

**TENDER DOCUMENT**

**FOR**

**SUPPORT FROM USO FUND**

**FOR**

**AUGMENTATION, CREATION AND MANAGEMENT OF INTRA-DISTRICT SDHQ – DHQ OFC NETWORK FOR TRANSPORT OF RURAL / REMOTE AREA TRAFFIC ON BANDWIDTH SHARING BASIS  
IN  
NORTH EAST- I CIRCLE (MEGHALAYA, MIZORAM, TRIPURA)**

**UNDER**

**INDIAN TELEGRAPH RULES AMENDED VIDE  
INDIAN TELEGRAPH (AMENDMENT) RULES, 2006**

**No. 30-170-8-NEI/2009-USF DATED 09.02.2011**

**GOVERNMENT OF INDIA  
MINISTRY OF COMMUNICATIONS & IT  
DEPARTMENT OF TELECOMMUNICATIONS  
OFFICE OF THE ADMINISTRATOR, USO FUND**

**UNIVERSAL SERVICE OBLIGATION FUND  
SANCHAR BHAWAN  
20, ASHOKA ROAD, NEW DELHI-110 001, INDIA**

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**F. No. 30-170-8-NE-I/2009-USF**  
**MINISTRY OF COMMUNICATIONS & IT**  
**DEPARTMENT OF TELECOMMUNICATIONS**  
**UNIVERSAL SERVICE OBLIGATION FUND (BB UNIT)**  
**SANCHAR BHAWAN, 20 ASHOKA ROAD,**  
**NEW DELHI -110 001, INDIA**

**NOTICE INVITING TENDER**

TENDER NO. AND DATE : 30-170-8-NE-I/2009-USF Dt.: 09-02-2011

DATE OF START OF SALE : 14.02.2011  
OF TENDER DOCUMENT

DUE DATE OF RECEIPT : 08.03.2011 TIME UPTO 15.30 HOURS

DATE OF OPENING : 08.03.2011 TIME AT 16.00 HOURS

VENUE OF TENDER OPENING : COMMITTEE ROOM, 2<sup>ND</sup> FLOOR,  
SANCHAR BHAVAN,  
20, ASHOKA ROAD, NEW DELHI-110001.

I) USO Fund has undertaken a scheme to provide subsidy support for strengthening the general rural infrastructure by way of optical fibre network augmentation, creation and management of intra-district SDHQ-DHQ OFC Network in the North East –I Circle (comprising states of Meghalaya, Mizoram & Tripura) for the development of telecommunication facilities and make available the network capacity to other service providers on sharing basis at the **prescribed rates on the terms & conditions**, specified in the tender.

II) **Notice Inviting Tender**

**On behalf of the President of India, sealed tenders are hereby invited for NE- I Circle, from National Long Distance Operators, Infrastructure Providers Category-II, Basic Services Operators (BSO), Cellular Mobile Telephone Service (CMTS) Providers, Unified Access Services Licensees (UASL), having valid DoT License/Registration Certificate for operation in NE-I Circle, for the scheme of “Support from USO Fund for augmentation, creation and management of intra-district SDHQ – DHQ Optical Fiber Cable (OFC) network for transport of rural/remote areas-traffic on bandwidth sharing basis in NE- I Circle”. The support from the USO Fund shall be provided to the successful Bidder at the representative rate arrived through the single stage Bidding process. The subsidy support shall be provided over the duration of the Agreement in a phased manner.**

III) **Eligible Bidders**

i) The NLDOs, IP-IIs, BSOs, CMSPs and UASLs, having valid DoT License/Registration Certificate, as applicable, for operation in NE-I Circle.

ii) The applicant shall have a minimum experience of installation, operation and management of 500 route-kilometers of Optical Fibre cable network and 50 numbers of optical nodes (where each optical node is of at-least 155 mbps/equivalent or higher capacity) during the last 5 years, from the date of the issuing of the tender.

iii) The applicant must have minimum financial eligibility requirement, i.e. minimum net worth of **Rs. 48000000 (Rupees forty eight crore only)** as per the audited annual report of the last financial year.

•	<b>Net Worth</b>
=	Subscribed and Paid-up Equity share capital
Add:	Reserves
Subtract:	Revaluation Reserves
Subtract:	Intangible Assets
Subtract:	Miscellaneous Expenditures to the extent not written off
Subtract:	Any other Accrued Liabilities

iv) An applicant can take 100% benefit of the technical capability and financial capability of its parent company for the purpose of evaluation. Any company will be required to have at least 26% equity either directly or indirectly in the applicant company to be considered as its parent company.

**(For details of the above cited eligibility criteria, please refer to the relevant tender document clauses)**

#### **IV) Bid Security/ Earnest Money**

The bidder for the scheme shall furnish a bank guarantee, issued by any scheduled bank for the amount towards earnest money for **Rs. 11500000 (Rs. one crore and fifteen lakh only)**.

#### **V) Purchase of Tender Document**

The Bidders may purchase the tender document along with relevant specifications from **the USOF Section, Room No.503, Sanchar Bhawan, 20, Ashoka Road, New Delhi** on payment of Rs.25,000/ (Rs. Twenty Five Thousand only), non refundable, in the form of a Account Payee Demand Draft drawn on any Scheduled Bank in New Delhi, in favor of the **“Pay & Accounts Officer (HQ), Department of Telecom, New Delhi”**. The tender document may be purchased on any working day between 14.00 Hrs. to 17.00 Hrs. from 14.02.2011 to 07.03.2011. The tender document is also available on USOF website [www.usof.gov.in](http://www.usof.gov.in) which can be used only for information by interested parties.

**Director (BB), USOF**

Tel. 011-23711751

e-mail: [drr1@rediffmail.com](mailto:drr1@rediffmail.com)

#### **Notes:**

1. Though adequate care has been taken while preparing this document, the Applicant shall satisfy himself that the document is complete in all respects.
2. Intimation of any discrepancy shall be given to this office by e-mail at the address [drr1@rediffmail.com](mailto:drr1@rediffmail.com) immediately. If no intimation is received from any Applicant

within ten (10) days from the date of issue of this document, it shall be considered that the issued document is complete in all respects and has been received by the Applicant.

3. While this Tender has been prepared in good faith, USOF does not make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information contained herein, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this request, even if any loss or damage is caused by any act or omission on its part.

**TENDER FOR AUGMENTATION, CREATION AND MANAGEMENT OF  
INTRA-DISTRICT SDHQ – DHQ OFC NETWORK FOR TRANSPORT OF RURAL /  
REMOTE AREA TRAFFIC ON BANDWIDTH SHARING BASIS IN NE-I CIRCLE**

**SECTION - 1**  
**GENERAL INFORMATION ABOUT THE TENDER**

**1.1 BACKGROUND OF USO FUND**

**Objective of USOF**

The New Telecom Policy'99 envisaged provision of access to basic telecom services at affordable and reasonable prices in rural and remote areas.

The financial resources for meeting the Universal Service Obligation (USO) are being raised through a Universal Service Levy (USL), which is a specified percentage of the Adjusted Gross Revenue (AGR) of various licensed Telecom Service Providers except the pure value-added service providers like Internet, Voice-mail, E-mail service providers etc.

The NTP'99 further envisaged that implementation of USO for rural and remote area would be undertaken by all Basic service providers, who shall be reimbursed from the Universal Service Obligation Fund (USOF). Simultaneously, other service providers were also to be encouraged to participate in USO provisioning, subject to technical feasibility, and would be reimbursed out of the USOF.

**Background of USOF**

Subsequently, The Indian Telegraph (Amendment) Act, 2003, giving statutory status to the Universal Service Obligation Fund (USOF) was passed in December 2003. The fund is to be utilized exclusively for meeting the Universal Service Obligation and the balance to the credit of the Fund will not lapse at the end of financial year.

The Rules for administration of the Fund known as Indian Telegraph (Amendment) Rules 2004 were notified on 26.03.2004, and were further amended vide Indian Telegraph (Amendment) Rules 2006 published on 17.11.2006 to include creation of general infrastructure in rural and remote areas for the development of telecommunication facilities under the scope of support from USOF.

**USOF Streams**

USOF has undertaken various schemes to support the provision of telecom services and infrastructure-creation in rural and remote areas under following Streams that are supported by the Rules -

**Stream-I: Provision of Public Telephones**

USOF is supporting provision of Village Public Telephones (VPTs), Rural Community Phones (RCP) and Replacement of Multi Access Radio Relay technology VPTs.

**Stream-II: Provision of household telephones in rural and remote areas -** USOF is supporting provision of Rural Direct Exchange Lines (RDELs).

**Stream-III: Creation of infrastructure for provision of mobile services in rural and remote areas -** USOF is supporting the *setting up & management of infrastructure for provision of mobile services* in rural and remote areas to be utilized on sharing basis by licensed mobile service providers.

**Stream-IV: Provision of broadband connectivity to villages in a phased manner -** USOF is supporting the provision of wire line broadband connectivity in rural and remote areas.

**Stream-V: Creation of general infrastructure in rural and remote areas -** USOF shall be supporting creation of infrastructure in rural and remote areas as determined by Central Government from time to time.

**Stream-VI: Induction of new technological developments in the telecom sector in rural and remote areas -** USOF is supporting pilot projects to establish new technological developments in the telecom sector which can be deployed in rural and remote areas.

## 1.2 RURAL TELECOM SCENARIO

### Rural statistics

Rural India comprises of 6,38,499 villages out of which about 44,856 villages are uninhabited as per the Census 2001. The remaining 5,94,000 (appx.) inhabited Villages account for 72.22 % of the total population of India. Out of 593 districts in India, only 9 are entirely urban and the remaining 584 districts have rural areas under them. The scenario of North East – I Circle covering the States of Meghalaya, Mizoram and Tripura (hereinafter referred to as NE-1) after the Census 2001 is as given below-

Sl. No	State	District	Blocks	Population as per 2001 in %		Villages as per 2001
				Rural	Urban	
1	Meghalaya	7	71	80.4	19.5	6027
2	Mizoram	8	62	50.6	49.4	817
3	Tripura	4	55	73.6	13.2	870
	<b>Total</b>	<b>19</b>	<b>188</b>	<b>204.6</b>	<b>82.1</b>	<b>7714</b>

### Telecom growth

The country has seen a phenomenal growth in the availability of telecom services. People from all sections of the population are now using mobile telephone and accessing the Internet for viewing/retrieval of information and e-mail. However, the urban-rural divide continues.

### Urban/rural divide

The telecom network in rural areas also expanded during Tenth Plan (2002-07). The number of phones in rural areas increased from 9.01 million in March 2002 to

671.69 Million by June 2010. The rural teledensity increased from 1.21% in March 2002 to 26.43% in June 2010. The all-India rural teledensity is much less as compared to urban teledensity of 128.2% in June 2010. The corresponding North East- I Circle (comprising Meghalaya, Mizoram & Tripura) the rural teledensity is 41.51% and urban teledensity is 154.96% as on 31 March 2010.

There is need to address this issue and build up strong telecom connectivity in rural/ remote areas because access to voice and data services will play a crucial role in the overall development and growth of the rural areas. The Government of India is determined to bridge the gap.

### **Overall targets and objectives of telecom development**

Government is supporting aggressive targets for rapid growth in telecom network and services in the country including rural / remote areas. The objectives of the Eleventh Plan (2007-12) related to rural areas are highlighted below:

- To reach a telecom subscriber base of 600 million
- To provide 200 million rural telephone connections by 2012, that is to reach a rural tele-density of 25%. The rural teledensity targeted is upgraded to 40% by 2014
- To provide telephone connections on demand across the country at an affordable price
- To reach a target of 20 million broadband connections and 40 million Internet connections by 2010 as envisaged in Broadband policy 2004
- To provide Third Generation (3G) services in all cities/towns with more than 1 lakh population
- To facilitate introduction of mobile TV
- To provide broadband connectivity to every secondary school (SS), health center, Gram Panchayats on demand
- Linkage is to be provided between block headquarters and nearest exchange for completing (SWANs) connectivity.

It is also envisaged that telecom expansion in rural areas may be facilitated through setting up of triple play networks.

## **1.3 BANDWIDTH REQUIREMENT IN INTRA-DISTRICT NETWORKS**

### **Rural traffic**

The telecom scenarios described above indicate that the rural/remote areas shall be brought into telecom services net through the deployment of various wireless and wire line technologies in access networks. These access networks will produce substantial telecom traffic. The deployment of OFC to provide connectivity in rural areas is therefore necessary.

### **Inadequate capacity in SDHQ–DHQ OFC network**

The transport system between SDHQs and DHQ in a district is inadequate on many counts to carry the present/future levels of rural traffic. The shortcomings include insufficient multiplex capacity, some SDHQ not having OFC connectivity, use of radio media having inherent bandwidth/spectrum constraints, and, automatic alternate path protection not available. Bulk of the two-way digital

traffic aggregating at the SDHQ nodes shall be outbound to destinations within country/outside India. This outbound traffic would be routed to District headquarters where after further concentration/ multiplexing/ switching operations, the traffic is interfaced to the national long distance network. It is observed that the service providers have adequate OFC- network to district headquarters (DHQ) from the core network, but connectivity between district-headquarter and the various taluka/tehsil/block-headquarters (sub-district headquarter or SDHQ) is deficient and constitutes a bottleneck towards achieving the objective of comprehensive rural connectivity.

- 1.3.1 The Indian Telegraph (Amendment), Rules 2006, inter-alia, envisages support for creation of general information in rural and remote areas for the development of telecommunication facilities. The present tender is to implement the provisions contained in the Indian Telegraph Rules and has been formulated under the powers vested in the Administrator in accordance with Rule 524(i) of the Indian Telegraph (Amendment), Rules 2006.

#### **1.4 NOTICE INVITING TENDER**

##### **1.4.1 Invitation to Bid**

**On behalf of the President of India, sealed tenders are hereby invited for NE-I Circle, from National Long Distance Operators, Infrastructure Providers Category-II, Basic Services Operators (BSO), Cellular Mobile Telephone Service (CMTS) Providers, Unified Access Services Licensees (UASL), having valid DoT License/Registration Certificate for operation in NE-I Circle, for the scheme of “Support from USO Fund for augmentation, creation and management of intra-district SDHQ – DHQ Optical Fiber Cable (OFC) network for transport of rural/remote areas-traffic on bandwidth sharing basis in NE- I Circle”. The support from the USO Fund shall be provided to the successful Bidder at the representative rate arrived through the single stage Bidding process. The subsidy support shall be provided over the duration of the Agreement in a phased manner.**

##### **1.4.2 Description and Scope of Work**

###### **Overall solution**

The solution, to meet the required capacity mentioned at clause 1.3 above, is to deploy appropriate transport technology for augmentation and creation of INTRA-DISTRICT TRANSPORT NETWORK that will provide cost-effective high capacity bandwidth. This network will also meet the futuristic requirement in terms of technology and the demand for various applications/services.

The USOF approach is to utilize spare fiber and multiplex capacity where available in the network (it's own or other's) as well as to utilize existing premises (instead of spending on new buildings/ shelters, etc. everywhere on the planned routes) and upgrade the existing capacity as required, install new OFC routes to SDHQ still not having OFC connectivity. In this approach, the duplication of physical resources including laying of optical fiber cables in parallel to already laid OFC is avoided as far as possible. It is in the Bidder's own interest to make all possible efforts to utilize the existing network(s) and avoid unproductive duplication of existing OFC-based telecom infrastructure.

The list of Districts, sub-district headquarters (SDHQ) is given in **Table-I-1.1-3 (under Annexure-I-1)** showing “Districts and Sub-districts and other locations of all the three states under NE- I circle that are to be inter-connected.

USOF intends to provide subsidy support for augmentation, creation and management of intra-district SDHQ – DHQ OFC network for transport of rural / remote area traffic on bandwidth sharing basis in NE- I Circle to the successful Bidder selected as per the term & conditions of the tender document from amongst the NLDOs, IP-IIs and BSOs, CMSPs and UASLs who are licensed for providing basic services/ Cellular/Unified Access services in NE- I Circle, subject to fulfilling the eligibility criteria as prescribed in this tender document.

**Network Bandwidth sharing: Use of augmented and created Bandwidth in OFC network transport**

The Network Bandwidth (here-in-after also referred to as ‘SUBSIDIZED BANDWIDTH’), is the augmented and created bandwidth capacity under the scheme, which shall be shared with other service providers for providing telecom services to rural/remote areas at prescribed rates and terms of this tender.

**Salient technical description of augmented and created OFC transport network**

The augmented and created OFC transport networks shall provide OFC connectivity to all SDHQ nodes via underground OFC cable as prescribed in Technical Conditions of the Tender. All SDHQ nodes, en-route location nodes and additional location nodes shall be connected on physical OFC Ring Route(s) with the DHQ node ensuring the cable route diversity. All intra-district OFC rings should be interconnected.

At all the SDHQ/DHQ/En-route/Additional location nodes, Optical Add Drop Multiplex TDM/IP or Ethernet based transport equipment with optical line output conforming to ITU-T Standard optical signals will be installed. These node equipment will be equipped with modules required for electrical multiplexing/de-multiplexing and dropping / inserting the digital traffic conforming to ITU-T rates and standards, along with all other necessary common modules required for clocking, regeneration, control and monitoring facilities.

The node equipment on the SDHQ-DHQ OFC Rings will be configured for Self-healing ring protection. Not more than 6 – 8 nodes are to be connected on a single OFC Ring to allow for adequate drop/insert interface capacity for rural/remote traffic at the node after allowing for protection capacity overhead. Each ring capacity for transport of telecom traffic, including integrated voice, data and video signals, shall be at least 2.5Gbps, expandable to 10Gbps. Each node shall have minimum aggregate Add/Drop capacity of 155Mbps, equipped with granularity up to 2 Mbps. The augmented and created network shall have capability to efficiently transport various protocols, including TDM, IP, Frame Relay, ATM, etc.

1.4.3

**USOF SUPPORT  
Subsidy support**

Recognizing that present/near-term revenue derived from carriage of rural/remote area traffic on the augmented and created SDHQ-DHQ intra-district OFC network may not be adequate to attract the required quantum of investment, USOF intend to provide financial subsidy support by way of capital recovery on rollout of the district-wise networks in NE- I Circle.

The subsidy, at the representative rates as arrived at through a single stage Bidding process, shall be disbursed in phased manner against the commissioning and rollout of OFC transport networks in the districts, subject to the terms and conditions specified in the Financial Conditions of the Tender Document.

1.5 The successful Bidder shall Set up and Provide (i.e. procure, install, test, commission), Build and Own, Operate, Maintain and Manage the augmented and created OFC transport network and associated infrastructure required for effective provision of bandwidth on sharing basis, as per the terms and condition laid down in the Agreement.

1.6 **A single Bid is invited for the whole North East- I Circle**

1.6.1 Reorganization of Telecom Circle or Metro City or change of Local Area, if any, during the operative period of the Agreement will have no effect on the territory comprised in Service Area. The Service Area (SA), in this document, refers to the SA as defined by DoT, for licensing purpose on the date of signing of the Agreement.

1.6.2 The District names and boundaries will be as per Government orders in force at the time of commissioning of the augmented and created Bandwidth (BW) district-wise SDHQ – DHQ OFC network(s).

1.7 **Bidding Process**

A “Single Stage Bidding Process”, as described in the Terms of Financial Bid, will be followed for inviting Bids. A single rate of subsidy should be quoted at par or less than the benchmark subsidy for NE- I Circle, which will be applicable for disbursement on percentage basis for the various districts, as mentioned in the Financial Bid form.

1.8 **PURCHASE OF TENDER DOCUMENT**

**Sale of tender document from USOF office**

The Bidders may purchase the tender document along with relevant specifications from **the USOF Section, Room No.503, Sanchar Bhawan, 20, Ashoka Road, New Delhi** on payment of Rs.25,000/ (Rs. Twenty Five Thousand only), non refundable, in the form of a Account Payee Demand Draft drawn on any Scheduled Bank in New Delhi, in favor of the “**Pay & Accounts Officer (HQ), Department of Telecom, New Delhi**”. The tender document may be purchased on any working day between 14.00 Hrs. to 17.00 Hrs. from **14.02.2011 to 07.03.2011**. The tender document is also available on USOF website [www.usof.gov.in](http://www.usof.gov.in) which can be used only for information by interested parties.

**SECTION – 2**  
**SCHEDULE OF IMPORTANT EVENTS**  
*(Unless otherwise notified separately)*

1.	Start of sale of Tender Document and placing tender on web-site	14.02.2011
2.	Receipt of letters seeking clarification, if any, from Bidders.	23.02.2011
3.	Pre-Bid conference	25.02.2011
4.	Issue of comprehensive clarifications along with tender modifications, if any	01.03.2011
5.	Last date for sale of tender document	07.03.2011
6.	Last date for submission of Bids for pre-qualification, first financial Bids, earnest money bank guarantee	08.03.2011
7.	Opening of Pre-Qualification Bids for Responsiveness	08.03.2011
8.	Clarifications if any and Declaration of Pre-Qualified Responsive Bidders	15.03.2011
9.	Opening of financial Bids	18.03.2011
10.	Declaration of successful Bidder	22.03.2011
11.	Notice for entering into an Agreement (Issue of Letter of Intent) to short listed successful Bidder	25.03.2011
12.	Acceptance of Offer for Agreement	30.03.2011
13.	Submission of Performance Bank Guarantee by successful Bidder	05.04.2011
14.	Signing of Agreement by the date specified in LOI	By the date specified in LoI, Day 11.04.2011 onwards

**NOTE:**

The dates of events may be changed at the discretion of Administrator without assigning any reason. Such change of dates, if any, will be suitably notified only to those who purchased the tender document. The notification will also be put up on USOF website [www.usof.gov.in](http://www.usof.gov.in)

**SECTION – 3**  
**GENERAL CONDITIONS**

**INTRODUCTION:**

- 3.1 FOR AND ON BEHALF OF The President of India, the Administrator, Universal Service Obligation Fund, Department of Telecom, proposes to enter into an Agreement with the Host Operator for augmentation, creation and management of intra-district SDHQ – DHQ Optical Fiber Cable (OFC) network for transport of rural/remote areas-traffic on bandwidth sharing basis in North East-I Circle.
- 3.2 Technical, Commercial, Operating, Financial Conditions, Terms of Financial Bid, Special Conditions and other General conditions are given in this Tender Document. The Agreements, containing terms and conditions, will be broadly in line with this tender document including clarification(s) issued, if any. The Agreement(s) will be signed with the successful Bidder(s).
- 3.3 The Host Operator shall always be liable to perform the obligations under these Agreements during the validity period of the Agreements. The terms and conditions of this tender document apply at all stages of the Bidding process (from submission of initial Bid till signing of the Agreements) and the Bidders must ensure compliance to these conditions at each stage of the process. For non-compliance to these conditions, Administrator reserves the right to disqualify any Bidder, at any stage of the Bidding process.
- 3.4 The Host Operator shall be solely responsible for complete augmented and created bandwidth in the district-wise OFC networks, covering existing routes/sections, utilized/upgraded as well as new sections. This responsibility shall be on a continuous basis and will extend to all aspects of the scheme viz., roll-out and commissioning, operation and maintenance, and providing bandwidth on sharing as prescribed therein.
- 3.5 **ELIGIBLE BIDDERS**
- i) The NLDOs, IP-IIs, BSOs, CMSPs and UASLs, having valid DoT License/Registration Certificate for operation in NE-I Circle, are eligible to Bid for NORTH EAST- I Circle, for augmentation, creation and management of intra-district SDHQ – DHQ Optical Fibre Cable (OFC) network for transport of rural/remote areas-traffic on bandwidth sharing basis in NE- I Circle. The Applicant should furnish a copy of the relevant pages of License/valid registration certificate, issued by DoT, as documentary evidence in support of its eligibility. The format for the Board Resolution from the Parent Company to be submitted, if applicable, is attached at **Annexure III-2**.
- ii) The applicant shall have a minimum experience of installation, operation and management of 500 route-kilometers of OF cable network and 50 numbers of optical nodes (where each optical node is of at-least 155 Mbps/equivalent or higher capacity) during the last 5 years, from the date of the issuing of the Tender as per **Annexure-III-8**, duly certified by the auditor. Applicants shall furnish

documentary evidence in support of the experience in the form of completion certificate from the duly authorized owner of the network.

iii) The applicant must fulfill the following minimum financial eligibility requirements

**Net Worth:** Minimum net worth of **Rs. 480000000 (Rupees Forty Eight Crore only)** as per the audited annual report of the last financial year.

•	<b>Net Worth</b>
=	Subscribed and Paid-up Equity share capital
Add:	Reserves
Subtract:	Revaluation Reserves
Subtract:	Intangible Assets
Subtract:	Miscellaneous Expenditures to the extent not written off
Subtract:	Any other Accrued Liabilities

For the purposes of the financial criteria, only unconsolidated audited annual accounts of the applicant (bidding company) shall be used. Applicants shall furnish documentary evidence of their financial capability as defined here in the format enclosed at **Annexure-III-9** to this document. A copy of the audited annual accounts of the applicant and parent company (if applicable) as per schedule VI of the companies act, shall also be submitted along with the tender (**Annexure-III-10**).

iv) An applicant can take 100% benefit of the technical capability and financial capability of its parent company for the purpose of evaluation. Any company will be required to have at least 26% equity either directly or indirectly in the applicant company to be considered as its parent company. If an applicant wishes to draw upon the technical and financial capability of its parent company, it will have to submit a legally binding undertaking supported by a board resolution from its parent company as per **Annexure-III-2** at the time of the submission of the tender document (on qualification) that all the equity investment obligations of the applicant shall be deemed to be equity investment obligations of the parent company and in the event of any default the same shall be met by the parent company.

The determination of the relationship of parent with the applicant company shall be as on **31<sup>st</sup> March 2009**. The documentary evidence to establish such relationship shall be furnished by the bidder along with the response to this tender.

### 3.6 COST OF BIDDING

The Bidder shall bear all costs associated with the preparation and submission of the Bid. In no case, the Administrator shall be responsible or liable for these costs, regardless of the conduct or outcome of the Biding process.

## **THE BID DOCUMENT (S):**

### **3.7 COMPLIANCE AND RESPONSE TO TENDER**

The Bidder shall strictly comply with General, Technical, Commercial, Financial, Operating, Special Conditions and Terms of Financial Bid described in the Tender Document.

The Bidder is expected to examine all instructions, forms, terms and specifications in the Tender Document. Failure to furnish all information required as per the Tender Document or submission of the Bids not substantially responsive to the Tender Document in every respect will be at the Bidder's risk and may result in rejection of the Bid.

**The Tender Document shall be supplied along with a signed copy of the Financial Bid Form for the scheme.** For the purpose of information, a copy of the Tender Document can be downloaded from the DoT Website. In case, any deviation is found in the downloaded copy of the Tender Document the contents of the hardcopy, supplied as Tender Document, shall prevail. The Bidders are required to submit the Financial Bids in Financial Bid Form supplied along with the Tender Document purchased from the USO Fund as per **Clause 1.4 of Section-1: Notice Inviting Tender.**

### **3.8 CLARIFICATION ON TENDER DOCUMENT**

Prospective Bidders, if they desire so, may send any of their queries on the conditions of this Tender Document in writing by hand/post or by FAX on 011-23372365 to **Director (BB), USOF, DOT, Room No.503, Sanchar Bhawan, Ashoka Road, New Delhi-110 001**, so as to reach **latest by 1600 hours of 23.02.2011**. The queries so received shall be clarified in the pre-Bid conference to be held on **25.02.2011**. **No new queries shall be taken up after the pre-Bid conference.**

Consolidated replies to the relevant queries will be communicated in writing by the Administrator to all the prospective Bidders and shall form part of the Tender Document.

