## Summary Points

Vodafone understands that the expansion of the reach of financial services is important for the long-term development of the country.

Many of those who are currently unbanked or 'under-banked' own, or have access to, a mobile phone and the use of mobile communications (whether via voice, SMS, USSD, downloaded application or the internet) to access financial services can play an important role in expanding financial inclusion. As the Consultation Paper (CP) points out, the use of mobile communications can cut the cost of accessing financial services for the customer (no need to visit a distant branch and lose a day's wages) and reduce the cost of supply for the provider (no need to build brick-and-mortar branches in areas of low population density).

Vodafone (and others) has already recognised the potential for delivering financial services using mobile communications. In November 2012 we launched our *M-Pesa* service. Through mobile communications *M-Pesa* customers can, simply and securely, using their *M-Pesa* account to: deposit and withdraw cash from designated outlets, transfer money to any mobile phone in India, remit money to any bank account in India, make payments to recharge their mobile, pay utility bills and DTH subscriptions, shop at select outlets and participate in e-commerce/m-commerce. *M-Pesa* customers access mobile banking via an IVR, SMS or a USSD session; they are charged for each banking transaction but not for the communications medium. Today, Vodafone is offering this service in eight circles and at more than 36,000 outlets.

Importantly, the *M-Pesa* service builds upon Vodafone existing nationwide distribution network (more than 7,000 exclusive stores and above 1.6 million outlets of which more than 56% are in rural areas) and our experience in taking customers' KYC documentation, handling lakhs of small denomination cash transactions *each day* and providing customer care for queries and problems. Without this infrastructure in place, despite the ease and low cost of accessing financial services via a mobile phone, mobile banking will not flourish. Put simply, accessibility via a mobile phone is a necessary but not a sufficient condition for successful mobile banking.

Vodafone competes with others to provide mobile banking services: Airtel has launched Airtel Money and Aircel offers Aircel Mobile Money. There is no 'market failure' in mobile banking. The unbanked, as long as they have a mobile phone, can purchase mobile banking services.

Although we support the objective of increasing financial inclusion (and we are investing in our *M-Pesa* service to bring this about) we do not believe that we can be required, by regulation, to connect to the NPCI platform (or any such aggregator platform) to provide a USSD banking service. Therefore, any decision to do so must stand on its own merits. We are concerned that the service described in the CP imposes upfront fixed costs on the mobile operators (e.g. a retail billing for USSD transactions, the need to generate CDRs, meeting the QoS standards) for a service which may ultimately turn out to be unsuccessful given the paucity of the banks' *necessary* supporting 'eco-system' (described above) in the rural areas.

Hence, we believe that the project should be 'de-risked' in its early stages, until both the banks and the mobile operators can determine its likely prospects. This would mean that, initially at least, the service is run as a B2B model where the banks part-fund the start-up costs of the mobile operators who, in turn, reduce their initial costs by not being required to invest in a retail billing system (and therefore not charging the user for the communications) and not needing to meet specified QoS standards. This would provide a low cost, low risk way of getting the service off the ground and assessing its attractiveness to the unbanked.

If the service is successful, it can migrate to a B2C model with the mobile operators putting in place the necessary billing systems. However, regulation should not preclude different arrangements, for example, a hybrid B2B/B2C arrangement. The banks and the mobile operators should be allowed to experiment with different structures of prices to discover which will maximise the use of the platform (it should be in both party's interests to do so). This 'optimal' structure of prices cannot be known beforehand; it requires a degree of trial and error in the market place.

Deciding on the best structure of prices is a common problem in any 'two-sided' market. A market is two-sided when there are two distinct groups of customers, those customers need each other in some way, and there is a 'platform' that can bring the two sides together. In the CP, the platform is provided by NPCI and it is bringing together the banks and the mobile operators. As an analogy, shopping malls bring together consumers and merchants. Consumers benefit from shopping at retailers in the mall, as well as from related amenities such as parking and restrooms, while retailers benefit from access to customers. Imagine a mall owner who begins business by charging for parking and levying slightly lower rents on the store owners. However, after experimenting with free parking on Fridays he discovers that footfall in the mall increases and the store owners are willing to bear the higher rents because they are more than paid for out of the increased sales. The lesson is that the right balance of charges between the store owner and the shopper, or the banks and the mobile companies cannot be known in advance and hence any *particular* structure should not be mandated by regulation. It may well be that the structure of prices which maximises use of the mobile banking platform is for the customer to be charged for the banking transaction and not for the communication with the platform and for one side of the platform (the banks) to compensate the other (the mobile operators) for the service that they provide.

Under a B2C model we believe that the Authority should not be contemplating regulating a service that does not even exist and without any evidence that any problems are likely to emerge. Mobile communications in India are supplied in a vigorously competitive market and competition between suppliers does an excellent job of constraining prices to affordable levels. TRAI should wait for market to develop and show signs of failure (we think this highly unlikely) before it considers regulating. We have seen with national roaming how tariff ceilings were a) unnecessary and b) stifled pricing innovation.

