

## Comments from Mobme Wireless

Issue for Consultation:

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.

A1: USSD is one of the most appropriate modes for mobile banking when looked at from a compatibility & ease of use point of view. But from a security stand point, USSD fails to be a secure mobile banking channel. A malicious network initiated USSD command could be used to steal the MPIN of an unsuspecting user very easily. There are several other risks as well like the ones mentioned below >>

[http://resources.idgenterprise.com/original/AST-0038025\\_Aujas\\_White\\_paper\\_-\\_Mitigating\\_Security\\_Risk\\_in\\_USSD\\_Apr11\\_.pdf](http://resources.idgenterprise.com/original/AST-0038025_Aujas_White_paper_-_Mitigating_Security_Risk_in_USSD_Apr11_.pdf)

Also, as per RBI's notification on Feb 28th 2013, Banks have been asked to consider the implementation of Digital Signatures for large value payments for all customers.

<http://rbi.org.in/scripts/NotificationUser.aspx?Id=7874&Mode=0>

Considering that there are successful Wireless PKI implementations in many European countries like Turkey, Norway, Finland, Estonia etc where hundreds of Banks are relying on this technology to provide branchless banking to its customers, it would be prudent for India to adopt this model.

By embedding the digital signatures on the SIM card with an in-built crypto-processor, it would be compliant with the conditions mentioned in Indian IT Act 2000 for the issuance of Class 2 & Class 3 digital signatures.

One of the biggest advantages of W-PKI is that it brings in non-repudiability into Mobile Banking. This is the only effective way to safeguard Banks, TSPs & Customers from mobile/internet banking frauds & the financial losses that usually accompany.

Another beauty of the technology is that the customer could still be using USSD, SMS, IVR, WAP, Mobile App, STK or even an Internet connected Laptop/PC/Tablet to access the Banking menu as per their convenience & the security layer of W-PKI can work together with any of the communication modes.

Unlike digital signatures on USB sticks (made for PC/laptop), W-PKI is extremely easy to use for the end customer. Putting a 'sign' - a legally valid digital signature, is as simple as entering a 4 digit PIN on their mobile phone. Since it is a SIM application, the technology works on all handsets. Customers can sign transactions & digital documents as well as authenticate themselves online making it not only a solution for mobile banking but an end-to-end Mobile Identity solution.

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.

A2: Yes. It is essential that TSPs facilitate agents of banks acting as aggregation platform providers to use SMS, USSD & IVR. This will foster innovation and push the platform providers to come up with innovative products & fantastic user experiences. Eventually there could also be a single stop solution that lets you access services of multiple banks.

Q3: Do you agree that in the case of USSD transactions for mobile banking, 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.

A3: TSPs should be able to provide USSD pipe to Banks/Agents on a TPS based commercial model so that it is up to the Bank to decide whether they want to charge the end-customer or not. The TPS based model could be similar to how the Bulk SMS business currently works. Advantage of such a system is that if Banks decide to absorb the cost of the pipe, then the adoption rate amongst users would be much higher. This would also rule out issues like charging users for session drops, for incomplete transactions, for time-outs, etc., which could otherwise create a major pain point in customer servicing. It is also to be noted that all the currently popular services available on USSD channel are free of cost.

Q4: Do you agree that 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 postpaid subscribers? Please support your viewpoint with reasons.

A4: Yes, this is a basic hygiene measure that's required & already in practice for all value added services. In case of a complaint at the call centre regarding charging (if any) or an error in transaction, this would be highly essential.

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.

A5: No. It might be so required that to increase early adoption, sessions be kept free of cost (e.g., Balance Enquiry). Instead, charging a slight premium on sessions that involve a fund transfer above a certain amount will prove viable. A ceiling might take out the flexibility with pricing completely. But at the same time, it is important to have a uniform pricing across all TSPs to access services of any Bank.

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

A6: Ideally there should be multiple models available. For e.g.: Unlimited access in a month for a particular subscription fee. Another model could be to have a fee based on the type of transaction, i.e. balance enquiry, mini statement, fund transfer etc.

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?

A7: As detailed in the reply for Q1, USSD fails to be secure enough & doesn't have non-repudiability, both of which are extremely necessary for any scalable mobile banking solution. Our suggestion to add an extra layer of security in the form of a W-PKI solution embedded on the SIM card is also in sync with the National Telecom Policy 2012 directive that says >>

NTP-2012 Item 1.9 - To leverage the mobile device and SIM Card with enhanced features for enabling secure transactional services including online authentication of identity and financial services.