### **3.9 AMENDMENT OF BID/TENDER DOCUMENT**

At any time, before the last date of submission of Bids, the Administrator may, suo-motu or in response to a clarification requested by a prospective Bidder, may modify the Tender Document by making suitable amendments.

The amendments, if any, shall be notified in writing by post or by FAX to all prospective Bidders who purchased the Tender Document. In addition, the amendments shall be notified on USOF website [www.usof.gov.in](http://www.usof.gov.in). These amendments shall form part of Tender Document and shall be binding for compliance on the Bidders.

**Time extension for Bidders to respond to amendments**

In order to afford time to prospective Bidders for taking the amendments into account while preparing their Bids, the Administrator may extend the deadline for the submission of Bids so as to give minimum of five calendar days time after such amendment.

**PREPARATION OF BIDS:**

**3.10 DOCUMENTS COMPRISING THE BID**

The Bid prepared by the Bidder shall comprise all supporting documents as required in this complete tender document. A Check List is given at **Annexure III-3** for assistance of the Bidder. The check list is not to be treated as exhaustive. Bidder must go through the tender thoroughly and ensure that all information is furnished.

- (a) Documents in accordance with **Clause 3.5 of Section-3: General Conditions** that the Bidder is eligible to Bid and is qualified to perform the contract, if his Bid is accepted.
- (b) (Bid Security/ EMBG furnished in accordance with **Clause 3.13 of Section-3: General Conditions**.)
- (c) Compliance statement as per the specified format in **Annexure III-5**
- (d) Financial Bid Form completed in accordance with **Annexure VIII-1**

**3.11 FINANCIAL BID FORM**

The Bidder shall complete the financial Bid form only in **the signed Financial Bid Form supplied along with the Tender Document, in Annex- VIII-1** indicating the rates to be quoted against the benchmark value as per details given in **Section-8: Terms of Financial Bid** of the Tender Document.

**3.12 DOCUMENTS TO BE SUBMITTED ESTABLISHING BIDDER'S ELIGIBILITY AND PRE-QUALIFICATION FOR THE SCHEME:**

**Following Documents are required to be submitted along with the Pre-Qualification Bid (s) for the Scheme:**

In case, the Bidder has drawn upon 100% technical and financial capability of its Parent company for the purpose of evaluation, a legally binding undertaking supported by a Board Resolution, as per the format prescribed in **Annexure III-2**, is to be submitted along with the Bid for the scheme from its Parent Company indicating the share of Parent Company in the Applicant Company and that all the equity investment obligations of the Bidder shall be deemed to be equity investment obligations of its Parent Company and in the event of any default the same shall be met by the Parent Company.

Earnest Money Bank Guarantees (EMBGs) for a sum as specified in Clause 3.13 or the scheme in prescribed manner as per **Annexure III-6**.

Compliance with General, Technical, Commercial, Financial, Operating, Special Conditions and Terms of Financial Bid of the Tender Document for the scheme in the form of the Compliance Statement **Annexure III-5**.

Proof of purchase of Tender Document from USO Fund for the scheme

Power of Attorney in favor of Authorized Signatory along with supporting Board Resolution for the scheme **Annexure VI**

Following **documents are required** to be submitted along **with the Financial Bid** for the scheme:

Financial Bid form and Compliance Statement for the scheme as per **Annexure VIII-1** and **Annexure III-5** respectively.

### 3.13 **BID SECURITY/ EARNEST MONEY**

The Bidder for the scheme shall furnish a Bank Guarantee issued by any Scheduled Bank for the amount towards Earnest Money for **Rs. 11500000 (Rs. One core and fifteen lakh only)**, valid for 45 days beyond the **initial Bid validity** of 180 calendar days i.e. 225days (and extendable at the request of the Administrator for a further period of 180 days) in the prescribed format as given in **Annexure III-6** .

#### **Return of EMBG**

After signing of Agreement, the Earnest Money Bank Guarantee will be returned to the successful Bidder. The bank guarantees of other Bidders, unless otherwise forfeited, shall also be returned within seven days after signing of Agreement with successful Bidder.

#### **Bid not accompanied with prescribed EMBG**

A Bid not secured in accordance with the clause 3.12 for the scheme shall be summarily rejected by Administrator USOF at the Bid opening stage on grounds of being non-responsive and returned to the Bidder unopened.

### 3.14 **FORFEITURE OF THE BID SECURITY (EMBG)**

The Bid security (EMBG) shall be forfeited:

(a) If the Bidder withdraws the Bid during the period of validity of the Bid

(b) In the case the successful Bidder, if the successful Bidder fails:

(i) To sign the Agreement with Administrator in accordance with **Clauses 3.28 and 3.29 of Section-3: General Conditions**

- (ii) To furnish the prescribed Performance Bank Guarantee in accordance with **Clause 3.29 of Section-III: General Conditions.**

In case of Bid security forfeiture, under clause 3.14 above, the Bidder will not be eligible to participate in any Tender floated by USO Fund for three years from the date of issue of Letter of Intent (LOI.)

### 3.15 **VALIDITY PERIOD OF BIDS**

The Bid shall remain valid for a minimum period of 180 calendar days from the date of Bid opening, further extendable by a period/periods not exceeding in all another 180 days at the request of the Administrator. The extension shall be with the consent of the Bidder Company. The period, during which there is any stay on the Bidding process by a court or tribunal, shall be excluded while counting the number of days stated above.

A Bid, valid for a shorter period, shall be rejected by the Administrator on grounds of being non-responsive.

In exceptional circumstances, the Administrator may request the consent of the Bidder for an extension to the period of Bid validity. The request and the response thereto shall be made in writing. The Bid Security (EMBG), provided under clause 3.13, shall also be suitably extended by the Bidder. The Bidder may refuse the request without forfeiting his Bid security. A Bidder, accepting the request for extension, will not be permitted to modify his Bid.

### 3.16 **FORMAT AND SIGNING OF THE BID**

The Bidder shall prepare one complete set of Original Bid (both Prequalification and Financial) and make 4 copies of the same, clearly marking one as '**Original Bid**' and remaining four as '**Copy No:1, Copy No:2, Copy No:3, Copy No:4**'. In the event of any discrepancy between the copies, the original shall govern.

The original and all copies of the Bid, except for un-amended printed literatures, shall be typed or printed and all the pages numbered consecutively and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. The letter of authorization shall be indicated by written power of attorney accompanying the Bid.

The first copy shall be marked as '**ORIGINAL**' both for **Pre-Qualification and First Financial Bid(s)** of the Bid and shall be duly signed in ink on each page by the authorized signatory of the Bidder. The other four photocopies of the original copy shall be marked as '**COPY No. \_\_\_\_\_**' duly signed on each page. Each page of the Bid is to be numbered.

The Bid shall not contain any interlineations, erasures or overwriting etc. In case any corrections are made to correct errors, such corrections shall be signed by the authorized signatory.

**SUBMISSION OF BIDS:**

**3.17 MARKING AND SEALING**

The Bids for the scheme shall be submitted in two **separate sealed covers** – **Cover-I for Pre-Qualification Bid, and Cover-II for Financial Bid**

**Sealed Cover-I**

Sealed Cover-I shall contain **five (5 Nos.) copies of Prequalification Bid**, the first copy marked “**ORIGINAL**” and four (4 Nos.) copies each marked “Copy No. \_\_\_\_\_” comprising compliance in the prescribed Performa as per **Annexure III-5** in respect of General, Commercial, Technical, Operating Financial, Terms of Financial Bid and Special Conditions as per Section-III to Section-X) comprising the non-price response to the Tender and separate Earnest Money Bank Guarantee (EMBG) as per clause 3.13 along with the eligibility and other requisite documents as per clause 3.5 of General Condition of the Tender document. It should be marked as “**BID FOR PRE-QUALIFICATION**” and bear the **Tender Number**, the **Bidder’s name & address, the name of Circle** (namely, North East-I Circle) and the **Due date & time of Tender opening**.

**Sealed Cover-II**

Sealed Cover-II shall contain five (5 Nos.) copies of **Financial Bid for the scheme** the first copy marked “**ORIGINAL**” and four (4 Nos.) copies each marked “Copy No. \_\_\_\_\_” along with duly filled in **Signed Financial Bid Form** as per clause 3.11 supplied with the Tender Document. The envelope should be marked as “**FINANCIAL BID**” and shall bear the **Tender Number**, the **Bidder’s name & address**, the (namely, North East-1 Circle) and the **Due date & time of the Tender opening**.

<b>BID for the Scheme</b>	
<b>Sealed Cover-I</b>	<b>Sealed Cover-II</b>
<b>Pre-Qualification Bid (one ORIGINAL and four copies)</b>	<b>Financial Bid (One ORIGINAL and four copies)</b>
<ul style="list-style-type: none"> <li>• EMBG as per Clause 3.13</li> <li>• Non-price response to the tender</li> <li>• Eligibility and other requisite documents as per Clause 3.5 &amp; 3.12, as applicable</li> <li>• Compliance Statement (Annexure III-5)</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Bid Annexure VIII-1</li> <li>• Compliance Statement Annexure III-5</li> </ul>

If the envelopes are not sealed, marked and submitted as prescribed above, the Bids are liable to be rejected.

**3.18 DUE TIME AND DATE OF BID SUBMISSION:**

The Bid documents in two separate sealed covers as specified above shall reach the Administrator, USOF **by 15:30 Hrs. on 08.03.2011** at the following address:

**Director (BB), USO Fund, DoT  
Room No. 503, Sanchar Bhawan, 20 Ashoka Road,  
New Delhi – 110 001**

The Bids may be sent by registered post/courier or delivered in person at the address as given above. The responsibility for ensuring that the Bids are delivered in time would rest with the Bidder exclusively. The Administrator shall not be responsible for any delays in post/courier services or if the Bids are delivered elsewhere.

**3.19 VENUE OF THE TENDER OPENING**

The Bids will be opened in the Committee Room, 2<sup>nd</sup> Floor, Sanchar Bhavan, 20, Ashoka Road, New Delhi-110001 at **16:00 Hrs. on 08.03.2011**. If due to administrative reasons, the venue/Time and/or date of Bid opening is changed, it will be displayed prominently on Ground Floor lifts and at reception office of Sanchar Bhavan, DoT, New Delhi.

**3.20 DEADLINE FOR SUBMISSION OF BIDS**

Bids must reach the Director (BB), USO Fund, DoT at the address specified above at Clause 3.18 not later than the date and time specified therein.

The Administrator may extend the deadline for submission of Bids and subsequent milestones, as given in Section-2 (schedule of important events) of this tender document, by amending the tender document and in such case, all rights and obligations of the Administrator and Bidders shall be subject to the extended deadline.

**3.21 LATE BIDS**

Any Bid received after the deadline for submission of Bids, shall be rejected and returned unopened to the Bidder.

**3.22 MODIFICATION AND WITHDRAWAL OF BIDS**

The Bidders are allowed to withdraw their Bids through written request before the scheduled time of submission of Bids but not later. In case of withdrawal, a withdrawal notice may be sent by FAX but must be followed by a signed confirmation copy sent by post not later than the deadline for submission of Bids.

The Bidder is allowed to modify the submitted-Bid before the deadline time and date of submission. No Bid shall be modified subsequent to the deadline for submission of Bids.

The Bidder's modification notice shall be prepared, sealed, marked and dispatched so as to reach the Administrator USOF at the address given in Clause 3.18 above, within the deadline time and date of submission in accordance with the provisions of Clauses 3.20 above.

In case any amendment to the Tender Document is issued after submission of the Bid, modifications to the Bid can be submitted to reach the Administrator, USOF at the address given above before the scheduled time of submission of Bids.

### 3.23 COMPLIANCE WITH TENDER CLAUSES

The Bidder shall furnish with compliance with General, Technical, Commercial, Financial Operating and Special Condition and Terms of Financial Bid and other Tender Clauses in the prescribed Performa as per Annexure III-5 for the scheme. **It should be clearly understood that any deviation shall not be accepted.**

If at any later date, it is found that averments/facts, submitted by the Bidder in the Bid based on which the Bidder has been considered eligible or successful or has entered into the Agreement, is false or not true to the knowledge or belief of the Bidder, the Administrator reserves the right to disqualify the Bidder. The Agreement, signed with a Bidder based on such false information shall be cancelled without any notice and any other remedies available in terms of the Agreement shall be invoked.

### **BID OPENING AND EVALUATION:**

### 3.24 OPENING OF PRE-QUALIFICATION BIDS

The Administrator, through his nominee, will open Bids contained in **Sealed Cover-I**, in the presence of Bidders' authorized representatives, if present, at the due date and time. The Bids shall be opened even if the authorized representatives of a Bidder company are not present in Bid opening. Pre-qualification Bids under Sealed Cover-I, which are accompanied by requisite EMBG, will only be considered. The Bidder's authorized representative(s), who is/are present, shall sign an attendance sheet. **The letter authorizing the representative to attend the Bid opening, shall be submitted on the letter head of the Bidder company, signed by the authorized signatory, before they are allowed to participate in the Bid opening.**

A maximum of two representatives from any Bidder company shall be permitted to attend the Bid opening.

The Bidder's names, modification, Bid withdrawals and the presence or absence of the requisite Bid security deposit (EMBG) and such other details as the Administrator or authorized person deems fit shall be announced at the time of Bid opening.

Similar steps shall be taken for opening of subsequent financial Bids.

If the date, fixed for opening of Bids, is subsequently declared as holiday by the Government, a revised date will be notified. However, in absence of such Notification, the Bids will be opened on the next working day, time and venue remaining unaltered.

### 3.25 **CLARIFICATION ON BIDS**

To assist in the examination and evaluation, the Administrator or his representative may ask the Bidder for any clarification on their Bid. The request for the clarification and the response, thereof, shall be made in writing. Uniform time of two (2) days shall be provided to all Bidders, if clarifications are asked for by the Administrator. However, no post Bid clarification at the initiative of the Bidder shall be entertained.

### 3.26 **EVALUATION OF THE PRE-QUALIFICATION BIDS (sealed cover-I)**

The Administrator shall evaluate the Bids to determine whether they are complete, whether they are free from any computational errors, whether required documents have been furnished, whether the documents have been properly signed and whether the Bids are generally in order.

Prior to the financial evaluation, the Administrator will determine the substantial responsiveness of each Bid to the Tender Document. For the purpose of these clauses, a substantially responsive Bid is one, which conforms to all the terms and conditions of the Tender Document without material deviations. The Administrator's determination of Bid's responsiveness shall be based on the contents of the Bid itself without recourse to extrinsic evidence.

A Bid, determined as not substantially responsive, will be rejected by the Administrator and shall not, subsequent to the Bid opening, be made responsive by the Bidder by correction of the non-conformity.

Arithmetical errors shall be rectified on the following basis. If there is a discrepancy between words and figures, the amount in words shall prevail. If the Bidder does not accept the correction of the errors, his Bid shall be rejected.

The Administrator may waive any minor infirmity or non-conformity or irregularity in a Bid, which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

The Bids will be technically and commercially evaluated giving due consideration for their conformity to the prescribed pre-qualification criteria namely, eligibility conditions and compliance with the General, Technical, Commercial, Operating, Financial and Special Conditions and Terms of Financial Bid as laid down in this Tender document. All the criteria have to be met for the purpose of pre-qualification and there is no weightage attached to any of the pre-qualification parameters. However, failure to meet any of these criteria will disqualify the Bidder. The qualified Bidders will be short-listed and their financial Bids (sealed cover-II) will be opened on the date as given in **SECTION-2: SCHEDULE OF**

**IMPORTANT EVENTS**, in the presence of the authorized representatives of the short-listed Bidders, if they desire to be present.

### 3.27 **EVALUATION OF FINANCIAL BIDS (Sealed Cover-II)**

The Administrator shall evaluate in detail and compare the Financial Bids of the shortlisted Bidders, determined to be substantially responsive pursuant to Clause: 3.26.

The evaluation and comparison of responsive Bids shall be done on the basis of the rates quoted against the Benchmark values of the Financial Bid Form in **Annexure-VIII-1** and other terms and conditions under **Section-7: Financial Conditions & Section-8: Terms of Financial Bid** of the Tender Document.

### **SIGNING OF AGREEMENT:**

### 3.28 **AGREEMENT**

For and on behalf of the President of India, the Administrator, Universal Service Obligation Fund, (**Here-in-after referred to as “Administrator”**) proposes to enter into an Agreement with the successful Bidder (**Here-in-after referred to as “Host Operator”**) for the above scheme in NE- I Circle.

### 3.29 **ENTERING INTO THE AGREEMENT**

A Letter of Intent (LOI) shall be issued to the successful Bidder selected. The Bidder shall convey acceptance of LOI with-in the given time frame as specified in **Section-2: Schedule of Important Events**.

The successful Bidder shall furnish the Performance Bank Guarantee(s) (PBGs) within 7 days of acceptance of the LOI as specified in the tender document, including any other payments, as specified in the LOI. No extension of time shall be permitted and the Agreement will be signed in the accordance with the procedure prescribed in **SECTION-7: FINANCIAL CONDITIONS & SECTION-VIII: TERMS OF FINANCIAL BID of this Tender Document**.

After acceptance of the LoI and submission of PBGs, the successful Bidder shall enter into an Agreement with the Administrator by signing the Agreement document by the specified date as mentioned in the LoI.

### 3.30 **RIGHT TO VARY THE NUMBER OF NODES**

The Administrator will have the right to make changes in the location or in the number of nodes limited up to 10% of the total number of nodes/sites as specified in the **Annexure I-1** without any change in, the Representative Rates, so arrived at after the Bidding process, or other terms and conditions at the time of signing of the Agreement, subject to the condition that such changes will not have any additional financial implication.

**3.31 RIGHT TO ACCEPT ANY BID / REJECT ANY OR ALL BIDS**

The Administrator reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids, at any time prior to signing of the Agreement without assigning any reason, whatsoever and without thereby incurring any liability to the affected Bidder or Bidders on the grounds of Administrator's action.

**3.32 ANNULMENT OF LETTER OF INTENT**

Failure of the successful Bidder to comply with the requirements following the issue of LoI shall constitute sufficient ground for the annulment of the LoI and the forfeiture of the Bid security in which event, the Administrator may enter into Agreement with any other Bidder or call for new Bids.

**3.33 TERMS & CONDITIONS APPLICABLE THROUGH BIDDING PROCESS:**

The Tender terms and conditions apply at all stages of the Bidding process from submission of initial Bid till signing of the Agreement, and the Bidders must ensure compliance with these conditions at each stage of the process. The Administrator reserves the right to disqualify any Bidder at any stage of the Bidding process for non-compliance of any of these conditions.

**3.34 CONTACTING THE ADMINISTRATOR**

No Bidder shall try to influence the Administrator or any of his officers or employees on any matter relating to the Bids, from the time of the Bid opening till the time the Agreement is signed.

Any effort by a Bidder to modify his Bid or influence the Administrator or any of his officers or employees in the Bid evaluation, Bid comparison or signing of the Agreement shall result in the rejection of the Bid and disqualification of the Bidder from future Bidding for a period to be specified by the Administrator.

**3.35 FRAUD AND CORRUPT PRACTICES**

The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOI and during the subsistence of the Agreement (with USOF). Notwithstanding anything to the contrary contained herein, or in the LOI or the Agreement, the Administrator shall reject a Bid, withdraw the LOI, or terminate the Agreement, as the case may be, without being liable in any manner, whatsoever, to the Bidder or Host Operator, as the case may be, if it determines that the Bidder or Host Operator, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, the Administrator shall forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-

estimated compensation and damages payable to the Administrator towards, inter alia, time, cost and effort of the USOF Administrator (USOFA), without prejudice to any other right or remedy that may be available to the USOFA hereunder or otherwise.

Without prejudice to the rights of the Administrator under Clause 3.31 hereinabove and the rights and remedies which the Administrator may have under the LOI or the Agreement, if a Bidder or Host Operator, as the case may be, is found by the Administrator to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOI or the execution of the Agreement, such Bidder or Host Operator shall not be eligible to participate in any tender or RFP issued by the Administrator USOF during a period of 2 (two) years from the date such Bidder or Host Operator, as the case may be, is found by the Administrator to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.

**For the purposes of this Clause the following terms shall have the meaning hereinafter respectively assigned to them:**

- (a) **“Corrupt practice”** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Administrator who is or has been associated in any manner, directly or indirectly with the Bidding Process or the LOI or has dealt with matters concerning the Agreement or arising therefrom, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Administrator, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOI or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOI or the Agreement, who at any time has been or is a legal, financial or technical Adviser to the Administrator in relation to any matter concerning the Project.
- (b) **“Fraudulent practice”** means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process.
- (c) **“Coercive practice”** means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person’s participation or action in the Bidding Process.
- (d) **“Undesirable practice”** means (i) establishing contact with any person connected with or employed or engaged by the USOFA with the objective of

canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and

- (e) “**Restrictive practice**” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

**SECTION - 4**  
**COMMERCIAL CONDITIONS**

4.1. The Agreement, signed by the successful Bidder of the scheme (Here-in-after referred to as Host Operator) with the Administrator USOF, shall be subject to the terms and conditions of the Registration/Certificate/License conditions for Infrastructure Providers Category-II (IP-II)/ BSO (Basic Services)/ CMTS (Cellular Mobile Telephone Services)/ UASL (Unified Access Service Licensees)/ NLD (National Long Distance) License issued by DoT, as applicable.

4.2. During the validity of the Agreement, the Host Operator shall share the bandwidth created under the scheme in the OFC transport network with the licensed service providers in the area of NE- I Circle, as per the rates and terms, prescribed in the tender.

4.3. **SCOPE OF THE AGREEMENT**

The Host Operator would be required to, inter-alia, create the requisite bandwidth by deploying appropriate transport technology as described in the **SECTION: 1 CLAUSE: 1.4.2** meeting deliverables of the scheme prescribed in the **SECTION: 5, TECHNICAL REQUIREMENTS** of the tender.

4.4. **BANDWIDTH SHARING UNDER AGREEMENT**

4.4.1. During the validity period of the Agreement, at least **70%** of the subsidized bandwidth capacity shall be made available by Host Operator to the service provider others than the Host Operator (Here- in-after referred to as the 'OTHER OPERATORS') for utilization, on equitable sharing basis, subject to the demand for the same.

4.4.2. The Host Operator may utilize a maximum of **30%** of the subsidized bandwidth capacity for carrying its existing and additional traffic over the Intra-district OFC network.

4.4.3. The Host Operator shall evolve suitable procedures to ensure that the subsidized bandwidth capacity is utilized to the fullest extent and is made available to all other Operators and not monopolized by any one of the other Operators. The Host Operator shall also enable the provision of Bandwidth to the Other Operators in the north and south bound directions of the OFC network created under this scheme. The provisioning of the bandwidth to Other Operators should be in a reasonable time-frame, as specified by TRAI/USOF/DoT from time to time. The Host Operator shall also provide a transparent monitoring mechanism for up-time/down-time, technical performance, and bandwidth sharing through a state-of-the-art NMS facility.

4.5. **PRESCRIBED LEASE CHARGES FOR BANDWIDTH SHARING**

4.5.1 The objective of scheme is to strengthen the intra-district OFC network, and hence make available the bandwidth on demand at the rates lower than the prevailing

TRAI rates to enable development of telecom services in remote/rural areas of NE- I Circle.

4.5.2 During the validity of the Agreement, the Host Operator shall provide bandwidth to other Operators at a rate **not more than 12% of the current TRAI ceiling tariffs** (i.e. the Host Operator shall **provide a minimum discount of 88% on the current TRAI ceiling tariffs**) for various bandwidth and distance slabs prescribed in TRAI tariff notification of 21 April 2005.

4.5.3 **In case the ceiling leasing charges are revised by TRAI during the Agreement period, the applicable discount (for each of the rates and distance slabs) shall automatically stand revised such that the prescribed leasing rates in absolute terms remain the same as before for each of the rates and distance slabs. Additionally the prescribed leasing rates shall, in no case, exceed the TRAI ceiling**

#### 4.6. **APPLICABILITY OF PRESCRIBED LEASE CHARGES**

The prescribed lease charges shall be applicable on **end-to-end basis** within NE- I Circle as follows –

4.6.1. On the subsidized bandwidth, provided on lease to other Operators, in the OFC transport network from SDHQ – SDHQ, having both the end nodes in same district or in different districts.

4.6.2. From the Date, the OFC network in the district has been declared commissioned under the scheme.

4.6.3. During the validity of the Agreement, the prescribed leasing rates as per clause 4.5 shall be mandatory.

4.6.4. After the Agreement period, the Host Operator shall be free to levy leasing charges on Other Operators sharing the bandwidth as per mutual Agreement in accordance with prevailing market rates. Such agreed rates shall be subject to directives of regulatory authorities including the licensing authority (DoT) and TRAI.

#### 4.7. **OTHER CHARGES**

During the period of the Agreement with USOF, the Host Operator shall not levy any charges on “the Other Operators” other than the above prescribed lease rates for the provision of bandwidth. Thus, the Host Operator shall not levy any charges for making arrangements for installation and operation of the terminal equipment and accessories of the Service Providers. These arrangements, to be made, may, inter alia include the allocation of space to install their terminal equipment/the new overhead cable trays/A.C/D.C power supply/any other accessories.

4.8. **ARRANGEMENT FOR THE OTHER OPERATORS**

The Host Operator shall give wide publicity to the present subsidy scheme and place detailed information about the capacity being offered for sharing on lease and the prescribed rates in the public domain including on their website. This information shall include, inter-alia, location of the physical sites, network elements available for sharing, pricing, technical conditions related to sharing of bandwidth capacity, ordering and provisioning procedures, maintenance and repair procedures, usage restriction, equipment characteristics and restrictions, security issues, safety standards, rules for allocation where space is limited, conditions for other Operators to inspect sites available, lead time to provide services, service level Agreements, billing, faults, repairs, compensation etc.

The Host Operator is not obliged to arrange for supply and installation of their terminal equipment and accessories such as DDF/DDM, overhead cable trays, the cables, associated nuts/bolts/fixtures and the DC power supply cable, etc.

4.9. **SERVICE LEVEL AGREEMENTS**

The Host Operator shall enter into Service Level Agreements (SLA) with the other Operators as per the broad parameters of SLA placed at **Annexure IV-1**.

4.10. **INSPECTION AND TESTS**

- i) The Administrator or his representative or the agencies authorized (**Here-in-after called 'Designated Monitoring Agency'**) shall have the right to inspect and test the network bandwidth created in the OFC transport network for leasing as per prescribed test schedules for their conformity to the specifications. Where the Administrator decides to conduct such tests on the Network Bandwidth created in the OFC transport network by the Host Operator, all reasonable facilities and assistance like testing instruments and other test gadgets including, access to drawings and other details, shall be furnished to the Designated Monitoring Agency (DMA) at no charge to the Administrator.
- ii) Should any inspected or tested components of the OFC transport network fail to conform to the specifications, the Administrator may reject them and the Host Operator shall either replace the rejected components of the infrastructure or make all alterations necessary to meet specification/requirements free of cost to the Administrator.
- iii) If any equipment or any part thereof is found defective or fails to fulfill the requirements of the Agreement, the Designated Monitoring Agency shall give notice to the Host Operator setting forth details of such defects or failure and the Host Operator shall, at their own cost, make the defective equipment good, or alter the same to make it comply with the requirements of the Agreement forthwith, and in any case, within a period not exceeding one month of the initial report. These replacements shall be made by the Host Operator free of all charge at site.

iv) Nothing in the Clause above shall, in any way, release the Host Operator from any warranty or other obligations under this contract.

