Universal Service Fund

“Every Pakistani has the right to modern telecommunication services and USF strive to provide that”

10th October 2018

www.usf.org.pk
Pakistan at a Glance

- Worlds 6th Largest Nation - ~208 million population
- Has a total area of 796,095 Km²
- Diverse Geography
  - Has 8 of the top 20 tallest mountains in the world
  - More than 92,000 Km² of Deserts
  - 25,220 Km² of Water Area
- Tourist Heavens

Great Trango Tower

K2: World's Second highest peak

Kailash Valley

Shangrila, Skardu

Faries' Lake - Saiful Malook
Bridging the Gap through USF Subsidy

- Despite massive growth many areas remain **Unserved & Under Served**
- **USF** Provides **metro equivalent services in unserved & underserved areas**
USF- SP COOPERATION

Challenges!

- Difficult Terrain
- Sparse Population
- Harsh Weathers
- No Electricity
- No Backhaul
- Poor Logistics
- Business Case

Solutions

- Extension in Implementation Time
- USF Service for Mauza with Population of 100 and above
- Mandatory Solar Power for all USF BTS Sites
- OFC Projects for Backhaul Provisioning
- CAPEX Subsidy up to 100% of Cost
- OPEX Subsidy for first 3 Years
USFCo BoD Framework

- **Public-Private-Partnership** - rather than purely Public
- **A Company** – with a fully authorized *Board of Directors*

- **PUBLIC**
  - Minister of IT
  - Federal Secretary IT
  - Member Telecom MoIT
  - Chairman PTA

- **USF Co. Board of Directors**

- **PRIVATE**
  - Nominee Cellular SPs
  - Nom. Fixed-Line SPs
  - Nominee ISPs
  - Nom. Consumer Groups

- **CEO USF**

PUBLIC-PRIVATE-PARTNERSHIP - rather than purely Public
A Company – with a fully authorized Board of Directors
USF Fund in Pakistan

Licensed Telecom Service Providers

Government acts as a “Trustee”!

Ministry of IT

Ministry of Finance
Cabinet Division

“USF Policy Committee”
USF Account with FTO

‘Company’ under Companies Ord. 1984

USF Co.

Consumers

- Project Designing
- Competitive Bidding
- Project Partner Selection
- Implementation
- Payments after Tech Audit.

1 Rep. each

1.5% of Revenues APC, if applicable

USF Subsidy Payments
Network Deployment
**USF PROGRAMMES**

- **BSD/ NG-BSD**
  - Broadband for Sustainable Development
  - Basic Telephony 2G/WLL
  - Mobile Broadband through 3G / 4G

- **Broadband**
  - Fixed Broadband
  - Primarily through DSL, EVDO & WiMAX

- **Optic Fiber**
  - Extension of Fiber Optic Connectivity to unserved areas

- **Digital Inclusion**
  - to extend the benefits of modern technologies to the marginalized sections of the society
  - ICT for
    - Special People
    - Girls
    - Educational Institutions
    - E-Commerce

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**BROADBAND PROLIFERATION & DIGITAL INCLUSION**
Telecommunication Coverage Status

Before USF – 2006-07

TELEDENSITY

44.06%
Total 6,725 Unserved Mauzas Covered till date

Covered

USF Lots Being Implemented

Advertised

Planned 18-19 Subject to Clearance

BSD – Broadband for Sustainable Development
Voice and Data 3G/4G

CURRENT TELEDENSITY
74.3%
1- Data Collection

- Topography Sheets, Co-ords of Villages: Survey of Pakistan
- Satellite Imagery: SUPARCO
- Population Data: Pakistan Census Organization
- Existing Telecom Infrastructure: Telecom Operators
- Field Data: Hired Consultants
Project Planning & Implementation at a Glance

2- Identification of Project Targets

- Digitize villages Data with Software tools
- Establish correlation between Data of SoP & PCO
- Plot Operators’ Data in GIS Tools
- Identify & mark Unserved Areas / villages
Project Planning & Implementation at a Glance

3- Project Implementation

Tender for Open Bidding Process Launch
Evaluation of Bids and Identification of Lowest Qualified Bidder
Contract Award after USF Board’s Approval
Project Implementation

SHANGLA DISTRICT
AFTER USF

- Already Served Mauza
- Mauza Under USF Coverage
- Already Served Area
- USF Coverage
- Unserved Area
- USF BTS Sites
- Cellular BTS
- PTCL WLL
- Telephone Exchange
- District Headquarters
- District Boundary
Broadband for Sustainable Development (BSD) Programme

TARGET!

