

## **Terms of Reference (ToR) for the Computer Training Programme (NTA-TA-9B)**

Nepal Telecommunications Authority (NTA) is seeking qualified Training Institute/Organization (TIO) to provide a series of Operational and Management training programs including software/hardware maintenance and networking knowledge to groups of people selected to commence work as ICT Center Managers cum Operators. The responsibilities of the TIO will be as per the following:

- (1) As per modules given below, TIO shall conduct trainings in well-furnished & adequately equipped space/rooms with Internet facility. Participants to computers ratio shall be 1:1.
- (2) For certain specific topics, Resource Persons identified by NTA, henceforth termed, as ‘NTAIRP’ shall be involved in conducting the training sessions. Such sessions are limited and pertain only to those dealing with specific concepts of social mobilization of the community, use of ICT for raising the lifestyles of the rural community through poverty reduction, better accessibility to educational & health services, and some technology specific topics. Such sessions have been identified as such in the Training Curriculum or modules given below.
- (3) The Training programs shall be conducted six days a week and shall be held in **Pokhara**.
- (4) TIO shall provide daily allowances (fixed amount: NRs 1500.00 per day), travel allowance (fixed amount for two way: NRs 10,000.00), service charge (fixed amount: NRs 1000.00 per hour or NRs 5000.00 per day) to the ‘NTAIRP’ for conducting classes as per Module-1 and certain portions of Module-2.
- (5) For the first series of training sessions designed for Chairpersons/Social Mobilization Leaders of the rural ICT Centers (hereinafter referred to as Mobilization Leaders), and consisting of Module- 1, there shall be a total of 80 participants from 40 ICT center locations. They will be divided into **two groups of 40 participants**, with the training being conducted one after another in serial

fashion. The training of another group will be started after accomplishment of the training for the previous group.

- (6) There shall be **four** 'NTAIRP' taking classes for Module-1 and certain portion of the Module-2. The 'NTAIRP' will also be taking classes for **two working days for each group for** Module-2 on the topics of Module-1 and on the business aspects.
- (7) For the second series of training sessions consisting of Module-2 and Module-3, there shall be another lot of 80 participants (Operators/Managers of ICT centers). For the training sessions, each group has been planned with a maximum of 20, and hence **four groups** will be formed. The training programs will be conducted one after another in **serial and/or parallel fashion**. The training of another group will be started after accomplishment of the training for the previous group.
- (8) Each day of the training, the TIO shall provide to the participants and Resource Persons, simple Nepali style lunch once in the afternoon, and tea/coffee and biscuits/snacks two times a day.
- (9) All the course content shall be provided to NTA, both in Electronic and Printed Form.
- (10) The TIO shall conduct training as per the training modules and course detail and days as specified below:

## **A. Course Outline of the Training for Mobilization Leaders of the Rural ICT Centers**

**Title of the Course:** Orientation Course for the Mobilization Leaders of rural ICT Centers (Module-1)

### **Objectives:**

1. To train Mobilization Leaders on social mobilization of the community, use of ICT for raising the lifestyles of the rural community through poverty reduction, better accessibility to educational & health services and on the concept of Information as an important Resource.

2. To sensitize Mobilization Leaders on Sustainability considerations of the ICT Centers: Achieving Financial Sustainability, Sustaining Staff Capability, Sustaining Community Acceptance, and Sustaining Service Delivery.
3. To sensitize the Mobilization Leaders on the management and operations of ICT Centres.
4. To impress upon the Mobilization Leaders the importance of smooth operation and first level maintenance of the equipment in ICT Centres.

### **Expected literacy levels of Participants:**

- Participants expected are persons like Chairperson of the Users' Committee of the ICT Centers, probably of the level of Chairpersons/Secretaries of Village Development Committees. Such participants are expected to be social leaders, motivators, and as such would have a wide vision of development of the community, and an educational level of Minimum of completing class Ten Level could be expected.