4.11. **CHANGES IN AGREEMENT SIGNED**

The Administrator may, at any time, by a written order given to the Host Operator, make changes, within the general scope of the Agreement, in any one or more of the following subjects to the condition that such changes will not have any additional financial implications:

- Designs or specifications for of the Scheme
- Utilization of the unutilized capacity of the augmented bandwidth
- Location of the new nodes
- Number of the new nodes

4.12. **DURATION OF AGREEMENT**

The Agreement shall be valid for a period of **seven years** from the effective date unless revoked earlier for reasons as specified elsewhere in the document.

4.13. **EXTENSION OF AGREEMENT**

The Administrator may extend, if deemed expedient, the validity of the Agreement for such period and on such terms as may be mutually agreed. The expediency of extension shall be considered during the seventh year of the Agreement. The decision of the Administrator shall be final in this regard. On expiry of the Agreement period, the responsibility of operation, maintenance and management of the network bandwidth created in the Intra-district OFC transport network for provision of bandwidth on lease shall lie on the Host Operator of the scheme.

4.14. **MODIFICATIONS IN TERMS AND CONDITIONS OF AGREEMENT**

The Administrator reserves the right to modify, at any time the terms, and conditions of the Agreement(s), signed with the Host Operator, if in the opinion of the Administrator, it is necessary or expedient to do so in public interest or in the interest of the security of the State or for the proper conduct of the service. The decision of the Administrator shall be final in this regard.

4.15. **REQUIREMENT TO FURNISH INFORMATION**

The Host Operator shall furnish to the Administrator, on demand, such documents, accounts, estimates, returns, reports or any other information as may be called for by the Administrator pertaining to the creation and augmentation of OFC transport network for provisioning network bandwidth on lease under the scheme.

**4.16. TERMINATION OF AGREEMENT**

- i) The Administrator may, without prejudice to any other remedy available for the breach of any conditions of the Agreement, by a written notice of 90 calendar days issued to the Host Operator at its registered office, terminate the Agreement under any of the following circumstances:
  - a) Failure to perform any obligation(s) under the Agreement;
  - b) Failing to rectify, within the time prescribed, any defect as may be pointed out by the Administrator.
- ii) The Agreement shall stand terminated forthwith in case the Host Operator goes into liquidation or is ordered to be wound up.
- iii) Provided that if the respective IP II Registration/ BSO/ CMTS/ UASL license is terminated, as the case may be, then the Agreement shall also stand terminated forth-with.
- iv) Wherever considered appropriate, Administrator may conduct an inquiry to determine whether there has been any breach in compliance of the terms and conditions of the Agreement by the Host Operator and upon such inquiry the Host Operator shall extend all reasonable facilities and shall endeavor to remove the hindrance of every type.
- v) It shall be the responsibility of the Host Operator to maintain the Quality of Service, as per conditions of the Agreement during the period of notice for termination of the Agreement; otherwise this shall be a cause for invocation and forfeiture of PBG.

**4.17 ACTIONS PURSUANT TO TERMINATION OF AGREEMENT**

Wherever the Agreement is terminated prematurely, the Administrator may, at his sole discretion, enter into an Agreement with another service provider for augmentation, creation and management of intra-district OFC network, who will be paid subsidy at the Representative Rate, determined under the Agreement, based on this tender.

If the Quality of Service (QoS) had not been maintained as per standard prescribed hereto during the notice period, then no subsidy for the notice period shall be payable.

In case of termination of the Agreement before the expiry period, the prescribed PBG will be encased and forfeited towards damages. Additionally, if it is found that the Host Operator had received any payment in excess of the amounts under the Agreement prior to termination, then such amount shall be paid back immediately on demand by the Host Operator to the Administrator. Any amount, due from the Host Operator under this Agreement, may without prejudice to any other mode of recovery, may be recovered as arrears of land revenue.

4.18. **INDEMNITY**

The Host Operator shall indemnify the Administrator in respect of any damages, claims, loss or action against Administrator for acts of commission or omission on the part of the Host Operator, its agents or servants.

4.19. **DISPUTES SETTLEMENT**

In the event of any question, dispute or difference arising under the Agreement, or in connection thereof, except as to the matter the decision of which is specifically provided elsewhere under the Agreement, the same shall be referred to an Arbitral Tribunal, hereinafter called the "TRIBUNAL", consisting of sole Arbitrator to be appointed by the Secretary, Department of Telecommunications, Ministry of Communication & IT, Government of India.

The Arbitration proceedings shall be conducted in accordance with the provisions of Arbitration and Conciliation Act 1996 as amended or replaced from time to time. The governing law shall be laws of India.

4.20. **FORCE- MAJEURE**

If at any time, during the continuance of the Agreements, the performance in whole or in part, by either party, of any obligation is prevented or delayed, by reason of war or Hostility, acts of the public enemy, civic commotion, sabotage, Act of State or direction from Statutory Authority, explosion, epidemic, quarantine restriction, strikes and lockouts (not limited to the establishments or facilities of the Host Operator), fire, floods, natural calamities or any act of GOD (hereinafter referred to as EVENT), provided notice of happenings of any such EVENT is given by the affected party to the other, within 10 Calendar days from the date of occurrence thereof, neither party shall, by reason of such event, be entitled to terminate the Agreement, nor shall either party have any claims for damages against the other, in respect of such non-performance or delay in performance. Provided the services under the Agreement shall be resumed as soon as practicable, after such EVENT comes to an end or ceases to exist.

The decision of the Administrator, as to whether the service may be so resumed (and the time frame within which the service may be resumed) or not, shall be final, binding and conclusive.

4.21. **SET OFF CLAUSE**

In the event, any sum of money or claim becomes recoverable from or payable by the Host Operator to the Administrator either against the Agreement or otherwise in any manner, such money or claim can be (without restricting any right of set off for counter claim given or implied by law) deducted or adjusted against any amount or sum of money then due or which at any time thereafter may become due to the Host Operator under this Agreement or any other Agreement or Contract between the Administrator and the Host Operator.

The aforesaid sum of money, payable by the Host Operator, shall include any valuable security convertible into money.

After exercising the right of set off, a notice shall always be given immediately by the Administrator to the Host Operator.

4.22. **OTHER OBLIGATIONS**

The Host Operator shall be bound by the terms and conditions of the Agreement as well as by such orders/directions/regulations of DoT/ TRAI as per provisions of the TRAI Act, 1997 as amended from time to time and instructions as are issued by the Administrator.

The provisions of the Indian Telegraph Act, 1885 or the Indian Wireless Telegraphy Act, 1933 as amended or replaced, the rules made and orders passed under these statutes, so far as applicable, shall be binding on the Host Operator.

**SECTION – 5**  
**TECHNICAL REQUIREMENTS**

**5.1. LICENCE FRAMEWORK**

The Host Operator shall work within the framework of the Technical conditions of the BSO/ CMTS/ UASL /NLDO license. The Infrastructure Provider Category-II shall work within the framework of the Registration Certificate for Infrastructure Providers Category-II (IP-II), issued by DoT.

**5.2.** The Technical requirements of the scheme described in this section (Section-5) shall supplement “**General Conditions**” as contained in **Section: 3** and “**Commercial Conditions**” as contained in **Section: 4** of this tender document, wherever is applicable.

**5.3. DETAILS OF THE SCHEME**

The technical specifications of the scheme for augmentation, creation and management of Intra-district SDHQ-DHQ OFC network for transport of rural/remote area traffic on bandwidth sharing basis in NORTH-EAST -1 Circle are explained in the forthcoming clauses.

**5.4. OUTLINE OF THE SCHEME**

The Host Operator shall augment, create and managed a OFC transport network in each district, having self-healing OFC rings, each with a capacity of 2.5Gbps bandwidth, in NE- I by deploying new or by upgrading the existing OF equipment of appropriate transport technology and associated electrical and battery connections at the connected or new unconnected nodes on the existing or new installed OF cable. This network will meet the futuristic requirement in terms of capacity and technology for various applications and services. The created high-capacity network bandwidth in the OFC transport network shall be **shared** with other Operators for providing telecom services to rural/remote areas at **prescribed rates on the terms & conditions** specified in this tender.

**5.4.1. TECHNOLOGY NEUTRAL APPROACH**

The Host Operator shall select the best appropriate technology, compliant with relevant ITU-T/IEEE/IETF/IEC/TEC standards, as applicable, to meet the deliverables of the scheme. In no case, the technology used should be proprietary one. The DMA may call for such documentary evidences ensuring the compliance with the prescribed standards, as applicable, from accredited test labs/designated agencies at the time of verification and testing.

The desired technical specifications for meeting the respective features and performances such as system timing, synchronization and power supply by the deployed OF equipment and associated interfaces, OF cable and associated accessories, Network management system for monitoring and provisioning, DC power supply, power plant, battery back up and diesel generator for *guidance* of

the Host Operator are placed at **ANNEXURE II, ANNEXURE III-4-Fig.1, ANNEXURE V-1-Fig.2 & ANNEXURE V-2.**

The selected technology should be capable to interface with existing national long distance and Inter-DHQ networks for transport of all types of digital traffic with various data rates and formats and/or protocols from source to destination location as per the requirement and demand. The deployed equipment should be interoperable and meet open standards both on the optical line and drop-insert/ingress-outgress ports side. It should be modular and support expansion in bandwidth capacity on interface side as well as optical line side through add-on hardware and/or software.

#### **5.4.2. DELIVERABLES OF THE SCHEME**

In NE- I Circle, the Host Operator shall commission at least 24F underground OF cable, as prescribed in Technical Conditions, on new OFC routes to those SDHQ nodes, en-route location nodes and the new location nodes as per Annexure-I-1 which are still not having OFC connectivity. All the nodes shall be connected in a ring topology using the newly commissioned or existing OF cable [leaving at least one spare fiber pair throughout the OFC route for maintenance], ensuring **at each node the cable route diversity and connectivity with DHQ** as prescribed in Technical Conditions.

The Host Operator shall augment and create the OFC transport network in each districts of NE- I Circle, having self-healing OFC rings. **All nodes in the OFC transport network shall be connected in ring topology** with self-healing ring protection feature. **In a single ring not more than 6 – 8 nodes shall be connected. The OFC rings within the district shall be interconnected.**

The Host Operator shall deploy appropriate transport technology ensuring each OFC ring to have a minimum transport capacity of 2.5Gbps bandwidth, upgradeable to 10Gbps, with protection channel, conforming to ITU-T Standard and performance level for availability of the OFC network as per clause 6.11 of **SECTION: 6, OPERATING CONDITIONS.**

The OFC transport network shall have the capability to efficiently transport various protocols, including legacy TDM traffic as well as IP, Frame Relay, ATM, etc. packet based traffic, conforming to ITU-T rates and standards.

The Host Operator, at each node, shall provide tributary/interface/ add-drop modules of required capacity and type on demand, for transport of rural/remote traffic. At each node, minimum add-drop capacity of 155 Mbps. shall be equipped with all tributary/interface cards up-to a minimum granularity of 2Mbps bit rate.

The Host Operator shall upgrade the power and replace the old PDH equipment with the new equipment, wherever required to create the bandwidth as per the above clauses.

The Host Operator shall be responsible for **procurement, installation, up-gradation of existing** OFC Equipment & OF Cable with accessories and all

related items and testing **and commissioning** of the Intra-district OFC transport network to meet the deliverables as specified in this Section.

- 5.4.3. The Host Operator shall build, operate, own and manage the Intra-district OFC transport network to meet the deliverables of the scheme, which shall include, but not limited to, 'Project management, Survey, Design & Engineering, Procurement, Installation, Testing, Integration, Trial run and Commissioning of all equipment & cables and related works, including electrical and civil works, preparation of the related drawings as well as taking all necessary permissions/approvals such as Right of Way (ROW) from the concerned Central/ State/Local Authorities.

5.5. **SPECIFICATIONS AND NETWORK FEATURES ENSURING DELIVERABLES OF THE SCHEME**

The Host Operator shall design the intra-district SDHQ – DHQ OFC transport network and deploy the equipment with associated infrastructure in the districts of all the states of NE- I Circle with the following features:

- a) **Scalability:** The Intra-district OFC transport network and the equipment should be technologically as well as capacity- wise scaleable, compatible and flexible so as to support the future bandwidth and service needs, to carry and route all traffic protocols, including Time Division Multiplexing (TDM), Asynchronous Transfer Mode (ATM), Internet Protocol (IP), Frame relay, etc. Each intra-district ring bandwidth should be 2.5Gbps (minimum) and expandable to 10Gbps.
- b) **Connectivity requirements:** The Intra-district OFC transport network and equipment should meet service provider's connectivity needs, ranging from circuit based to packet based services, from connection-less to connection-oriented, from legacy services (E1, E3) to Frame Relay, SDH, ATM, IP, etc. The network will also provide connectivity to Ethernet services and multimedia traffic protocols.
- c) **Configurability:** It shall be possible to configure and deploy the equipment in linear, ring or mesh topologies, as required in the network, as a Terminal Equipment (TE) or as a Traffic Drop/Insert Equipment (T-D/I-E) or as Digital Cross Connect (DXC) equipment or as regenerator to pass the traffic through the node to another destined node with or without dropping/insertion.
- d) **Upgradability:** Equipment deployed in the Intra-district OFC transport network should be upgradeable to higher capacity or alternative functionality/configuration to meet the bandwidth capacity growth both on interface side and optical line side through add-on hardware and/or software.
- e) **Protocol conversion of service streams/traffic from various networks:** The equipment shall support the necessary protocol conversion of individual service traffic streams, whether TDM or packet based, at the ingress/outgress ports for traffic, as required. It shall also support multiplexing/demultiplexing grooming, protocol conversion, as required, to ensure end-to-end transparent transport of traffic to/from all types of networks such as mobile networks, DSL networks,

cable networks, wireless-access networks, Ethernet, other IP networks, voice traffic networks, etc.

- f) **Equipment protection:** The traffic affecting modules and the key common modules in the main transport equipment at the node should have adequate redundancy.
- g) **Resiliency:** The system equipment in the network, should meet carrier-grade resiliency standards. In the event of network failure, services should **be restored within 50 millisecond** of failure. The restoration time also includes detection time, protection switching time and all other times involved, as applicable, in the complete service restoration process.
- h) **External alarm/status:** The external alarm/status in the network should be provided through suitable mechanism.
- i) **Cable Route diversity:** All the nodes in the intra-districts OFC rings should have cable route diversity, i.e., east-end and west-end of the optical transport equipment installed at the nodes are connected through two different cables, which shall be laid along two different routes.
- j) **Automatic self-healing feature:** The OFC rings created shall have **Self-Healing** feature, i.e. OFC rings shall incorporate protection mechanisms that detect failure and re-route traffic from failed links and nodes onto other routes rapidly. Accordingly, the network will ensure that in case of OFC cut on the working route, the end-to-end configured bandwidth pipe, containing aggregated digital traffic, should automatically get routed from source to destination on alternative route within the required standard time-limit, as specified in the **SECTION:5 TECHNICAL CONDITIONS** for ensuring required end-to-end continuity of communication of the various encapsulated individual traffic streams.

This feature should be available on end-to-end configured bandwidth pipe between SDHQs located on different OFC rings in the same district or in different districts.

- k) **Network Management System:** The TMN/NMS shall manage the multi-service OFC transport system by an integrated and open standard interface so that it can interconnect with other vendor's systems also. The TMN/NMS shall provide the capability to monitor, configure, re-configure and control the elements of the telecommunication network from a centralized location and also at each node of the network where equipment is located using portable devices

## 5.6. **INSTALLATION, LAYING AND CONSTRUCTION SPECIFICATION:**

The Bidder shall adopt standard practice of installation, laying and construction while executing the project. The details are placed at **ANNEXURE – V-2**

**5.7. RESPONSIBILITY OF THE HOST OPERATOR**

The Host Operator shall bring to the prior notice of Administrator USOF, any deviation in meeting any of the deliverables and specifications, as prescribed in the **SECTION:5 TECHNICAL CONDITIONS** .

The Host Operator shall furnish details of OFC plan and Node configuration, proposed to be deployed, in **Table-V-3.1 and 3.2, of Annex V-3** format at the time of signing of the Agreement.

The Host Operator shall up-grade the existing battery backup suitably, as necessary to meet the minimum 6 hrs backup capacity such that battery set is not required to be discharged beyond 80% of its rated capacity at any time to meet 100% load. The nominal output voltage of battery bank will be -48V D.C. The DC power plant, after suitable up-gradation, as necessary, should be capable to take simultaneous loads of battery charging and 100% existing equipment loads with minimum 50% additional capacity. It should be equipped with Battery Health Check systems and Remote Monitoring facility. The diesel engine alternator set of adequate capacity shall be provided to meet the load requirement for the plan and future expansion.

In case, the earthing arrangement at the existing sites is not adequate for the new equipment to be installed, the Host Operator shall make improvement in the existing arrangement or make new earthing arrangement to bring the values within the specified range.

The Host Operator shall make proper arrangements for fire detection and fire extinguisher system, as per fire safety norms applicable for that location, and necessary arrangement for the security, safety and protection of the systems. Any items, if not specifically mentioned, but considered essential for completion of the work in all respects, shall be deemed to be included in the scope of procurement and services of the Host Operator.

The Host Operator shall obtain all necessary statutory clearances, including Right of Way (RoW) clearance, custom clearance, excise, octroi clearances, environmental clearances, etc. from central/state/local authorities, regulatory bodies, statutory bodies of the central/state Government, municipality, highway authority, electrical utilities, forest department, gas authorities, pollution board for clearance for DG set operation and any environmental clearances, and any other clearances, if required.

**5.8. CONFORMITY WITH EXISTING LICENSES/REGISTRATION CERTIFICATES**

The Host Operator for the Scheme shall work within the framework of the technical conditions and other terms and conditions of the IP-II Registration Certificate (IP-II), BSO (Basic Service), CMTS (Cellular Mobile Telephone Services), UASL (Unified Access Service Licensees), NLD (National Long

Distance) License as the case may issued by DoT. A copy of the same is attached at **Annexure III-1, Table III-1.1.**

## **5.9. QUALITY OF SERVICE PARAMETERS**

The Quality of Service Parameters (QOS) for lease bandwidth, as prescribed by TRAI, shall be applicable.

The Host Operator shall ensure provision of subsidized bandwidth on lease to the services providers as per the Quality of Service (QoS) prescribed by the TRAI from time to time. The Host Operator shall adhere to such QoS standards and provide timely information as required therein.

The Administrator or TRAI may carry out performance tests either directly themselves or through Designated Monitoring Agency (DMA) and also evaluate the QoS parameters at any time during the tenure of the Agreement. The Host Operator shall provide ingress and other support, including documents, instruments, equipment etc. for carrying out such performance tests and evaluation of Quality of Service parameters.

The Host Operator will keep a record of equipment installed at, OF cable provided for connecting, and lease bandwidth provided from, the node installed under the scheme. The Host Operator shall also maintain faults and rectification reports of the nodes, OF cable and other related items of the transport network such as Battery, Power Plant in respect of the bandwidth, provided to the service provider on lease, which will be produced before the Administrator or TRAI, as and when and in whatever form desired.

The Host Operator shall be responsive to the complaints lodged by the customers. They shall rectify the deficiencies and maintain the history sheets for each installation, statistics and analysis on the overall maintenance status.

Proper arrangement should be made by the Host Operator for reporting/booking service related complaints.

**SECTION – 6**  
**OPERATING CONDITIONS**

**6.1. PROVISION OF BANDWIDTH ON LEASE**

The terms and conditions of the NLDO or BSO or CMTS or UASL License Agreement or IP-II registration (**Table III 1.1 of Annex III-1**) as applicable, shall prevail and shall be binding *mutatis mutandis*. The same shall also be applicable in case of migration to or award of new license in lieu of the NLDO/BSO/ CMTS/ UASL license/IP-II registration.

The Host Operator shall make all associated arrangements regarding finalization of the terms and conditions for providing subsidized bandwidth on lease to other Operators, accepting and processing their applications, collection of deposits, bandwidth provisioning, billing/charging and payment realization, booking and handling the complaints and setting up of redressal mechanisms.

During the validity of the Agreement, the Host Operator shall place the above details including the capacity available for sharing, the terms and the leasing tariffs in the public domain, including on the web site.

**6.2. NETWORK OPERATIONS RECORD**

The Host Operator shall keep a record of the OFC transport network augmented and created under the scheme, along with the equipment details and OFC ring connectivity of nodes, network bandwidth created and provided to various other Operators, types of traffic transported from different nodes and also maintain other Operator-wise and node-wise faults and rectification reports of the OFC transport system, line cards, battery, power plant and other related details in respect of the service rendered, which will be produced before the Administrator or TRAI, as and when and in whatever form desired.

**6.3. REPORTING OF BANDWIDTH PROVISIONED**

The Host Operator shall provide the commissioning report for the district(s), as per **Appendix (FI-A) and (FI-B) to ANNEXTURE VII**, and the details of the subsidized bandwidth provided section/route-wise, other Operator-wise along with the type of traffic transported by the other Operator on **quarterly basis** as per **Appendix (F VI) to ANNEXTURE VII**. This will be certified in the prescribed Performa by a competent and responsible representative duly authorized by the Host Operator.

**6.4. HANDLING OTHER OPERATOR'S COMPLAINTS**

Proper arrangement should be made by the Host Operator for reporting/ booking service related complaints. The Host Operator shall be responsive to the complaints lodged by the other Operators and shall rectify the deficiencies and maintain the history sheets for each installation, statistics and analysis on the overall maintenance status.

**6.5. RIGHT TO INSPECT, TEST AND MONITOR**

The Administrator or his authorized representative shall have the right to inspect the augmented and created Intra-district OFC transport network, the associated nodes and also the equipment installed for providing the network bandwidth by the Host Operator in particular, but not limited to, physical inspection of terminating interfaces, distribution frames, etc. and conduct the service monitoring and performance tests as per the **SECTION:5 TECHNICAL REQUIREMENTS**. The Host Operator will provide the necessary facilities at its own cost for monitoring of the system, as required by the Administrator or its authorized representative(s). The Inspection will ordinarily be carried out after reasonable notice except in circumstances where giving such a notice will defeat the very purpose of the inspection

Wherever considered appropriate Administrator may conduct any inquiry, either suo-motu or on a complaint, to determine whether there has been any breach in compliance of terms & conditions of the Agreement by the Host Operator, and during such inquiry the Host Operator shall extend all reasonable facilities without any hindrance.

**6.6. ROLL OUT**

**The Host Operator shall have to commission Intra-district OFC transport network, as per the terms and conditions prescribed in the tender in all districts of NE- I Circle, within 24 months from the date of signing of the Agreement.**

The Host Operator shall submit an indicative roll out plan for each district within two months' period from the date of signing of the Agreement, which will be followed by a PERT chart for the monitoring of the scheme.

The Rollout period may be extended, if deemed fit, by the Administrator under exceptional circumstances.

The Host Operator shall provide a quarterly statement in giving, details of the districts, where the OFC transport network has been commissioned and the subsidized bandwidth provided from the nodes of the districts during the quarter respectively.

**6.7. COMMISSIONING THE INTRA-DISTRICT OFC TRANSPORT NETWORK**

The Host Operator should conduct a detailed site survey, immediately after award of contract, at all existing/new proposed sites, including all the SDHQ/en-route/additional-locations and new and existing routes, to assess and provision for land / building / shelter / space requirements, deciding of new OFC routes, inlet arrangements for OFC into buildings/ equipment rooms/ shelters, available and additional air-conditioning, requirements for upgrading the existing DC power supplies / storage batteries or installing new ones, requirement of new and upgrade/addition AC DG sets and electricity connections and all other aspects

required for complete site and route engineering. Administrator USOF will be kept informed of the survey and the results obtained as also the engineering plans developed accordingly for each of the Districts of NORTH-EAST I Circle for monitoring the progress.

The Host Operator shall be fully responsible for Network **Design & Engineering** of the intra-district SDHQ – DHQ OFC network in the districts of NE- I Circle. It includes design of the network in ring topology in each district ensuring cable route diversity at each node, detailed link engineering, based on optical fiber characteristics and optical transmit power and optical receiver threshold levels of the equipments to be used. It will also lay down the procedures for smooth changeover of existing traffic on to the higher capacity replaced equipment and assessing the requirement of adequate space and other facilities such as power supply, air-conditioning equipment, earthing, etc. for the terminating the other service providers equipment, desiring to take the bandwidth from the Host Operator on lease. The Host Operator will do a detailed dimensioning and quantification of items, D.C. power supply up-gradation at existing locations, including power plant equipment and storage batteries, A.C. power supply up-gradation at existing locations including capacity augmentation of backup DG set power.

The Host Operator has the primary responsibility to integrate both new and existing routes/networks and carry out inspection and testing of supplies and services at all stages viz., FAT (Factory Acceptance Testing), verification of supplies, local testing of system and of A.C./D.C. power supplies at the equipment Node locations, testing of alarms and status display, loop testing, commissioning tests, tests on network management system and trial run including simulated/active traffic loading.

The Host Operator shall ensure that at all the nodes, equipment are supplied with optical line terminating equipment modules, digital cross-connect, controller, power supply and other common modules as well as with the minimum specified interface modules, as per the clause 5.4.1 & 5.4.2 of **SECTION: 5 TECHNICAL CONDITIONS** are available, all tests and measurements done at all nodes and for each link are properly categorized and compiled in one T&M Document for each District that will be an essential pre-requisite for DMA to undertake network for validation and certification.

On completion of augmentation and creation of Intra-district SDHQ-DHQ OFC transport network, the Host Operator shall self-certify and declare the OFC transport network successfully commissioned in the district, in all respect, as specified in **SECTION: 5 TECHNICAL REQUIREMENTS**, inter-alia, the installation, testing and commissioning of the OF cable connecting all the nodes in ring configuration, OF Equipments of appropriate transport technology to create 2.5Gbps bandwidth, meeting all the deliverables, and the Host Operator is ready for sharing network bandwidth with other Operators as per the terms of the Agreement. The Host Operator shall provide details in the **Appendix (FI-A and FI-B) to Annexure VII**.

## 6.8. VALIDATION AND CERTIFICATION OF THE COMMISSIONED INTRA-DISTRICT OFC TRANSPORT NETWORK

On completion of the roll out, the DMA shall carry out inspection and testing of the augmented and created intra-district OFC transport network and network bandwidth as per prescribed test schedules for their conformity to the specifications. DMA will conduct the inspection and testing and issue the certification as per **Appendix-F-II/ Appendix-F-III to Annexure VII**, as applicable. The Host Operator shall provide all reasonable facilities and assistance like testing instruments and other test gadgets including access to drawings and other details to DMA at no cost to the Administrator.

The Host Operator shall be fully responsible for making the system work. In case, at the time of validation by DMA, it is established that the technology/system deployed fails to meet the specified requirements or is unable to effectively extend the transport services to rural/remote areas through the SDHQ node equipment, the Host Operator shall replace the entire equipment at own cost, wherever deployed.

6.9. During the validity of the Agreement, the Host Operator shall, carry out software and hardware upgrades, add additional interface modules and reconfigure, as per requirement and demand, for provisioning transport services to rural/remote areas. It will be ensured that all performance parameters of the network and QoS parameters are maintained.

