



# COAI Response

TRAI Consultation Paper on  
USSD Based Mobile Banking  
Services for Financial Inclusion

04 October 2013

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## I. EXECUTIVE SUMMARY

1. The bank-based initiatives undertaken by Government and Reserve Bank of India (RBI) to extend the reach of banking to those outside the formal banking system have failed in achieving financial inclusion. Financial inclusion, which certainly aims at “Banking the unbanked”, can be achieved by creating an interoperable effective transaction infrastructure for any kinds of payments so as to make them simple, affordable and risk-free for the unbanked. This requires us to make a clear distinction between mobile banking and mobile payment – while mobile banking includes all the four mandates of financial services - deposits/savings, credit, micro insurance and transfers/remittances, mobile payments include the most basic one – transfers/remittances. Mobile operators are best placed to fulfill the objective of financial inclusion through mobile payments as they possess the four key elements that are a precursor to its achievement – distribution/retail network, infrastructure, technology and back-end support.
2. An Inter-Ministerial Group (IMG) was constituted by the Cabinet Secretariat to enable finalization of a framework for delivery of basic financial services using mobile phones. The IMG framework focussed on transactions and envisages creation of “Mobile linked No-Frills Accounts” by the Banks, which will have various transaction limits. The limit placed on the transactions helps to address the security concerns related to money laundering and fraud. No specific communication channel of provisioning services was identified for no-frill banking services.
3. We would like to highlight the shortcomings of the IMG report in limiting the role of MSP and treating m-banking as primarily a banking service. COAI believes that allowing cash-out for mobile payments (pre-paid instrument) is the key step towards making mobile payments successful. Harmonizing and unifying KYC norms for banks and telcos can speed up customer adoption and give quick results. The security concerns related to money laundering and fraud can be overcome by allowing for limited balance backed by ESCROW account by operators to cover customers with cash-out facility at multiple retail points.
4. International experience also shows that an enabling regulatory framework plays a fundamental role in expanding the reach and improving the efficiency of the financial sector. Building an inclusive digital financial system requires a level playing field in which both banks and non-banks, particularly mobile network operators (MNOs), can provide mobile money services. Developing mobile money requires leveraging the value-added proposition for MNOs. Also, the regulators across different countries have stayed away from mandating the business model and technology for providing these services.
5. The emphasis on USSD based mobile banking services is not a viable option for developing mobile payment eco-system as it does not lead to the core objective of financial inclusion. **COAI believes that a technology-neutral B2B model should be encouraged by the regulator. Thus, the authority should not mandate the business model, technology to be deployed and the pricing/ceiling for these services.**

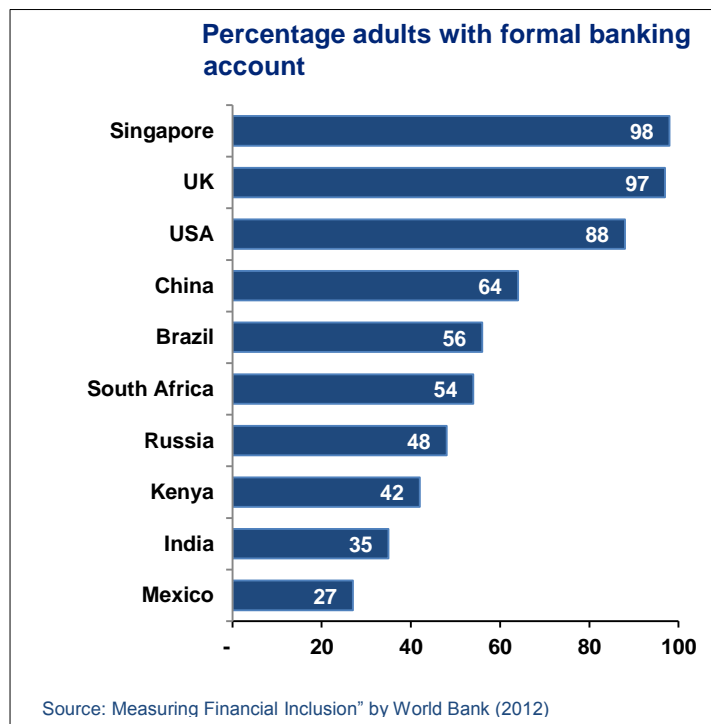
## II. PREAMBLE

### 1. INTRODUCTION

1.1. As an industry, we support the national objective of financial inclusion of the unbanked. Financial inclusion has been formally defined by The Rangarajan Committee on Financial Inclusion as, “a comprehensive and holistic process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost”. Financial inclusion should improve access to mainstream banking products/services: deposits/savings, credit, micro insurance and remittances/transfers. It is based on the premise that mainstream banking addresses the unmet/ under-met needs of the Bottom of Pyramid (BoP) sections to access financial services at reasonable costs, and become part of the formal economy.

### 2. STATUS OF BANKING SERVICES IN INDIA

2.1. In India, significantly large regions and populations are still unbanked and under-banked and as per Census 2011, a sizeable proportion of households (41%) do not have a bank account. India has lower banking penetration compared to the other developed and developing countries of the world.



2.2. Only 58.7% of total households are availing banking services in the country. There are 102,343 branches of Scheduled Commercial Banks (SCBs) in the country, out of which 37,953 (37%) bank branches are in the rural areas and 27,219 (26%) in semi-urban areas. The total number of villages with banking services stands at less than one lakh villages, as at end March 2011 and nearly 100 million households are still excluded from banking.

