



Universal Service Fund

(A company setup under Section 42 of the Companies Ordinance 1984)

TERMS OF REFERENCE

Technical Auditor Services for USF BSD Projects

Tender ID: USF/BSDProjects/TechAuditor/2018/01

Issued at Islamabad

12th September 2018

USF Fifth Floor, HBL Tower, Jinnah Avenue, Islamabad Pakistan	Tel:051-9212308-09 Fax: 051- 9214261 URL: www.usf.org.pk
--	---

Part 1: Context and Purpose of Technical Auditor Services

1. Universal Service Fund (USF) was established by Ministry of Information Technology and Telecom (MoITT), Govt. of Pakistan to bridge the digital divide, establish Information and Communication Technology Infrastructure and to provision metro equivalent Telecom services at affordable rates, to un-served/underserved areas of the country.
2. USF has initiated multiple major Programs and projects that provision Telecom Network Infrastructure, Telecom Coverage and Services to un/under served areas. For the purpose USF initiates relevant Projects and enters into a Services and Subsidy Agreement (SSA) with USF Telecom Service Providers (SP's) for deployment of Telecom Infrastructure for USF Network and provision of defined Telecommunications Services (called USF Services) in un-served and under-served areas of Pakistan (named USF areas).
3. The Technical Auditor (TA) is appointed by USF to conduct audit of USF Network, evaluate the technical performance of the SP and make related determinations, as per **USF Broadband for Sustainable Development Project (BSD) Audit Methodology**, referred to as *Audit Methodology* in this document.
4. As such USF intends to engage a Firm/Company to perform the functions of the TA as per USF SSA and enter into a Technical Auditor Agreement.

Objectives

The objective of Technical Audit is to verify that USF Services consisting of Voice and Data Services with given quality of service, as defined in Schedule A & B of SSA have been made available in USF Areas consisting of unserved mauzas/highways/motorways etc. as defined in Schedule C of SSA. For the purpose the TA shall carry out field audit of Telecom Network consisting of Radio Access Network, Radio and Optical Backhaul Network, site civil work, main and alternate power, verify BoQ, carry out drive tests to verify coverage, national roaming and quality of services and issue certificates of completion, snags, force majeure etc. and use formal tools and methods as per USF Audit Methodology.

Part 2: Scope of Work

The audit is triggered upon claim by SP that USF Services are available for given number of target Mauzas along with provision of audit pre-requisite data. The TA is engaged to undertake the following tasks:

Task 1. Verification and evaluation of Milestone Pre-requisite data

1. Verify and evaluate milestone pre-requisite data within 5 days of receiving the data. In case of any shortcomings, the TA will intimate USF and SP in a timely manner. The TA will accept or reject the MS offer based on sanity of audit pre-requisite data.

Task 2. Verification of Milestone Implementation

After acceptance of audit data, the TA shall verify roll-out and implementation of USF Network and Services in USF Areas as defined in Schedule C of SSA in accordance with the Audit Methodology. **The verification of each MS has to be completed within 30 days of acceptance of offer of MS Data.** The TA shall:

Terms of Reference

1. Conduct a Technical Audit Process and certify whether USF SP has met its service coverage obligations under the USF SSA.
2. Conduct technical audit and evaluate performance of the USF Network and Services and verify if USF Service requirements as specified in Schedule A and Schedule B of the SSA are met.
3. Assess whether Project Implementation Milestones as set out in Schedule D of the SSA have been met and whether USF Subsidy payments should be made.
4. Issue certificates or written notices regarding the completion or failure of the Project Implementation Milestones.
5. Develop data collection and reporting processes, enabling the TA to issue reports to USF on USF SP progress and performance.
6. Determine whether a Force Majeure conditions exists or ceases to exist and advise USF on the practical impact of Force Majeure conditions including any changes to Project Implementation Milestones or other project requirements.
7. Issue certificates or written notices regarding whether Force Majeure conditions exists or ceases to exist and the consequences of any Force Majeure condition.
8. Assisting USF in any consultations with USF SP, including any dispute resolution processes, related to any of the above tasks.
9. In performing these certification functions, the TA shall incorporate the following functions:
 - (a) For assessing Project Implementation Milestone, the TA will assess roll-out and service performance in each USF Area (Mauza). This will include physical verification of infrastructure sharing, Solar System, DG, Battery Bank and Rectifier, Commercial Power, BSS and Transmission. Drive Test for Mauza Coverage and Quality of Service. Report observations and major and minor Snags.
 - (b) For all tests and measurements, the TA will use dedicated & certified equipment/tools in the form of hardware, associated licensed software, probes etc. to ensure accuracy of the results and their acceptability by both USF and USF Service Provider.
 - (c) The firm shall ensure use of state-of-the-art, field proven, high grade and licensed test equipment and licensed software from vendors of repute.
 - (d) The TA shall verify that USF Network complies with all the objectives, quality specifications and the general guidelines such as Infrastructure sharing and all the other applicable SSA conditions.
 - (e) The TA will submit, Network and services performance reports and test results that include BoQs, Physical Infrastructure tests and tests for verification of network performance/quality.
 - (f) The TA will assess and report both USF Services impacting and non-impacting snags with details of the shortcomings and their impact. After the snags are

