

**Central Asian Cellular Forum** 

# Pakistan: DIRBS Implementation Journey and Outcomes

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### Pakistan: DIRBS Implementation Journey and Outcomes







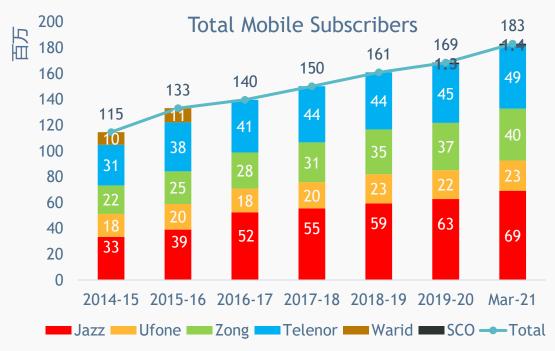
16 Years of service in advancing the mobile ecosystem through policy support, software development, engineering services and system integration

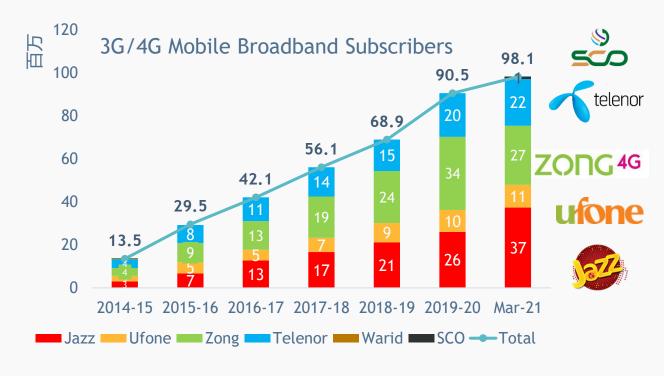
### Pakistan Telecom Stats

### World's 9th most Mobile Subscribers

Pakistan has an emerging market in mobile industry. Its Average Annual Growth Rate(AAGR) in last five years for mobile subscribers is 10% whereas for mobile broadband subscribers is 28%









### Why DIRBS?

- Worldwide impact of counterfeiting on smartphone sales is estimated at 184 million units, valued at 45.3 billion EUR or 12.9% of total sales.
  - Pakistan is estimated to have 23.8% of lost sales in the country.
- IMEI tampering was illegal. Type Approval process was available however it was manual with limited functionalities
- Strong need for an automated technical solution to identify and block invalid/illegal devices from operating on networks
- Mandate for PTA (Pakistan Telecommunication Authority)
  in Telecom Policy 2015 for developing a framework to
  curb the counterfeit devices.





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## DIRBS Outcomes – Quantitative Import Revenues



\$ 577 Million



Individuals Device Revenues



**2019** 

Untapped revenue



309 %

2020

2019

### DIRBS Outcomes – Local Mobile Assembly

**2G/3G/4G** For Import & Export 'Manufactured in Pakistan'



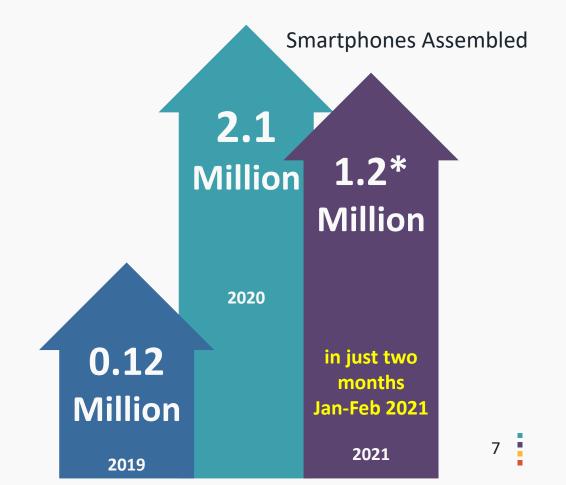
Country's first
Mobile Device
Manufacturing (MDM)
Regulations notified

25
Million
Local Mobile Devices
Assembled

33
Local Mobile
Assembly Plants

Mobile
Manufacturing
Authorization

10 Valid for Next 10 Years





### **DIRBS Outcomes - Qualitative**

	Pre-DIRBS	Post-DIRBS
IMEI Verification	Consumers could not verify the status of mobile devices (Legally Imported, Counterfeit etc.)	Consumers can check the compliance status of the device using any method i.e.: Web Portal, Mobile App, SMS
Digital transformation of registration process	Manual process for mobile registration	Consumers can register their mobile device using multiple digital platforms i.e. through web portal, USSD code or by visiting nearest MNO franchisee
One Window Mobile Registration	Consumers required to visit multiple departments to complete application process	One window solution for applicants as Platform integrated with all stakeholders
Ease of Registration: Device Registration without Internet	Individuals could not apply without internet connectivity	Pakistan is the first country in the world to introduce mobile device registration through USSD code (consumers can now apply for mobile registration through USSD code by dialing *8484#).
Automation	No processing after office hours or on public holidays	Round the clock availability of system
IMEI Validation across the platform	Manual IMEI verification done with GSMA-TAC data only.	Each IMEI is verified with multiple dataset i.e. GSMA/Stolen/Duplicated /PTA Registered Devices during approval. Hence Data integrity, consistency and uniformity achieved.