As per Census 2011			
Households	Total number of households	Number of households availing banking services	Percent of total households
Rural	167,826,730	91,369,805	54.4
Urban	78,865,937	53,444,983	67.8
<b>Total</b>	<b>246,692,667</b>	<b>144,814,78</b>	<b>58.7</b>

2.3. CRISIL Inclusix, a comprehensive index for measuring the progress of financial inclusion in the country down to the district-level, showed all-India CRISIL Inclusix score of 40.1 (on a scale of 100 and over a three-year timeframe from 2009 to 2011), which is relatively low. It is a reflection of under-penetration of formal banking facilities in most parts of the country. The bottom 50 scoring districts have just 2% of the country's bank branches.

### 3. STEPS UNDERTAKEN BY GOVERNMENT, RBI AND BANKS FOR FINANCIAL INCLUSION

3.1. To extend the reach of banking to those outside the formal banking system, Government and Reserve Bank of India (RBI) have introduced various initiatives as listed below:

3.1.1. **Opening of Bank Branches:** Government had issued detailed strategy and guidelines on Financial Inclusion in October 2011, advising banks to open branches in all habitations of 5,000 or more population in under-banked districts and 10,000 or more population in other districts. **By the end of April, 2013, new branches have been opened up in only 38% of the identified villages/habitation.**

3.1.2. **Each household to have atleast one bank account:** Banks were advised to ensure service area bank in rural areas and banks assigned the responsibility in specific wards in urban area to ensure that every household has at least one bank account. **India is still far away from covering 100% households.**

3.1.3. **Business Correspondent Model:** In 2006, RBI permitted banks to use the services of intermediaries - Business Facilitators (BFs) and Business Correspondents (BCs) to enable them to expand their outreach and offer a limited range of banking services at low cost, particularly where setting up a brick and mortar branch is not viable. Further, since September 2010, RBI permitted banks to engage for profit companies registered under the Indian Companies Act, 1956, excluding Non-Banking Financial Companies (NBFCs), as BCs. According to the data maintained by RBI, the total number of BCs deployed by Banks was only 152,000 as at December 2012. **During 2012-13, over 18.38 crore transactions valued at INR 16,533 crore had been undertaken by BCs till December 2012. Banks have to realize that for the BC model to succeed, BCs have to be compensated adequately so that they too see this as a business opportunity.**

3.1.4. **Swabhimaan Campaign:** Under the Financial Inclusion Campaign - "Swabhimaan" launched in February 2011, Banks provided banking facilities to over 74,000 habitations having a population in excess of 2000 using various models and technologies including branchless banking through Business Correspondents Agents (BCAs) by March, 2012. **However, most of these accounts have been lying dormant and customers are not using the services as low-income households are generally reluctant to access their bank accounts; visiting the**

nearest bank branch means not only expenditure on transport but also the loss of a day's wages.

3.1.5. **Setting up of Ultra Small Branches (USBs):** Only a total of over 50,000 USBs have been set up in the country by March, 2013.

3.1.6. **USSD based mobile banking services:** The Department of Financial Services (DoFS) through the National Payments Corporation of India (NPCI) worked upon a common USSD Platform for all Banks and Telcos to offer mobile banking services. **NPCI data on IMPS trends for 2012 show that during January-December 2012, while over 45 million MMIDs had been issued by 52 banks, only 9 lakhs transactions aggregating to over INR 229 crore took place, reflecting just over 2% of users actually transacting on the mobile phones.**

#### 4. PROGRESS TOWARDS FINANCIAL INCLUSION

4.1. The data evidence as suggested above clearly shows that the government and RBI have failed to achieve financial inclusion through these initiatives and it seems like a distant dream. It is apparent from the above initiatives that India has chosen a bank-based model, primarily due to concerns of risk mitigation and supervision. Yet after many years, banks are struggling under the mandate, progress is slow and the cost of continuing exclusion is rising.

4.2. The TRAI consultation paper seems to suggest that mobile banking would help draw unbanked and under-banked into the banking fold. We wish to highlight that the role of the TSPs is limited to provisioning of the communication channel for mobile banking and cannot be the reason for success or failure in increasing the banking fold. The NPCI data evidence suggests that even though subscribers were in the millions, the number of transactions remained in the thousands. However, the key point is that the provision of the service alone is not the cause and TSPs alone cannot be the panacea for success/failure of financial inclusion.

#### 5. SUCCESS FACTOR FOR FINANCIAL INCLUSION: MOBILE BANKING OR MOBILE PAYMENTS

5.1. This raises a serious question as to what is at the root-cause of not being able to progress towards the defined objective of financial inclusion. The answer is simply the failure to distinguish between mobile banking and mobile payments and not boosting the correct service, i.e., mobile payments. At this juncture, it is important to first understand the difference between both of them.