## 6.10. LIQUIDATED DAMAGES

6.10.1 For the districts where the Intra-district OFC transport network is not commissioned as per the rollout period prescribed in clause 6.6 of **Section 6: OPERATING CONDITIONS** of the tender document, without prior written concurrence of the Administrator; the delayed period shall entail recovery of Liquidated Damages (L.D.). Provided further that for the districts where the OFC transport network is commissioned within 30 calendar days of the expiry of the roll out period from the effective date of the Agreement, the Administrator shall accept the districts without levy of the L.D charges. For the shortfall in commissioning of the OFC transport network in various districts after the 30 days of the expiry of the roll out period as per clause 6.6, the Administrator shall recover Liquidated Damages at the rate of 5% of the total subsidy payable for the respective districts for each calendar month of delay or part thereof, subject to a maximum of two months period (10% of the total subsidy thus payable for the districts). For the purpose of charging the Liquidated Damages, the representative rate for the respective district, where the OFC transport network is not commissioned as per the roll out obligation, shall be taken into account.

6.10.2 In case, the Host Operator fails to roll out the Intra-district OFC transport networks in NE- I Circle, as per the prescribed roll out plan, within three months after the expiry of the roll out period, action as per **Clause 4.16 and Clause 4.17 of Section 4: Commercial Conditions** shall be taken.

**6.11. PERFORMANCE LEVEL**

The Host Operator shall ensure that the OFC transport network performance level meets the TRAI Quality of Service parameters defined for OFC transport network. The OFC network availability at each node shall be better than or equal to 99%. The OFC network in the district shall be taken as 'available' if the bandwidth provided to the service provider on lease is working either on main channel or on the protection channel, even if, the main route within the ring OFC transport network, at that time, due to any reason, is failed/faulty/under-breakdown also, all the nodes in the district are able to communicate with their respective DHQ on the main transport network channel or even on the protection channel.

The OFC transport network in the district shall be taken as 'not available' when one or more of its nodes are unable to communicate with their respective DHQ on the main transport network channel and also on the protection channel.

The Equated annual subsidy payable for a district shall be subject to a minimum average availability of 99% of the OFC Network in a district, covering all causes of downtimes achieved in each quarter of the year, for which equated annual subsidy is claimed, as prescribed below. A deduction of the prescribed percentage of the quarterly equated annual subsidy, payable for the district(s), shall be made for the subject Quarter(s), as given below:

<b>APPLICABLE ON OFC NETWORK POST-COMMISSIONING DURING VALIDITY OF THE AGREEMENT</b>	<b>Average availability of the OFC Network in a district in the quarter</b>	<b>Subsidy deduction</b>
	<b>95%=<math>\leq</math> and <math>&lt;99\%</math></b>	<b>2.5%</b>
	<b>90%=<math>\leq</math> and <math>&lt;95\%</math></b>	<b>5%</b>
	<b>85%=<math>\leq</math> and <math>&lt;90\%</math></b>	<b>10%</b>
	<b>80%=<math>\leq</math> and <math>&lt;85\%</math></b>	<b>20%</b>
	<b>75%=<math>\leq</math> and <math>&lt;80\%</math></b>	<b>30%</b>
	<b>Below 75%</b>	<b>100% subsidy deduction</b>

The calculation of performance level and of deduction (if required) is shown in **Appendix F VII-B to Annexure VII.**

**6.12. CONFIDENTIALITY OF INFORMATION**

The terms and conditions as to confidentiality of information of the BSO or CMTS or UASL or NLDO Agreement or IP-II Registration, as the case may be, shall be binding *mutatis mutandis*.

**6.13. PROHIBITION OF CERTAIN ACTIVITIES BY THE UNIVERSAL SERVICE PROVIDER**

The terms and conditions as to prohibition of certain activities of the BSO or CMTS or UASL Agreement, as the case may be, shall be binding *mutatis mutandis*.

**6.14. SECURITY CONDITIONS**

The terms and conditions as to security conditions of the BSO or CMTS or UASL or NLDO Agreement or IP-II Registration, as the case may be, shall be binding *mutatis mutandis*.

**SECTION -7**  
**FINANCIAL CONDITIONS**

**7.1 SUBSIDY FROM UNIVERSAL SERVICE OBLIGATION FUND**

- 7.1.1 Financial Support to the Successful Bidder (Host Operator) shall be in the form of a percentage of the Capital Recovery for rolling out the Intra-District OFC Network and provisioning of Subsidized Bandwidth Capacity at the Prescribed Leasing Charges. The support shall be payable as subsidy on the basis of the outcome of the Bidding process as per details given in Section 8 Terms of Financial Bid.
- 7.1.2 The subsidy shall be paid in Indian Rupees as per subsidy disbursement schedule described below at the district-wise subsidy rates emerging from the Bidding process. This district-wise subsidy rates and the schedule of payment shall be specified in the Agreement.
- 7.1.3 The Host Operator shall receive the subsidy towards roll out of the Intra-District OFC Network as per **Annexure I-1**. The subsidy shall be due from the date of successful completion of the work as detailed below.
- 7.1.4 Subsidy Claims shall be preferred within thirty (30) days of the end of the quarter in which they become due, with each Quarter ending on 30<sup>th</sup> June, 30<sup>th</sup> September, 31<sup>st</sup> December and 31<sup>st</sup> March.
- 7.1.5 The Quarter in which the Date of Signing of the Agreement falls shall be considered to be the first Quarter of the Agreement.

**7.2 SCHEDULE FOR DISBURSEMENT OF SUBSIDY BY THE ADMINISTRATOR TO THE HOST OPERATOR**

**Subsidy shall be disbursed in a phased manner over the period of the Agreement. Forty percent (40%) of the subsidy for each district shall be disbursed upon commissioning of the network in the relevant district. Twenty percent (20%) of the subsidy for the entire Circle shall be disbursed upon the commissioning of the entire Intra-District OFC Network. The balance forty percent (40%) subsidy due against each district shall be payable in four Equated Annual Subsidy (EAS) installments.**

**7.2.1 District Commissioning Claim**

**Forty Percent (40%) of the subsidy for each district shall become due at the end of the Quarter in which the network in that district is commissioned. The Host Operator shall submit the first claim in Format as per Annexure-VII along with Attachment-I and Attachment-II. In support of the District Commissioning Claim, the Host Operator shall be required to submit self-certificate giving details of the OFC network set up as per proforma given in Appendices (FI-A) and (FI-B) to Annexure VII. This claim along with supporting documents should be submitted within 30 days of the end of the quarter in which the network of the district is commissioned.**

7.2.2 **Circle Commissioning Claim**

**Twenty Percent (20%) of total subsidy payment due as per Agreement for NE-I Circle shall be paid on commissioning of the entire Intra-District OFC Network as specified in Annexure I.1 of the tender document.** The Host Operator shall submit the Circle Commissioning Claim in claim format **Annexure-VII along with Attachment-I.** In support of this claim the Host Operator shall be required to submit a copy of the certification of completion of work of all the districts (entire Intra-District OFC Network) which shall be given by the DMA as per **Appendix (FII) to Annexure VII.** This claim may be preferred at the end of the relevant quarter in which the completion of all the districts is certified.

7.2.3 **Equated Annual Subsidy Claims**

**The Balance forty percent (40%) of total subsidy payment due as per Agreement for each district will be paid in four Equated Annual Subsidy Installments (EAS) over a four year period following the commissioning of the network in the subject district.** Each EAS claim shall be for **10%** of the District Subsidy as per Agreement. The claim for EAS is to be preferred in **Annexure-VII along with Attachment-I and Attachment-III.**

7.2.4

The first EAS claim for a district shall become due at the end of one year from the date of commissioning of the network in that district. However, no EAS claim may be lodged before the end of the ninth quarter from the date of signing of the Agreement. The first installment of EAS will be released subject to certification of commissioning of the network of the relevant district by the DMA. This would be as per **Appendix (F-II) to Annexure VII** in case the network for all the districts of NORTH EAST- I Circle (entire Intra-District OFC Network) has been commissioned within the prescribed roll out period as per Clause 6.6 of Section 6, Operating Conditions, of the tender document and duly certified by the DMA as per **Appendix (F-II) to Annexure VII.** However, in case the Host Operator is not able complete the network of all the districts in the prescribed roll out period, the DMA shall conduct verification work as per Clause 6.8 of Operating Conditions of tender for only the completed districts and certify the same as per **Appendix (F-III) to Annexure VII** which may be submitted with the first EAS claim of the relevant district.

7.2.5

The second EAS claim for a district shall fall due at the end of the second year from the date of commissioning of the network of the relevant district and so forth. Second, third and fourth EAS claims may be lodged at the end of the Quarter in which they fall due. Each EAS claim must be accompanied by a statement of Continuation of Services in the form of **Appendix (F-IV) to Annexure VII**, a statement of Network Utilization in the form of **Appendix (F-V) to Annexure VII**, Other Operator Service Provisioning Report in the form of **Appendix (F-VI) to Annexure VII** and Network Availability Report in the form of **Appendix (F-VII (A&B)) to Annexure VII.**

7.2.6

Following supporting documents shall be submitted along with all the prescribed Claim Statements and thus form an integral part of the subsidy claim:

- (a) The claim shall be duly certified as per **Annexure-VII** by a representative of the Host Operator duly authorized by a board resolution of the Host Operator.
- (b) All claims for subsidy shall be accompanied by a pre-receipted bill with revenue stamp.
- (c) In addition to the hard copy, the Host Operator should also submit the claim on a CD ROM in MS Excel format. The authorized signatory of the company should put his signature and seal of the company on the CD ROM Disc.

7.2.7 In addition, supporting documents as described below shall be submitted along with specific claims.

- a. District Commissioning Claim (Forty percent claim): Self Certificate as per **Appendix F-I (A&B) to Annexure VII**.
- b. Circle Commissioning Claim (Twenty percent claim): Certificate of Completion of Intra-District OFC Network from the DMA as per **Appendix (F-II) to Annexure VII**.
- c. EAS claim:

First EAS Claim:

- i) Certificate of Commissioning of District as per **Appendix (F-II/F-III) to Annexure VII**, as applicable.

All EAS Claims:

- ii) Statement of Continuation of Service Report as per **Appendix (F-IV) to Annexure VII**
- iii) Statement of Network Utilization as per **Appendix (F-V) to Annexure VII** for EAS claims of each commissioned district network.
- iv) Other Operator Service Provisioning Report as per **Appendix (F-VI) to Annexure VII**
- v) Network Availability Report as per **Appendix( F-VII (A&B)) to Annexure VII**

7.2.8 The claims along with the supporting documents should be submitted at the Controller of Communication Account Office of NORTH-EAST-I Circle.

7.2.9 The Subsidy Disbursement Schedule has been tabulated below:

Claim Type	Eligibility condition	Subsidy Formats and supporting documents
District Commissioning (40% of district subsidy)	Self Certification of commissioning of the network in the relevant district	<ul style="list-style-type: none"> <li>• <b>Claim format:</b> Annexure-VII along with Attachment-I and II.</li> <li>• <b>Self Certification</b> by way of Appendices (FI-A and FI-B) to Annexure VII.</li> </ul>
Circle Commissioning (20% of total North-East-I Circle subsidy)	DMA certification of commissioning of Intra-District OFC Network	<ul style="list-style-type: none"> <li>• <b>Claim Formats:</b> Annexure-VII along with Attachment-I</li> <li>• <b>DMA Certificate</b> in Appendix (F-II) to Annexure VII.</li> </ul>
Equated Annual Subsidy (10% of district subsidy)	<p>a.<u>First:</u> Completion of one year from the date of commissioning of the network in the relevant district and DMA certification of the district commissioning (with the condition that no EAS claim may be lodged before the end of the ninth quarter from the date of signing of the Agreement).</p> <p>b.<u>Subsequent EAS claims:</u> The second EAS claim shall fall due at the end of the second year from the date of commissioning of the network in the relevant district and so forth</p>	<p>a. <u>First:</u></p> <ul style="list-style-type: none"> <li>• Subsidy claim Format: Annexure-VII along with Attachment-I and III.</li> <li>• DMA certificate in Appendix (F-II) to Annexure VII if all district networks are commissioned (entire Intra-District OFC Network) and in Appendix (F-III) to Annexure VII in case of partial commissioning.</li> <li>• Appendices (F-IV to F-VII) to Annexure VII.</li> </ul> <p>b. <u>Subsequent EAS claims:</u></p> <ul style="list-style-type: none"> <li>• Subsidy claim Format: Annexure-VII along with Attachment-I and III.</li> <li>• Appendices (F-IV to F-VII) to Annexure VII</li> </ul>

### 7.3 DEDUCTION OF SUBSIDY

In case of non-achievement of minimum post commissioning performance for a district in terms of network availability, covering all causes of downtime in a quarter as detailed in Clause 6.11 of Section 6, Operating Conditions of the tender document, a deduction of a percentage of the EAS subsidy shall be effected on pro-rata basis as detailed in Clause 6.11 of the Operating Conditions of the Tender document.

### 7.4 PAYMENT OF SUBSIDY

7.4.1 Disbursement of subsidy shall be by cheque, through the Office of the Controller of Communication Accounts of the North-East-1 Circle.

7.4.2 The aforesaid subsidy claim statements of each year shall be required to be audited by the auditors of the Host Operator appointed under **Section-224/Section-619 of the Companies Act, 1956**. The report of the Auditors should be in the prescribed form given in **Annexure-VII-1** to be filed with the Administrator or designated authority as specified within 7 (seven) calendar days of the date of signing of the audit report but not later than 30<sup>th</sup> September of the following year.

7.4.3 The district-wise subsidy shall be paid after making adjustments, if any, for the payments made in the previous period(s).

7.4.4 Final adjustment, if any in respect of excess or shortage in the subsidy disbursed shall be made in the following year based on the various subsidies claim statements duly certified by the auditors of the Host Operator.

7.4.5 In case the Host Operator is found to have claimed and received in excess of 10% of the subsidy due to them, the entire amount in excess shall be recovered along with an interest from the date of disbursement at the prime lending rate (PLR) of State Bank of India prevalent on the day the disbursement was made. The interest shall be compounded monthly and a part of the month shall be reckoned as a full month for the purposes of calculation of interest. (Month for this purpose shall be taken as an English calendar month). No further subsidy shall be disbursed until final adjustment of the excess payment.

7.4.6 No interest shall be payable for any short/late payment made to the Host Operator by the paying authority.

7.4.7 All the relevant records of the Host Operator shall be subject to such scrutiny as may be prescribed by the Administrator so as to facilitate independent verification of the subsidy claimed.

7.4.8 For the purpose of post payment audit of subsidy claims, the Controller of Communication Accounts offices shall conduct verification, monitoring and field

inspections which shall include, inter alia, the examination of various documents installed facilities and equipment etc.

- 7.4.9 In order to ensure proper and correct verification of subsidy paid, the Administrator can modify, alter, or substitute and amend, if deemed necessary, whatever is stated herein.

## **7.5 BANK GUARANTEES**

- 7.5.1 The Host Operator shall submit a Performance Bank Guarantee (PBG) to Administrator USOF in the prescribed proforma (**as per Annexure-III-7**) valid for one year for the work awarded to him in NE-I Circle, from any scheduled bank in India. The amount of PBG shall be **Rs. 90000000 (Rs. Nine crore only)**. The PBG must be submitted within seven days of issue of letter of intent and before signing of the Agreement.

- 7.5.2 Initially, the PBG shall be valid for a period of one year. The Host Operator, on its own, shall extend the validity period of the PBG on similar terms at least one month prior to the day of its expiry without any demand or notice from the Administrator.

- 7.5.3 The PBG shall be kept valid for an extended period of six months beyond the period of Agreement or till finalization of accounts whichever is later. Any failure to do so, shall amount to violation of the terms of the Agreement and entitle the Administrator to en-cash the bank guarantee(s) and to convert it into a cash security without any reference to the Host Operator at its risk and cost. No interest or compensation whatsoever shall be payable by the Administrator on such encashment.

- 7.5.4 Without prejudice to its rights of any other remedy, Administrator may en-cash bank guarantee and forfeit the amount upon any failure of performance of the terms & conditions of the Agreement by the Host Operator.

- 7.5.5 PBG is not required from a Host Operator as long as the Govt. of India has 100% controlling stake in it.

## **7.6 MAINTENANCE OF RECORDS**

- 7.6.1 The Administrator shall have the right to call for and Host Operator shall be obliged to maintain, supply and provide for examination the relevant books of accounts, measurement books, log books and any record(s) relating to it. The Host Operator shall also be required to supply and provide for examination any other records that it maintains in respect of the business carried on to provide the service(s) under this Agreement at any time.

- 7.6.2 The Host Operator shall invariably preserve all accounting records and other records (electronic as well as hard copy) for a period of three years from the date of publishing of duly audited & approved accounts of the company and any

dereliction thereof shall be treated as a material breach independent of any other breach, sufficient to give a cause for cancellation of the Agreement.

- 7.6.3 The relevant records of the Host Operator will be subject to such scrutiny as may be prescribed by the Administrator or TRAI so as to facilitate independent verification of the amount due to the Host Operator as subsidy from the USOF.

**SECTION -8**  
**TERMS OF FINANCIAL BID**

- 8.1 The financial bid shall be submitted in a separate sealed envelope (marked **Sealed Cover-II**) along with the bids for Pre-Qualification vide Tender No. 30-170-8-NEI/2009-USF DATED 09.02.2011. This Financial offer by pre-qualified bidders shall be opened in the presence of bidders' representatives at the place and time as mentioned in **Section-: 3 General Conditions** of the Tender Document unless a modification is conveyed.
- 8.2 Financial Bid Form duly signed by authorized representative of Administrator USOF shall be supplied along with the Tender Document. Format of the Financial Bid Form is enclosed at **Annexure-VIII-1**. The bidder shall submit the bids clearly indicating the quote in the prescribed proforma. A single rate of subsidy should be quoted for North-East-I Circle which will be applicable for disbursement on percentage basis for the various districts as mentioned in the Financial Bid form.
- 8.3 The bidders shall note that the bid submitted by them is applicable for all the districts mentioned in the tender document (**Annexure-I-1**) and not selectively for some districts.
- 8.4 **Annexure-III-5** contains a declaration from the bidder that he shall comply with all conditions of this document without any reservations. This must be signed by the duly authorized signatory of the bidder. The authority under which power to sign is granted to the authorized signatory must accompany the bid.
- 8.5 The bid shall be opened on the specified date and time (including extension, if any) in the presence of the representatives of bidders. While opening the bid, the name of the bidder and the bid amount quoted by the bidder in **Annexure-VIII-1** will be read out to the bidders who are present.
- 8.6 The Administrator reserves the right to enter into Agreement with the successful bidder.
- 8.7 PROCESS OF FINANCIAL BIDDING**
- 8.7.1 The bidding process has been structured as 'Single Stage Bidding Process'.
- 8.7.2 The bidders must quote a subsidy amount less than or equal to the amount specified for Benchmark for the whole NE- I Circle as stated in the Financial Bid Form placed at **Annexure-VIII-1** of the tender document. Quotes higher than the Benchmark value for the subsidy shall not be treated as a valid bid and shall be summarily rejected. The Bidder adjudged as responsive in terms of Clauses of this section quoting the lowest subsidy, shall be declared as the successful bidder (the "Successful Bidder").

- 8.7.3 In case of a tie amongst two or more bidders in the initial round of the financial bidding for L1 position, all such bidders shall qualify for the next round of financial bidding and this process shall continue till the tie is resolved.
- 8.7.4 Withdrawal, backing out of their last quoted bid or not quoting the bid amount in successive rounds (in case of tie) shall result in disqualification of such bidder(s) and their EMBGs shall be forfeited.
- 8.7.5 In the event that the lowest Bidder withdraws or is not selected for any reason the Administrator reserves the right to cancel the tender.
- 8.7.6 The bidder of the final round (in case of tie) of financial bidding with the lowest subsidy offer will be declared successful bidder for signing of the Agreement. The rate quoted by the lowest bidder shall be the Representative Rate.
- 8.7.7 The signing of Agreement as a result of the bidding process will not be treated and taken as grant of fresh License under the Indian Telegraph Act, 1885.
- 8.7.8 If the Agreement is not signed with the Successful Bidder for whatsoever reason, the Administrator reserves the right to cancel the tender.

## **8.8 SIGNING OF THE AGREEMENT**

- 8.8.1 The Successful bidder shall submit a Performance Bank Guarantee (PBG) (as per **Annexure-III-7** of **Rs. Nine crore** as per Clause 7.5 of **Section. 7: Financial Conditions** of the Tender Document within seven days (7 days) from the date of issue of LOI and prior to signing of the Agreement. The Agreement will become effective from the date of signing of the Agreement. In case the successful bidder does not furnish the PBG within the given time, their EMBG shall be encashed and the amount forfeited. Such bidder shall be disqualified from participating in further bidding process and blacklisted for a period of three years.
- 8.8.2 No extension of time shall be given for submission of PBG. Non-submission of PBG will result in encashment of Earnest Money Bank Guarantee and its forfeiture.
- 8.8.3 The Successful Bidder shall be bound by the terms and conditions of the Agreement or any other instructions issued from time-to-time by the Administrator.
- 8.8.4 In case, the Successful Bidder withdraws from the Scheme after signing of the Agreement the Administrator shall en-cash the bank guarantee submitted by the Successful Bidder and may offer the next lowest bidder to enter into Agreement with Administrator at the representative rates, so arrived at for the Scheme.

## **8.9 CONTACTS DURING BID EVALUATION**

Bids shall be deemed to be under consideration immediately after they are opened and until such time the Administrator makes official intimation of award/ rejection to the bidders. While the Bids are under consideration, Bidders and/ or their

representatives or other interested parties are advised to refrain from contacting by any means, the Administrator and/or employees/ representatives of the USOF Administration on matters related to the Bids under consideration.

**SECTION - 9**  
**DEFINITIONS**

**9.0 INTERPRETATION OF TERMS/ DEFINITIONS**

Unless the context otherwise requires, the different terms and expressions used shall have the meaning assigned to them in the following paragraphs:

- 9.1 ADMINISTRATOR** means the Administrator, Universal Service Obligation Fund in the Department of Telecommunications under Ministry of Communications & IT.
- 9.2 AGREEMENT** shall mean the Agreement signed by the successful Bidder with the Administrator for Augmentation, Creation and Management of Intra-District SDHQ – DHQ OFC Network for Transport of Rural / Remote Area Traffic on Bandwidth Sharing Basis in NE- I circle.
- 9.3 BENCHMARK** is the rate that shall form the upper ceiling for submission of Bids. It will comprise of subsidy amount based on a percentage of the capital recovery for the specified No. of years.
- 9.4 CAPITAL RECOVERY** means the aggregate of depreciation, interest on debt and return on equity on the capital cost.
- 9.5 DESIGNATED MONITORING AGENCY** refers to the agency, authorized by the Administrator, to carry out inspection of the records, claims and installations, including physical verification in order to ensure compliance with the conditions of the Agreement.
- 9.6 DISTRICT** means the revenue districts after Census 2001.
- 9.7 EFFECTIVE DATE** is the date of signing of the Agreement by the successful Bidder and the USOF.
- 9.8 HOST OPERATOR** means the successful Bidder, who upon entering into Agreement with the Administrator, shall augment/create and manage the intra-district OFC Network.
- 9.9 INTRA-DISTRICT OFC TRANSPORT NETWORK** is interchangeably used as OFC Transport Network/Intra-district network which is augmented, created and managed by the Host Operator under this Agreement, inter-connecting the Nodes, SDHQs and the respective DHQs on OF cable & Equipment, as prescribed in the **SECTION:5 TECHNICAL CONDITIONS**, for transport of rural/remote area traffic on bandwidth sharing basis in NE- I.
- 9.10 LICENCE** means a License granted or having effect as if granted under the **Section-4 of the Indian Telegraph Act, 1885** and the **Indian Wireless Act, 1933**.

- 9.11** **LICENSEE** means a registered Indian Company that has been awarded License to provide the service (Basic and/ or CMTS and/or Unified Access Service and/or NLD), within the geographical boundaries of the specified State.
- 9.12** **North East-I Circle** means the area comprising the States of Meghalaya, Mizoram, & Tripura.
- 9.13** **OTHER OPERATOR** is the service provider other than the Host Operator who takes on lease the subsidized bandwidth capacity on the intra-district OFC Transport Network from the Host Operator during validity period of the Agreement.
- 9.14** **PRESCRIBED LEASING RATES** mean the rates, prescribed under this Tender, at which the Host Operator will charge the Retail Service Provider(s) for the leased subsidized bandwidth capacity.
- 9.15** **QoS** is the Quality of Service parameters for lease bandwidth, as prescribed by TRAI.
- 9.16** **SERVICE AREA** means the territorial jurisdiction, as specified under the BSO or CMTS or UASL Service License, except the areas that may be notified to be excluded from time to time.
- 9.17** **SUBSIDISED BANDWIDTH** interchangeably used as Network Bandwidth is the bandwidth capacity augmented/created in the intra-district OFC Transport Network under this Agreement.
- 9.18** **SUBSIDY FROM UNIVERSAL SERVICE OBLIGATION FUND (USOF)** means the disbursements from USOF towards meeting the universal service obligations in terms of the Agreement.
- 9.19** **TRAI** means Telecom Regulatory Authority of India constituted under the TRAI Act, 1997 as amended from time to time.
- 9.20** **USO** means Universal Service Obligation as enunciated in the **Indian Telegraph (Amendment) Act, 2003**, the **Indian Telegraph (Amendment) Ordinance, 2006** and the Rules framed there under.
- 9.21** **USO FUND** means the fund established under the **Indian Telegraph (Amendment) Act, 2003** and Rules framed there under.

**ANNEXURES**

**ANNEXURE-I-1**

The following includes Table-I showing the list of stations and the Network requirement of additional districts clubbed with some existing districts.