Terms of Reference

removed by the SP, the TA will re-visit and verify rectification of snags and submit report accordingly.

- (g) All re-visits for verification of USF Network (coverage and infrastructure) will be paid as per Price Table (Row 9) against each activity carried out by the TA and within the maximum limit as defined in there.

Part 4: Financial Proposal

- 1- The TA shall submit financial proposal as per Pricing Table – Annex I: The table is explained below:
 - a. Items 1 to 7 provide for prices per Unit and Total Price of Audit activity including Mandatory and Optional Mauza Audit, New and upgraded BTS, Repeater, Fiber Node and MSC audit as per Audit Methodology. The “Units” field refers to the total quantity of items for given project.
 - b. Item 8 provides for additional payments up to a maximum of 15% of Project Audit Cost under item 1 to 7 for re audit of mauzas and sites.
 - c. Item 9 provide for price per Unit and Total Price of Force Majeure verification activity as per Audit Methodology. A maximum of 4 FMs are catered for in this contract.
 - d. Item 10 provides for Payment for Final Report
- 2- The TA shall submit item wise price and total price of each item and final total price of the audit activity.

Part 4: Payment Terms

- 1- Mobilization advance amounting to 20%; payable within thirty (30) business Days of Effective Date against a bank guarantee of the similar amount. Such guarantee against advance payment will be reduced by 20% each time an installment payment is released to the TA and advance payment is adjusted in the installment payments.
- 2- Payments shall be made to the Technical Auditor as per Pricing Table of Annex I, against the work offered to the TA and actual work done

Annex I: Technical Audit Financial Proposal

To: The Chief Executive Officer
USF Co
5th Floor, HBL Tower,
Jinnah Avenue, Islamabad
Pakistan

Applicant's Technical Audit Financial Proposal for [Lot Name]:

The Applicant, *[insert name of Applicant]*, hereby commits to assume all of the responsibilities of the Technical Auditor as identified in this RFP and the TOR, in consideration for the award of the Technical Audit Agreement and payment of the amount of Technical Audit Fee as indicated in the following table:

USF Area:	Amount of Proposed Technical Audit Fee (in Pakistan rupees):
As identified in Schedule C of the USF Services and Subsidy Agreement (provided to the TA Firm along with this RFP)	[Enter amount of Technical Audit Fee proposed for the USF Areas. The amount must be set out in both Words and numbers.]

1. In the event of any discrepancy between the amounts set out in words and numbers, the amount set out in words shall govern.
2. This Proposal form shall remain valid in accordance with section 7 of this RFP.

3. Pricing Table

a. For DI Khan Lot

S. No.	Description	Units*	Unit price	Total Price
1	Mandatory Mauzas	285		
2	Optional Mauzas**	50		
3	New BTS	56		
4	Upgraded Sites from 2G to 3G	12		
5	Repeater	3		
6	Fiber Node	NA		
7	Visit to MSc Server, HLR & IN in Islamabad	1		
Subtotal				
8	Re-verification of item 1-7 when required – Upto max %age of total	15%		
9	FM Verification	4		
10	Final Report	1		
Total				

b. For Khyber Lot

S. No.	Description	Units*	Unit price	Total Price
1	Mandatory Mauzas	428		
2	Optional Mauzas**	75		
3	New BTS	78		
4	Upgraded Sites from 2G to 3G	27		
5	Repeater	4		
6	Fiber Node	NA		
7	Visit to MSc Server, HLR & IN in Islamabad and Peshawar	1		
Subtotal				
8	Re-verification of item 1-7 when required – Upto max %age of total	15%		
9	FM Verification	4		
10	Final Report	1		
Total				

Terms of Reference

*This count may change

**Any Optional Muaza that might be offered will have to be Drive Test verified.

Authorized Signature:

Name:

Designation:

Date: