



**Universal Service Fund**

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

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**Terms of Reference (ToR)**

**For**

**Consultancy Services to conduct a study for Digital Inclusion in Pakistan**

**ID: USF/CON-Digital/2019/01**

**Issued at Islamabad**

**20<sup>th</sup> February 2019**

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## 1. INTRODUCTION:

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.

Un/under-served areas are those that are devoid of or have limited availability of Telecom services such as Telephony and Broadband Services. Over the last decade, USF has successfully implemented multiple programs that are enabling digital inclusion of remote underprivileged areas by subsidizing ICT Infrastructure and Services.

Information and Communication Technologies (ICT) are considered utmost essential for achieving Sustainable Development Goals (SGD). The three pillars of sustainable development – economic development, social inclusion and environmental protection require ICT and Telecom as a catalyst (ITU). Digital Services play a key role in adoption of ICT services. ICT with enabling digital platforms deliver social and economic benefits to the masses, thus break the poverty cycle and eliminate social divide. Digital Platforms facilitate communities, businesses, and governments to achieve economic and social growth.

To realize these benefits, governments around the world are implementing comprehensive nationwide plans and highly focused Broadband Programs and projects coupled with strategies that ensure availability and affordability of Digital Platforms and Services.

This tender is being launched to hire the services of an experienced and competent consulting firm to:

- a) conduct a study of digital initiatives and strategies that can enhance digital inclusion of urban, semi-urban and rural areas
- b) recommend digital platforms and solutions that are globally proven in helping the underprivileged populations adopt a digital life style with a known impact on socio-economic indicators.
- c) Propose Digital initiatives and services that are sustainable, suitable for Pakistan and help bridge the digital divide
- d) Review the need and modalities of a USF intervention in the smart handset market place.

For the purpose of this consultancy, the focus areas are Urban, Sem Urban and Rural areas of Pakistan.

## 2. BACKGROUND

When referring to Digital Inclusion, **USF Areas** may refer to marginalized communities that have not adopted digital services because of unavailability or lack of awareness.

USF has initiated Major Programs and projects that provision Telecom Network Infrastructure, Telecom Coverage and Services to USF areas. These include:

### a) **Broadband for Sustainable Development (BSD):**

A Basic Telephony Services provisioning program named Rural Telephony and e-Services (RTeS) was initiated in 2007 to provide Basic Telephony and e-services to unserved areas of Pakistan. Under the program, approx. 6,300 Mauzas (the smallest land revenue unit) are being provided 2<sup>nd</sup> Generation Cellular Coverage.

After grant of licenses for Next Generation Mobile Services in 2014, USF modified its Program to include 3<sup>rd</sup>/4<sup>th</sup> Generation Cellular services. This program is renamed as Broadband for Sustainable Development (BSD) and so far, 13 projects have been launched that promise provision of Next Generation Cellular services to 6,100 Mauzas, a population of approx. 2.5 million and an area of approx. 272,000 Sq Km.

**b) Next Generation Broadband for Sustainable Development Program (NG-BSD)**

With proliferation of enabling apps and digital platforms, user behavior has shifted from voice and data centric to app-centric. This requires networks to deliver seamless app coverage with optimum end to end performance. As such BSD Program was re-designed to provide higher data rates and wider coverage to un/under-served areas. The new program is called NG-BSD and is intended to create an environment of ICT adoption and uptake. It aims to provide seamless Broadband Coverage at higher data rates (512Kbps downlink and 256Kbps uplink), higher population coverage targets and blanket coverage between rural and urban areas.

So far 3 NG-BSD Projects have been launched that will provide Next Generation Broadband Services to a population of approx. 52 Mil. in 1825 mauzas.

**c) Broadband Program:**

A Broadband Program was launched in 2009 that provisioned Wired/Wireless Internet Services to un-served urban areas. The program offered Target Based Subsidy to address affordability, digital inclusion and adoption issues. This is unlike other USF Programs that offer Subsidy based on provision of Infrastructure. The program provisioned 700K Broadband Connections covering approximately 2.1Mil households by utilizing diverse Broadband Access Technologies such as DSL, WiMax and CDMA EVDO.

After successful auction of Next Generation Mobile Services in 2014, the program has been merged into the BSD Program. Currently Provisioning of Broadband services is carried out via 3G/4G Cellular Services.

**d) Optical Fiber Program:**

This program provisions high speed, reliable and cost effective, Optical Fiber based Backhaul services to un-served areas thus connecting remote unconnected areas to the National Backbone and enabling future provisioning of reliable and high quality ICT. In this program Service Providers are offered Subsidy on Optic Fiber Cable Plant and Terminal Equipment to connect un-served Tehsils (Administrative unit at Sub-District Level, A small Town/City) so that high quality Telephone and Data Services can be provisioned later on through BSD Programs. A total of 6000Kms of Optical Fiber Cable has so far been laid that connects 400 un-served Tehsils.

**e) Special Projects/Digital Inclusion Projects:**

USF has initiated multiple projects under this program to address various aspects of digital inclusion of the Society, including:

- Computer Labs for Women Empowerment Centers (WEC), provides computer labs to WECs of Bait-ul-Maal (a Govt dept. for the under privileged) that enable access to ICT to underprivileged girls. 100 Female Master Trainers were initially trained by Microsoft on teaching skills and basic software coding. These trainers have also been trained by Facebook and UNWOMEN on entrepreneurship and economic empowerment.
- “Computer Labs for Under privileged children”, provides computer labs to under privileged children in Orphanages run by Govt.

- Tele Medicine Network for 15 rural sites and Low Vision Labs for 2 institutes.
- Computer Labs for Schools, that provided computer labs and teachers to underprivileged schools in the areas surrounding the Federal Capital.
- E-Commerce for craft M/SMEs, an e-Commerce platform for Micro Small and Medium Enterprises to identify, train and bringing them on board, increasing their reach and sales via e-Commerce.

### **3. OBJECTIVES:**

The objective of the consultancy is to propose and suggest strategies and plans for increasing Digital Adoption and inclusion in Urban, Semi Urban and Rural areas of Pakistan. The consultant will have to carry out a detailed study based on representative samples of candidate areas, identify challenges in; provision of affordable access and increasing digital inclusion and adoption, while taking into account the international perspective, experience and trends.

The deliverable of the consultancy needs to be a balance between short term strategic and tactical recommendations. It is expected that the final recommendations will include specific area which are ripe for USF intervention as well as some strategic guidance that can influence future USF mandate.

Key objectives of this consultancy are as follows:

- Analysis of existing digital landscape across Pakistan and compare it with Global initiatives.
- Demand and affordability analysis for digital services in un/underserved areas of Pakistan
- Analysis of need and modality of a Smart Handset subsidy program sponsored by USF.
- Any Recommendations to enhance existing USF Digital/Special Projects.
- Identification of hurdles & impediments hampering the digital services in Pakistan

### **4. SCOPE OF WORK:**

The Consulting Firm shall be responsible for performing the following tasks:

- a) Conduct a comprehensive study of existing digital landscape in Pakistan and globally that promise innovative and cost-effective delivery of advanced digital services to rural un/underserved population of Pakistan.
- b) Provide recommendations for future digital projects keeping in view, USF's mandate and sustainability.
- c) Carry out a demand analysis where Digital Platforms can be implemented and provide recommendations on successful implementation methodologies leveraging public private partnerships.
- d) Provide proven case studies and identify applications/services that could solve problems of access to health, finance, education and livelihood information using Digital Services.
- e) Identify Key Performance Indicators (KPI's) for performance monitoring of recommended projects.

**Part 1: Analysis of existing digital landscape in Pakistan and globally**

- a) Identify & analyze innovative digital services that are currently launched in Pakistan and globally with their success and challenges.
  - i. Special Focus on Mobile Network Operator launched DIGITAL services in Pakistan.
  - ii. Services launched with focus on digital inclusion of the underserved Globally.