### **Expected Outcome:**

After the completion of this course, it is expected that the participants will be able to:

1. Understand basic concepts of social mobilisation and information as resource
2. Oversee and ensure smooth operation of ICT Centres
3. Ensure that the ICT Center Managers, Operators can operate equipment at the ICT center smoothly, and run the Center to satisfaction of community.
4. Ensure that the ICT Center Managers, Operators can troubleshoot in the operation of equipment at the first level and maintain computers and other ICT equipment
5. Ensure that the ICT Center Managers, Operators are able to provide computer training to the community and create ICT awareness in the community

**Duration:** Two (2) working days

**Participants:** Two persons from each of the Community based Organization or User Committees

**Total number of participants for Module-1:** Eighty (80)

## **B. Course Outline of the Training for ICT Centres Managers cum Operators**

**Title of the Course:** Basic Computer Hardware and Software Operation and Maintenance (Module-2 & Module-3)

### **Objectives:**

1. To train ICT Center Managers cum Operators on social mobilization of the community, use of ICT for raising the lifestyles of the rural community through poverty reduction, better accessibility to educational & health services and on the concept of Information as an important Resource.
2. To impress upon Managers cum Operators the significance of Sustainability of the ICT Centers: significance of Achieving Financial Sustainability, Sustaining Staff Capability, Sustaining Community Acceptance, and Sustaining Service Delivery.
3. To train ICT Centre Managers cum Operators on the management and operations of ICT Centres.
4. To train ICT Centre Managers cum Operators in the operation and first level maintenance of the of the equipment in ICT Centres
5. To train ICT Centre Managers cum operators in the basic skills of hardware and software maintenance of computer and related equipment.

### **Expected literacy levels of Participants:**

- Minimum of completing class Eight Level and self motivated and enthusiastic person

### **Expected Outcome:**

After the completion of this course, it is expected that the trainees will be able to:

1. Understand basic concepts of social mobilisation and information as resource
2. Manage operation of ICT Centres
3. Operate Computer, Internet/Email, printer, photocopy machine etc
4. Troubleshoot in the operation of equipment at the first level and maintain computers and other ICT equipment

5. Able to provide computer training to the community and create ICT awareness in the community

**Duration:** Sixteen (16) working days

**Participants for Module-2 and Module-3:** From each the ICT centers, two persons (operators cum managers) directly involved in and responsible for managing and operating the ICT centers, selected by the User Committee/Community based organization.

**Number of Groups:** Four (4)

**Maximum Participants in a Group:** Twenty (20)

**Total number of participants for Module-2 and 3:** Eighty (80)

## **Training Modules**

### **Module-1**

**(Duration of 2 working days):**

**This module will briefly introduce the participant to the objectives of establishing the ICT centers like social mobilization of the community, use of ICT for raising the lifestyles of the rural community through poverty reduction, by ensuring better accessibility to educational & health services, and impress upon the importance of sustainability of ICT centers, community acceptance of these centers, sustaining service delivery; Subjects like ownership and responsibilities of user committees, monitoring and reporting, role as social mobilizer, and business making shall also be discussed. (Majority of the Sessions of this Module shall be conducted by NTAIRP).**

## **Module-2**

**(Duration of 3 working days)**

**On day one, this module will briefly introduce the participants to the objectives of establishing the ICT Center, like social mobilization of the community, use of ICT for raising the lifestyles of the rural community through poverty reduction, by ensuring better accessibility to educational & health services as described in module-1. In addition, this module will focus on business aspect/model in running the centers, need to identify service needs of community, and importance of taking informed decision on services and applications to be offered, and on the necessity of making ICT centres sustainable; Topics like cost benefit analysis, daily management of the centres, maintaining logbooks, keeping records of income and expenses, marketing aspect etc. shall also be discussed in the following days. (*Majority of the Sessions of the first two days of this Module shall be conducted by NTAIRP.*)**

## Module-3

(Duration of 13 working days)

This module will focus on basic skills related to computer, such as computer basics, operating systems, operation and maintenance, consideration related to power consumption and its significance in rural context, technical operation and first hand maintenance aspects of computer and other ICT equipments like printers, scanners etc.