**Q.1 - 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.**

USSD is one method of accessing mobile banking services. It has advantages (ubiquity, ease of use) and disadvantages (messages cannot be saved on a device, sessions may time out in mid transaction, the difficulty of adaptation for the vernacular languages). Other methods to access financial services are also available from a mobile phone—voice, IVR, SMS, downloaded app and internet access—we do not yet know which method customers will favour and therefore mandating the use of particular technologies risks unpopularity with customers and early obsolescence. Neither the RBI guidelines nor the IMG report mandates or prefers any specific mode for delivery for m-banking services.

**Q.2 - 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**

We would like to submit that banks (and their agents) providing mobile banking platforms are not licensed telecommunications providers and hence connection to the platform is not a form of interconnection. Furthermore, the UAS/UL license defines what services a licensee can offer and also what technology can it deploy. Hence, we do not believe that licensed mobile operators can be required by regulation to connect to the platform to offer USSD based mobile banking service. Also since mobile operators are currently providing mobile banking services to the unbanked, such an imposition is unjustified.

We have also not come across any other country where the provision of a technology specific mobile banking service has been mandated by regulation.

**Q.3 - 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.**

**AND**

**Q.5 - Would it be appropriate to fix a ceiling of Rs. 1.50 per USSD session for mobile banking? Please support your viewpoint with reasons.**

**AND**

**Q.6 - In case your response to Q5 is in the negative, please suggest an alternative methodology to fix a ceiling tariff for USSD session for mobile banking. You may also support your viewpoint with a fully developed model with associated assumptions, if any.**

We are concerned that the service described in the CP imposes material upfront fixed costs on the mobile operators at the retail level (e.g. the need to generate CDRs for USSD transactions, mediation and retail billing system costs and the network investments needed to meet the QoS standards[1]) for a service whose degree of success cannot be predicted and may turn out to be below expectation (or very low volumes) given the paucity of the banks' *necessary* supporting 'eco-system' (technology and distribution reach across India) in the rural areas and 'stranding' these investments.

In order to obviate the need for investment in the above systems and infrastructure we suggest that, in the initial stages, this project is 'de-risked' until both the banks and the mobile operators can determine its likely prospects. Initially the service should be run under a B2B model with banks part-funding the set up costs of the mobile operators. Once the success of this form of mobile banking has been established it should have the flexibility to move to a B2C model (or a hybrid model) when the mobile operators can bill their customers. This would provide a low cost, low risk way of getting the service off the ground.

Under a B2C model the Authority should not be contemplating regulating a service that does not even exist and without any evidence that any problems are likely to emerge. Mobile communications in India are supplied in a vigorously competitive market and rivalry between suppliers does an excellent job of constraining prices to affordable levels. Such intrusive intervention (setting price ceilings without any demand side visibility) risks stifling pricing innovation (e.g. in case of national roaming, earlier STVs were not allowed, however post new regulation allowing roaming STVs, the market has witnessed significant uptake of roaming STVs running into few lacs per month, thereby increasing usage). We hope that the Authority will recognize that it is in the mobile operators' interest to maximise usage to recover their costs and that TRAI can always intervene later if problems emerge.

Importantly TRAI should not mandate the *structure* of prices. It is impossible to know in advance the structure of prices that will maximize the use of the platform i.e., the best mix between charging by the operators per USSD session and charging by the banks per transaction (or a mixture of the two). TRAI should not preclude changes to the structure of prices. Put simply, if the service fails to take-off then a different balance of prices should be explored and this should not be hampered or constrained by regulation.

[1] Unlike SMS, USSD is an interactive and real-time bearer, occupying the signaling resource for a longer duration, and mandating a QoS can entail significant investments if volumes materialise.

**Q.4 - 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 postpaid subscribers? Please support your viewpoint with reasons.**

Yes, records for transactions must be generated and kept for a period of six months. This capability does not exist at present and it will need to be developed. Its developments will require modifications to the USSD gateway to enable it to generate CDRs and customizing the pre-pay IN platform so that we can determine whether the customer has sufficient balance to pay for the USSD session.

**Q.7 - 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?**

We have summarised our comments the QoS standards in the table below:

| Means of Communication | Time Frame (Response time) | Vodafone Comments |
|---|---|---|
| SMS | <= 10sec | Traffic at these signaling levels cannot be segregated and therefore differential QoS cannot be ensured. |
| USSD | <= 2sec | |
| IVR | <= 10sec | Conformance with the QoS standards is partially dependent on the performance and capabilities of platforms which are outside of Vodafone's control and for which it should not have responsibility. |
| WAP | <= 10sec | |
| STK | <= 10sec | |