**DELIVERABLES**

- i. Reports with detailed case studies on at least 6 digital projects. Detailed information on project goals, sponsors, success, challenges and final outcomes.
  - a. 2 projects in Pakistan by Mobile Network Operators
  - b. 2 projects for digital inclusion of underserved Globally
- ii. Identify content, applications and services that enhanced adoption of e-services. Provide details on any supporting measures and innovative techniques to bring more people into Digital Inclusion.
- iii. Identify and analyze low cost smartphone subsidy projects implemented globally with their detailed case studies and outcomes achieved.

**Part 2: Demand and Affordability Analysis for digital services in Pakistan**

Conduct a demand and affordability analysis of the USF Areas, identify challenges and impediments in proliferation of ICT and propose strategies to increase digital adoption, inclusion and affordability at individual as well as public/private organizational level.

- a. Demand and affordability analysis of digital services in Pakistan with emphasis on urban, semi urban and rural Areas. Use sample field analysis based on actual surveys.
- b. Challenges and impediments in proliferation of digital services
- c. Whether handset prices, availability, customization and awareness are real hurdles in broadband adoption.
- d. Conduct field surveys of remote and rural areas with diverse geographic and demographic coverage to get a sample of on ground challenges.

**DELIVERABLES**

- i. Report with details on demand and affordability analysis of digital services in Pakistan
- ii. Results of sample field surveys conducted to access on ground situation.
- iii. Analysis of availability and affordability of smart devices and the level of impact they have on broadband penetration.
- iv. Identify any need for new applications or local language content that can facilitate digital adoption.

**Part 3 - Recommendations for new/proposed Digital Projects for next 3 years based on:**

Identify a menu of 5 USF Co projects that can be launched within 1year horizon. Ensure that;

- a) compliance with USF mandate (or the need to change the mandate) and incorporation of lessons learned.

- b) include constraints of process (Public Procurement Rules, AGP Audits) while providing the recommendation.
- a) addressing regulation and compliance challenges (Province vs Federal Domain, Pakistan Telecom Authority, Law Enforcing Agencies, Financial Compliance etc.).

Include recommendation on need and feasibility of USF subsidy program for handset. Whether such subsidy should be given direct to operator or in the form of an assembling subsidy to the local industry.

## **DELIVERABLES**

- i. Overall Guidelines, best practices and modalities for Pakistan for digital initiatives with a focus on socio economic uplift of Pakistani population in underserved/unserved areas.
- ii. Overall score and ranking of 5 projects recommended to be launched in Pakistan by USF within the next 1 year.
  - This should be ranked in order of success probability, impact on unserved and ease of implementation.
  - Include best modalities of public, private partnerships for each project that can maximize success.
  - Include outcome based KPIs which can be used to measure success and disburse payments.
- iii. Suggest any changes to USF mandates to engage in such projects including changes to Special program. This can include Telecom Policy 2016 or USF Rules 2006.
- iv. Submit detailed study on need and level of USF subsidy towards handsets with focus on USF lots that can benefit from such subsidy, mode of granting subsidy (subsidy to local industry for assembly or direct to consumer via Service provider or other) and need of any SW customization to address the underserved.
- v. Specific recommendations to enhance existing USF Digital/Special Projects. This includes ongoing special or digital projects in planning or pilot mode.

## **5. Reporting**

- a) Upon completion of tasks, the Consulting Firm shall submit a detailed report addressing all the requirements, details of recommended projects, case studies and references in both soft (MS Word) and hard copy.
- b) Each page of the submitted report shall be signed by the authorized representative of the Consulting Firm.
- c) The successful bidder shall submit weekly reports on the progress of the assignment and a final report summarizing the tasks performed, conclusions and recommendations.
- d) The Report shall be considered final, only after it has been accepted by USF and a certificate thereof issued.

**6. Time Schedule for assignment:**

Assignment must be completed within 12 weeks from the contract signing date

**7. Payment Terms:**

Following payment terms will be followed:

- i. 5% payment on contract signing in the form of Mobilization Advance
- ii. 75% upon submission of the Final Report
- iii. 20% on final acceptance by USF

**8. References:**

- a) USF - <https://www.usf.org.pk/>
- b) PTA - <http://www.pta.gov.pk/en>
- c) MoITT - <http://www.moitt.gov.pk/>