  |  |  |  |  |  |  |
| 3.0 | April 2023 to March 2024 | 6024 | 6022 | 6019 |  |  |  |  |  |  |  |  |  |
| 3.0 | April 2024 to March 2025 | 101  | 100  | 100  |  |  |  |  |  |  |  |  |  |

*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      | <input checked="" type="checkbox"/> 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      | <input checked="" type="checkbox"/> 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      | <input type="checkbox"/> Showing Practical Demonstrations to the learners                                                |                                                                                                                  |                        |
| 4      | <input type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training                    |                                                                                                                  |                        |
| 5      | <input type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice                                                         |                                                                                                                  |                        |
| 6      | <input type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations                                      |                                                                                                                  |                        |
| 7      | <input type="checkbox"/> 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/N6400: Splice Optical Fiber | <i>Check the availability of tools, spares, and advanced equipment</i>                                                                                                                                                                                                         | 4            | 10              | -             | 4          |
|                                 | PC1. check the availability and functionality of advanced optical testing tools such as AI-enabled Optical Time-Domain Reflectometer (OTDR), power meter, Optical Spectrum Analyzer (OSA), Chromatic Dispersion (CD) Analyzer, and Polarization Mode Dispersion (PMD) Analyzer | 1            | 2               | -             | 0.5        |
|                                 | PC2. check for the availability of tools for advanced splicing including automated splicers, robotic arms, precision cleavers, smart cleavers, splice trays, and inspection tools                                                                                              | 1            | 2               | -             | 0.5        |
|                                 | PC3. check for adequate stock of splicing consumables including joint kits, connectors, patch cords, heat shrink sleeves, and environmental sealing materials along with RCC joint chambers, fiber optic enclosures, and other site-specific materials                         | 1            | 2               | -             | 1          |
|                                 | PC4. ensure splicing machines and testing equipment are calibrated, updated with the latest firmware, and meet precision standards                                                                                                                                             | 0.5          | 2               | -             | 1          |
|                                 | PC5. handle inventory and coordinate repair or replacement of faulty tools through defined channels                                                                                                                                                                            | 0.5          | 2               | -             | 1          |
|                                 | <i>Prepare cables for splicing for new installations</i>                                                                                                                                                                                                                       | 5            | 12              | -             | 4          |
|                                 | PC6. locate and identify fibers for splicing as per network designs, connectivity plans and colour-coded sequences using automated mapping tools                                                                                                                               | 0.5          | 2               | -             | 0.5        |

|       |                                                                                                                                                                                |          |           |          |          |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|----------|----------|
| PC7.  | check cables for physical and sheath damage using visual and advanced inspection tools                                                                                         | 1        | 2         | -        | 0.5      |
| PC8.  | prepare optical fibers by removing jackets and cleaning cores using automated cleaning systems                                                                                 | 1        | 2         | -        | 0.5      |
| PC9.  | secure cables and ensure compliance with bend radius and stress limits specified by manufacturers                                                                              | 0.5      | 2         | -        | 0.5      |
| PC10. | install and ground joint closures, splitters, and pigtails with weatherproofing measures to minimize environmental effects                                                     | 0.5      | 2         | -        | 1        |
| PC11. | manage routing of connectorized fibers inside junction boxes and document compliance with network plans                                                                        | 0.5      | 1         | -        | 0.5      |
| PC12. | perform twist splicing for copper or hybrid cables where applicable                                                                                                            | 1        | 1         | -        | 0.5      |
|       | <i>Maintain and troubleshoot laid Optical Fiber Cables (OFCs)</i>                                                                                                              | <i>8</i> | <i>12</i> | <i>-</i> | <i>4</i> |
| PC13. | identify fiber faults using advanced tools such as AI-enabled OTDR and real-time monitoring systems                                                                            | 1        | 2         | -        | 0.5      |
| PC14. | use robotic arms, Optical Fiber Identifiers (OFIs), and smart cleavers for precise maintenance in challenging environments                                                     | 1        | 1         | -        | 0.5      |
| PC15. | coordinate with the Network Operations Center (NOC) for outage windows and route updates                                                                                       | 1        | 1         | -        | 0.5      |
| PC16. | access fault points safely and inspect for microbends, sheath damage, or environmental wear using advanced inspection tools                                                    | 1        | 1         | -        | 0.5      |
| PC17. | clean and prepare all fibers for splicing as per applicable specifications                                                                                                     | 1        | 2         | -        | 0.5      |
| PC18. | replace damaged sections, re-splice fibers, and ensure all connections meet loss and reflection standards                                                                      | 1        | 2         | -        | 0.5      |
| PC19. | secure and weatherproof cables following the applicable standards                                                                                                              | 1        | 2         | -        | 0.5      |
| PC20. | document maintenance and troubleshooting activities digitally for analysis and reporting                                                                                       | 1        | 1         | -        | 0.5      |
|       | <i>Perform advanced splicing operations with automation and precision</i>                                                                                                      | <i>8</i> | <i>10</i> | <i>-</i> | <i>4</i> |
| PC21. | operate advanced fusion splicing machines with automation features to minimize human error                                                                                     | 1        | 1         | -        | 0.5      |
| PC22. | perform mechanical, fusion, ribbon, crimp, mass and nano fiber splicing for various network applications, including harsh environments                                         | 1        | 2         | -        | 0.5      |
| PC23. | ensure splice quality using real-time diagnostics integrated into automated splicing machines                                                                                  | 1        | 1         | -        | 0.5      |
| PC24. | minimize splice loss and optimize alignment using precision cleavers and advanced imaging tools                                                                                | 1        | 1         | -        | 0.5      |
| PC25. | test splice quality using real-time monitoring systems integrated into splicers                                                                                                | 1        | 2         | -        | 0.5      |
| PC26. | seal splices with heat-shrink or cold-shrink closures, ensuring protection against environmental factors                                                                       | 1        | 1         | -        | 0.5      |
| PC27. | conduct micro and nano fiber splicing using specialized tools for high-performance, low-loss connections in specialized industries such as medical and military communications | 1        | 1         | -        | 0.5      |
| PC28. | document splicing details and results digitally for future reference                                                                                                           | 1        | 1         | -        | 0.5      |
|       | <i>Utilize advanced fiber testing tools and document results</i>                                                                                                               | <i>5</i> | <i>6</i>  | <i>-</i> | <i>4</i> |