**TABLE–I.1 Table showing Districts/ Sub-districts/ other locations of MEGHALAYA that are to be interconnected in the augmented/ expanded district-wise OFC network.**

S.No	State	District	Block/Tehsil/Taluka	Type	Node ID
1.	Meghalaya	West Garo Hills	Tura	DHQ	
2.	Meghalaya	West Garo Hills	Selsella	SDHQ	
3.	Meghalaya	West Garo Hills	Dadenggiri	SDHQ	
4.	Meghalaya	West Garo Hills	Tikrikilla	SDHQ	
5.	Meghalaya	West Garo Hills	Rongram	SDHQ	
6.	Meghalaya	West Garo Hills	Betasing	SDHQ	
7.	Meghalaya	West Garo Hills	Zikzak	SDHQ	
8.	Meghalaya	West Garo Hills	Dalu	SDHQ	
9.	Meghalaya	West Garo Hills	Gambegre	SDHQ	
10.	Meghalaya	West Garo Hills	Phulbari	En. Loc.	
11.	Meghalaya	West Garo Hills	Rajabala	En. Loc.	
12.	Meghalaya	West Garo Hills	Garobadha	En. Loc.	
13.	Meghalaya	West Garo Hills	Mahendraganj	En. Loc.	
14.	Meghalaya	East Garo Hills	WilliamNagar	DHQ	
15.	Meghalaya	East Garo Hills	Resubelpara	SDHQ	
16.	Meghalaya	East Garo Hills	Dambo Rongjeng	SDHQ	
17.	Meghalaya	East Garo Hills	Songsak	SDHQ	
18.	Meghalaya	East Garo Hills	Samanda	SDHQ	
19.	Meghalaya	East Garo Hills	Kharkutta	SDHQ	
20.	Meghalaya	East Garo Hills	Mendipathar	En. Loc.	
21.	Meghalaya	East Garo Hills	Bajengdoba	En. Loc.	
22.	Meghalaya	South Garo Hills	Baghmara	DHQ	
23.	Meghalaya	South Garo Hills	Chokpot	SDHQ	
24.	Meghalaya	South Garo Hills	Rongara	SDHQ	

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25.	Meghalaya	South Garo Hills	Gasuapara	SDHQ	
26.	Meghalaya	South Garo Hills	Rewak	Addl. Loc.	
27.	Meghalaya	South Garo Hills	Nangalbibra	Addl. Loc.	
28.	Meghalaya	West Khasi Hills	Nongstoin	DHQ	
29.	Meghalaya	West Khasi Hills	Riangdo (Mawshynrut)	SDHQ	
30.	Meghalaya	West Khasi Hills	Mairang	SDHQ	
31.	Meghalaya	West Khasi Hills	Ranikor	SDHQ	
32.	Meghalaya	West Khasi Hills	Mawkyrwat	SDHQ	
33.	Meghalaya	West Khasi Hills	Mawthadraishan	SDHQ	
34.	Meghalaya	West Khasi Hills	Kynshi	En. Loc.	
35.	Meghalaya	West Khasi Hills	Umdohlun	En. Loc.	
36.	Meghalaya	West Khasi Hills	Mawngap (East Khasi Hills)	En. Loc.	
37.	Meghalaya	West Khasi Hills	Welloi (East Khasi Hills)	En. Loc.	
38.	Meghalaya	West Khasi Hills	Rambrai	Addl. Loc.	
39.	Meghalaya	West Khasi Hills	Mawdob	Addl. Loc.	
40.	Meghalaya	West Khasi Hills	Nongkhlaw	Addl. Loc.	
41.	Meghalaya	Ri Bhoi	Nongpoh	DHQ	
42.	Meghalaya	Ri Bhoi	Umling	SDHQ	
43.	Meghalaya	Ri Bhoi	Umsning	SDHQ	
44.	Meghalaya	Ri Bhoi	Jirang	SDHQ	
45.	Meghalaya	East Khasi Hills	Shillong	DHQ	
46.	Meghalaya	East Khasi Hills	Mawphlang	SDHQ	
47.	Meghalaya	East Khasi Hills	Myllem	SDHQ	
48.	Meghalaya	East Khasi Hills	Mawryngkneng	SDHQ	
49.	Meghalaya	East Khasi Hills	Mawkynrew	SDHQ	
50.	Meghalaya	East Khasi Hills	Mawsynram	SDHQ	
51.	Meghalaya	East Khasi Hills	Shella Bholaganj	SDHQ	
52.	Meghalaya	East Khasi Hills	Pynursla	SDHQ	
53.	Meghalaya	East Khasi Hills	Khatarshong Laikroh	SDHQ	
54.	Meghalaya	East Khasi Hills	Lawbah	En. Loc.	
55.	Meghalaya	East Khasi Hills	Cherrapunji	En. Loc.	
56.	Meghalaya	East Khasi Hills	Laitlyngkoi	En. Loc.	
57.	Meghalaya	East Khasi Hills	Dauki (Jowai)	En. Loc.	

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58.	Meghalaya	East Khasi Hills	Anilerem (Jowai)	Addl. Loc.	
59.	Meghalaya	Jaintia Hills	Jowai	DHQ	
60.	Meghalaya	Jaintia Hills	Thadlaskein	SDHQ	
61.	Meghalaya	Jaintia Hills	Laskein	SDHQ	
62.	Meghalaya	Jaintia Hills	Amlarem	SDHQ	
63.	Meghalaya	Jaintia Hills	Khliehriat	SDHQ	
64.	Meghalaya	Jaintia Hills	Saipung	SDHQ	
65.	Meghalaya	Jaintia Hills	Nongbah	En. Loc.	
66.	Meghalaya	Jaintia Hills	Rymbai	En. Loc.	
67.	Meghalaya	Jaintia Hills	Ummolong	En. Loc.	
68.	Meghalaya	Jaintia Hills	Nartiang	En. Loc.	
69.	Meghalaya	Jaintia Hills	Mynso	En. Loc.	
70.	Meghalaya	Jaintia Hills	Sutnga	Addl. Loc.	
71.	Meghalaya	Jaintia Hills	Lakadong	Addl. Loc.	

**Notes:**

1. Abbreviations: DHQ – District Headquarter, SDHQ – Sub-District Headquarter
  2. A sub-district headquarter (SDHQ) means a Taluka or Tehsil or Block headquarter
- \* The Additional districts decided after 2001 census.

**TABLE-I-1.2 Table showing Districts/ Sub-districts/ other locations of MIZORAM that are to be interconnected in the augmented/ expanded district-wise OFC network.**

S.No	State	District	Block/Tahsil/Taluka	Type	Node ID
1.	Mizoram	Mamit	Mamit	DHQ	
2.	Mizoram	Mamit	Zawlnuam	SDHQ	
3.	Mizoram	Mamit	West Phaileng	SDHQ	
4.	Mizoram	Mamit	Reiek	SDHQ	
5.	Mizoram	Mamit	Tutphai	En. Loc.	
6.	Mizoram	Mamit	Tuidam	En. Loc.	
7.	Mizoram	Mamit	Phuldungsei	Add. Loc.	
8.	Mizoram	Mamit	Bungham	Block	
9.	Mizoram	Kolasib	Kolasib	DHQ	
10.	Mizoram	Kolasib	North Thingdawl	SDHQ	
11.	Mizoram	Kolasib	Kawnpui	En. Loc.	
12.	Mizoram	Kolasib	Bairabi	En. Loc.	
13.	Mizoram	Kolasib	Bilkhawthlir	Block	
14.	Mizoram	Aizawl	Aizawl	DHQ	
15.	Mizoram	Aizawl	Darlawn	SDHQ	
16.	Mizoram	Aizawl	Phullen	SDHQ	
17.	Mizoram	Aizawl	Thingsulthliah	SDHQ	
18.	Mizoram	Aizawl	Tlangnuam	SDHQ	
19.	Mizoram	Aizawl	Aibawk	SDHQ	
20.	Mizoram	Aizawl	Siphir	Repeater	
21.	Mizoram	Aizawl	Khawruhlian	Repeater	
22.	Mizoram	Aizawl	Vanbawng	Repeater	
23.	Mizoram	Aizawl	N.E. Bualpui	Repeater	
24.	Mizoram	Aizawl	Saitual	En. Loc.	
25.	Mizoram	Aizawl	Sialsuk	Repeater	
26.	Mizoram	Aizawl	Thenzawl (Serchhip)	Repeater	
27.	Mizoram	Aizawl	Chingchhip (Serchhip)	En. Loc.	
28.	Mizoram	Champhai	Champai	DHQ	
29.	Mizoram	Champhai	Ngopa	SDHQ	

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30.	Mizoram	Champhai	Khawzawl	SDHQ	
31.	Mizoram	Champhai	Khawbung	SDHQ	
32.	Mizoram	Champhai	Kawlkulh	En. Loc	
33.	Mizoram	Champhai	Hliappui	En. Loc	
34.	Mizoram	Champhai	Kawlberm	Repeater	
35.	Mizoram	Champhai	Hnahlan	Addl. Loc.	
36.	Mizoram	Champhai	Khawhai	En. Loc.	
37.	Mizoram	Champhai	Biate	Repeater	
38.	Mizoram	Champhai	Zwakhathar	Addl. Loc.	
39.	Mizoram	Serchhip	Serchhip	DHQ	
40.	Mizoram	Serchhip	East Lungdar	SDHQ	
41.	Mizoram	Lunglei	Lunglei	DHQ	
42.	Mizoram	Lunglei	West Bunghmun	SDHQ	
43.	Mizoram	Lunglei	Lungsen	SDHQ	
44.	Mizoram	Lunglei	Hnahthial	SDHQ	
45.	Mizoram	Lunglei	Tuichong	En. Loc	
46.	Mizoram	Lunglei	Sumasumi	Repeater	
47.	Mizoram	Lunglei	Buarpui	Repeater	
48.	Mizoram	Lunglei	South Lungdai	Addl. Loc.	
49.	Mizoram	Lunglei	Leite	Repeater	
50.	Mizoram	Lawngtlai	Lawngtlai	DHQ	
51.	Mizoram	Lawngtlai	Chawngte	SDHQ	
52.	Mizoram	Lawngtlai	Diltlang	Repeater	
53.	Mizoram	Lawngtlai	Tawipui (Lunglei)	Addl.Loc	
54.	Mizoram	Lawngtlai	S.Bungtlang	Addl.Loc	
55.	Mizoram	Lawngtlai	Sangu	Block	
56.	Mizoram	Chhimtuipui (Saiha)	Saiha	DHQ	
57.	Mizoram	Chhimtuipui (Saiha)	Sangau	SDHQ	
58.	Mizoram	Chhimtuipui (Saiha)	Tuipang	SDHQ	
59.	Mizoram	Chhimtuipui (Saiha)	Siata	Repeater	
60.	Mizoram	Chhimtuipui (Saiha)	Lungbun	Repeater	
61.	Mizoram	Chhimtuipui (Saiha)	Bualpui	Repeater	
62.	Mizoram	Chhimtuipui (Saiha)	Phura	Addl. Loc.	

**Notes:**

1. Abbreviations: DHQ – District Headquarter, SDHQ – Sub-District Headquarter
2. A sub-district headquarter (SDHQ) means a Taluka or Tehsil or Block headquarter  
\* The Additional districts decided after 2001 census.

**TABLE–I-1.3 Table showing Districts/ Sub-districts/ other locations of TRIPURA that are to be interconnected in the augmented/ expanded district-wise OFC network.**

S.No	State	District	Block/Tahsil/Taluka	Type	Node ID
1.	Tripura	West Tripura	Agartala	DHQ	
2.	Tripura	West Tripura	Hezamara	SDHQ	
3.	Tripura	West Tripura	Padmabil	SDHQ	
4.	Tripura	West Tripura	Khowai	SDHQ	
5.	Tripura	West Tripura	Kalaynpur	SDHQ	
6.	Tripura	West Tripura	Teliamura	SDHQ	
7.	Tripura	West Tripura	Jirania	SDHQ	
8.	Tripura	West Tripura	Mohanpur	SDHQ	
9.	Tripura	West Tripura	Tulashikar	SDHQ	
10.	Tripura	West Tripura	Bishalgarh	SDHQ	
11.	Tripura	West Tripura	Boxanagar	SDHQ	
12.	Tripura	West Tripura	Sonamura	En. Loc.	
13.	Tripura	West Tripura	Melaghar	SDHQ	
14.	Tripura	West Tripura	Barjala	En. Loc.	
15.	Tripura	West Tripura	Jampuijala	SDHQ	
16.	Tripura	West Tripura	RanirBazar	En. Loc.	
17.	Tripura	West Tripura	Kathalia	SDHQ	
18.	Tripura	West Tripura	Mandai	SDHQ	
19.	Tripura	West Tripura	Dukli	Block	
20.	Tripura	West Tripura	Mungiakami	Block	
21.	Tripura	South Tripura	Udaipur	DHQ	
22.	Tripura	South Tripura	Amarpur	SDHQ	
23.	Tripura	South Tripura	Bagafa	SDHQ	
24.	Tripura	South Tripura	Santir Bazar	Repeater	
25.	Tripura	South Tripura	Matarbari	SDHQ	
26.	Tripura	South Tripura	Karbuk	SDHQ	
27.	Tripura	South Tripura	Silachari	Repeater	
28.	Tripura	South Tripura	Rupaichari	SDHQ	
29.	Tripura	South Tripura	Satchand	SDHQ	

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30.	Tripura	South Tripura	Jolaibari	Repeater	
31.	Tripura	South Tripura	Hrishyamukh	SDHQ	
32.	Tripura	South Tripura	Belonia	En. Loc.	
33.	Tripura	South Tripura	Kakaben	SDHQ	
34.	Tripura	South Tripura	Killa Bazar	SDHQ	
35.	Tripura	South Tripura	Rajnagar	SDHQ	
36.	Tripura	South Tripura	Ompi	Block	
37.	Tripura	Dhalai	Ambasa	DHQ	
38.	Tripura	Dhalai	Manu	SDHQ	
39.	Tripura	Dhalai	Chamanu (Chaailengta)	SDHQ	
40.	Tripura	Dhalai	Sardinkhapara	Repeater	
41.	Tripura	Dhalai	DumburNagar (Gandecharra)	SDHQ	
42.	Tripura	Dhalai	Salema	SDHQ	
43.	Tripura	North Tripura	Kailashahar	DHQ	
44.	Tripura	North Tripura	Gournagar	SDHQ	
45.	Tripura	North Tripura	Kaumarghat	SDHQ	
46.	Tripura	North Tripura	Panisagar	SDHQ	
47.	Tripura	North Tripura	Kadamtala	SDHQ	
48.	Tripura	North Tripura	Pencharthal	SDHQ	
49.	Tripura	North Tripura	Dasda	SDHQ	
50.	Tripura	North Tripura	Damchhara	SDHQ	
51.	Tripura	North Tripura	Jampui Hills	SDHQ	
52.	Tripura	North Tripura	Sanichhara	En. Loc.	
53.	Tripura	North Tripura	Kanchanpur	En. Loc.	
54.	Tripura	North Tripura	Dharamnagar	Add. Loc.	
55.	Tripura	North Tripura	Manpai	En. Loc.	

**Notes:**

- a. Abbreviations: DHQ – District Headquarter, SDHQ – Sub-District Headquarter
- b. A sub-district headquarter (SDHQ) means a Taluka or Tehsil or Block headquarter
- c. \* The Additional districts decided after 2001 census.

The list of Total Districts/DHQ/ SDHQ/ Additional Locations/ En-route Locations/Repeaters are shown below-

<b>Types</b>	<b>Meghalaya</b>	<b>Mizoram</b>	<b>Tripura</b>
<b>Total Districts</b>	7	8	4
<b>Total DHQ</b>	7	8	4
<b>Total SDHQ</b>	37	19	36
<b>Addl. Loc.</b>	8	7	1
<b>En-route Loc.</b>	19	10	7
<b>Repeater</b>	0	15	4
<b>Total Nodes</b>	<b>71</b>	<b>62</b>	<b>55</b>

**TECHNICAL SPECIFICATIONS OF OFC EQUIPMENT & OF CABLE ENSURING DELIVERABLES AND NETWORK FEATURES UNDER THE SCHEME**

**1.0 TRANSPORT EQUIPMENT SPECIFICATION**

- a) The equipment shall meet/exceed EMC/EMI requirements as per TEC Standard No. TEC/EMI/TEL-001/01/Feb.-09 (including latest revisions and amendments) or equivalent ITU-T/International standards.
- b) **Power Supply requirement, Power System timing and Synchronization:** The deployed system shall have a system-wide timing synchronization, in accordance with per ITU-T Rec. G.811/G.812/G.822, as applicable, fully capable to be distributed to all the network elements of the successful Bidder as well as to the other service providers sharing the network. The overall system shall synchronize with i) the clock signal of the existing transmission network ii) incoming signal iii) external clock at 2048 KHz as per ITU-T G.703 iv) external clock at 2048 Kbps as per ITU-T G.703 (as applicable).
- c) **Equipment Specification and System Performance:** Optical Transport Equipment including line transport and tributary interfaces shall conform to ITU-T/TEC Standards and shall be capable to carry circuit & packet based traffic, including TDM/IP/Ethernet/ATM signals/protocols both in the form of electrical and optical signals.
- d) The system performance shall be equal to or better than 10(-12) as per relevant ITU-T/TEC Standards, including Rec. G.821/G.826/IETF RFC 2544/Standards, specific to the deployed technology, and any-other approved specifications, as applicable.
- e) Supplies/converters for the OFC equipment (except computer system supplied as part of NMS and other AC powered equipment, if any, shall use 230 V AC with variation of -15% to +10% at 50Hz  $\pm$  2Hz) provided under this scheme, shall use -48V DC uninterrupted primary source power. The power supply may vary normally within the voltage range -40 to -60 V DC and the supplied equipment shall operate satisfactorily within this range.
- f) **Interfaces and Interface combinations:** At the ingress/outgress side of the SDHQ node-equipment for interconnecting to traffic to be transported over the intra-district SDHQ – DHQ network, the equipment shall support various interfaces in an integrated architecture, including the following, but not limited to-

<b>(A) SDH Optical interfaces (both transmit &amp; receive)</b>		
	STM-1 <sub>o</sub>	Compliant with ITU-T G.957, G.707 and other related specs., Optical codes as per Table 2/ITU-T G.957, including_ - S-1.1, L1.1, L1.2,
	STM-4 <sub>o</sub>	Compliant with ITU-T G.957, G.707 and other related specs., Optical codes as per Table 3/ITU-T G.957, including Options – S-4.1, L-4.1, L-4.2
	STM-16 <sub>o</sub>	Compliant with ITU-T G.957, G.707 and other related specs., Optical codes as per Table 4/ITU-T G.957
	STM-64 <sub>o</sub>	Compliant with ITU-T G.691, G.707 and other related specs., Optical codes as per Table 1/ITU-T G.691
<b>(B) Electrical Interfaces (bi-directional)</b>		
	STM-1 <sub>e</sub>	ITU-T Rec. G.703 and related specs.
	34/45 Mbps	As per ITU-T G.703 and G.704 specs., as applicable,
	E1	As per ITU-T G.703 specs., supporting both 75 ohm unbalanced and 120 ohm balanced terminations
<b>(C) Data Interfaces</b>		
	Gigabit Ethernet	Optical 1000BASE-SX/LX, as per IEEE802.3 and other related specs. For electrical 10/100/1000BASE-T
	Fast Ethernet	Optical/Electrical, 100BASE-FX/SX/LX /10/100/BASE-T as per IEEE802.3 and other related specs.

The Ethernet interfaces shall support VLAN (IEEE 802.IP/Q), spanning tree (IEEE 802.1D) quality. All ports shall be auto-sensing and auto-configurable as half-duplex or full- duplex.

The Bidder shall specify the various possible combinations of above interface module type and number that can be equipped at the transport node equipment.

- g) **Optical transmitter and receiver:** The optical line-terminating unit, part of the node transport equipment, shall work at **Optical wavelength** of 1310nm/1550nm (selectable considering the characteristics of optical fiber and the link budget) equipped with **Optical source – Laser confirming to** ITU-T G.664 and IEC 60825-1 and IEC 60825-2.
- h) **OF Equipment and cable accessories:** In addition to the overall specifications, the optic-optic equipment and cable accessories, shall meet/exceed the relevant ITU-T/TEC Specifications. The Host Operator shall mention the standard specifications complied with in the testing reports.

## 2. UNDERGROUND OPTICAL FIBRE CABLE SPECIFICATION:

- a) The OFC shall meet/exceed applicable ITU-T/TEC specifications and the materials used in the manufacture of OFC.
- b) The Bidder shall provide the unarmored OFC, with minimum 24 fibers in compliance with ITU-T G.652 latest version, rated for best attenuation coefficient,

and excellent bending performance, and with transmission characteristics optimized for both 1310nm and 1550nm operation and other ITU-T fiber types for future DWDM operation in 1550nm & 1625nm regions. The Bidder shall mention the standard specifications complied with in the respective test reports.

- c) The UG OFC shall be of low weight, small volume and high flexibility, suitable for underground installation in pipes through open cut trenches or direct burial through trench-less digging.
- d) The host operator should procure the OF equipment and OF cable, including associated accessories like attenuators, distribution Frame, patch cord, pig tail, termination boxes, enclosures, fiber-joint boxes, termination fiber-joint boxes, with associated tools, splicing and testing instruments.
- e) The Host Operator should carry out the installation, testing and commissioning of OFC ring transport/transmission equipment and OF cable, including system synchronization, system integration with existing and supplied defined interfaces. The host operator should also ensure all civil and electrical works, power supply system (both D.C and A.C) and earthing of telecom equipment including cabling, wiring, and connection to the equipment at electrical and optical level of the equipment nodes. The host operator should also provide Telecom Network Management System TMN (also termed as Network Management System (NMS)) including Element Management system (EMS) for Configuration and monitoring of Channels / circuits / TCP / IP network and providing suitable interfaces on the F.O. communication system.
- f) Any other work/items required for completion, successful commissioning and commercial operation of the scheme shall be responsibility of the host operator.
- g) The Host Operator should lay permanently lubricated high density polyethylene PLB/ HDPE duct & HDPE couplers, RCC pipe, GI pipe and associated hardware/ accessories / consumables / fittings / joint boxes, etc. as required for installation of underground OF cable as well as cement, bricks, sand for making jointing chambers or prefabricated jointing chambers, etc. It will carry out the trenching & backfilling after laying HDPE pipes, and Blowing/pulling of un-armoured underground OF Cable, preparation of mid-section jointing chambers and jointing/splicing of the fibers, along the route, Termination of OFC cables at the FDF<sub>1</sub> with the associated accessories like pig tails, patch cords, splice closures etc, Testing of all fibers of the jointed cable and rectification of any defects.
- h) **PLB HDPE Pipe:** Permanently Lubricant High Density Polyethylene (PLB HDPE) Pipe shall be laid for blowing or conventional pulling of the fiber optic cable shall meet/exceed the functional requirements, major technical parameters and Type and Factory Acceptance Testing requirements as per ITU-T/TEC Standards. The desired overall dimensions of the PLB HDPE Pipe are as follows–

I	Outside diameter	40 mm + 0.4 mm
Ii	Wall thickness	3.5 mm (+0.2 mm/ -0.00 mm)
Ii i	Standard length	1000 meters $\pm$ 100 meter
Iv	Thickness of permanent lubricant	$\geq$ 0.4 mm
V	Maximum outer diameter of FO cable that can be installed by blowing technique	16 mm or 24/48-fibre optical cable dia. whichever is higher.
V i	Thickness of Inner Layer	Min. 0.28mm, Max. 0.42mm

### 3. DC POWER SUPPLY AND POWER BACK-UP

- a) **BATTERY:** MF VRLA (Valve regulated Lead Acid) Maintenance Free battery bank (comprising 2-volt nominal storage cells) utilizing fire-retardant material will be deployed. Backup capacity will be for minimum 6 hrs. Capacity of battery shall be planned such that battery set is not required to be discharged beyond 80% of its rated capacity at any time to meet 100% load. The nominal output voltage of battery bank will be -48V D.C. The detailed specifications will meet or exceed the ITU-T/TEC standards. Existing battery backup shall be suitably upgraded as necessary.
- b) **D.C.POWER PLANT:** DC power plant along with battery backup is to be provided (for -48VDC working). SMPS D.C Power plants are to be compatible with VRLA batteries and also conventional Lead Acid batteries, and are to be equipped with Battery Health Check systems and Remote Monitoring facility meeting the relevant specifications as per ITU-T/TEC GR/SMP-01/05 Jan 2005. It should be modular in nature with N+1 configuration where N is the capacity of each SMPS module in the power plant. New Power Plant, or Existing power plant after suitable up-gradation, as necessary, will be capable to take the following loads simultaneously-
- i) Battery charging (trickle charging and also replenishment charging) load
  - ii) 100% equipment loads with minimum 50% additional capacity to cater to equipment upgrade/new equipment.
- c) **Diesel Engine Alternator:** Diesel Engine Alternator, set in silent canopy of adequate capacity, shall be provided to meet the load requirement for the plan and future expansion. The Diesel Engine shall be conforming to the relevant Indian Standards (IS)/International/British standards, as applicable. The engine and the enclosure will be approved from designated authority and will have necessary environmental and other clearances.

### 4. ENVIRONMENTAL SPECIFICATIONS:

Equipment and their components provided under this specification shall operate reliably under the following environmental operating limits.

<b>Temperature Range and relative humidity:</b>	
To Specification	0 to +50 °C, 50%RH
Operation without damage	5 to +55 °C, 50%RH
Shipping/storage	-5 to +60 °C, 50%RH
Max. Temperature with guaranteed specifications	35 °C, 95% RH
Max. Temperature for equipment survival	40 °C, 95%RH
Elevation: (operation)	To 3,500 m

The environmental standard complied shall meet/exceed the provisions prescribed above or in the respective TEC GR as applicable. The testing schedule and procedure shall comply with DoT document QM-333 or any other international standard as applicable.

**5. LIGHTNING AND TRANSIENT VOLTAGE PROTECTION:**

Bidder shall provide lightning and transient voltage protection for all telecommunications equipment, in accordance with the following-

- a) Should have proper earthing arrangement as per ITU-T/IEC/BIS/TEC standards.
- b) At the outside cable plant point-of-entry of all cabling penetration, the Bidder shall provide lightning and transient voltage isolation as well as surge protection, wherever applicable, for the inside-plant cabling, wiring, and all terminations and equipment.
- c) All equipment installed, under this specification that requires 230VAC primary power, shall be surge protected.

**6. STATION SAFETY EARTHING AND SIGNAL GROUNDING:**

The equipment shall meet the IEC publication 60950 (2001) in general and for optical safety it shall comply with ITU-T G.664 and IEC 60825-1 and IEC 60825-2. For each facility, the Bidder is responsible for meeting the following station and equipment earthing requirements-

- a) All safety earthing and signal grounding shall be in full compliance as per relevant international standards.
- b) Each cabinet (enclosure) shall include suitable signal ground and safety earth networks. The signal ground network shall terminate at a separate signal ground stud connection isolated from safety earth.
- c) Each earth/ground network shall utilize copper bus bars, copper braids and/or 16 sq.mm or bigger earth cable. All equipment earth/ ground connections shall made directly to the equipment chassis utilizing grounding and secured metal-to-metal with star washers. Use of the enclosure frame, skin or chassis mounting hardware, as part of the earthing/grounding networks, is not acceptable.

- d) The safety earth network shall be connected to "earth ground" at the safety earth stud. The earth stud connection shall be sized for an external earthing cable equipped with a 2/0 solid copper lug secured metal-to-metal with star washers. Primary AC feeds and distribution within enclosures requires earthing wire connection to the safety earth stud.
- e) The safety earth and signal ground networks shall be inter-connected only at the safety earth stud and signal ground stud.
- f) The Bidder is responsible for providing all required earthing/grounding cable and installation. The Bidder shall be responsible for providing earthing systems including pits, earthing studs and earthing net etc, as required, wherever the existing station earthing is found to be unsuitable for equipment being provided. In case, new earthing studs are provided, the Bidder shall be responsible for connection of new studs to the existing studs if any.

7. **NETWORK MANAGEMENT SYSTEM:** The Bidder shall provide, a Telecommunication Management Network System (TMN) also referred to as Network Management System (NMS). The TMN/NMS shall manage the multi-service transport system by an integrated and open standard interface so that it can interconnect with other vendor's systems also. The TMN design concept, functional and infrastructural architecture and physical architecture, shall be according to ITU Rec. M.3010. The NMS should be provided, along with carrier-class element management system (EMS), local craft terminal/client terminals/work stations, as applicable. The TMN/NMS shall provide the capability to monitor, configure, re-configure and control the elements of the telecommunication network from a centralized location and also at each node of the network where equipment is located using portable devices (e.g. laptops).

8. **EQUIPMENT AVAILABILITY:** The Mean Time Between Failure (MTBF) of the deployed equipment by the host Operators shall be at least 80,000 hours. The calculations shall be as per international standards. An MTTR of maximum 3 hours will be assumed ensuring the equipment availability at least 99.998%.

