

Government of Pakistan
Ministry of Information Technology
(IT & Telecom Division)

No. 8-8/2006-Dir (W)

Islamabad, 20th May, 2008

Subject: **Policy Directive to Support Technical Implementation of Mobile Banking including Mobile Money Transfers and Remittances**

Penetration of banking and financial services outreach in Pakistan has improved gradually. However, it can still be termed as low for demographic difficulties and per capita income levels. The banks are still in the mindset that it is not cost effective to establish branch infrastructure in far flung and low income areas. Government has set itself the agenda for improvement of access to financial services through alternative mechanisms. Recent widespread proliferation of wireless communications has opened new avenues of possibility for bringing the unbanked communities into banking net through mobile banking (m-banking). The m-banking access through wireless enabled phones and infrastructure can enable benefits of a diverse range of financial services like cash-in, cash-out, micro-payments, utility bill payments etc which can easily be accessed at any time without the need of visiting bank branches. Several models of m-banking have been successfully implemented around the world. It has been an active area of study by the MoIT-SBP joint Committee which was setup for working out suitable models for Pakistan.

2. In today's environment where telecom has reached nooks and corners of the country a simplified approach to provide access to financial services has become possible. This can be achieved by having a simplified financial and telecom sector regulations model to harness full potential of such services for rural populace. In pursuance of the work of the Joint Committee State bank of Pakistan has issued "Branchless Banking Regulations" based on "Bank-led model" for financial institutions for operation of m-banking using wireless/cellular technology options. A relevant telecom sector policy framework to compliment the SBP regulations is being defined through subject policy directive being detailed below.

3. Now keeping above background in view and;

Noting

- i). *the important role and strengths of wireless telecom networks in completion of different kinds of permissible financial transactions; and*
- ii). *that at a future point of time "Non bank/telecom operator led" model framework may also be acceptable to SBP and it may allow operators and other license holders with valid licenses to take on the banking part of the m-banking activity on their own under SBP financial regulations.*

Considering

- i). *The criticality attached to smooth completion of financial transaction for the success of m-banking services.*
- ii). *that the Financial Institutions (FIs) involved in m-banking services will carry responsibility of fraud protection and other associated risk. FIs will be highly dependent on reliable relay of user transactions over the networks of wireless/cellular mobile operators.*



- iii). *that for "any to any" case involving multiple financial institutions at the back end and multiple networks at the other end there will be a Third Party Service Provider (TPSP) for settling such transactions, which will also need regulatory oversight of the Pakistan Telecommunication Authority under existing Class Licensing for Value added Services (CVAL) regime;*
- iv). *also that both FIs, TPSPs and wireless operators will have to enter into Service Level Agreements (SLAs) and Agency Agreements (AAs) as prescribed in SBP regulations which will also need inputs and endorsement of telecom regulator.*
- v). *further that PTA will have to go through SBP regulations while framing telecom sector regulations to govern m-banking implementations, and appropriate provisions of the same will have to be included appropriately in PTA regulation.*

Recognizing

- i). *that due to importance of prudent handling and timely transport of financial transactions occurring through the m-banking and micro-payment systems there is a need for setting critical thresholds and benchmarks for performance of SLAs between technology partners and the FIs; and*
- ii). *that there is a need to define and add a category for Third Party Service providers within the Class Licensing regime already issued by the Authority*

4. In view of the foregoing the Federal Government is pleased to issue policy directives given below under section 8 subsection (ii)(aa) of The Pakistan Telecommunication (Re-organization) Act 1996 (amended 2006), to Pakistan Telecommunication Authority (PTA). It also requires PTA to implement framework for telecommunication sector development for reaching out with m-banking services through regulations to be framed by PTA as per detail outlined hereunder. These regulations shall govern technical implementation of m-banking systems, through mobile infrastructure of cellular operators facilitating transfers and remittances etc. based on following general and technical parameters:

Eligibility of Offering m-Banking Services

According to FI regulations issued by SBP there are several possible ways of setting up m-banking services. This may include direct relationship/s between FI/s and wireless operator network/s or similar relationships affected through TPSPs with the third party provider acting as technology provider and intermediary between the networks and FIs (relationship diagram at annex I). This policy covers both the Operators and the TPSPs.