|                                                       |                                                                                                                                                                            |           |           |          |           |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|----------|-----------|
|                                                       | PC29. use AI-enabled OTDR for real-time fault detection, predictive maintenance, and accurate loss measurement                                                             | 1         | 2         | -        | 1         |
|                                                       | PC30. test signal quality and propagation characteristics using advanced tools such as OSAs, CD analyzers, and PMD analyzers                                               | 1         | 1         | -        | 0.5       |
|                                                       | PC31. verify performance KPIs, including attenuation, reflection, and chromatic dispersion, for spliced fibers                                                             | 1         | 1         | -        | 0.5       |
|                                                       | PC32. generate automated reports using cloud-based platforms for remote monitoring and compliance tracking                                                                 | 1         | 1         | -        | 1         |
|                                                       | PC33. maintain proper documentation of test results for quality assurance and network optimization                                                                         | 1         | 1         | -        | 1         |
|                                                       | <b>Total Marks</b>                                                                                                                                                         | <b>30</b> | <b>50</b> | <b>-</b> | <b>20</b> |
| TEL/N6401: Test Effectiveness and Record Test Results | <i>Test the effectiveness of the splice using advanced tools</i>                                                                                                           | <i>13</i> | <i>25</i> | <i>-</i> | <i>9</i>  |
|                                                       | PC1. use AI-enabled OTDR to analyze splice joints, diagnose faults, and ensure conformance to design specifications                                                        | 2         | 4         | -        | 2         |
|                                                       | PC2. ensure optical losses (e.g., reflectance, return, insertion losses) are within acceptable thresholds                                                                  | 2         | 3         | -        | 1         |
|                                                       | PC3. seal joint closures using appropriate methods (heat shrinking, multi-diameter seals, or mechanical seals) to ensure protection under adverse environmental conditions | 2         | 3         | -        | 1         |
|                                                       | PC4. strengthen splices using appropriate reinforcement materials like Fiber Reinforced Plastic (FRP)                                                                      | 2         | 3         | -        | 1         |
|                                                       | PC5. conduct power source and power meter tests at both ends of the fiber to detect and eliminate cross-fiber issues                                                       | 2         | 3         | -        | 1         |
|                                                       | PC6. ensure proper placement of joints in the chamber and coiling of spare cables (loop) within the joint enclosure                                                        | 1         | 3         | -        | 1         |
|                                                       | PC7. perform predictive maintenance using data insights from AI-enabled tools to identify potential faults proactively                                                     | 1         | 3         | -        | 1         |
|                                                       | PC8. integrate eco-friendly deployment techniques, minimizing material waste during the testing process                                                                    | 1         | 3         | -        | 1         |
|                                                       | <i>Record test results for traceability and analysis</i>                                                                                                                   | <i>7</i>  | <i>10</i> | <i>-</i> | <i>4</i>  |
|                                                       | PC9. maintain a comprehensive jointing record for future reference                                                                                                         | 2         | 3         | -        | 1         |
|                                                       | PC10. record OTDR and power meter test results in the prescribed format                                                                                                    | 2         | 3         | -        | 1         |
|                                                       | PC11. submit test and jointing records to the appropriate authorities for validation and inspection                                                                        | 2         | 2         | -        | 1         |
|                                                       | PC12. update documentation on predictive maintenance and fault diagnostics conducted during testing                                                                        | 1         | 2         | -        | 1         |
|                                                       | <i>Follow health, safety, and sustainable practices during fiber splicing</i>                                                                                              | <i>10</i> | <i>15</i> | <i>-</i> | <i>7</i>  |
|                                                       | PC13. check sites for potential health, safety, and environmental risks before beginning work                                                                              | 2         | 3         | -        | 2         |
|                                                       | PC14. use Personal Protective Equipment (PPE) such as helmets, safety glasses, gloves, and trench guards while splicing                                                    | 2         | 3         | -        | 1         |
|                                                       | PC15. comply with site-specific risk controls, OHS standards, and environmental guidelines                                                                                 | 2         | 3         | -        | 1         |