**ANNEXURE III-1**

**Table III-1.1 DETAILS OF THE TELECOM SERVICE LICENSES HELD BY THE BIDDER COMPANY**

<b>Sl. No.</b>	<b>Name of Bidder Company</b>	<b>Name of Service</b>	<b>Licence Agreement &amp; Date, and validity period/ IP-2 Registration letter</b>	<b>Service Area</b>	<b>Details of allocated spectrum from WPC</b>	<b>Documentary Support enclosed with Bid (Licence agreements/ IP-2 Registration certificates/ amendments/ Spectrum allocation letters etc.)</b>

Annexure III-2

**FORMAT FOR BOARD RESOLUTION OF PARENT/HOLDING/GROUP-COMPANY**

**(To be submitted on the letterhead of the Company)**

The Board, after discussion, at the duly convened Meeting on \_\_\_\_\_ [*insert date*], with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 1956, passed the following Resolution:

RESOLVED THAT pursuant to the provisions of the Companies Act, 1956 and compliance thereof and as permitted under the Memorandum and Articles of Association of the Company and in view of the fact that (Name of the parent /holding/group-company (*strike out which is not applicable*)) holds ----- % of the equity in (name of the bidder), the Board of (*Name of the parent /holding/group-company*) hereby undertakes to invest the entire amount proposed to be invested by (*Name of the bidder*) in case of failure of [*insert the name of the Bidder*] to make such investment in the project envisaged in the tender No. ----- by USO Fund for 'Support from USO Fund for augmentation and expansion of existing intra-district SDHQ – DHQ OFC network for transport of rural / remote area traffic on bandwidth sharing basis on build, operate and own basis in NE- I Circle.

FURTHER RESOLVED THAT \_\_\_\_\_ (*name and designation of signatory*), whose signatures are attested hereunder, be and is hereby authorized to enter into and take all the steps required to be taken by (*Name of the parent /holding/group-company*) in this regard, including in particular, signing and issuing of all the related documents, certified copy of this Board resolution or letter, undertakings etc, required to be submitted to the USO fund as part of the Tender or such other documents as may be necessary in this regard.

Certified True Copy

Notes:

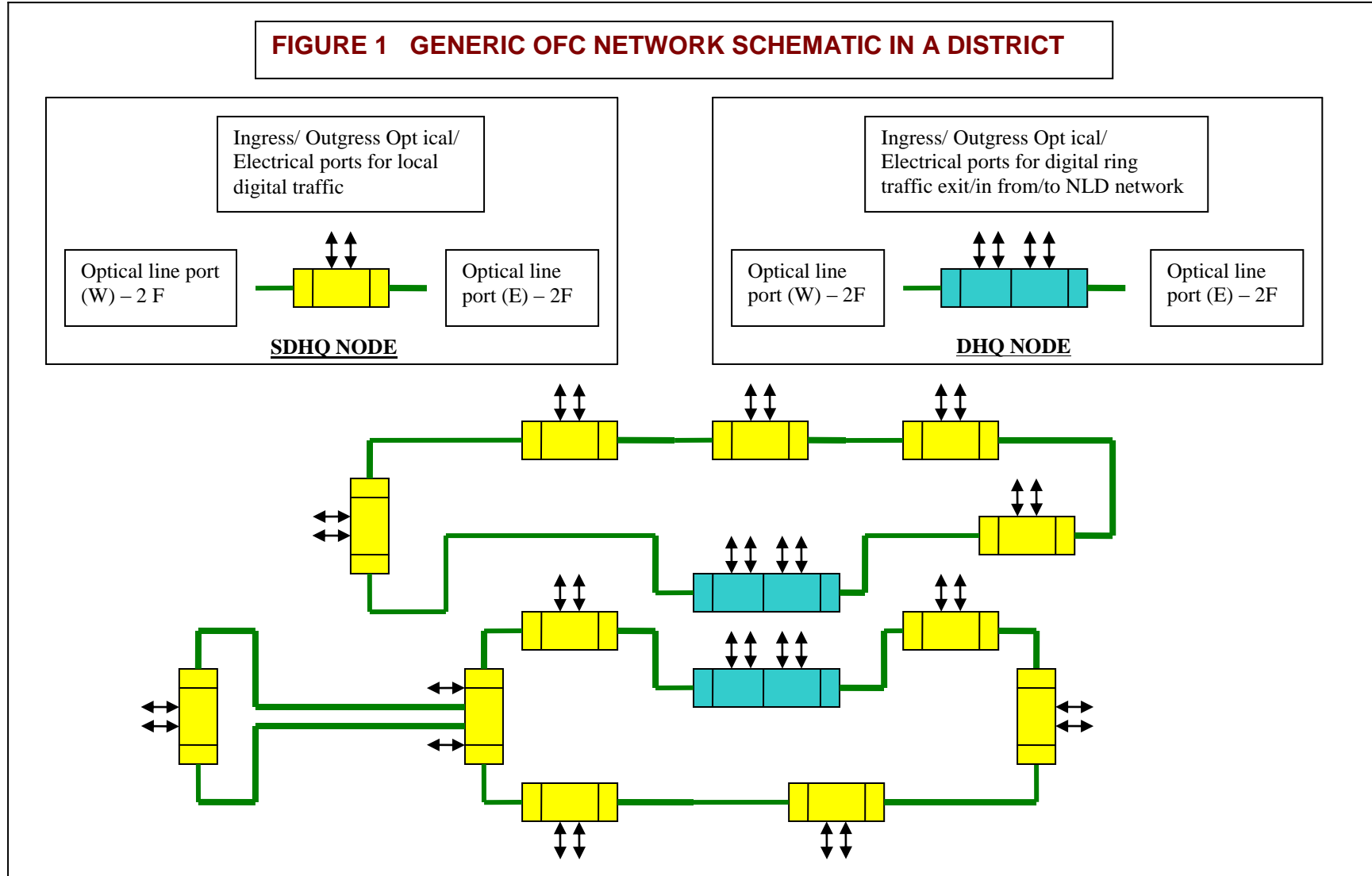
This certified true copy should be submitted on the letterhead of the Company, signed by the Company Secretary or any of the authorized Directors of the Company and the Common Seal of the Company shall be affixed.

**ANNEXURE III-3****CHECK LIST**

<b>No</b>	<b>Brief description</b>	<b>Clause Ref.</b>	<b>Included Yes/ No/ Not applicable</b>
1	Original receipt for purchase of tender document	1.8 & 3.12	
2	License /Registration details of applicable BSO/ CMTS/ UASL/ NLDO / IP-2 Certificate in Annexure III-1 Table III-1.1	3.5	
3	CD containing copies of Licenses/ Registration Certificates	-	
4	Board Resolution as per Annexure III-2	3.5 & 3.12	
5	Compliance Statement as per Annexure III-5	3.10 & 3.23	
6	Earnest Money Bank Guarantee in prescribed format of Annexure III-6	3.13	
7	Format for Power of Attorney for Bid Signatory	3.12	
8	Original plus four copies of Bid	3.16 & 3.17	
9	Technical and Financial bids submitted in separate envelops	3.17	

ANNEXURE III-4

FIGURE 1 GENERIC OFC NETWORK SCHEMATIC IN A DISTRICT



**ANNEXURE III-5**

**COMPLIANCE STATEMENT**

We \_\_\_\_\_ (name of the Company) state that we comply in full manner with all the General, Commercial, Technical, Operating, Financial Conditions, Terms of Financial Bid and Special Conditions of the Tender Document for Support from USO Fund for augmentation and expansion of existing intra-district SDHQ – DHQ OFC network for transport of rural / remote area traffic on bandwidth sharing basis on build, operate and own basis in NE-I Circle\_\_vide Tender No.....dated-----without any reservation and deviation.

For and on behalf of (Name of the company)

**ANNEXURE III-6**

**PROFORMA FOR EARNEST MONEY BANK GUARANTEE**

Whereas \_\_\_\_\_ (hereinafter called the tenderer”) has submitted their offer dated \_\_\_\_\_ in response to Tender No. \_\_\_\_\_ for augmentation and expansion of existing intra-district SDHQ – DHQ OFC network for transport of rural/remote area traffic on bandwidth sharing basis on build, operate and own basis in NE- I Circle (hereinafter called the “tender”).

KNOW ALL MEN by these presents that WE \_\_\_\_\_ (hereinafter called the “Bank”) having our registered office at \_\_\_\_\_ are bound unto the President of India acting through Administrator Universal Service Obligation Fund (hereinafter called the “Administrator”) in the sum of Rs. \_\_\_\_\_ for which payment will and truly to be made to the said Administrator. The Bank binds itself, its successors and assigns by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Administrator during the period of its validity-
  - a) Fails to furnish the Performance Security for the due performance of the Agreement.
  - b) Fails or refuses to execute the Agreement within the specified period.

We undertake to pay without any demur the Administrator up to the above amount upon receipt of its first written demand, without the Administrator having to substantiate its demand, provided that in its demand the Administrator will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of bid validity of 180 calendar days and is further extendable at the request of the Administrator for another period of 180 days.

Signed and sealed with the Common Seal of the said Bank this \_\_\_\_\_ day  
of the \_\_\_\_\_.

(Signature for and behalf of the Bank)

Annexure III-7

**PROFORMA FOR PERFORMANCE BANK GUARANTEE**

To  
The President of India  
Acting through the Administrator (USF)

In consideration of the President of India (hereinafter referred to as 'the Administrator') having agreed to enter into an Agreement with M/s \_\_\_\_\_ of \_\_\_\_\_ (hereinafter called 'the SUCCESSFUL BIDDER/ HOST OPERATOR') to..... (name of activity) provided under the Agreement (hereinafter called 'the SERVICE') as per Tender Document and Letter of Intent/Agreement No. \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter called 'the said Agreement') on the terms and conditions contained in the said Agreement which inter-alia provides for production of a Bank Guarantee to the extent of Rs. \_\_\_\_\_ (in words \_\_\_\_\_) for the due observance and performance of the terms and conditions of the said Agreement. We \_\_\_\_\_ (indicate the name and address and other particulars of the Bank) (hereinafter referred to as 'the Bank') at the request of the HOST OPERATOR hereby irrevocably and unconditionally guarantee to the Administrator that the HOST OPERATOR shall render all necessary and efficient services which may be required to be rendered by the HOST OPERATOR in connection with and/or for the performance of the said AGREEMENT and further guarantees that the service which shall be provided by the HOST OPERATOR under the said Agreement, shall be actually performed in accordance with terms & conditions of the AGREEMENT to the satisfaction of the Administrator.

2. We, the Bank, hereby undertake to pay the Administrator an amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) as the Administrator shall demand for any claim under the said AGREEMENT for liquidated damages or breach of any of the terms and conditions contained in the said Agreement including non extension of the validity of this guarantee.

3. We, the Bank hereby, in pursuance of the terms of the said Agreement, absolutely, irrevocably and unconditionally guarantee as primary obligor and not merely as surety the payment of an amount of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) to the Administrator to secure due and faithful performance by the HOST OPERATOR of all his/their obligations under the said Agreement.

4. We, the Bank hereby also undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Administrator stating that the amount claimed is due by way of liquidated

damages or by reason of breach by the said HOST OPERATOR of any of the terms or conditions contained in the said Agreement or by reason of the HOST OPERATOR'S failure to perform any of it's obligations under the said Agreement.

5. We, the Bank, hereby agree that the decision of the Administrator as to whether the HOST OPERATOR has failed to or neglected to perform or discharge his duties and obligations as aforesaid and/or whether the service is free from deficiencies and defects and is in accordance with or not of the terms & conditions of the said Agreement and as to the amount payable to the Administrator by the Bank hereunder shall be final and binding on the Bank notwithstanding any differences between the Administrator and the HOST OPERATOR, or any dispute between them pending before any court, tribunal arbitrator or otherwise or by the discharge of the HOST OPERATOR for any reason whatsoever.

6. WE, THE BANK, DO HEREBY DECLARE AND AGREE that:

(a) the Guarantee herein contained shall remain in full force and effect for a period of one Year from the date hereof and that it shall continue to be enforceable till Administrator certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said HOST OPERATOR and accordingly discharged this guarantee.

(b) the Administrator shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance of any obligations by the said HOST OPERATOR from time to time or to postpone for any time or from time to time any of the powers exercisable by the Administrator against the said HOST OPERATOR and to forbear or to enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any variation or extension being granted to the said HOST OPERATOR or forbearance act or omission on the part of the Administrator or any indulgence by the Administrator to the said HOST OPERATOR or to give such matter or thing whatsoever which under the law relating to sureties would but for this provision, have effect of so relieving us.

(c) any claim which we have against the HOST OPERATOR shall be subject and subordinate to the prior payment and performance in full of all the obligations of us hereunder and we will not without prior written consent of the Administrator exercise any legal right or remedy of any kind in respect of any such payment or performance so long as the obligations of us hereunder remains owing and outstanding.

(d) This Guarantee shall be irrevocable and the obligations of us herein shall not be conditional of any prior notice by us or by the HOST OPERATOR.

(e) This Guarantee shall not be vitiated by reconstruction or merger of the HOST OPERATOR with any other company or winding up or liquidation of the HOST OPERATOR.

7. We the BANK undertake not to revoke this Guarantee during its currency except with the previous consent of the Administrator in writing.

SIGNED and SEALED with the common seal of Bank on

Dated \_\_\_\_\_ day \_\_\_\_\_ for  
\_\_\_\_\_  
(Name of the Bank)

Witness:

1.....  
.....  
.....  
.....

2.....  
.....

**Annexure III-8**

**FORMATS FOR TECHNICAL REQUIREMENT**

To,  
**Insert Address**

Dear Sir

I certify that the Applicant has a minimum experience of 500 Route km of OFC Network & 50 optical nodes (where each optical node is of 155 Mbps/equivalent or higher capacity), **during the last 5 years from the date of issue of Tender**, as per the Attachment No. 1 to this Annexure.

**Signature of Company Secretary**

**Signature and Seal of Auditors**

**(Please also affix company seal)**

Date:

**Note:**

The above response sheet should be signed and certified as true by the Company Secretary and Auditor appointed by the Applicant. The Auditor must be a qualified Chartered Accountant.

**Attachment 1 to Annex III-8**

Name of Bidder: \_\_\_\_\_

**EXPERIENCE OF OFC ROUTE KMS & OPTICAL NODES DURING THE  
LAST FIVE YEARS FROM THE DATE OF ISSUE OF TENDER**

Sl. No.	Name of Applicant or their Parent Company	Relationship with Applicant Company	State	Route description	Date of Commissioning	OFC Route KM.*	System Capacity (Mbps)	Transmission Technology	No. of Optical Nodes on the Route^	Name of Nodes with capacity	
										Name	Capacity
1.											
2.											
<b>Total high-capacity route Km.</b>							<b>Total No. of Optical Nodes on the Routes</b>				

\* Bidder will furnish certified **documentary proof** of installing & commissioning of OFC cable and optical nodes.

^ Optical nodes of only 155 Mbps/equivalent or higher capacity to be indicated here.

**ANNEXURE-III-9****FORMAT FOR FINANCIAL REQUIREMENT - NET WORTH**

To,  
**Insert Address**

Dear Sir,

I certify that the Applicant has a minimum net worth of **Rs. ----- Crore** in the last financial year's audited annual accounts **(ended on 31.3.09)**. This net worth has been calculated as per the instructions provided in the Tender document.

For the above calculations, we have considered the following companies for the Financial Year \_\_\_\_\_:

<b>Name of Applicant or their Parent Company</b>	<b>Relationship with Applicant</b>	<b>Net Worth (Rs. Crore)</b>
<b>Total</b>		

<b>Sl. No.</b>	<b>Item</b>	<b>Value in Rs.</b>	<b>Schedule, items and page number of the Annual Accounts</b>
1	Subscribed and Paid-up Equity share capital		
2	Add: Reserves		
3	Subtract: Revaluation Reserves		
4	Subtract: Intangible Assets		
5	Subtract: Miscellaneous Expenditures to the extent not written off and		
6	Subtract: Any other Accrued Liabilities		
7	<b>Net Worth = 1 + 2 - 3 - 4 - 5 - 6</b>		

**Signature of Company Secretary**

**(Please also affix company seal)**

Date:

**Note:**

1. The above response sheet should be signed and certified as true by the Company Secretary.

**ANNEXURE-III-10**

**AUDITED ANNUAL ACCOUNTS OF THE APPLICANT AND PARENT COMPANY,  
IF APPLICABLE, AS PER SCHEDULE VI OF THE COMPANIES ACT**

**ANNEXURE-IV-1**

**SERVICE LEVEL AGREEMENT BETWEEN HOST OPERATOR AND OTHER SERVICE PROVIDER/INTERNET SERVICE PROVIDER (ISP) FOR CARRIAGE OF DIGITAL TRAFFIC**

**PREAMBLE**

This agreement, hereinafter called the Service Level Agreement (SLA), is made on the..... day of .....(year) to be effective from .....(date) between M/s..... having office at..... and registered office at ..... (Hereinafter called the 'Host Operator' which expression shall unless repugnant to the context, include its successors in business, legal representatives and administrators or permitted assigns) of the ONE PART, and, M/s ..... having office at ..... and registered office at ----- (Hereinafter called the "Other Operator" which expression shall unless repugnant to the context, include its successors in business, legal representatives and administrators or permitted assigns) of the OTHER PART.

NOW the AGREEMENT WITNESSETH shall cover the following salient features:

**1. Service Level Agreement Period**

The validity of this service level agreement shall be for a minimum period of five years or till the validity of the agreement with USOF. The SLA shall be renewable at mutually agreed terms for further five-year periods.

**2. General Conditions**

This agreement is applicable for transport of telecom traffic over the subsidized intra-district OFC networks.

**3. Responsibilities of Host Operator**

**4. Responsibilities of Other Operator**

**5. Provision and acceptance of service**

Data Rate \_\_\_\_\_  
From \_\_\_\_\_(destination)\_\_\_\_\_ To \_\_\_\_\_(destination)\_\_\_\_\_  
Km. slab \_\_\_\_\_  
Lease charges \_\_\_\_\_  
Route description \_\_\_\_\_  
Protection Level \_\_\_\_\_  
Priority \_\_\_\_\_

**6. Uptime**

During the period of SLA, the Host Operator shall ensure proper functioning of the network ensuring a **reliability** (uptime) of .....% (..... per cent) on a monthly/ quarterly basis.

**7. Measurement of “downtime” or “fault duration”**

Causes of downtime include but are not limited to

- AC Main Power outages
- Power Backup outages
- Equipment failure
- OFC cuts
- Earthing failure
- Security failure
- Human error
- Process failure

**8. Determination of Fault Duration**

**9. Entry and inspection by Other Operator**

**10. Procedure of Fault booking**

**11. Restoration of Faults**

**12. Bandwidth Charges**

**13. Payment terms and conditions**

**Article I. 14. Termination of the Agreement**

**Article II. 15. Consequence of Termination**

**Article III. 16. Severability**

**17. Rebates**

**18. Arbitration**

**19. Force Majeure**

**20. Any other condition**

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THROUGH THEIR RESPECTIVE AUTHORIZED REPRESENTATIVES ON THE DAY AND YEAR FIRST ABOVE WRITTEN.

Signed and delivered for and on behalf of Host Operator.

By \_\_\_\_\_

Witness

1 \_\_\_\_\_

2 \_\_\_\_\_

Signed on behalf of M/s. \_\_\_\_\_ (Other Service Provider/ISP)

BY SHRI \_\_\_\_\_ HOLDER OF GENERAL POWER OF  
ATTORNEY DATED \_\_\_\_\_ EXECUTED IN ACCORDANCE WITH  
THE RESOLUTION NO. NIL DATED \_\_\_\_\_ PASSED BY BOARD  
OF DIRECTORS.

In the presence of:

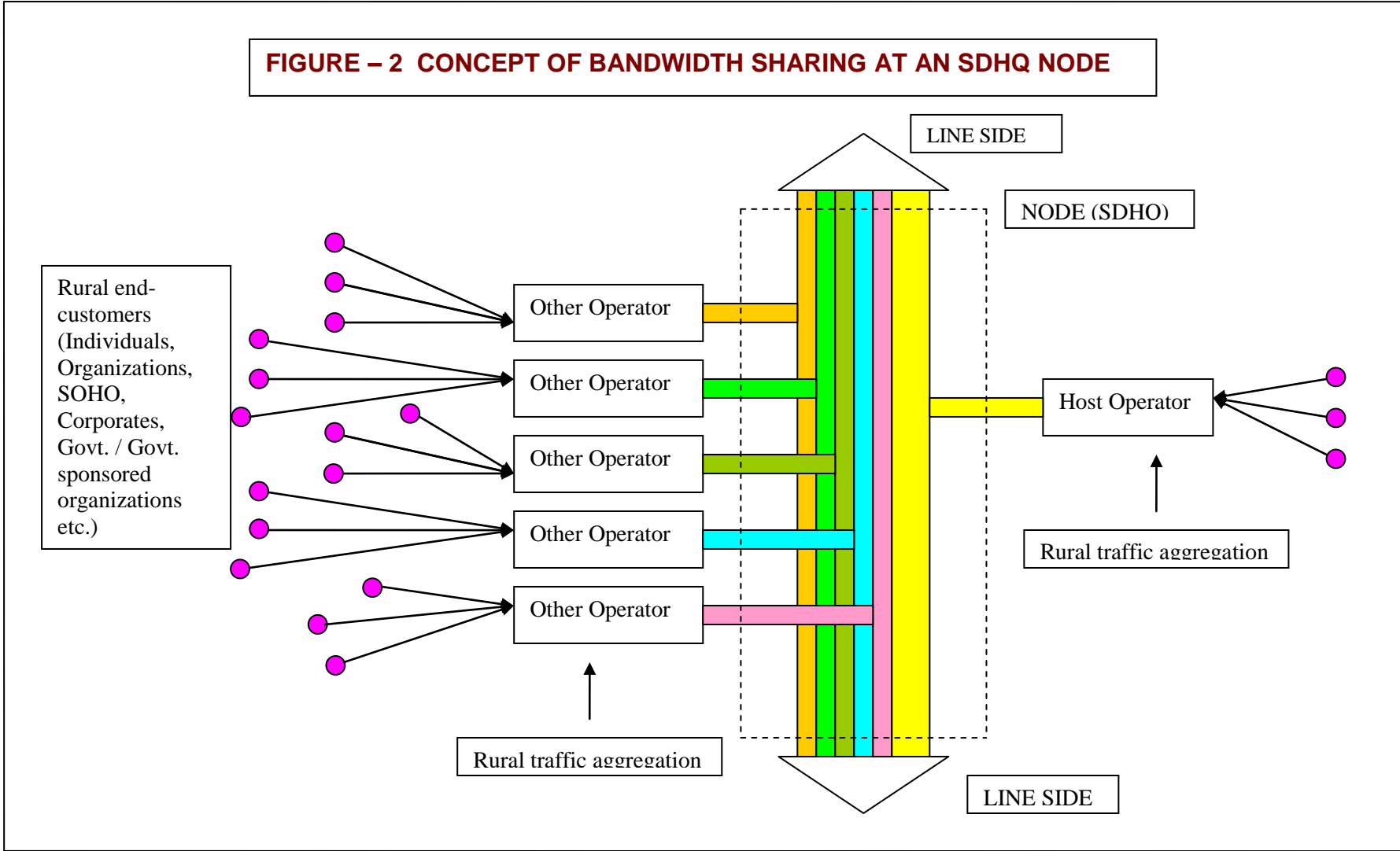
Witness:

1 \_\_\_\_\_

2 \_\_\_\_\_

ANNEXURE V-1

**FIGURE – 2 CONCEPT OF BANDWIDTH SHARING AT AN SDHQ NODE**



**ANNEXURE V-2**

**OFC CONSTRUCTION PRACTICE**

**1. INTRODUCTION**

The following are for guidance purpose for OFC Construction Practices. The following practices are summarized here-under, from the point of view of describing the scope of work under various items of work.

**2. ROUTE PLANNING AND SURVEY**

The Optical Fiber Cable route will be planned taking a balanced judgement on following issues-

- a) The route should achieve minimum possible route length vis-à-vis route having maximum number of towns with potential telecom growth, as per the scope of this Bid.
- b) The node locations off the main road should preferably be connected by routing the main cable to the node on separate roads (from main road) if possible. If not at all feasible then spur route (single cable to node) may be planned.

**3. ROUTE-SURVEY RECORD**

After deciding above-mentioned issues, a detailed measurement of lengths of cable route along with details of rail/road crossings, culverts, causeways, etc may be recorded in the detailed survey register. The probable locations of mid-section optical fibre joints, three-way joint locations, and major man-holes for housing the joints with provision for future branch routes, terminations and re-generators may also be decided and marked on the route map.

**4. PERMISSIONS**

- 4.1. On the basis of surveys, general permission from road and rail authorities for laying the Optical Fiber Cable along the decided routes and permission for rail / road crossings will have to be obtained.
- 4.2. It is imperative that the cable is laid after obtaining due permission from all the concerned authorities to avoid any damage/shifting at a later stage and also disruption of services/revenue loss.

**5. ALIGNMENT**

- 5.1. Generally, O.F.C. is laid straight as far as possible along the road near the boundaries, away from the burrow pits. The O.F.C. is laid along the roads at a minimum distance of 15 meters from the centerline of the road or in accordance with the permission from the concerned road authorities in view of their road-widening plan.

- 5.2. In special cases, where it may be necessary to avoid burrow pits or low lying areas, the cable may be run underneath the shoulders at a distance of 0.6 meters from the outer edge of the road embankment provided the same is located at least 4.5meters away from center line of road and 1.2.meter below the road surface.
- 5.3. In **city areas** the trench will normally follow the foot path of the road except where it may have to come to the edge of the carriage way when cutting across road with specific permissions from the authorities responsible for maintenance of that road.
- 5.4. **Outside the City limits** trench will normally follow the boundary of the roadside land.
- 5.5. However, where the road side land is full of burrow pits or afore-station or when the cable has to cross culverts, bridges or streams, the trench may be closer to the road edge or in some cases, over the embankment or shoulder of the road as per approval of site-engineer.
- 5.6. The line up of the trench must be such that HDPE Pipe(s) shall be laid in a straight line, both laterally as well as vertically except at locations where it has to necessarily take a bend because of change in the alignment or gradient of the trench, subject to the restrictions mentioned else where.

## 6. DEPTH AND SIZE OF TRENCH

- 6.1. The Optical Forcible is laid through HDPE Pipes buried at a nominal depth of 165 cm. The detailed specifications and further steps involved in OF Cable construction are as under –
- 6.2. Excavation of trench up to a nominal depth of 165 cm. in **non-rocky soil**, according to Construction specifications along National/State-Highways/Other Roads and also in city limits. The trench will be excavated to a depth which is not less than 165 cm. from top of the surface, unless otherwise permitted.
- 6.3. In **rocky soil** where chiseling/blasting is required, minimum 90 cm. depth shall be achieved.
- 6.4. The width of the trench shall be sufficient to lay requisite number of HDPE/GI/RCC pipes and also concreting wherever required.
- 6.5. When trenches are excavated in slopes/uneven ground/inclined portion, the lower edge shall be treated as top surface of land and depth of trench measured accordingly.
- 6.6. In certain locations, such as uneven ground/hilly areas and all other places due to any other reason, excavation may be done beyond standard depth of 165 cm. so that the bed of the trench is as smooth as possible.
- 6.7. Near the culverts, both ends of the culverts shall be excavated to a depth of more than 165 cm. so that the gradient is less than 15 degrees with horizontal.