	Mobile Payments	Mobile Banking
Value Proposition to Customer	P2P transfer of money	Mobile access to advanced financial products
Bank Account	<ul style="list-style-type: none"> <li>No need to have a bank account</li> </ul>	<ul style="list-style-type: none"> <li>Mandatory to have a bank account</li> </ul>

<b>Typical Products</b>	<ul style="list-style-type: none"> <li>• Remittances</li> <li>• P2P airtime transfer</li> <li>• P2P mobile money transfer</li> </ul>	<ul style="list-style-type: none"> <li>• Microfinance</li> <li>• Savings and deposits.</li> <li>• Credit products</li> <li>• Stock trading, Securitization</li> <li>• Loan and insurance payment</li> </ul>
<b>Benefits for Financial Inclusion</b>	<ul style="list-style-type: none"> <li>• Expand reach to the unbanked population at low cost</li> </ul>	<ul style="list-style-type: none"> <li>• The opportunity to convert the unbanked population to banked populations and provide them benefits like credit/loans etc.</li> </ul>
<b>Status in India</b>	Services like airtime transfer are offered directly by MNOs. Other services like remittances are offered by banks, with MNOs acting as Business Correspondents	Mobile finance is the more advanced stage of mobile money and can be realized only after proven adoption of mobile payments. These services have no footprint in India.

5.2. We believe that the priority today is creating an interoperable effective transaction infrastructure for any kinds of payments to make them simple, affordable and risk-free. **When people get the confidence that m-transactions do not pose risks to their own funds, the adoption of other services such as credit and insurance will become more natural. Thus, over a period of time, as subscribers get accustomed to the use of m-payment services, we can advance to other elements of mobile banking.**

5.3. Mobile operators are best placed to fulfill the objective of financial inclusion through mobile payments as they possess the **four key elements that are a precursor to its achievement – distribution/retail network, infrastructure, technology and back-end support.**

5.4. Thus, the **present focus of financial inclusion must be to address only one of the four mandates of financial inclusion: transfers and payments, beginning with a mapping and creation of bank accounts for the unbanked population, and preparing them for the pipeline of direct benefit transfers. The second stage represents a growing participation and increased consumption of appropriate financial products - credit, savings, insurance, etc.**

5.5. The above structure for m-payments allow “financial inclusion” as:

- 5.5.1. The receiver doesn’t need to have a bank account and can directly collect the transferred amount using his mobile at a business correspondent outlet.
- 5.5.2. Expands the outreach of financial products.
- 5.5.3. Reduces cash transactions.
- 5.5.4. Leverages the existing physical distribution network for cash transactions of the MNO and also bank ATMs – interoperable and also collaborative.
- 5.5.5. Merchant ecosystem benefits by the cashless transactions and cost effective payment instrument (for collections).
- 5.5.6. Brings informal transactions into the formal fold.

5.6. This distinction between mobile banking and mobile services will also help to overcome the second error in the definition of financial inclusion which seems to be pointing to ‘transfers/ payments’ as exclusively ‘banking’ services. This has created a need to reassess the roles and contribution of all the other stakeholders: payment gateways, Telco’s and mobile money, BCs and other institutional actors, which play a key role in enabling transfers and payments, but have little mandate or interest in providing banking services. The priority of the service should dictate the ownership and responsibility - Government/Bank/Telco or Demand-driven.

5.7. Thus, in conclusion the present definition of financial inclusion that certainly points to ‘banking inclusion’ needs to be modified to point to providing access to transfers/transactions.

## 6. IMG REPORT AND ITS APPLICABILITY

6.1. An Inter-Ministerial Group (IMG) was constituted by the Cabinet Secretariat to enable finalization of a framework for delivery of basic financial services using mobile phones. The recommendations of the report are really relevant to bring about financial inclusion through mobile phones:

6.1.1. The framework in the IMG report focusses on transactions and envisages creation of “Mobile linked No-Frills Accounts” by the Banks, which will have various transaction limits. Thus, the intent of the Group of Ministers was to address the needs of the unbanked and not the already banked customers as has been the case with NPCI services. The limit placed on the transactions helps to address the security concerns related to money laundering and fraud.

6.1.2. IMG identified the following three elements of the optimal delivery framework:

- a) Shareable “Know Your Customer (KYC)” norms
- b) A ubiquitous infrastructure component for “cash-in” and “cash-out” operations at the village / local level
- c) An additional infrastructure component for facilitating the management of a large number of small-value accounts and micro-transactions involved in the delivery of basic financial services.
- d) We certainly believe that all three key elements are a must for optimal delivery framework.

6.1.3. No specific communication channel of provisioning services was identified for no-frill banking services.

## 7. RECOMMENDATIONS FOR FOSTERING MOBILE PAYMENTS TO ACHIEVE FINANCIAL INCLUSION

7.1. While mobile banking is beginning to be a success in countries, it has so far failed to reach its true potential in India. The mobile based payment systems have immense potential in India and the success depends on certain measures facilitated by the regulatory authorities as below:

7.2. **Reasonable regulations:** Nobody disputes the idea that financial transactions need to be monitored. But there is also equally clear, a rather big difference between a money-transfer

system and a full lending bank. The regulations need to be tight enough to protect users and discourage money laundering but open enough to allow new services to emerge. The existing banking regulations are both over- and under-protective because they did not foresee the convergence of telecommunications and financial services.