- (1) All existing cellular and other relevant wireless operators with valid licenses (hereinafter called operators) shall be eligible to offer m-banking services. This will be one of the Value Added Services (VAS) from their integrated/upgraded platforms without the need for any further licensing.
- (2) these operators who consent to regulatory framework shall be eligible and obligated to offer m-banking through either direct collaboration with SBP designated FIs or also through Third Party Service Providers (TPSPs) as mentioned in the SBP regulations based on "Bank led" model.



- (3) the right to offer m-banking service for operators will accrue automatically subject to up gradation of infrastructure as mentioned in clause (5) to (7) below. PTA will be obliged to have (opt-in) consent of the operators to comply with conditionalities laid down in this framework and to be suitably reflected in PTA regulations. These regulations will have to be in place prior to undertaking of the venture.
- (4) PTA, through public process, will invite TPSPs to install their platforms complying to the requirements of the bank-led model, this framework and within PTA regulations. Such TPSPs will be given rights to install their platforms under the CVAL category established for the purpose. The fee structure for such CVAL will be kept on nominal levels and specific to this service or other associated services to be prescribed by the authority.

Network Conditioning:-

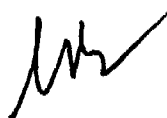
- (5) A variety of protocols e.g. Short messaging Service (SMS), Wireless Application Protocol (WAP), Interactive Voice Recognition (IVR) etc. can be used for provisioning of m-banking services although most popular models are SMS and WAP. Operators will ensure, through conditioning of their networks, that whatever model of transport is technically and commercially agreed with their m-banking partners (FIs/ third party), there should be available robust and highly available priority pipes/channels so that no transactions are lost or delayed beyond permissible timeslots.
- (6) To ensure maximum benefit of m-banking to mobile users across the board, operators will ensure interoperability between systems of other operators no matter which technical platform they chose to implement for m-banking service in collaboration with their banking and TPSP partners.
- (7) Short codes to be facilitated by PTA made available by the operators to FIs and/or TPSPs for differentiation of services and branding.
- (8) No operator may deny interconnection to another operator who has m-banking system with same or other FI/s

Transaction Data Security and Integrity:-

- (9) Operators will ensure that appropriate security/ encryption arrangements are in place in their networks to ensure integrity of transaction data during transport in the network and delivery to end user terminal.
- (10) Similarly appropriate actions should be taken to ensure confidentiality of user authentication and transaction related data during the transient or caching operations as well as for stored data within the operators' servers as the case may be.

Third Party Service Providers (TPSPs)

- (11) The authority will incorporate special category of Financial and Applications service provider in the Class Value Added License (CVAL) framework already in place with specific operational requirements, QoS benchmarks and Security related provisions for



registration and operation of Third Party Service Providers (TPSPs) to act as technology intermediary between the operator/s and FI/s.

Quality of Service and SLA Benchmarks

- (12) Since the implications of risks and liabilities of the failure during any stage of transaction in the "Bank led model" mandated by the regulatory framework of SBP will be on the FI involved, Authority will prescribe minimum QoS thresholds/ possible benchmarks to be guaranteed by Operators and TPSPs, to mitigate and manage possible technology related risks. These may include but will not be limited to network and resource availability, reliability, priority SMS and other message delivery as well as security standards required for protecting crucial financial transaction and user right protection.
- (13) As a matter of extreme importance the turnaround time from initiation of a transaction to receipt of confirmation message or otherwise, for both parties involved in the transaction, should have a certain maximum limit set according to best practices in the spirit of real-time financial transactions.