### **DIRBS Pakistan Implementation Phases**

















### DIRBS Pakistan: Concept Phase & Regulation

- DIRBS Concept paper and stakeholder consultation for development of framework
- Regulator decides to deploy a Device Identification, Registration and Blocking System (DIRBS)
- Engaged CACF for customization, installation and operations
- Stake holders on boarding regarding regulation- MNOs, FBR (Federal Board of Revenue), OEMs, Importers, retailers etc
- DIRBS regulation notified





### DIRBS Pakistan: Deployment & Problem Analysis

- Data Collection & Analysis
- DIRBS becomes operational and starts gathering information about the country's device landscape that included invalid/illegal devices operating on networks

- · Decisions for amnesty of existing counterfeit and smuggled devices.
  - 100 million counterfeit IMEI pairs with MSISDN/IMSI
  - Harmonization of all the existing valid IMEIs





### **DIRBS Pakistan: Awareness**

### **Reason for Awareness**

- To encourage buy PTA approved devices
- Verify IMEI based device with DVS (Device Verification System) before purchasing
- Use existing mobiles to avoid blocking

### Comprehensive and integrated awareness campaign

- Workshops to all major stakeholders i.e. Mobile Network Operators, Device Importers, Custom Authorities
- Articles and information ads in print and electronic media
- Dissemination of information through web/internet (banners, blogs, articles etc.)
- SMS messages to mobile subscribers

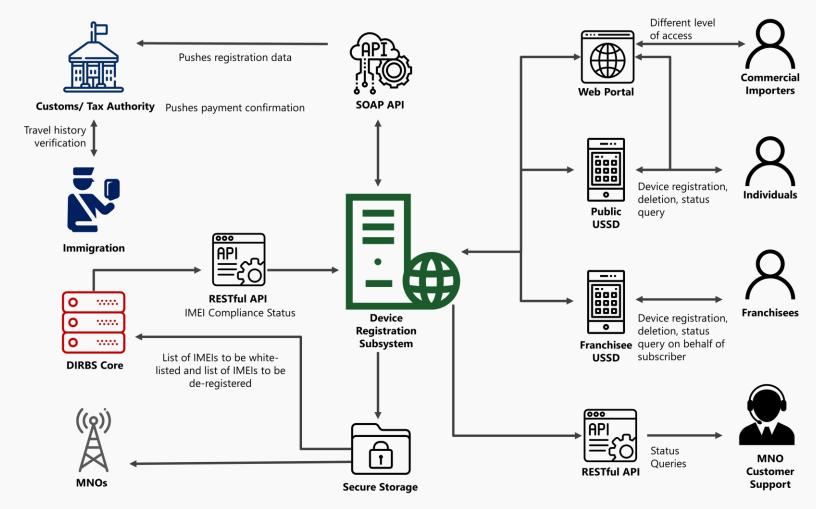






### DIRBS Pakistan: Integration

- Integration with all the relevant government departments is essential to ease up the process for consumers and they don't have to visit multiple offices.
- Consumers can register their mobile devices by using multiple platforms including web portal, USSD platform and by visiting nearest cellular operator franchisees.





Enforcement

DIRBS Pakistan: Enforcement



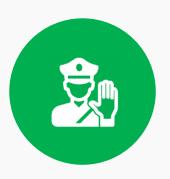
24 Million
Counterfeit
Device
Blocked



675K

Duplicated /
Cloned IMEIs

Blocked



175K
Stolen Devices
Blocked

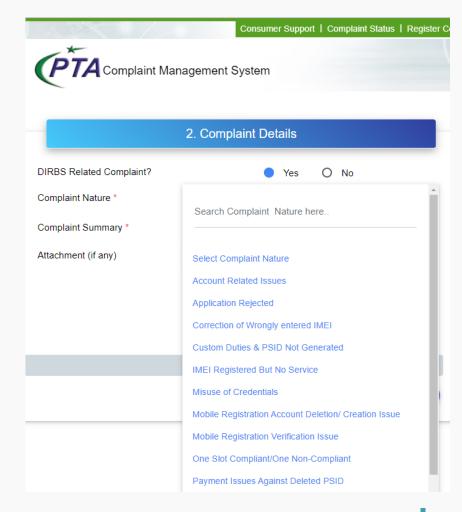




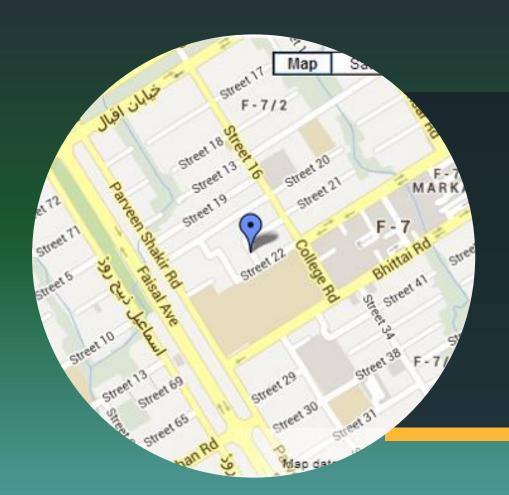
### **DIRBS: Consumer Support**

To facilitate consumers, customers services are available through:

- Regulator
  - Complaint Management System (CMS) Web Portal
  - Help desk at regulator headquarter and regional offices
  - Email Support
  - Phone Support via toll free number
- Mobile Network Operators (MNOs)
  - With over 1422 contact points
  - Customer support centers through DIRBS API / Web Services - 24x7







### Thank You

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