- 7.2.1. In April 2012, TRAI released the Mobile Banking - Quality of Service Regulations, which lays down strict quality of service parameters including time frame for delivery of the messages relating to banking services. The delivery of any such service involves multiple parties – banks, TSPs, BC, customers, etc. When the delivery of services involves several parties and factors, application of regulations for meeting the quality parameters cannot be enforced just on the TSPs. Thus, the quality of service parameters should be modified taking into account the system performance and constraints of all stakeholders involved.
  - 7.2.2. Instead of regulations making it even more prescriptive and mandatory, one alternative is to invest significantly in the pilots where the services have been launched to ensure coverage and traction. We do not know which of the several modes- SMS, IVR, USSD, etc., are more acceptable to customers, and what are the transaction needs and levels. Thus, proper pilots and research studies will help us gather evidence and can help lead to better customer experience. Hence, we should roll out these services on B2B basis to observe the potential traction it may achieve.
- 7.3. **Addressing Security Issues:** The prime concerns of regulators while expanding coverage of the formal financial system revolve around ensuring financial stability and consumer protection, while addressing the risks of fraud and money laundering.
- 7.3.1. A regulation aimed at payment services alone, therefore, provides for a level playing field for all participants in the payments business, banks or non-banks: funds collected for the specific purpose of payments are isolated from the other funds of the institution, credit disbursement is disallowed from these funds, there are strict capital requirements, etc.
  - 7.3.2. There is a need for proportional regulation, i.e., lower levels of regulation for lower levels of risks.
  - 7.3.3. Placing a limit on the size of transactions and the total balance that can be stored reduces the risk of mobile money being used to launder cash.
  - 7.3.4. Money Laundering and Cross Border Financing of Terrorism (CFT) concerns are effectively addressed by the KYC process adhered to for customers.
- 7.4. **Allowing Cash-out for pre-paid instruments:** Access to cash-in and cash-out facility is most important for uptake of mobile money, because this creates ease of use, and creates customer confidence in the liquidity feature of the product. Cash-in and Cash-out at the retail outlets and ATMs will guarantee instant gratification for money remittances and propel its adoption. In light of the same, there is a need to allow cash-out on mobile prepaid instruments at retail outlets, ATMs and business correspondents. Limited balance backed by ESCROW account by operators to cover customers with cash-out facility at multiple retail points addresses security concerns. This has been supported by IMG report.

Taking cognizance of the fact that mobile payments can be a game changer both in the financial sector as well as to mobile companies, Shri Raghuram Rajan, the RBI Governor, recently stated their intent to conduct a pilot enabling cash payments using such instruments



and Aadhaar based identification. RBI will also set up a Technical Committee to examine the feasibility of using encrypted SMS-based funds transfer using an application that can run on any type of handset.

7.5. **Know your customer (KYC) norms** - Consumer protection and systemic risk are the major obstacles in pushing forward aggressively. There is no need to apply the strict KYC rules required in banking. This has been supported by IMG report. Harmonizing and unifying KYC norms for banks and telcos can speed up customer adoption and give quick results. Aadhaar can play a big role and act as a means to authenticate a person's identity at the point of transfer and collection of funds.

7.6. **Creating awareness:** There is a huge lack of awareness among customers and neither RBI nor any bank is doing anything about it. The case in point is the adoption of ATMs, which have become a retail banking mainstay. Consumers feel comfortable using it and see the benefits derived from using the service. The key to the success of ATMs is that it was rolled out gradually and consumers were given the right education in how to use it. Also, the key to fraud prevention does not lie in technology but in customer awareness and education.

7.7. **Government support:** The adoption of mobile payment network by the Government for Direct Benefit Transfer (DBT), the distribution of salaries and pensions, collection of taxes and encouragement for remittance transfer can give the mobile money system a much needed boost. It will also reduce leakages in the system as the payments are made directly through mobile platform cutting out touch points where corruption happens.

## 8. INTERNATIONAL BEST PRACTICES

8.1. At this juncture, we suggest that we study the successful International mobile banking models to understand the elements that led to their success which can be implemented in India.

8.2. **Kenya - M-Pesa: By far the most successful example of mobile money is M-PESA, launched in 2007 by Safaricom in Kenya.** It is now being used by over 17 million customers, equivalent to more than two-thirds of the adult Kenyan population; around 25% of the country's gross national product flows through it. M-Pesa allows a customer to deposit money at widely available M-Pesa outlets across Kenya, withdraw money at both outlets and ATMs and use M-Pesa as a cashless payment instrument for a variety of uses. It, thus, allows cash-out.

8.2.1. The factors behind the success of M-PESA can be listed as below:

- a) It was originally designed as a system to allow microfinance-loan repayments to be made by phone, reducing the costs associated with handling cash and thus making possible lower interest rates. But after pilot testing it was broadened to become a general money-transfer scheme.
- b) Cash-out facility was allowed. It offered a low cost and secure means of making financial transactions as compared to other methods.
- c) The most critical factor was the regulator's initial decision to allow the scheme to proceed on an experimental basis, without formal approval. M-PESA has since been extended to offer loans and savings products, and can also be used to disburse salaries or pay bills, which saves users further time and money (because they do not need to waste hours queuing up

at the bank). One study found that in rural Kenyan households that adopted M-PESA, incomes increased by 5-30%.

- d) A clear and effective marketing campaign (“Send money home”) contributed tremendously to its success.
- e) An efficient system to move cash that worked around behind the scenes was another important element.

**8.3. Sri Lanka:** In 2012, the Central Bank of Sri Lanka (CBSL) succeeded in establishing an enabling regulatory framework for mobile money after a dedicated effort of five years.