S.N.	Particulars	Duration (in Day(s))	Remarks
1.	<b>Computer Basics and Operating System</b> <ol style="list-style-type: none"><li>1. Introduction to computers, their parts, peripherals and their operations</li><li>2. Logical architecture of a computer system</li><li>3. Operating system environment, utilities</li><li>4. Using Word processor, Spreadsheet, Database, making presentations- <b>more practical sessions</b></li><li>5. Virus, Virus Protection, Virus Cleaning-practical work</li><li>6. Backup &amp; Data security-<b>practical work</b></li><li>7. Nepali Language computing-Nepali Unicode and other developments</li></ol>	3	
2	<b>Basic electricity, Electronics and Basic telecommunications</b> <ol style="list-style-type: none"><li>1. Solar Power system Power supplies – types, batteries, uninterruptible power supplies,</li><li>2. Considerations related to power consumption and its significance in rural context</li><li>3. Lightening protection, Safety from high voltages for people and equipment.</li><li>4. Digital / Analogue Systems</li><li>5. Telephone system, Modems etc.</li><li>6. Radio Communication, Satellite Communication etc.</li></ol>	1.5	

3.	<p><b>Hardware/software -practical sessions mainly</b></p> <ol style="list-style-type: none"> <li>1. Disassembly &amp; assembly of computers</li> <li>2. Formatting hard disks, Creating Partitions etc.- practice sessions</li> <li>3. Driver Installation, Hardware &amp; software preventive maintenance</li> <li>4. Diagnostics and trouble shooting (hardware/software)- <b>more practical work</b></li> <li>5. Concept of Networking, IP address basics, assigning IP addresses to PC, Network cabling</li> <li>6. NIC Card Installation its configuration, Sharing of computer and printers and other devices</li> <li>7. Image digitisation-scanning fundamentals</li> <li>8. Photocopy/Fax/Scanner/Printer technologies, operation and care</li> </ol>	3	
4	<p><b>Email/Internet and practical sessions</b></p> <ol style="list-style-type: none"> <li>1. Internet and Email</li> <li>2. Internet, ISPs, WWW-world wide web,</li> <li>3. Internet and Email settings, browsers</li> <li>4. Application of Favourites, or bookmarks</li> <li>5. Customizing browsers</li> <li>6. Internet chatting, voicemail</li> <li>7. Various important government and non-government websites.</li> <li>8. Web mails, HTTP, URLS</li> <li>9. Hands on-learning experience <ul style="list-style-type: none"> <li>▪ Image digitalisation -scanning fundamentals – project work</li> <li>▪ Using a web camera – project work</li> <li>▪ Optimising computing resources</li> <li>▪ Introduction to Internet/ intranet and enabling infrastructure</li> <li>▪ Search engines and browsing</li> <li>▪ (Project work on information retrieval in key thematic areas)</li> </ul> </li> </ol>	3	

	<p>10. Methods of connecting to Internet</p> <ul style="list-style-type: none"> <li>• Dial-up</li> <li>• Leased line</li> <li>▪ Connecting to Internet and sending an receiving e-mails (project work)</li> <li>▪ Attaching files and images in email messages</li> <li>▪ Practical Session on Internet</li> <li>▪ Application useful to local needs</li> <li>▪ Practical Session on Internet application useful to local needs</li> </ul>		
5.	<p><b>VSAT and WiFi Basics</b></p> <ol style="list-style-type: none"> <li>1. Basics of VSAT and Wireless (WiFi) equipments</li> <li>2. Arrange a visit to a VSAT installation for demonstration and familiarization</li> <li>3. Practical demonstration of installation and configuration of WiFi equipments (participants to have hands on practice)</li> <li>4. Testing and Verifications (Practical Sessions) of WiFi equipment</li> </ol>	2	
6.	<p><b>Evaluation Exam and Feedback collection</b></p> <ol style="list-style-type: none"> <li>1. General exam</li> <li>2. Discussion &amp; Feedback Collection</li> </ol>	0.5	

## **CONSULTANT MINIMUM QUALIFICATIONS REQUIRED**

- The Institutions/organizations must have a minimum of 2 years of demonstrated working experience in conducting similar training.

## **MINIMUM FACILITIES TO BE PROVIDED**

- TIO shall conduct trainings in well-furnished & adequately equipped space/rooms with Internet facility.
- Participants to computers ratio shall be 1:1.