Providing Voice and Broadband Internet services to Mauzas in Unserved Remote and Rural Areas

Evolution

- **2007**
  - RTeS
  - Voice
  - Basic Data

- **2015**
  - BSD
  - Voice
  - Mobile Broadband (256Kbps)

- **2018**
  - NG-BSD
  - Voice
  - Mobile Broadband (512 kbps)
Future Outlook - Next Gen. BSD Program

- **Voice centric**
  - Data Rate in USF Areas WERE:
    - Downlink – 50 kbps
    - Uplink – Not Defined
    - 2G/WLL Services

- **Broadband centric (Enhanced Data Rates)**
  - Data Rate in USF Areas WERE:
    - Downlink – 256 kbps
    - Uplink – 64 kbps
    - Backhaul for 2G and 3G

- **User behavior shifting to app-centric**,
  - NEW Data Rates for APP coverage
    - Downlink – 512 kbps
    - Uplink – 128 kbps
    - 4G Services

**NG-BSD Scope**

- Higher Data Rates
- Seamless app coverage
- National Roaming where applicable
- Projects to provide coverage along National Highways and Motorways
NG-BSD : Plan for Current FY

- Dadu Lot
- Hyderabad Lot
- Bahawalpur Lot
- Bahawalnagar Lot &
- Rahim Yar Khan Lot

Potential NG BSD Lots

USF 3G Lots

Planned 5 NG BSD Lots
Future Outlook

Next Gen. BSD for National Highways & Motorways

Salient Features

- Next Generation Broadband Infrastructure for un/under served segments of Motorways and Highways
- 512Kbps Downlink, 128Kbps Uplink
- Mandatory Infrastructure Sharing
- National Roaming

Estimated Route Lengths

<table>
<thead>
<tr>
<th>Province</th>
<th>Motorways and National Highways</th>
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<tbody>
<tr>
<td></td>
<td>Total Route Length (Kms)</td>
</tr>
<tr>
<td>Balochistan</td>
<td>4,129</td>
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<tr>
<td>Sindh</td>
<td>2,407</td>
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<tr>
<td>Punjab</td>
<td>3,697</td>
</tr>
<tr>
<td>Khyber Pakhtunkhwa</td>
<td>2,215</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,448</strong></td>
</tr>
</tbody>
</table>
Broadband Programme

TARGET!

- Establishment of Broadband Infrastructure
- Establishment of Broadband Centers for Educational Institutions and Community

Evolution

Primarily Fixed Broadband in Unserved Urban Areas

2009 to 2015

479 Towns & Cities Covered & 784,279 subscribers Achieved

More than 1,300 EBCs and 370 CBCs established
Optic Fiber Cable (OFC) Programme

TARGET!

To connect unserved Tehsil Headquarters and Major Towns enroute with OFC

About 7,000 kms of fiber laid connecting 84 Tehsil HQs and Towns Across Country
Digital Inclusion

**CURRENTLY:**

- ICT for Girls Initiative
  - ICT Labs in Women Empowerment Centers
  - ICT Labs in FDE Girl Schools
  - ICT4G Web portal
- ICT Labs in Sweet Homes
- ICT for People with Special Needs
- E-Commerce
Women Empowerment Centers

ICT Labs in WECs being run by Pakistan Bait-ul-Maal

100 Master Trainers trained by Microsoft

WECs are imparting employable skills to women

100 Labs Established
20 Labs in Process
ICT for Girls Schools of FDE

To establish ICT Labs in Girls Schools being run by Federal Directorate of Education

226 Computer Labs Established

202 Female Teachers Hired by USF & trained by Microsoft
Sweet Homes

ICT Labs in Orphanages being run by Pakistan Bait-ul-Maal

12 Labs Established
Special Project: ICT for Disabled

Launched in Last FY: Targets are National Library of Pakistan and 5 Special Education Centers under CADD

- Computer Labs with furniture, Specialized equipment & Software
  - Braille embosser,
  - Zoom text large Keyboard,
  - Joystick Mouse,
  - Interactive console with gesture control sensor for autistic people

Launched in last FY - Implementation in Progress
Objective: To empower Craft MSMEs via E-commerce Platform to increase Sales

- Registration of MSMEs and products
- MSME benefits from increase in online sales Volume
- E-commerce platform is self sustainable

Clusters:

- Leather
- Carpet
- Furniture
- Textile
- Jewelry
- Pottery

Success:

1. Number of MSMEs REGISTERED ON E-commerce platform
2. % increase in Sale Volumes AFTER Registration on platform
Looking Ahead: VISION AND MISSION

VISION
• Prepare Pakistan for the 4th industrial revolution by enabling digital inclusion for all.

MISSION
• Re-focus on BB availability for all of Pakistan
• Smartphone and Data Package Affordability
• Launch “Digital Inclusion” program for onboarding

Multi pronged approached to Kickstart Digital Lifestyle Inclusion of the un/underserved
Thank you