8.3.1. The move opened the market to both bank and non-bank providers and extended services to Sri Lanka’s unbanked population. Marking this shift was the launch of eZ Cash – operated by Dialog Axiata PLC (Dialog) – a mobile money service that signed up over 1 million customers in just one year.

8.3.2. To move from m-payments to m-banking, Central bank requires that mobile banking users must first be a bank account holder and apply for account under existing rules. The logical path available is through support of institutional payments.

**8.4. Philippines:** Mobile payment services were first launched in the Philippines in 2000 by Smart Communications’ venture Smart Money; in 2004 Globe Telecom launched G-cash. Both these services are cleared by the central bank and anti-money laundering (AML) council and do not need any banking tie-ups.

8.4.1. The Philippines market offers a well-developed mobile money proposition, in addition to cash-in, cash-out, money transfer, domestic remittances it also offers advanced services like salary payment, international remittances, loan repayment facility.

8.4.2. The regulatory approach being taken for m-banking services in the Philippines provide a good model for other countries. Rather than trying to work out the best rules in advance, which could hamper innovation, the regulator is working closely with the banks and operators behind the country's m-banking schemes. That way the regulator can see what is going on, so the scheme operators get more flexibility. The experience will feed into new banking regulations.

**8.5. Pakistan:** Mobile banking services took off in Pakistan in 2009 when Telenor Pakistan partnered with the Tameer Micro Finance Bank to launch their mobile banking services. The mobile banking services in Pakistan are not-stand alone “mobile accounts”; instead they are actual bank accounts (opened at the associated bank) linked to a mobile number. But the process of opening a Mobile Account has been simplified; a mobile subscriber can open the account at any associated MNO Sales and Service Center, MNO Franchise or Bank branch. Using Mobile Account the telecom subscribers, in addition to viewing account balances and requesting mini-statements, are provided the capability of making a host of payments, such as pay utility bills, recharge pre-paid and make post-paid payments for their mobile phone connections, and account to account fund transfers from their mobile phones.

**8.6. Bangladesh:** Bangladesh's first mobile financial service “bKash” was launched in July 2011. bKash is a Payment System Operator (PSO) License holder, and is regulated by the Bangladesh Bank. The banking partners for this service are BRAC Bank and ShoreBank International. The mobile banking services are provided through an extensive network of community-based agents using mobile technology. Most basic mobile banking features like cash-in, cash-out, and money transfer to both to people registered and not registered on the network and bill payment is

supported. However, advance services like International remittances, salary payment etc. are still not allowed as per the existing framework.

8.7. **Indonesia:** The mobile banking services were first launched in Indonesia in 2009 by Telkomsel. The mobile money activity in Indonesia is regulated and MNOs need to procure e-money license from the Bank of Indonesia. Currently Telkomsel, Indosat and Exelcom hold the e-money license. Remittance transfer is a key focus area of their business model from launch because of the large international migrant communities across Asia who needs to send money home, to Indonesia.

8.8. **There are several lessons that emerge from examples of mobile money services offered in other countries:**

- a) **Enabling regulatory framework** play a fundamental role in expanding the reach and improving the efficiency of the financial sector.
- b) Building an inclusive digital financial system requires **a level playing field in which both banks and non-banks, particularly MNOs,** can provide mobile money services.
- c) Developing mobile money requires **leveraging the value-added proposition for MNOs.**
- d) There is likely no need to reinvent the wheel: some of the policy and regulatory solutions to enable mobile money have already been tested successfully in a number of countries where MNOs are providing sound and secure mobile money services.
- e) **No need to mandate the business model, pricing structure/ceiling and technology to provide m-payment services.**
- f) **Availability of cash-out facility.**

## 9. USSD BASED MOBILE BANKING SERVICES: FRAMEWORK FOR SUCCESS

9.1. There needs to be a broader clarity on service-charge based approach for retail payments with an escrow fall back and a risk mitigation mechanism - which is the big picture versus a mandated 'session-based' user interface, which is narrowly focused on a query/single use transactions. Mandating investments and pricing only on the 'sessions' denies due consideration of all the future investment requirements for fraud detection, velocity checks, etc., which are larger banking control issues. USSD based mobile banking services through NPCI may not be a viable option for developing mobile payment eco-system as it hinders the core objective of financial inclusion, mandates an untried communication channel and supports an unfeasible business model. While as an industry, we are in support of the cause of financial inclusion, the main reasons why USSD based m-banking services will not help the cause are listed below.

9.1.1. **Banking the unbanked:** The objective of financial inclusion is to bring the unbanked population under the banking net. This has been supported by IMG report. **However, the initiatives of NPCI and banks focus on offering m-banking services to already banked customers and hence, these initiatives do not serve the objective of financial inclusion.**

9.1.2. **Issues pertaining to NPCI:** We would like to highlight following issues with regard to tying up with NPCI as the payment gateway provider:

- a) There are several entities that have been granted a payment processing permission by RBI. Therefore, it should be left to the operators to choose from the payment solution provider in order to provide the mobile banking services.

- b) The initiative of NPCI focusses on offering m-banking services to already banked customers and hence, this initiative does not serve the objective of financial inclusion.
- c) We believe that the agreement to provide the m-banking services should be between the banks and the Telcos, while the payment gateways should only work as a technical interface between banks and Telcos.

