

# Skilling of Personnel to Work for ISPs



### **About us**

Telecom Sector Skill Council (Telecom SSC) is industry-led apex body, jointly set up by the Cellular Operators Association of India (COAI), Indian Cellular and Electronics Association (ICEA) and National Skill Development Corporation (NSDC), to ensure adequate availability of skilled manpower to boost growth and productivity in the Telecom sector.

TSSC has emerged as the bridge between Ministries, Indian telecom industry and youth of our nation for skill development. We are committed to develop world class skilled manpower for the telecom Industry to ensure adequate manpower availability for the ecosystem by deploying best in class skill training programs to boost growth and productivity in the telecom sector.



## **TSSC Governing & Advisory Board**





AKHIL GUPTA BHARTI ENTERPRISES



P BALAJI VODAFONE IDEA



PANKAJ MOHINDROO ICEA



LT GEN DR SP KOCHHAR DG COAI, EX CEO - TSSC



RAJESH SHARMA ICEA



ANJALI HANS VI



TR DUA DIPA



KAPIL AHUJA RELIANCE JIO



SHRESHTA GUPTA NSDC



ARVIND BALI TSSC



ANKIT AGARWAL STL



JOSH FOUGLER FOXCONN



HARI OM RAI LAVA MOBILES



SANDEEP GIROTRA ATC



LOHIT BHATIA QUESS CORP



RIHAN KHAN SURI DSEU



RAJESH AGARWAL MICROMAX



ABHINAV PURI FICA



PAMELA KUMAR TSDSI



BHUVNESH KUMAR, IAS MEITY



HARSH KHUARANA HUAWEI

## **Government Schemes and Projects**































### **Centers of Excellence: 7 Skill Labs**



TSSC has ready to deploy 7 skill labs for new technologies to provide exceptional skill development for our youth.



5G Technology



Internet of Things



Handheld Device Repair



Advance Security Surveillance / Cyber Security



Optical Fibre



Line Assembler



Drone Technology

## **Our Training Focus**















**5**G

bT

AML

Cloud

Dranes

**Retail** 

Popular Job roles with TSSC			
1	Handset Repair Engineer	6	Last Mile Active Network Installer
2	5G Project Engineer	7	AI – Data Analyst
3	Call Centre Executives	8	Tower Technician
4	IoT Technical Service Executive	9	Cloud Computing – Test Analyst
5	Retail Sales Associate	10	Drone Monitoring and Maintenance Associate

## **Top Telecom Players**



Service Segment

















Handset & Manufacturing Segment



















Passive Infrastructure Segment













Network Managed Segment

































## **Internet Service Provider (ISP)**



An internet service provider (ISP) is a business entity that grants individuals and organizations the ability to connect to the internet. ISPs offer various methods of access, such as dial-up, DSL, cable, wireless, and fiber-optic connections. Several types of companies act as ISPs, including Cable providers, Mobile carriers & Telephone companies

## **Broadband Connectivity**

ISPs provide broadband connections, which offer high-speed internet access.

## Types of Internet Connections

DSL (Digital Subscriber Line), cable, fiber-optic, and satellite

#### Service Packages

ISPs typically offer different service packages to cater to diverse user needs.

## **Internet Security**

ISPs often provide security measures to protect users from online threats.

## **Customer Support**

ISPs offer customer support services to address issues, troubleshoot problems, and assist with connectivity or technical difficulties.

## **Upskilling in the Fiberization Wave in India**

As India leads the 5G and 6G technology Revolution, Government of India has promoted Fiberisation in India with projects such as "National Broadband Mission", "BharatNet" and PM Wani.

Trained workforce are crucial to support these projects.

**Bharatnet: The world's largest** rural broadband project, is to provide broadband connectivity to all the 2.5 lakh Gram Panchayats across India and 50 Lakh Kms of **Fiber by 2025.** 

191,069

**Gram Panchayats** connected

450,185 Fiber to the Home subs 632,000 Kms

**Optical Fiber Laid** 

104,671

Wi-Fi Hotspots for last mile

The PM-WANI framework envisages provision of **Broadband through Public Wi-Fi Hotspot** providers.

148,184

Wi-Fi Hotspots

**National Broadband** Mission

> 50 Lakh KMs By 2024-25

35.5 Lakh KMs As of September 2022

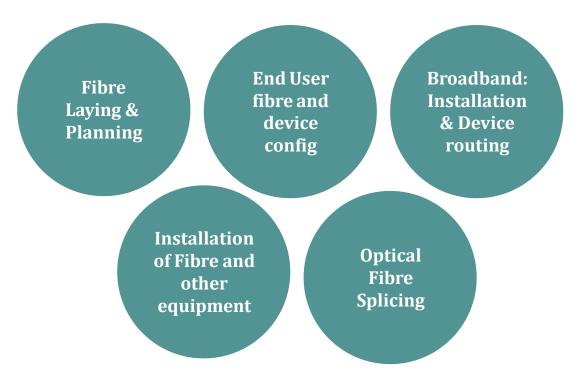


## **Upskilling in the Fiberization Wave in India**



Due to the **high attrition rate** and **migration** within industries for technicians, it is essential to have a continuous supply of skilled workers, considering the significant scope of projects by the government.