- 6.8. In large burrow pits, excavation shall be done not less than 165 cm. in depth and both sides of burrow pit shall be excavated more than 165 cm. in depth to keep gradient of bed less than 15 degree with horizontal.
- 6.9. If excavation of trench is not possible up to the minimum depth of 165 cm. then the trench-depth may be kept less with approval of site-engineer.
- 6.9.1 In **non-rocky soil**, the depth from top of PLB may be relaxed to 150cm. as per decision of site-engineer.
- 6.9.2 In **rocky soil**, where excavation has to be done by chiseling/blasting, trench depth should be minimum 90cm. from top of PLB.
- 6.9.3 In non-rocky and built-up area where it is not found feasible to go deeper, a depth of minimum 1.0m from top of PLB may be allowed.
- 6.9.4 If depth is less than 1.2m, then, suitable mechanical protection by CC or RCC/GI pipe should be provided.
- 6.10. Rail/Road crossing depth should be minimum 1.5 meter and encased in RCC pipe or 65mm. diameter GI pipe.
- 6.11. On culverts, around bridges or places with some obstruction for small stretches of maximum 10 - 15 metres, OFC should be laid at the most possible depth with suitable protection of CC/ RCC/ GI pipes.
- 6.12. Warning Bricks**  
Warning bricks shall be used in city area i.e. within municipal limits. Bricks (non-modular) class designation-5(50) of the actual size 225 mm (length) x 111 mm (width) x 70 mm (thick) shall be laid breadth-wise, average 8 bricks per metre immediately above the sand layer in which PLB HDPE pipe is installed.
- 6.13. Warning Tape**  
A Warning Tape (width: 10cm, thickness: 500 micrometer), made of HDPE/LDPE (low density poly ethylene)/other suitable inert material, containing a printed warning message shall also be laid over the pipe throughout the cable route at a depth of 1000mm in normal soil (the depth of warning tape in soft rock, hard rock and at less-depth stretches shall be as per site-engineer), for warning the person who may be excavating the trench in future.

## **7. FINISHING TRENCH-BED**

After trench is excavated to the specified depth the bottom of the trench has to be cleared of all stones or pieces of rock & leveled up properly. A layer of ordinary soil/sand of not less than 5 cm. thick is to be used on the trench-bed for leveling the trench to ensure that cable when laid will follow a straight alignment and possibility of damage to HDPE duct and/or O.F. cable is avoided.

## **8. REMOVING OBSTRUCTING VEGETATION**

In order to prevent damage to HDPE Pipe/PLB Blowing Type/Pre-installed rope over a period of time, due to the growth of trees, roots, bushes, etc., such vegetation shall be removed at the time of construction.

**9. AVOIDING DAMAGE TO EXISTING UNDERGROUND INSTALLATIONS**

While trenching, no damage should be caused to any underground installations belonging to others agencies; any such damage caused should be made good by the successful bidder.

**10. CLEARANCE FROM EXISTING UNDERGROUND INSTALLATION**

A minimum free clearance of 15 cm. should be maintained above or below any existing underground installations.

**11. EXCAVATION**

11.1 In city limits as well as in built up area, only manual labour will be used to ensure that no damage is caused to any underground or surface installations belonging to other public utility services and/or private parties.

11.2 Along the High ways and cross country mechanical means of excavation may be used, provided that no underground installation existing in the path of excavation if any, are damaged.

11.3 Water present in the trench at the time of laying the HDPE Pipe/PLB Blowing Type/Pre-installed ropes shall be pumped out before lowering in the pipes to ensure that no mud or water gets into the pipes.

11.4 **Horizontal boring method** shall be used to bore a hole of required size and push through G.I. Pipe of 65mm./40mm. dia. for encasing the HDPE Pipe/PLB Blowing Type/Pre-installed rope which is also pushed through at road crossing or rail crossing or small hillocks etc.

11.5 In **Rocky strata** excavation shall be carried out by use of electro-mechanical means like breakers or by blasting, wherever permissible with express permission from the competent authority. If blasting operations are prohibited or not practicable, **chiseling** shall be carried out for excavation in hard rock. Minimum 90cm. trench depth shall be achieved.

11.6 The classification of soil is given in Clause 18 below.

11.7 Where soil is likely to cave in, sufficient width and slope of trench sides should be excavated.

11.8 In all cases, the slope of the trench shall not be less than 15 degrees with the vertical. The width of the trench shall normally be 45cm. at the top and 30 cms at

the bottom. In case, additional pipes (HDPE /GI /RCC Pipes) are to be laid in some stretches, the same shall be accommodated in this normal size trench.

## 12. LAYING OF PLB-HDPE DUCT

- 12.1 Preparatory to aligning the pipe for jointing, each length of the duct shall be thoroughly cleaned to remove all sand, dust or any other debris that may clog, disturb or damage the optical fiber cable when it is pulled/blown at a later stage. The ends of each pipe and inside of each PLB-HDPE Socket shall be thoroughly cleaned of any dirt or other foreign materials.
- 12.2 After the trench is cleaned the PLB-HDPE Pipe/Coil shall be laid in the cleaned trench, jointed with 'O' ring type PLB-HDPE Couplers/Sockets & 6 mm PP rope should be drawn through the PLB-HDPE Pipes at the time of laying the pipes to facilitate cable pulling at a later stage. At every manhole approximately at every 200m. or at bends or turns the PP rope will be tied to the HDPE end caps used for sealing the HDPE pipes, to avoid entry of rodents/mud etc.
- 12.3 At the end of each day work, the open ends of the pipes sections shall be tightly closed with end caps to prevent the entry of dirt/mud, water or any foreign matter into HDPE pipe until the work is resumed.
- 12.4 HDPE Pipe/PLB Blowing Type/Pre-installed ropes coupled by HDPE/PLB sockets shall be laid in excavated trenches and on bridges and culverts. 6 mm Polypropylene Para pro rope (P.P. rope) shall be drawn through the HDPE pipes/coils and HDPE pipe ends sealed at every manhole by HPE end caps of suitable size.
- 12.5 The HDPE Pipe/PLB Blowing Type/Pre-installed ropes can be of 75 mm diameter and 50 mm diameter with collar jointing arrangement or spigot.
- 12.6 The HDPE Pipe/PLB Blowing Type/Pre-installed ropes shall be laid in 150/100 mm diameter RCC spun pipes, at road crossings and through G.I. Pipes on culverts and bridges and also in exceptional cases where the depth of the trench is less than 165 cm.
- 12.7 At road crossings, two or more extra HDPE Pipe/PLB Blowing Type/Pre-installed ropes should be laid for future provision.

## 13. PROTECTION TO PLB-HDPE DUCT/OFC IN THE DUCT

- 13.1. In **cross country routes**, where depth of trench is less than 1.20m, HDPE Pipe/PLB Blowing Type/Pre-installed ropes should be laid within GI/RCC pipes. Alternatively, HDPE Pipe/PLB Blowing Type/Pre-installed ropes may be encased in reinforced concrete casing of dimensions 275mm x 275mm.
- 13.2. In **built-up areas**, irrespective of depth suitable protection shall be provided. Where the depth of trench is **not less than** 165 cm. HDPE Pipe/PLB Blowing Type/Pre-installed ropes should be laid within GI/RCC pipes. In case of trench depth **being less than** 165 cm, the HDPE Pipe/PLB Blowing Type/Pre-installed

ropes may be encased in reinforced concrete casing of dimensions 275 mm x 275 mm.

- 13.3. In case of **nullahs**, which are dry for nine months in a year, the HDPE Pipe/PLB Blowing Type/Pre-installed ropes shall be laid within the RCC pipe laid at a minimum depth of 165 cm. The RCC pipes shall be extended 2 mtrs. beyond the bed of nullah on either side.
- 13.4. Wherever GI pipes are used, rubber bushes shall be used at the two ends of the GI pipes to protect the damages of HDPE Pipe/PLB Blowing Type/Pre-installed ropes.
- 13.5. Wherever RCC pipes are used for protection, two ends must be properly sealed to bar entry of rodents, as described below. The gaps between the RCC collars and the RCC pipes shall be sealed using cement mortar 1:3 (1: 53 grade cement of reputed brand, 3: fine sand without impurities). Every third collar of RCC pipes (normally of 2 meters length) and also both ends of RCC Pipes will be embedded in a concrete block of size 40cm.(L)x40cm.(W)x25cm.(H) of 1:2:4 cement concrete mix (1: 53 grade cement of reputed brand, 2:coarse sand, 3: stone aggregate of normal size of 20 mm.) so that the alignment of RCC pipes remain firm and intact and to avoid entry of rodents.
- 13.6. Normally, 100 mm RCC Pipe shall be used for protecting HDPE Pipe but if more than one HDPE Pipe is to be laid and protected, RCC Pipe of suitable size to accommodate the required number of HDPE Pipe shall be used.
- 13.7. On road crossings, the HDPE Pipe/PLB Blowing Type/Pre-installed ropes shall be laid a depth 165 cm. encased with full round RCC pipe. The RCC pipes shall be extended 3 meters on either side of the road.
- 13.8. On Rail bridges and crossings, the HDPE Pipe/PLB Blowing Type/Pre-installed ropes shall be encased in suitable cast iron/RC pipes as prescribed by the Railway Authorities.

## **14. MECHANICAL PROTECTION MATERIAL SPECIFICATIONS**

### **14.1 RCC Full Round Pipes**

Reinforced cement concrete pipes (Spun type) coupled with RCC collars sealed with cement mortar are used to provide mechanical protection to HDPE pipes/coils. The RCC pipes/collars should be of NP-2 class for 150 mm outer dia. and 100 mm internal dia. full-round, conforming to IS standard 458-1988 revised up to date. The pipes should have a nominal length of 2 meters.

- 14.1.1 The RCC collars should be properly sealed using cement mortar 1:3 (1: 53 grade cement of reputed brand, 3: fine sand without impurities). If the mechanical protection is provided by RCC pipes, every third joint will be embedded in a concrete block of size 60cm.(L) x 40 cm.(W) x 25 cm. (H) of 1:2:4 cement concrete mix 1:2:4 (1: cement, 2: coarse sand, 4: stone aggregate of 20mm nominal size) so that the alignment of RCC pipes remain firm and intact. Both ends of RCC/GI pipes would have been sealed by providing concrete block of size

40cm.(L) x 40cm.(W) x 25cm. (H) of 1:2:4 cement concrete mix to avoid entry of rodents.

**14.2 G.I. Pipes**

G.I. Pipes should be of medium duty class having dia. of 65/40 mm. The G.I. Pipe should conform to IS 554/1985 (revised upto date), IS 554/1989(Part-I)-1900 Sockets (revised upto date) and IS-1239 (Part II)/ 1992 (revised upto date). As space on parapet wall on Bridge/culverts is limited, 40mm GI pipes may be used with 32mm HDPE coil drawn inside.

**14.3 M.S. Weld Mesh**

The HDPE pipes can be protected by embedding it in concrete of size of 275 mm. x 275mm reinforced with MS weld mesh. The MS weld mesh used should be of 50mm x 100mm size, 12 SWG, 120 cm. in width in rolls of 50 m each. One meter of MS weld mesh caters to approx. 3 meters of concreting.

**15. BACKFILLING AND DRESSING THE TRENCH**

15.1 The earth used for filling shall be free from all roots, grass, shrubs, vegetation, trees, saplings and rubbish.

15.2 After the HDPE Pipe/PLB Blowing Type/Pre-installed ropes have been properly laid in the trench at the specified depth, the back filling operation shall follow as closely as practicable. The back filling operation shall be performed in such a manner as to provide firm support under & above the pipes and avoid **bend or deformation of the HDPE Pipe/PLB Blowing Type/Pre-installed ropes** when these get loaded with the back filled earth. No debris shall be allowed in the back fill at any time.

15.3 At locations where the back filled material contains hard clods, rock fragments and other materials which may cause injury to HDPE Pipe/PLB Blowing Type/Pre-installed rope & where excavated or rock fragmi are intended to refill the trench in whole or in part, the trench should be initially filled, with a **layer of ordinary soil or de-rocked loose earth of not less than 10 cm. above the pipes.**

15.4 Back filling on public, private roads, railway crossings, and foot paths in city areas shall be performed immediately after laying the HDPE Pipe/PLB Blowing Type/Pre-installed ropes. Back filling at such locations shall be thoroughly rammed, so as to ensure original condition & made safe to traffic. All excess soil/material left out on road/footpath/railway crossing shall be removed. However, along the high ways and cross country, the dug up material left out should be kept as heap above the trench while refilling.

15.5 In **city limits, no part of the trench should be kept open for more than 50 meters length at any time** and in all places where excavation has been done, **no part of the trench should be kept open over-night** to prevent any mishap or accident in darkness.

**16. LAYING PROTECTION PIPES ON BRIDGES AND CULVERTS**

- 16.1 The work involves laying of HDPE pipes /PLB Blowing Type/Pre-installed ropes through GI Pipes of not more than 4" diameter or GI Troughs of size 4" x 4" laid on the Bridges/Culverts.
- 16.2 In bridges/Culverts, where proper ducts are already provided, the HDPE Pipe/PLB Blowing Type/Pre-installed ropes will be laid through the ducts.
- 16.3 Normally in the Bridges/Culverts, where there are no ducts and where the cushion on the top of the Arch is 0.5m or more thick the G.I. Pipe/ G.I. Trough carrying HDPE Pipe/PLB Blowing Type/Pre-installed rope & Cable may be buried on the top of the Arch adjoining the parapet wall, by digging close to the wheel guards.
- 16.4 Where the thickness of the Arch is less than 0.5m, the pipes must be buried under the wheel guard masonry and the wheel guard rebuilt.
- 16.5 If any of the above methods is not possible, the G.I. Pipe/G.I. Troughs must be clamped outside the parapet wall with suitable clamps. If necessary, the pipes may be taken through the parapet wall at the ends where the wall diverges away from the road.
- 16.6 In cases, where the methods explained in clause 15.4 & 15.5 above, are not possible, the G.I. Pipes/G.I. Troughs can be fixed on the top of the road kerb close to the inside face of the parapet wall by means of clamps, supplied, using rawl plugs & wood screws or small diameter bolts, without damaging concrete & limiting external diameter of the bolts to 7.5 mm. The permission for carrying out this work will be obtained from the Road Authorities.
- 16.7 Methods cited in clauses above should be carried out under close supervision of the Road authorities and restoration of any damages to the structures in any of the methods adopted should be done to the entire satisfaction of the road authorities.
- 16.8 When HDPE Pipe/PLB Blowing Type/Pre-installed ropes are laid on bridges/culverts, except when pipes are clamped outside of the bridge, cement concreting shall be provided over the protection pipes/troughs.
- 16.9 If PLB-HDPE duct is laid in culvert bed (second option vis-à-vis using the overhead bridge/culvert), protection like GI+CC, RCC pipe shall be provided.

## **17. SPECIFICATIONS FOR CONCRETING**

- 17.1 The nominal dimension of concreting is of 275 mm x 275 mm. section. However depending on the actual situation, this cross section may be varied to ensure uniformity with any existing structure / base, on which the GI pipes/ GI troughs are placed, as required by the road authorities.
- 17.2 As the RCC is cast at site, it is imperative to ensure that proper curing arrangements are made with adequate supply of water. Mechanical mixer should be used for providing consistency of the mix.

- 17.3 The concreting surface should be thoroughly cleaned and leveled before concreting. Necessary wire mesh of adequate size shall be provided as reinforcement for the concrete.
- 17.4 For carrying out concreting work in trenches, yellow PVC sheets of width not less than 1.0 m and weight not less than  $1 \text{ kg./8m}^2$  shall be spread and nailed on sides of the trench to form trapezoidal section for concreting in the cleaned trench, to avoid seepage of water into the soil. A bed of cement concrete mixture of appropriate width and 75 mm thickness shall be laid on the PVC sheet, before laying HDPE pipes. The HDPE pipes shall then be laid above this bed of concrete. After laying the HDPE pipes, MS weld mesh would have to be wrapped around and tied and concrete mix is poured to form the required cross sectional dimensions. The strength of RCC is dependent on proper curing; therefore, it is imperative that water content of RCC mix does not drain out into the surrounding soil. Portions where cement concreting has been carried out shall be cured with sufficient amount of water for reasonable time to harden the surface. After curing, refilling of the balance depth of the trench has to be carried out with excavated soil.
- 17.5 At both the ends of the Bridges/Culverts, where the GI Pipes/Troughs slope down and get buried, the concreting should be carried out to ensure that no portion of the GI Pipe/Trough is exposed and further down as required by the site in charge to protect the Pipe/Trough from any possible damage externally caused.
- 17.6 Any damages, caused to the existing structure such as Foot-Path or base of the Parapet or Kerb wall on which GI Pipes/Troughs are placed, should be repaired and original condition restored to the satisfaction of Road Authorities.
- 17.7 Where white wash/colour wash exists on the Bridges/Culverts, the same should also be carried out on the concreted portion to ensure uniformity.
- 17.8 Cement Concrete Mixture used should be of 1:2:4 Composition i.e. 1: :53 grade cement of a reputed company, 2: Coarse Sand, 4: graded Coarse Stone aggregate of 20 mm. nominal size, and reinforced with MS weld mesh.
- 17.9 Smooth finishing of exposed surface should be done with a mixture of 1:3: i.e. 1 Cement: 3 Fine Sand.
- 17.10 Portions where cement concreting has been done shall be cured with sufficient amount of water for reasonable time to harden the surface.

## **18. NATURE OF SOIL**

The nature of soil strata from the standpoint of excavation is categorized as under-

### **18.1. Non -rocky soil (soft soil)**

This will include all types of soils- soft soil/hard soil/murum, i.e. any strata, such as sand, gravel, loam, clay, mud, black cotton murum, single, river or nullah bed boulders, soiling of roads, paths etc. and hard core, macadam surface of any description (water bound, grouted tarmac etc.) line concrete, mud concrete

and their mixtures for excavation of which need application of picks, shovels, scarifiers, ripper and other manual digging implements.

**18.2. Soft - rocky soil (hard soil)**

This type of soil is generally any rock which can be excavated by splitting with crow bars or picks and does not require blasting, wedging or similar means for excavation such as lime stone, sand stone, hard conglomerate. The un-reinforced cement concrete roads as well as other type of roads (except RCC) are also included under this category. If required, light blasting may be resorted to for loosening the materials.

**18.3. Hard- rocky soil**

Generally any rock or boulder for the excavation of which blasting is required such as quartzite, granite, basalt, reinforced cement concrete (reinforcement to be cut through but not separated from concrete) and the like.

**19. SAFETY CONSIDERATIONS**

**19.1 Precautions while working on roads**

19.1.1 Necessary barricades will be provided to prevent any accident to pedestrians or vehicles and night lamps, warning boards and required watchmen will be provided. Sufficient manpower for this shall be employed with caution boards, flags, sign writings etc.

19.1.2 The period between half an hour after sun-set and half an hour before sunrise, and any period of fog or abnormal darkness may also be considered as night for the purpose of these instructions, for the purpose of providing the warning signs.

19.1.3 Excavation liable to cause danger to vehicles or the public must at all times be protected with fencing of rope tied to strong uprights or bamboo pole at a suitable height or by some other effective means. Any such temporary erection which is likely to cause obstructions and which is not readily visible should be marked by posts carrying red flags or boards with a red background by day and by continuously lighted lamps at night.

19.1.4 The flags and the lamps should be placed in conspicuous positions so as to indicate the pedestrians and drivers of vehicles the full expanse i.e. both width and length of the obstruction. The distance between lamps or between flags should not generally exceed 1.25m along the width and 6m along length of the obstruction in non-congested areas, but 4 meters along the length in congested areas. If the excavation is extensive, sufficient notice to give adequate warning of the danger should be displayed conspicuously not less than 1.25m above the ground and close to the excavation.

19.1.5 Where any excavation is not clearly visible for a distance of 25 m to traffic approaching from any direction or any part of the carriage way of the road in which the excavation exists, a warning notice should be placed on the kerbed or edge of all such roads from which the excavation or as near the distance as is practicable but not less than 10 m from the junction of an entering or intersecting road in which the excavation exists.

- 19.1.6 All warnings, in these should have a red background and should be clearly visible and legible. All warning lamps should exhibit a red light, but white lights may be used in addition to facilitate working at night.
- 19.1.7 Wherever required, a passage for pedestrians with footbridge should be provided.
- 19.1.8 At excavations, cable drums, tools and all materials likely to offer obstructions should be properly folded round and protected. This applies to jointer's tents as well. Leads, hoses etc. stretched and across the carriage way should be guarded adequately for their own protection and also that of the public.
- 19.1.9 Where a road or footpath is to be opened up in the course of work, special care should be taken to see that proper protection is provided to prevent any accidents from occurring. Excavation work should be done in such a manner that it would not unduly cause inconvenience to pedestrians or occupants of buildings or obstruct road traffic. Suitable bridges over open trenches should be so planned that these are required for the minimum possible time

**19.1.10 Traffic Control**

The police authorities are normally responsible for the control of traffic and may require the setting up of traffic controls to reduce the inconvenience occasioned by establishment of a single line of traffic due to restriction in road width or any other form of obstruction caused by the work. As far as possible, such arrangements should be settled in advance. If there are any specific regulations imposed by the local authorities, these should be followed.

**19.2 Work along Railway lines**

- 19.2.1 Normally all works at Railway crossing is to be done under supervision of the railway authorities concerned, but it is to be borne in mind that use of white, red or green flags by the Bidder's staff is positively forbidden to be used when working along a railway line as this practice may cause an accident through engine drivers mistaking them for railway signals. When working along a double line of railway, the men should be warned to keep a sharp look on both the "UP" and "DOWN" lines to avoid the possibility of any accident when trains pass or happen to cross one another near the work spot.
- 19.2.2 Where bridges are constructed to accommodate vehicular traffic and is done near or on railway property, it should be with the full consent and knowledge of the competent authorities.
- 19.3 Working in excavations close to electric cables**
- 19.3.1 Before undertaking the work, full information should be obtained from Electricity Authorities regarding any electric cables which are known or suspected to exist near the proposed excavation. Preferably, Electricity Undertaking should be asked to send a representative for consultation.
- 19.3.2 Only wooden handled tools should be used until the electric cables have been completely exposed.

- 19.3.3 A cover slab or concrete, brick or stone, usually protects from above power cables, not laid in conduits. They may or may not be protected on the sides. Digging work should be accordingly done.
- 19.3.4 No workman should be permitted to work alone where there are electric cables involved. At least one more man should be working near by so that help can be given quickly in case of an accident.
- 19.3.5 If disconnection of power could be arranged in that section, it will be better.
- 19.3.6 No electric cables shall be moved or altered without the consent of the Electric Authority and they should be contacted to do the needful. If an electric cable is damaged even slightly, it should be reported to the Electric Authority and any warning bricks disturbed during excavation should be replaced while back filling the trench.
- 19.3.7 Before driving a spike into the ground, the presence of other underground properties should be checked. Information on plans regarding the location of power cables needs not to be assumed as wholly accurate.
- 19.3.8 Full precautions should be taken in the vicinity until the power cable is uncovered. All electric cables should be regarded as being live and consequently dangerous. Any power is generally dangerous, even low voltage proving fatal in several cases.
- 19.3.9 Electric shock-Action and treatment:**  
Free the victim from the contact as quickly as possible. He should be jerked away from the live conductors by dry timber, dry rope or dry clothing. Care should be taken not to touch with bare hands as his body may be energized while in contact. Artificial respiration should begin immediately to restore breathing even if life appears to be extinct. Every moment of delay is serious, so, in the meanwhile, a doctor should be called for.
- 19.4 Danger from failing material**  
Care should be taken to see that apparatus, tools or other excavating implements or excavated materials are not left in a dangerous or insecure position so as to fall or be knocked into trench thereby injuring any workman who may be working inside the trench.
- 19.5 Care when working in Excavations:**  
Jumping into a trench is dangerous. If it is deep, workmen should be encouraged to lower themselves. Workers should work at safe distance so as to avoid striking each other accidentally with tools. If the walls of the trench contain glass bits, corroded wire or sharp objects, they should be removed carefully. If an obstruction is encountered, it should be carefully uncovered and protected, if necessary. Care must be taken to see that excavated material is not left in such a position that it is likely to cause any accident or obstruction to a roadway or waterway. If possible, the excavated material should be put between the workmen and the traffic without encroaching too much on the road.

**19.6 Danger of cave in**

When working in deep trenches in loose soil, timbering up/shoring the side will prevent soil subsidence. The excavated material should be kept at sufficient distance from the edge of the trench or pit. Vehicles or heavy equipment must not be permitted to approach too close to the excavation. When making tunneled opening, it should be ensured that the soil is compact enough to prevent cave in even under adverse conditions of traffic. Extra care should be taken while excavating near the foundations of buildings or retaining walls. In such cases, excavation should be done gradually and as far as possible in the presence of the owners of the property.

**20. JOINT CHAMBER**

The joint chamber is provided at every joint, normally at a distance of 2 km, to keep the O.F.C. joint protected and also to keep extra length of cable, which may be required in the event of faults at a later date. The joint chambers are made at site using bricks and mortar or are of pre-cast RCC type.

**20.1 Construction of brick chamber at site.**

**20.1.1** For constructing brick chamber, first a pit of size 2m x 2m x 1.8m (D) is dug.

**20.1.2** Then, base of the chamber is made using PCC mix of 1:5:10 (1: cement, 5:coarse sand, 10:graded stone aggregate 40 mm nominal size) of size of 1700mm x 1700mm x 80mm (thickness) is constructed.

**20.1.3** Walls of brick chamber having internal dimensions of 1200m x 1200mm x 1000mm (H) should be constructed on this base having wall thickness of 225mm using cement mortar mix of 1:5 (1: cement, 5: fine sand). The bricks to be used for this purpose should be of size 9” x 4.5” x 3” and of best quality available having smooth rectangular shape with sharp corners and shall be uniform in colour and emit clear ringing sound when struck.

**20.1.4** The joint chamber should be so constructed that HDPE pipe/PLB Blowing Type/Pre-installed ropes ends remain protruding minimum 5cm. inside the chamber on completion of plastering. The HDPE pipes should be embedded in wall in such away so that, the bottom brick should support the pipe and upper brick should be provided in a manner that HDPE pipe remains free from the weight of the construction.

**20.1.5** The joint chamber should be plastered on all internal surfaces and top edges with cement mortar of 1:3 (1: cement, 3: coarse sand), 12 mm thick finished with a floating coat of complete cement as per standard.

**20.1.6** Pre-cast RCC slab in two halves with two handles to facilitate easy lifting, of size 700mm x 1400mm each and of thickness of 50mm having one handle for each half in center and word ‘OFC’ engraved on it are to be used to cover the joint chamber. Two numbers of such slabs are required for one joint chamber. This pre-cast slab should be made of cement concrete mix of 1:2:4 (1:cement, 2:coarse sand, 4: stone aggregate 6 mm nominal size ) reinforced with steel wire fabric 75 x 25 mm mesh of weight not less than 7.75 kg/sq. m. The joint chamber is filled

with clean sand before closing. Lastly, back filling of joint chamber pit with excavated soil is carried out.

**20.2 Pre cast RCC chamber**

For fixing pre-cast RCC chamber, first a pit of size 2 m x 2 m x 1.8 m depth is required to be dug. Pre cast RCC chamber consists of three parts (i) round base plate in two half of 140 cm. dia. and 5 cm thickness (ii) full round RCC joint chamber with diametre of 120 cm and height of 100 cm and thickness of 5 cm (iii) round top cover will be in two halves with diametre of 140 cm and thickness of 5 cm having one handle for each half in center and word 'OFC' engraved on it. After, fixing the pre cast RCC joint chamber, the joint chamber is filled with clean sand before closing. Lastly, back filling of joint chamber pit with excavated soil is carried out.