9.1.3. **Issues pertaining to the business model:** We are of the view that operators should be able to offer B2B model for m-banking services and B2C should not be forced by regulation due to its inherent challenges as follows:

- a) **Network investments:** We wish to state that signalling links of telecom operators and its bearer channel are fundamental to the business of providing telecoms services. USSD uses the ever critical signalling channel of a telecom network. TRAI has notified a Quality of Services (QoS) regulation for Mobile Banking Services in April 2012, which would require telecom service providers to reserve a dedicated channel to Banks to meet the QoS benchmarks for mobile banking without affecting the QoS benchmarks of core telecom services. A separate dedicated channel capacity will require enormous effort in terms of Network planning and designing along with capital expenditure (CAPEX) and operating expenses (OPEX) which require to be adequately compensated through a sustainable business model. Even any enhancement of the existing network would also require very high CAPEX and operating costs.

Thus, the requirements for mobile banking especially on USSD platform will have to be met with a business model best selected by Banks and MSPs. NPCI may function as an aggregation point from a traffic aggregation perspective. Owing to the respective obligations of Banks and Telecom Service providers towards their sector Regulators, this arrangement need to be worked out between these two entities with NPCI as an aggregator for traffic.

- b) **Consumers will be impacted in case of B2C model:** Most of the Banks do not charge their consumer for the mobile banking services. Infact Banks encourage the use of mobile banking as it is one of the least cost mode of transaction compared to other modes such as branches, ATM, internet etc. for the Banks. Thus, if the B2C model is adopted for m-banking services the same will have a negative impact on consumers i.e. consumer who were not charged earlier will now be charged for the mobile banking services.
- c) **Investment in billing system:** The business case for mobile banking itself is not sufficient to support a new investment in building a new billing system to support B2C Mobile Banking services on the USSD platform.

9.1.4. **Technology neutral m-banking services:** Any step of mandating the USSD based mobile banking services is not legally tenable as TSPs have the right to choose the technology for provision of services under their license conditions. Further, TRAI's QoS regulations also authorize use of SMS, USSD and IVR to provide banking services. Thus, mandating USSD based mobile banking services without doing cost benefit analysis of the issue spectrum defeats the principle of technology-neutrality and represents an intrusive elimination of the existing rights of licensees. The IMG report also does not prescribe a particular communication channel. Thus, TRAI should encourage technology neutrality in providing the m-banking services rather than forcing the operators to provide the services by using

particular technology and compelling the consumers to avail the services by using that technology. The IMG report also does not prescribe a particular communication channel.

**9.1.5. Issues pertaining to roll out of the USSD based Mobile Banking services in its current state:**  
Telcos have following concerns on the rollout of the USSD based Mobile Banking service in its current state.

- a) USSD has not been tested out as a mainstream commercial service; it rides on the stand-alone dedicated control channel (SDCCH) of telecom networks, which is predominantly designed to carry voice traffic. So far, USSD access for financial services has remained only in pilot stages. There is insufficient evidence of the results and the challenges from the experiences to date.
- b) It has a limitation in terms of being versatile in vernacular languages. Thus, user adoption may be a hindrance. Further, the numerous steps involved in the transaction can build reluctance to use these services.
- c) There has been very little discussion and agreement with banks as to the roles, responsibilities, liabilities and cost estimations for enabling USSD and customer support. For instance, a failed transaction or query would most likely result in a customer calling the Telco's, which would entail call centre charges, with no clarity on who should bear these costs.
- d) CDMA network does not support USSD based services and so far sustainable attempts have not been made by banks and their aggregators to explore a solution.
- e) New billing system for USSD is to be established in case of B2C model, amounting to high cost to the operators: In order to provide the USSD based Mobile Banking services based on the B2C Model all the operators would have to implement a new billing system in order to charge their customers, the billing system for the USSD services is currently not available. This would amount to significant capex for the operators.

## **10. WAY-FORWARD**

10.1. TRAI should promote an eco-system and build regulatory environment that fosters m-payment services. To summarize, we suggest the following in order to foster mobile banking services:

10.1.1. There is a need to separate mobile banking and mobile payments and put in place an eco-system to make transactions accessible, efficient and transparent to the un-served/ under-served sections. Over a period of time, as subscribers get accustomed to the use of m-payment services, we can advance to other elements of financial inclusion.

10.1.2. Allow cash-out facility for mobile payments and set a limit on the size of transactions that is low enough to deter money-launderers but high enough to satisfy most customers.

10.1.3. Harmonize and unify KYC norms for banks and telcos for quick results.

10.1.4. To address the security concerns.

10.1.5. Create awareness and boost usage through DBT scheme.

10.2. We believe that an enabling policy framework which provides clarity to the roles and responsibilities of banks and TSPs will help to achieve the national objective of providing financial services to the unbanked. This would entail creating a compelling business case by banks and TSPs together to meet the required goals.

10.2.1. Considering the amount of capex required by Telco's in providing the USSD based Mobile Banking services, banks should be asked to commit to the number of possible USSD transactions.

10.2.2. Allow Telcos and Banks to discuss and agree on the technology and business model to provide the m-banking services.