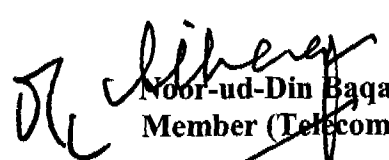
SLA Enforcement and Dispute Resolution

- (14) All SLAs and/or AAs between the m-banking chain players relating to data integrity and communications quality will be also be submitted to PTA and the Authority will oversee the performance of telecom players according to the SLAs/AAs. The sample drafts/model for SLAs to be included in the PTA regulations.
- (15) Network related disputes involving SLA/AA performance between the FIs, TPSPs and the Operators will be referred to the Authority in case they cannot be amicably resolved on commercial basis between these entities.
- (16) Authority may take any other enforcement measures within the mandate and spirit of this policy framework, giving due considerations to the SBP Regulations to ensure smooth and non-burdensome implementation.

5. In view of background and need established in paras (1) to (3), the policy directive in para 4 above are being issued with the approval of the Minister for IT.

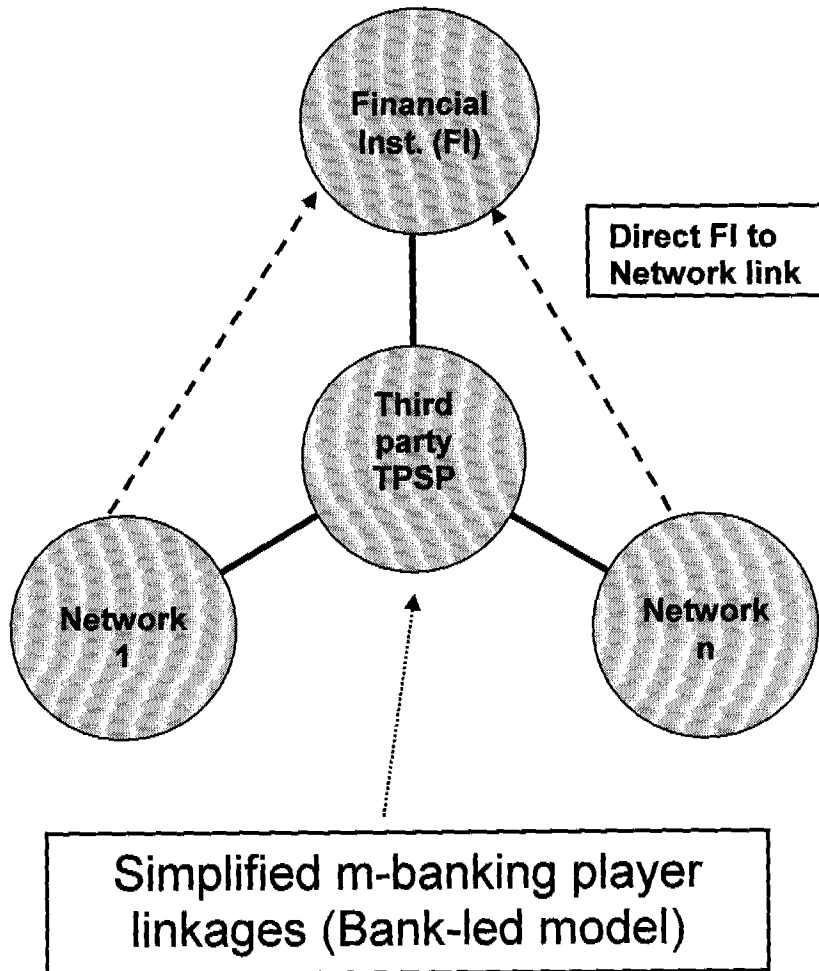
✓ Chairman,
Pakistan Telecommunication Authority,
Islamabad.

Copy to: ✓ i) Secretary, Cabinet Division for information please.
✓ ii) Secretary, Finance Division for information please
✓ iii) Governor State Bank of Pakistan, Pakistan.


Noor-ud-Din Baqai
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Annex I



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