|                                                           |                                                                                                                                                                                                                                                          |           |           |          |           |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|----------|-----------|
|                                                           | PC16. identify and address environmental hazards like Earth Potential Rise (EPR) during testing and splicing                                                                                                                                             | 2         | 2         | -        | 1         |
|                                                           | PC17. incorporate recycling of fiber waste and adopt eco-friendly materials to align with global sustainability goals                                                                                                                                    | 1         | 2         | -        | 1         |
|                                                           | PC18. dispose of waste materials such as cut fibers in a safe and eco-friendly manner                                                                                                                                                                    | 1         | 2         | -        | 1         |
|                                                           | <b>Total Marks</b>                                                                                                                                                                                                                                       | <b>30</b> | <b>50</b> | <b>-</b> | <b>20</b> |
| <b>DGT/VSQ/N0101:<br/>Employability Skills (30 Hours)</b> | <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 &amp; 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 &amp; 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 | -          | -          | -        | -          |
|  | <b>Total Marks</b>                                                          | <b>20</b>  | <b>30</b>  | <b>-</b> | <b>-</b>   |
|  | <b>Grand Total</b>                                                          | <b>200</b> | <b>330</b> | <b>-</b> | <b>120</b> |

### 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                |
| FTTx    | Fiber to the x                                       |
| FTTN    | Fiber to the Node                                    |
| FTTC    | Fiber to the Curb                                    |
| FTTB    | Fiber to the Building                                |
| PON     | Passive Optical Network                              |
| GPON    | Gigabit Passive Optical Network                      |

|             |                                   |
|-------------|-----------------------------------|
| <b>OTDR</b> | Optical Time Domain Reflectometer |
| <b>OSA</b>  | Optical Spectrum Analyzer         |
| <b>CD</b>   | Chromatic Dispersion              |
| <b>PMD</b>  | Polarization Mode Dispersion      |
| <b>OFIs</b> | Optical Fiber Installations       |
| <b>NOC</b>  | Network Operations Center         |
| <b>OSP</b>  | Outside Plant                     |
| <b>WDM</b>  | Wavelength Division Multiplexing  |
| <b>TDMA</b> | Time Division Multiple Access     |
| <b>ONT</b>  | Optical Network Terminal          |
| <b>VFL</b>  | Visual Fault Locator              |
| <b>CPE</b>  | Customer Premises Equipment       |

## Glossary

| <b>Term</b>                                  | <b>Description</b>                                                                                                                                                                                                                     |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>National Occupational Standards (NOS)</b> | 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.                                               |
| <b>Qualification</b>                         | 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                                                       |
| <b>Qualification File</b>                    | 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. |
| <b>Sector</b>                                | A grouping of professional activities on the basis of their main economic function, product, service or technology.                                                                                                                    |
| <b>Long Term Training</b>                    | Long-term skilling means any vocational training program undertaken for a year and above. <a href="https://ncvet.gov.in/sites/default/files/NCVET.pdf">https://ncvet.gov.in/sites/default/files/NCVET.pdf</a>                          |