10.2.3. IVR, Voice, USSD and SMS are ubiquitously deployed and available for all telecom subscribers. M-banking services need to be technology neutral. Instead of making it even more prescriptive and mandatory, one alternative is to invest significantly in the pilots where the services have been launched to ensure coverage and traction. We do not know which of the several modes- SMS, IVR, USSD, etc., are more acceptable to customers, and what are the transaction needs and levels. Thus, proper pilots and research studies will help us gather evidence and can help lead to better customer experience.

10.2.4. Leave it to Telcos and Banks to decide on the payment gateway provider to use as an interface for providing the USSD based m-banking services.

10.2.5. All the commercial agreement should be between the Banks & Telcos.

### III. RESPONSE TO QUESTIONS

**Q1: Do you agree that USSD is one of the most appropriate modes for mobile banking for financial inclusion? If not, which mode do you think is more appropriate? Please support your viewpoint with reasons.**

#### COAI Comments:

- 1) Each access channel should be given equal weightage for enabling M banking services. We believe that a holistic and comprehensive approach will go a long way to improve the uptake of m-banking in India.
- 2) Further, there are some issues pertaining to roll out of the USSD based Mobile Banking services in its current state. The same has been highlighted in **point number 9.1.4 and 9.1.5 of the Preamble.**
- 3) Thus, we are of the view that for financial inclusion it is necessary to increase the scope of the mobile money model (pre-paid Payment instrument) of mobile banking rather than encouraging any mobile based delivery channel.
- 4) As highlighted above, we believe that the best way to facilitate financial inclusion is by allowing the “Cash Out” for the mobile money services (prepaid payment instrument), wherein the concept of proportionality could be used by the regulator (RBI) at the initial stage. i.e. Lower levels of regulation for lower levels of transactions in order to tackle AML & CFT.

**Q2: Do you agree that the Mobile Banking (Quality of Service) Regulations, 2012 should be amended for mandating every TSP, acting as bearer, to facilitate not only the banks but also the agents of banks acting as the aggregation platform providers to use SMS, USSD and IVR to provide banking services to its customers? Please support your viewpoint with reasons.**

#### COAI Comments:

- 1) **We do not concur with any view of mandating TSPs, to facilitate the agents of banks acting as the aggregation platform providers to use SMS, USSD and IVR to provide banking services to its customers.**
- 2) M-banking service is a licensed service only permitted to banks. Hence, it may be extended to banks on the basis of a reliable business case justifying the investments in enabling USSD for banks. Any connectivity in such a commercial arrangement has to stand on its own merits. If there is a merit to connect to any platform – the business case must justify that.
- 3) The liabilities and bank customer obligations would have to be clearly defined and borne by banks. The role of access service providers also need to be defined to exclude banks liabilities.
- 4) This service should be extended to banks on a B2B billing model. The same should be well supported with the volume of transactions.
- 5) The eco-system for mobile banking is yet to develop. For the unbanked, a mobile linked no frills account would be better served by entities that are permitted to offer these services bearing in mind the obligations of the provider towards their customers for these services. Since TSPs are

committed to working with the Authority, Government and the banks, we do not feel that there is any need to mandate TSPs to facilitate access to banks.

- 6) TRAI should encourage technology neutrality in providing the m-payment services rather than mandating operators to provide the services by using particular technology.
- 7) Also, as per the license condition's mobile service providers are only mandated to provide Voice and SMS to its customer. Any step of mandating the USSD based mobile banking services through a particular agent is not legally tenable as TSPs have the right to choose the technology and business model for provision of services under their license conditions.
- 8) Further, there are issues pertaining to QoS Regulation for Mobile Banking Services. Specifically on the QoS Regulation, we would like to highlight the following:
  - a) The UAS/Unified License clearly defines what services a telecom licensee can offer under the scope of its license.
  - b) Nowhere in the license, is the term - mobile-banking or USSD based m-banking defined as a telecom service. Infact, mobile banking as a service is governed under the RBI guidelines and circulars.
  - c) USSD is one of the bearer channels to facilitate overall communication, and not any product or service that a licensee offers.
  - d) Mandating differential QoS standards for different set of services are simply unworkable and not possible, e.g. m-banking QoS regulation.
  - e) Similarly, mandating a QoS norm separately for an individual bearer USSD and SMS is not possible and would require either reserving voice channel or provisioning more bandwidth
  - f) The m-banking volumes as indicated by the platform providers/Department of Financial Services (DoFS) for the entire industry do not justify the business case for Telcos to make investments in their respective networks.
- 9) Such obligation and mandates are simply unworkable and would act as a deterrent to rollout.

**Q3: Do you agree that in case of USSD transactions for mobile banking, the TSPs should collect charges from their subscribers as they do in the case of SMS based and Application (App) based mobile banking? Please support your viewpoint with reasons.**

**&**

**Q4: Do you agree that the records for USSD transactions must be generated by the TSPs to provide an audit trail for amounts deducted from prepaid subscribers and bills raised to post-paid subscribers? Please support your viewpoint with reasons.**

#### COAI Comments:

We believe that the B2B Model should be followed for the USSD based Mobile Banking services where instead of the customer being charged by TSPs the banks should be charged. The rationale thereof and challenges in rolling out the suggested B2C model is as under.

- 1) **New billing system for USSD is to be established in case of B2C model, amounting to high cost to the operators:** In order to provide the USSD based Mobile Banking services based on the B2C Model all the operators would have to implement a new billing system in order to charge their customers, the billing system for the USSD services is currently not available. This would amount to significant capex for the operators.