**21. ROUTE /JOINT INDICATOR**

- 21.1 The route/joint indicators are co-located with each manhole/joint chamber. The route-indicators are to be placed at intervals of 200m, along the route. In addition, route indicators are also to be placed where route changes direction like road crossings etc.
- 21.2 The route/joint indicators made of pre-cast RCC, should have the following dimensions-  
Base - 250 mm x 150 mm  
Top - 200 mm x 75 mm  
Height - 1250 mm
- 21.3 The route indicators are painted yellow and the same are placed at 2 ft away from the center of the trench towards jungle side.
- 21.4 The joint indicators are placed at OFC joints and placed 1 ft away from wall of the joint chamber facing jungle side and are painted red.
- 21.5 The engraved word '(initials of service provider) OFC' should be painted in white, on route- as well as joint-indicators.
- 21.6 Numbering of route indicators/joint indicators should also be done in white paint. The numbering scheme for route indicators will be joint No/Route Indicator No. for that joint. For example, '2/6' marking on route indicator means 6<sup>th</sup> route indicator after 2nd joint.
- 21.7 Additional joints on account of faults at a later date should be given number of preceding joint with suffix 'A, B, C, D'; for example sign-writing 2A on a joint indicator means, additional joint between joint No.2 and 3. The numbering of existing route/joint indicator should not be disturbed on account of additional joints.
- 21.8 Enamel paints of reputed brand should be used for painting and sign writing of route- as well joint-indicators.

21.9 The pits for fixing the indicator shall be dug for size of 60 cm x 60 cm and 75 cm (depth). The indicator shall be secured in up right position by ramming with stone and murrum up to depth of 60 cm and concreting in the ratio of 1:2:4 (1: Cement, 2: coarse sand, 4: stone aggregate 20 mm nominal size) for the remaining portion of 15 cm. Necessary curing shall be carried out for the concreted structure with sufficient amount of water for reasonable time to harden the structure.

**22. P.P. Rope (for cable pulling)**

6mm PP rope is drawn through the HDPE pipes/coils and safely tied to the end caps at either ends with hooks to facilitate pulling of the OF Cables at a later stage. The PP rope used is 3 strands Polypropylene Para Pro rope having yellow color and shall be of 6 mm diameter and it should have a minimum breaking strength of 550 kg. The length of each coil of rope should be 205 meters and it should conform to (i) BS4928 Part-II of 1974, (ii) IS 5175 of 1982, (iii) It should be of special grade and should have ISI certificate mark (iv) It should be manufactured out of industrial quality Polypropylene.





**ANNEXURE-VI**

**FORMAT FOR POWER OF ATTORNEY**

Know all men by these presents,  
We.....(name and address of the  
registered office) do hereby constitute, appoint and authorize Mr. /  
Ms.....(name and residential address) as our true and  
lawful attorney, to do in our name and on our behalf, all such acts, deeds and  
things necessary in connection with or incidental to submission of our Tender for  
the envisaged project of Subsidy support **from USO Fund for Augmentation,  
Creation and Management of Intra-district SDHQ– DHQ OFC Network for  
Transport of Rural / Remote Area Traffic on Bandwidth Sharing Basis in  
NE- I Circle**”, including signing and submission of the Tender and all documents  
specified in the Tender Document, including, undertakings, letters, certificates,  
acceptances, clarifications, guarantees, etc, making representations to the USOF  
and providing information / responses to the USOF, representing us in all matters  
before the USOF, and generally dealing with the USOF in all matters in  
connection with our Tender for the said Project.

WE HEREBY AGREE TO RATIFY ALL ACTS, DEEDS AND THINGS  
LAWFULLY DONE BY OUR SAID ATTORNEY PURSUANT TO THIS  
POWER OF ATTORNEY AND THAT ALL ACTS, DEEDS AND THINGS  
DONE BY OUR AFORESAID ATTORNEY SHALL AND SHALL ALWAYS  
BE DEEMED TO HAVE BEEN DONE BY US.

ALL THE TERMS USED HEREIN BUT NOT DEFINED SHALL HAVE THE  
MEANING ASCRIBED TO SUCH TERMS UNDER THE TENDER  
DOCUMENT.

**SIGNED BY THE WITHIN NAMED**  
\_\_\_\_\_ **[INSERT THE NAME OF THE EXECUTANTS (S)]**  
**THROUGH THE HAND OF**  
**MR.** \_\_\_\_\_  
**DULY AUTHORIZED SIGNATORY**

DATED THIS \_\_\_ DAY OF 2011

**BEFORE ME,**

**NOTARY**

**ACCEPTED**

..... (SIGNATURE)

(NAME, TITLE AND ADDRESS  
OF THE ATTORNEY)

**NOTE:**

THE MODE OF EXECUTION OF THE POWER OF ATTORNEY SHOULD BE IN ACCORDANCE WITH THE PROCEDURE, IF ANY, LAID DOWN BY THE APPLICABLE LAW AND THE CHARTER DOCUMENTS OF THE EXECUTANTS AND WHEN IT IS SO REQUIRED THE SAME SHOULD BE UNDER COMMON SEAL AFFIXED IN ACCORDANCE WITH THE REQUIRED PROCEDURE.

ANNEXURE-VII

FORMAT FOR CERTIFICATION OF SUBSIDY CLAIM FOR QE .....

AGREEMENT NO. ----- DATED -----

1. I ....., aged about ..... Years s/o, d/o of Shri ....., resident of ....., do solemnly affirm and state as under:
2. That I am .....of ..... (Name of the Company), Host Operator in .....Circle and I am duly authorized by the resolutions dated ..... passed by Board of Directors of the Company to furnish a Certificate on behalf of ..... (Name of the Company).
3. That a claim of Rs. .... (Rupees ..... ) is being made for the period ..... to ..... . The details of calculation of subsidy are as per Attachments enclosed.
4. That the contents of **Attachments I, II & III** (as applicable) to **Annexure-VII** are true and correct to the best of my knowledge, based on the records of the company, which are available for further verification by the appropriate authorities and that the **OFC network and services have been provided and were functional/ services rendered** from the quarter in which they have been shown as installed/commissioned and that the contents of **Appendices (F-I), (F-IV), (F-V), F(VI) and F (VII) to Annexure VII** as applicable are true and correct to the best of my knowledge, based on the records of the company, which are available for further verification by the appropriate authorities.
5. That the claim pertains to the **OFC network and services** installed/commissioned as per the Agreement.
6. That excess payment or shortage, if any, in the subsidy received shall be adjusted in the following year based on the subsidy statements duly certified by the Auditors of the Company and scrutiny as prescribed by the Administrator.
7. While submitting EAS claims, deduction of subsidy has been duly made for the period of downtime exceeding the maximum permissible downtime during the quarter as per Clause 7.3 of the Financial Conditions of the Agreement.
8. The **District OFC network and Services** shown as installed/commissioned/ in the said quarter have been completed as provided in the claim
9. I understand that Administrator or his representative shall have the right to inspect the site and records and if any deficiency is observed the subsidy paid to the company shall be recovered forthwith without prejudice to the right of administrator to take any other action(s) as deemed fit.

10. That all necessary approvals including Right of Way and operation of DG set have been obtained from the concerned authorities. All other regulations as per local laws are complied with.

11. That the components of the Intra-District OFC Network shown as installed/commissioned in the Attachments and Appendices to Annexure VII have been completed on the dates shown therein.

13. That the tariff charged for bandwidth leasing services is not higher than Prescribed Leasing Rates as stipulated in the Agreement.

14. The contents of the Self Certification are true and correct, no part of it is false and nothing has been concealed there from.

For and on behalf of (Name of the company)

Signature of the authorized signatory of the bidder company

ATTACHMENT-I TO ANNEXURE-VII  
SUMMARY STATEMENT OF SUBSIDY ALREADY PAID AND CLAIMED FOR THE QUARTER ENDING:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	
Name of District	Total Subsidy payable for District	District Commissioning Subsidy Amount (40% of district subsidy )	District EAS Amount (10% of district subsidy )	Circle Commissioning Subsidy Amount (20% subsidy of entire NORTH EAST- 1 Circle subsidy)	Date of Commissioning of District	Claimed in QE	Paid on	Claimed in QE	Paid on	Claimed in QE	Paid on	Claimed in QE	Paid on	Claimed in QE	Paid on	Circle Commissioning date	Claimed in QE	Paid on	Amount	Type (40%/EAS/20%) State as applicable	Subsidy deduction on account of Downtime (as per col. 7 of Attachment-III)	Net subsidy payable (Col.20 - Col.22)	
						District Commissioning Subsidy (40% of district subsidy)			1st EAS		2nd EAS		3rd EAS		4th EAS		20% Payable on Circle Commissioning(PI refer Note 3 below)			Subsidy Payable for the Quarter (in Rs.)			
<b>TOTAL OF RELEVANT COLUMNS</b>																							

Note:

**NE-I OFC Tender No. 30-170-8-NEI/2009-USF DATED 09.02.2011**

1. The Attachments must be accompanied by relevant Annexures as per Financial Conditions of the Agreement.
2. Rounding off the subsidy to the nearest Rupee shall be made only in the total subsidy due.
3. For Circle Commissioning Claim (20%), only columns (17), (18) and (19) are to be filled up.

(Signature of the Authorised Signatory along with Company seal)



ATTACHMENT-III TO ANNEXURE-VII  
CLAIM STATEMENT FOR COMPUTATION OF EAS

QUARTER ENDING:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Name of District	Total Subsidy payable for the district	Date of Commissioning	Due date for payment of 1st EAS	Nature of EAS claimed (1st, 2nd, 3rd or 4th)	Amount of EAS claimed	Deduction on account of downtime (as per Clause- 7.3 of Financial Conditions)	Net EAS payable (Col. 6 - Col.7)

Note:

Deduction of subsidy on account of downtime shall be calculated in the Appendix (F-VII (A &B)) (Network Availability Report)

(Signature of the Authorised Signatory along with Company seal)

**ANNEXURE VII**

**Appendix (FI-A) Self Certified Commissioning Report for OFC Route, Section and Transmission Capacities**

Circle: \_\_\_\_\_

District Name: \_\_\_\_\_

Route No. (Pl refer Note-2)	Route description	Sections (Route-wise) (Pl. refer Note-3)	OFC-Km. (Section- wise)		DHQ/ SDHQ/ Other loc. name and address with location type (Section-wise)		Main transport system commissioned (A to B)		Maximum interface capacity (Mbps)		Equipped interface capacity (Mbps)		Date of Commissioning
			Existing	Newly created	Stn. A	Stn. B	Type (Pl. see Note 1)	Optical Line Rate (Mbps)	Stn. A	Stn. B	Stn. A	Stn. B	
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)

**Notes:-**

1. Type of transport system may be SDH/DWDM/IP technology/other transmission technology
2. A consistent Route No. Scheme should be followed in line with following suggested: [3-digit alphabetical code to denote district name][1-digit alphabetical code to denote Ring / Spur][two numeric to denote Route number] e.g. GUWR34 denotes District Guwahati, Ring configuration, route no.34. If this were Spur route, the code would be GUWS34. Separate Tables showing (a) 3-digit alphabetical code for each district name, (b) District-wise Table containing columns ‘Names of stations on Ring/Spur Route’ ‘Ring or Spur’ and ‘Route no.’ is to be appended by successful bidder to the above Table. A master copy should be attached with first claim.
3. Section is station to contiguous station.

(Signature of the Authorized Signatory along with Company seal)

**Annexure VII**

**Appendix (FI-B) – Self-Certified Commissioning Report for Main Equipment & other Equipments**

Circle: \_\_\_\_\_

District Name: \_\_\_\_\_

Route No. (Pl. see Note-1)	Node Location / Name	Node Type (Pl. see note-2)	Main transport equipment commissioned		D/I modules equipped		FDF		DDF and DDM		Storage Battery		DC Power Plant		DG Set		Other Eqpt.		Date of Commissioning.
			Type (Pl. see note-3)	Qty.	Type (Pl. see note-4)	Qty.	Type (Pl. see note-5)	Existing(E)/ New(N)	Type (Pl. see note-6)	Existing(E) / New(N)	Type (Pl. see note-7)	Existing(E) / New(N)	Type (Pl. see note-8)	Existing(E) / New(N)	Type (Pl. see note-9)	Existing(E) / New(N)	Type	Existing(E) / New(N)	
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)	(xvi)	(xvii)	(xviii)	(xix)	(xx)

**Notes:-**

1. The consistent Route No. Scheme as given in Annexure FI-(A) shall be followed.
2. Please mention DHQ / SDHQ / En-route location / Additional location.
3. Please mention type of transport equipment e.g. SDH / DWDM / IP technology /other transmission technology (specify). Pl. also mention make and capacity e.g. SDH ADM 2500 Mbps Nortel.
4. Please mention type of module with capacity e.g. STM-1 / Fast Ethernet 1000 Mbps / 20E1 line interface etc.
5. Please mention type, capacity equipped, and make e.g. 19” Rack/Wall mounted FDF (Fibre Distribution Frame) with two FDM each of 36 optical line ports.
6. Please mention DDF (Digital Distribution Frame) detail, no. of equipped DDM with configuration and make e.g. 19” DDF with capacity 8 nos. DDM equipped 2 nos. DDM for 75 ohm unbalanced 2Mbps terminations,
7. Please mention make, AH capacity, number of banks e. g. Exide 480AH per battery. bank, two battery Banks.
8. Please mention makes total and equipped SMPS modules and Ampere capacity e.g. Tycor 6\*50 A SMPS capacity, equipped 2\*50 SMPS.

9. Please mention make, configuration and capacity in KVA e.g. Kirloskar Silent DG 3-phase 65 KVA
10. Please submit separate Tables for different districts.

(Signature of the Authorized Signatory along with Company seal)

**ANNEXURE VII**

**Appendix (F-II) - DMA Certificate Format certifying the Completion of  
Intra-District OFC Network of NE- I Circle**

It is to certify that,

1. We have carried out network validation, inventory checking and performance checking on sample basis covering all the districts of NORTH EAST- 1 Circle as per approved manual;
2. We have taken into account the documentary backup made available;
3. We have also observed the network configuration on the network management system;
4. The detailed report is annexed herewith along with exceptional points (if any);
- 5. On basis of above we conclude that the Operator has installed and commissioned the network as per Agreement No. ....  
Dated .....**

For and on behalf of  
Designated Monitoring Agency

**(Authorized signatory)**

Enclosure: Detailed Report.

ANNEXURE VII

Appendix (F-III) - DMA Certificate Format Certifying the Completion of Network of Relevant District(s)

It is to certify that,

1. We have carried out network validation, inventory checking and performance checking on sample basis covering the below mentioned districts of NE- I Circle as per approved manual;

Districts:

.....  
.....

2. We have taken into account the documentary backup made available;

3. We have also observed the network configuration on the network management system;

4. The detailed report is annexed herewith along with exceptional points (if any);

5. On basis of above we conclude that the Operator has installed and commissioned the network as per Agreement No. ....  
Dated ..... in the districts .....

.....

For and on behalf of  
Designated Monitoring Agency

**(Authorized signatory)**

Enclosure: Detailed Report.

Enclosure: List of commissioning reports as per Annexure- (F III) earlier submitted.

**ANNEXURE VII**

**Appendix (F-IV) STATEMENT OF CONTINUATION OF SERVICES**

For Year 1 period \_\_\_\_\_ to \_\_\_\_\_ / Year 2 period \_\_\_\_\_ to \_\_\_\_\_ / Year 3 period \_\_\_\_\_ to \_\_\_\_\_ / Year 4 period \_\_\_\_\_ to \_\_\_\_\_

Name of Circle: \_\_\_\_\_

Name of District: \_\_\_\_\_

This is to certify that the intra-district OFC Routes, Sections/links (earlier reported as commissioned vide Appendices FI-A and F-IB to Annexure-VII ) situated in the District \_\_\_\_\_ which is owned/managed and operated by <Host Operator Name>, has been providing Bandwidth Leasing Services to the Other Operators as tabulated below during the above stated period. The following parameters are indicative of the same.

1. **Total TDM Traffic leased** (in Mbps): \_\_\_\_\_

2. **Total IP Traffic leased** (in Mbps): \_\_\_\_\_

(As per Appendix F-VI attached)

3. **Total Uptime:** Days-      Hours-      Minutes-      Seconds-

4. **Total Downtime:** Days-      Hours-      Minutes-      Seconds-

(Averaged over a Quarter)

(As per Appendix F-VII attached)

5. **Network Utilisation Factor**

**Previous reported** \_\_\_\_\_

**Current reported** \_\_\_\_\_

(As per Appendix F-V attached)

**Enclosure:**

Appendix F-V Network Utilisation Report

Appendix F-VI Customer Service Provisioning Report

Appendix F-VII Link Status Report

(Signature of the Authorized Signatory along with  
Company seal)

**Appendix (F-V) STATEMENT OF NETWORK UTILIZATION**

Circle: \_\_\_\_\_

District: \_\_\_\_\_

For Year 1 period \_\_\_\_ to \_\_\_\_ / Year 2 period \_\_\_\_ to \_\_\_\_ / Year 3 period \_\_\_\_ to \_\_\_\_ / Year 4 period \_\_\_\_ to \_\_\_\_

Ring Route No. (Pl. see note -1)	Optical Line Rate (Mbps) (installed capacity)			Commercial leased ring capacity (Mbps) (Please see note-2)			Self utilized Ring capacity(Mbps)			Network utilization			
	Previous reported	Increment	Current reported col. (ii) + (iii)	Previous reported	Increment	Current reported (v) + (vi)	Previous reported	Increment	Current reported (viii) + (ix)	Previous reported		Current reported	
										Leased (v)/(ii)	Self utilized (viii)/(ii)	Leased (vii)/(iv)	Self utilized (x)/(iv)
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)

**Notes:**

1. The consistent Route No. Scheme as given in Annexure FI-(A) shall be followed and master copy is to be attached (with first claim).
2. The total leased capacity for all customer circuits IP+TDM should be aggregated.

(Signature of the Authorized Signatory along with Company seal)



**APPENDIX (FVII-A) NETWORK AVAILABILITY REPORT**

Circle: \_\_\_\_\_

District: \_\_\_\_\_

Total no. of nodes (n) in District \_\_\_\_\_

Total time for 100% availability = 129600 minutes (90 d x 24 h/d x 60 min/h) = 1296\*(100)

For: Year 1 period \_\_\_\_ to \_\_\_\_ / Year 2 period \_\_\_\_ to \_\_\_\_ / Year 3 period \_\_\_\_ to \_\_\_\_ / Year 4 period \_\_\_\_ to \_\_\_\_ (Enter as applicable) For Q1 period \_\_\_\_ to \_\_\_\_, Q2 period \_\_\_\_ to \_\_\_\_, Q3 period \_\_\_\_ to \_\_\_\_, Q4 period \_\_\_\_ to \_\_\_\_ (Enter as applicable)

Sl	Node ID (Pl. see note-1)	Node downtime in minutes aggregated over a quarter				
		Equipment failure	Optical fiber cable failure	Power supply failure	Any other cause	All causes (sum of col. (ii) to (v))
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
1.	Total downtime	____(D <sub>E</sub> )____	____(D <sub>OF</sub> )____	____(D <sub>PS</sub> )____	____(D <sub>X</sub> )____	____(D <sub>T</sub> )____
2.	Average district downtime					____(D <sub>T</sub> /n)____
3.	Average percentage Non-availability					____[(D <sub>T</sub> /n)]/1296____
4.	Average percentage Availability					100 less [(D <sub>T</sub> /n)]/1296____

**Notes: -**

- The consistent Route No. Scheme as given in Annexure FI-(A) shall be extended to defining **Node ID** as follows - [3-digit alphabetical code to denote district name][1-digit alphabetical code to denote Ring / Spur][two numeric to denote Route number][2-digit alphabetical code to denote DHQ/ SDHQ (tehsil/taluka/block) / Additional location/ En-route Location i.e. DX/ SX/ AL/ EN][3-digit alphabetical code to denote Node name/location]. A master list should provided with first claim.
- (a) The NMS shall be configured to measure down-time for each failure event and compile the data as required for the above Table; Host Operator shall provide the basic log-sheets if required.  
(b) The observations should be over a **3-month cycle**  
© One spare 2 Mbps circuit should be maintained over all the links for test/measurement and downtime measurement purpose.
- Please furnish separate sheet for each Districts and for each of the four quarters.
- Downtime of all nodes and routes is to be counted whether or not carrying customer traffic.

5. **Criteria for downtime:** The OFC transport network in the district shall be taken as 'not available' when one or more of its nodes are unable to communicate with their respective DHQ on the main transport network channel or even on the protection channel.

(Signature of the Authorized Signatory along with Company seal)

**Annexure VII**

**APPENDIX (FVII-B) NETWORK AVAILABILITY REPORT (B):CALCULATION OF ANNUAL SUBSIDY DEDUCTION**

Circle: \_\_\_\_\_

District: \_\_\_\_\_

(Please furnish separate sheets for separate districts)

For Year 1 period \_\_\_\_ to \_\_\_\_ / Year 2 period \_\_\_\_ to \_\_\_\_ / Year 3 period \_\_\_\_ to \_\_\_\_ / Year 4 period \_\_\_\_ to \_\_\_\_

For Q1 period \_\_\_\_ to \_\_\_\_, Q2 period \_\_\_\_ to \_\_\_\_, Q3 period \_\_\_\_ to \_\_\_\_, Q4 period \_\_\_\_ to \_\_\_\_ .

Annual Subsidy amount payable: \_\_\_\_\_ (Rs. EAS) \_\_\_\_\_

Pro-rata quarterly subsidy amount payable: \_\_\_\_\_ (Rs. EAS/4) \_\_\_\_\_

Sl. No.	Description	Year			
		Q1	Q2	Q3	Q4
(i)	(ii)	(iii)	(iv)	(v)	(vi)
	<b>Achieved:</b>				
1	Average Percentage Availability 100 less [(DT/n)]/1296 from column (vi) of Row 4. of Appendix F-VII-A				
	<b>Norm:</b>				
2	Minimum acceptable availability averaged <b>per node</b> over a quarter period for the district	<b>99%</b>	<b>99%</b>	<b>99%</b>	<b>99%</b>
	<b>Coding:</b>				
3	'1' = Figure Row 1 < 75% '0.3' = Figure Row 1 ≥75% and <80% '0.2' = Figure Row 1 ≥80% and <85% '0.1' = Figure Row 1 ≥85% and <90% '0.05' = Figure Row 1 ≥90% and <95% '0.025' = Figure Row 1 ≥95% and <99% '0.0' = Figure Row 1 ≥99%				
	<b>Subsidy deduction calculation</b>				
4.1	Quarter-wise : ('code' for the quarters from row 3) x (EAS/4)				
4.2	Total Annual subsidy deduction (sum col. (iii) to (vi) in row 4.1				

(Signature of the Authorized Signatory along with Company seal)

**ANNEXURE VII-1**

**FORMAT FOR AUDITOR’S REPORT ON STATEMENT OF CLAIM FOR  
SUBSIDY FROM USOF**

To  
The Board of Directors  
.....  
.....

We have examined the attached Statement(s) of claim for subsidy from USO Fund of ..... (The name of the Host Operator) for the quarter (s) ending \_\_\_\_\_. We understand that the aforesaid statement(s) is /are to be furnished to the Central Government for assessment of the subsidy payable to the Host Operator by the Government, in terms of the Tender document /Agreement No. \_\_\_\_\_ for Subsidy Disbursement for augmentation, creation and management of Intra District OFC networks for transport of rural/remote area traffic on bandwidth sharing basis at concessional rates in NE- I Circle under Universal Service Obligation.

We report that:

We have examined all the record and obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit.

In our opinion and to the best of our knowledge and belief and according to the explanations given to us, the Statements have been prepared in accordance with the conditions contained in the said Tender document/Agreement and clarification thereon in this behalf and gives a true and correct view of the subsidy claimed for the period computed on the basis of the aforesaid conditions.

In our opinion and to the best of information, record of downtime is kept in such a manner as to reflect the correct position, for the purpose of claiming subsidy.

(Name and Signature of the Auditor signing)

FOR AND ON BEHALF OF (NAME OF THE AUDITOR FIRM)

**Annexure VIII-1**

**FINANCIAL BID FORM**

**(Only valid if bearing original signatures of issuing authority)**

**IMPORTANT NOTE:**

1. FINANCIAL BID FORMS, DULY SIGNED, WITH BENCHMARK VALUES SHALL BE SUPPLIED ALONG WITH TENDER DOCUMENT PURCHASED.
2. THE SIGNED COPY OF THE FINANCIAL BID FORM SUPPLIED ALONG WITH TENDER DOCUMENT SHOULD BE SUBMITTED WITH THE BID DOCUMENTS.
3. FINANCIAL BID FORM SHOULD BE SIGNED BY THE AUTHORISED SIGNATORY FOR AND ON BEHALF OF THE BIDDER.
4. **THE BENCHMARK IS THE UPPER LIMIT FOR SUBSIDY AND A BIDDER SHOULD NOT QUOTE MORE THAN THE BENCHMARK.**
5. **A SINGLE RATE SHOULD BE QUOTED FOR NE- I CIRCLE.**
6. **THE WORK WILL BE AWARDED FOR THE COMPLETE NORTH EAST- 1 CIRCLE TO THE SUCCESSFUL BIDDER.**

**FINANCIAL BID FORM FOR FINANCIAL BID**  
**(TENDER NO: \_\_\_\_\_ USF dated \_\_\_\_\_)**

**1 PARTICULARS OF THE BIDDER: -**

	<b>Description</b>	<b>Particulars (to be filled in by the Bidder)</b>
(i)	Name:	
(ii)	Address:	
(iii)	Telephone No.:	
(iv)	Fax No.:	
(v)	E-mail address:	

**2. OFFER FOR SUBSIDY REQUIRED AGAINST TENDERED NORTH EAST- I Circle**

**2.1) BENCHMARK SUBSIDY**

<b>Benchmark Subsidy</b>	<b>Subsidy (In Indian Rupees)</b>
North East- I Circle Benchmark Subsidy covering all Districts as detailed at 2.2 below:(District-wise breakup in percentage of benchmark subsidy amount is given below)	<b>Rs. 89.93 CRORE</b>
BIDDER'S QUOTATION** FOR NORTH EAST- I CIRCLE FOR ALL DISTRICTS OF NORTH EAST-I CIRCLE (in figures)	
BIDDER'S QUOTATION** FOR NORTH EAST- I CIRCLE FOR ALL DISTRICTS OF NORTH EAST-I CIRCLE (in words)	

**\*\*In case of discrepancy between figures and words, the amount in words shall be taken as the Bidder's Price Quote.**

**2.2) District-wise breakup of benchmark subsidy**

<b>Sl. No.</b>	<b>District</b>	<b>Indicative no. Of SDHQ locations*</b>	<b>Percentage of NE- I Circle Benchmark Subsidy in ( 2.1 ) above#</b>
<b>1</b>	West Garo Hills	13	4.41%
<b>2</b>	East Garo Hills	8	0.41%
<b>3</b>	South Garo Hills	6	9.00%
<b>4</b>	West Khasi Hills	13	7.80%
<b>5</b>	Ri Bhoi	4	1.36%

6	East Khasi Hills	14	4.65%
7	Jaintia Hills	13	5.74%
8	Mamit *	8	9.87%
9	Kolasib *	5	3.22%
10	Aizawl	14	10.47%
11	Champhai *	11	10.55%
12	Serchhip *	2	0.99%
13	Lunglei	9	6.53%
14	Lawngtlai	6	7.42%
15	Chhimituipui (Saiha)	7	6.53%
16	West Tripura	20	0.00%
17	South Tripura	16	3.07%
18	Dhalai	6	5.13%
19	North Tripura	13	2.82%

\*Locations - DHQ/ SDHQ/ Additional Locations/ En-route Locations as prevailing at the time of commissioning as per Government orders.

# These percentages are approximate on account of rounding off.

Note: The district-wise subsidies payable will be as per the above mentioned percentages, where 100% = Representative Rate accepted by the Administrator USOF as per **Section 8**, Terms of Financial bid.

----- **End of the Tender Document**-----