**Telecom SSC** aims at upskilling the youth of India under *Place & Train* skill development projects to bridge the skill gap and meet industry demand.



Telecom Sector Skill Council has job roles catering to the backhaul fiberisation wave in India.

Optical Fiber Splicer Optical Fiber Technician

Broadband Technician

**FTTH Technician** 

Grass Root Telecom Provider Wireless Technician

## **TSSC's ISP** related job roles





**Broadband Technician** 



**Optical Fibre Splicer** 



**Optical Fibre Technician** 



**Wireless Technician** 



Fiber to-the Home (FTTH/X) Installer

### **Broadband Technician**



Broadband Technician is responsible for installation, configuration and testing of CPE (modem, routers and switches) for broadband access. He also establishes connectivity between CPE and end-user device (CPU, Laptop, tablets, Smart/IP TV etc.) at customer premises and carries out basic trouble-shooting for identifying, localizing & rectifying cable, connectivity and equipment fault in coordination with NOC.

#### **Key activities:**

- 1. Cable/system wiring and equipment installation at customer premises
- 2. Configuration of equipment and establishing Broadband connectivity
- 3. Trouble-shoot to localize and rectify faults
- 4. UPS installation & Domestic Power Supply checks

#### **Educational Qualification:**

Class 12th OR 10th+ITI OR Diploma (Science/Electronics/Telecom/IT and other relevant fields)





## **Optical Fibre Splicer**



Optical fibre splicer is responsible for ensuring efficient splicing of the optical fibre cables and supports in optical fibre installation and in carrying out fibre testing using Optical Time Domain Reflectometer (OTDR) and power meter.

#### **Key activities:**

- 1. Undertake splicing of optical fiber
- 2. Installation & Commissioning of Optical fiber cables (OFC)

#### **Educational Qualification:**

Class 10th OR Class 8th with 1-year relevant experience





## **Optical Fibre Technician**



Optical fibre technician is responsible for maintaining uptime and quality of the network segment (both optical media & equipment) assigned to him by undertaking periodic preventive maintenance activities and ensuring effective fault management in case of fault occurrence. He is also required to coordinate activities for installation and commissioning of Optical Fibre Cable (OFC) as per the route plan.

#### **Key activities:**

- Co-ordinate Installation & Commissioning of Optical fiber cables (OFC)
- 2. Undertake Condition based Maintenance & Planned repair activities
- 3. Perform corrective maintenance/restoration of optical fault

#### **Educational Qualification:**

Class 12th OR Class 10th+ITI OR Diploma (Science/Electronics/Telecom/IT and other relevant fields) OR Certified in NSQF L-3 Optical Fiber Splicer with 2 Years Experience





### **Wireless Technician**



Wireless Technician is responsible for installation, configuration and testing of Wi-Fi Backhaul Eqpt (5 GHz) and Wi-Fi Access Points (2.4 GHz) for broadband access. He also establishes connectivity in the backhaul network.

#### **Key activities:**

- 1. Wi-Fi Backhaul Equipment (5 GHz) & Wi-Fi Access Points (2.4 GHz) wiring & Installation at different sites
- 2. Configuration of Equipment and establishing connectivity
- 3. Troubleshoot to localize and rectify faults.
- 4. UPS Installation & domestic Power supply checks.
- 5. Health and Safety

#### **Educational Qualification:**

Class 12th OR Class 10th + ITI (2 years in Electronics/Telecom/IT and other relevant fields) OR Class 10th with 2 years of relevant experience OR Class 8th + ITI (2 years in Electronics/Telecom/IT and other relevant fields) with 2 years of relevant experience OR Diploma after 10th (2 years in Electronics/Telecom/IT and other relevant fields)





## Fiber to-the Home (FTTH/X) Installer



At the end of the program, the learner should have acquired the listed knowledge and skills.

- Follow procedures for outside plant cable installation.
- Prepare cables for splicing.
- Install passive FTTH/X components.
- Construct FTTH/X cabling inside the building.
- Follow safety precautions pertaining to optical fiber.
- Organize work and resources as per health and safety standards.
- Communicate, develop interpersonal skills and develop sensitization towards gender and person with disability.

#### **Educational Qualification:**

Class 10th OR Class 8th with 2 years of relevant experience OR Class 8th + ITI (Electronics/Telecom /IT and other relevant fields)





## **Our achievements in past 10 years**



#### 10+ Lakhs Trained Manpower

Experience of 10+ years in skill development ecosystem

#### **Qualification Packs - 58**

Industry Specific QP covers all 5 verticals -Service, Handset, Passive Infrastructure, Network and Retail

#### **Training centers - 1000+**

Available from Ladakh to Kanyakumari; Rajasthan to Arunachal Pradesh

#### **Assessment Partners - 8**

Robust assessment system that leverages technology through well established 3rd party assessment agencies





#### **Key Industry Advisors 40+**

+450 industry associates with major industry players across the telecom sector



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