- 2) **Consumers will be impacted in case of B2C model:** Most of the Banks do not charge their consumer for the mobile banking services. Infact Banks encourage the use of mobile banking as it is one of the least cost mode of transaction compared to other modes such as branches, cheque, ATM, internet etc. for the Banks. Thus, if the B2C model is adopted for m-banking services the same will have a negative impact on consumers i.e. consumer who were not charged earlier will now be charged for the mobile banking services.
- 3) **M-banking services as per RBI can only be provided by the Banks:** M-Banking as a service can only be offered by banks and not by the TSP's UASL or the Mobile Banking guidelines do not allow TSPs to offer or charge for such services. Further, liability of transactions also lies with the banks. Hence Telecom Service Providers cannot bill its customers for such transactions.
- 4) **TRAI's QoS norms for mobile banking delivery channels:** We wish to state that signalling links of telecom operators and its bearer channel are fundamental to the business of providing telecoms services. USSD uses the ever critical signalling channel of a telecom network. TRAI has notified a QoS regulation especially for Mobile Banking Services in April 2012, which would require telecom service providers to reserve a dedicated channel to Banks to meet the QoS benchmarks for Mobile banking without affecting the QoS benchmarks of core telecom services. A separate dedicated channel capacity will require enormous effort in terms of Network planning and designing along with CAPEX and OPEX which require to be adequately compensated through a sustainable business model. Even any enhancement of the existing network would also require very high CAPEX and operating costs.
- 5) **Please refer to point no. 9.1.3, 9.1.4 and 9.1.5 of the Preamble for more details.**

**Q5: Would it be appropriate to fix a ceiling of Rs. 1.50 per USSD session for mobile banking? Please support your viewpoint with reasons.**

**&**

**Q6: In case your response to Q5 is in the negative, please suggest an alternative methodology to fix a ceiling tariff for an USSD session for mobile banking. You may also support your viewpoint with a fully developed model with associated assumptions, if any.**

**COAI Comments:**

- 1) TRAI has followed a policy of forbearance of tariffs. The telecom sector in turn has delivered the lowest tariffs in the world for 873 million subscribers in India. This stupendous growth in subscribers and volumes has been achieved due to the flexibility provided to access service providers. It is important that a similar consistent approach is maintained to allow proliferation of mobile banking services in India.
- 2) The above questions are not applicable as we believe and suggest that the USSD based Mobile Banking services should be based on the B2B model wherein Banks should pay the TSPs for availing its service for the delivery of the banking services to its customers.
- 3) TRAI may also note the fact that an eco-system for m-banking services is still developing. A ceiling tariff would then not be a positive step in the direction of enabling such services.
- 4) Operators will have to invest in enabling these services and they should be allowed to recover their investments.

- 5) The transaction volumes suggested vide TRAI letter dated 25<sup>th</sup> February 2013 vary from 9.6 million in 2013 to 16.7 million transactions in 2015-2016 across all access service providers. The volumes projected are not compelling for high investments in enabling mobile banking.
- 6) There should be no ceiling tariffs for USSD for mobile banking while allowing it to be provided on only B2B basis to assess its uptake and the interest of banks to drive volumes of transactions for operators to invest in the required infrastructure

**Q7: Is there any other relevant issue which should be considered in the present consultation on the use of USSD as a bearer for mobile banking services?**

**COAI Comments:**

**1) Common short Code**

- a) As highlighted by TRAI in its consultation paper that the code currently being used by the customers of two banks namely SBI and ICICI Bank for availing the USSD services are \*595# and \*525#. We suggest that the common short code of \*99# as prescribed by DoT for the USSD based mobile banking services should be changed to the 3 digit short code i.e. \*999#, as there are very limited numbers in the double digit that can be allocated by all telcos. Hence, they would be able to provide only three digits short codes for USSD based Mobile Banking services.
- b) For the purposes of addressing issues such as billing & reconciliation, network security and QoS compliances comprehensively, operators should be able to identify each bank that their telecom subscribers are communicating with. To enable this, each bank may be allocated a common code by the telecom industry and the special character string \*999 would be suffixed with an individual bank code. For instance for Bank A, the common code can be \*1N# and thus, the character code for Bank A becomes \*999 \*1N#. This would enable operators to identify banks or other RBI licensed entities with whom the various financial applications are connected.

**2) QoS Regulations:** There are issues pertaining to QoS Regulation for Mobile Banking Services. Specifically on the QoS Regulation, we would like to highlight the following:

- a) The UAS/Unified License clearly defines what services a telecom licensee can offer under the scope of its license.
- b) Nowhere in the license, is the term - mobile-banking or USSD based m-banking defined as a telecom service. Infact, mobile banking as a service is governed under the RBI guidelines and circulars.
- c) USSD is one of the bearer channels to facilitate overall communication, and not any product or service that a licensee offers.
- d) Mandating differential QoS standards for different set of services are simply unworkable and not possible, e.g. m-banking QoS regulation.
- e) Similarly, mandating a QoS norm separately for an individual bearer USSD and SMS is not possible and would require either reserving voice channel or provisioning more bandwidth
- f) The m-banking volumes as indicated by the platform providers/Department of Financial Services (DoFS) for the entire industry do not justify the business case for Telcos to make investments in their respective networks.

Such obligation and mandates are simply unworkable and would act as a deterrent to rollout.