MicroSave

Market-led solutions for financial services

MicroSave's response

to the TRAI consultation paper on

The review of regulatory framework for the use of USSD for mobile financial services

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<u>Review of regulatory framework for the use of USSD for mobile financial services</u>

Q1: In your opinion, what should be the maximum number of stages per USSD session for mobile banking service:
(i) Five
(ii) Eight
(iii) Unlimited
(iv) Any other (please specify)
(Please provide justification in support of your response)

It is our opinion that option (iii) Unlimited should be introduced. We feel there should not be a cap on the number of stages per USSD session for mobile banking services.

For any transaction over the USSD channel, the customer has to provide several details, such as name, name of the bank, bank a/c number, IFSC code, amount to be transferred, and security PIN. The flow can also change with changes in underlying banking requirement in order to bring simplicity, besides safety and security of transactions. In order to present this in a form with an easy–to-use interface, a cap will impede any efforts at simplification of content and navigation.

It must be noted that the universe of digital payment services is evolving. New services and transactions may be added to the current service bouquet, for which mobile financial service providers may collaborate with new age FinTech companies. Placing any form of restriction in such an early phase of development will only serve to stifle innovation in the financial inclusion space. Let us be mindful that capping the number of stages will not enable simplification of the service to the key customer group, characterised by lower levels of literacy and awareness.

On the other hand, enabling unlimited stages should not be challenging, given the fact that TSPs provide unbridled access to their customers to navigate through USSD sessions for self-care. It is also important to note that, with TSP-promoted Payments Bank, it is important to provide level playing field to all the financial service providers.

Globally, USSD is used by a majority of large-scale mobile money deployments. These include bKash in Bangladesh, Wing in Cambodia, EasyPaisa in Pakistan, Tigo and M-Pesa in Tanzania, and EcoCash in Zimbabwe, to name a few. If we take the example of Bangladesh, there is no restriction on the number of stages. The largest mobile financial service provider, bKash, allows for a seven-stage USSD transaction, as illustrated in Figure 1.

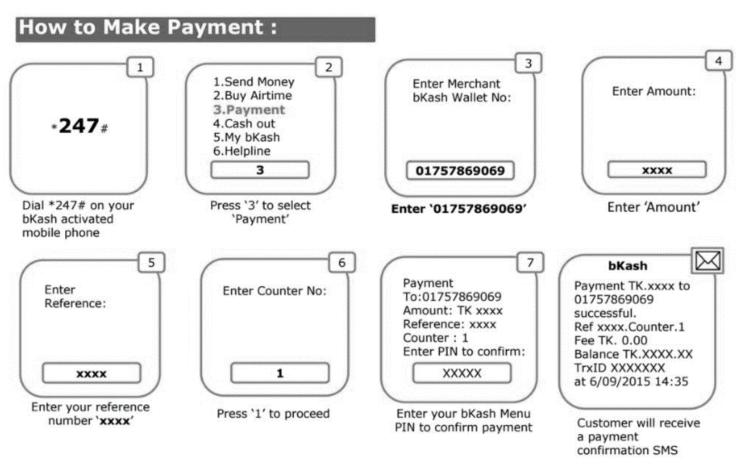
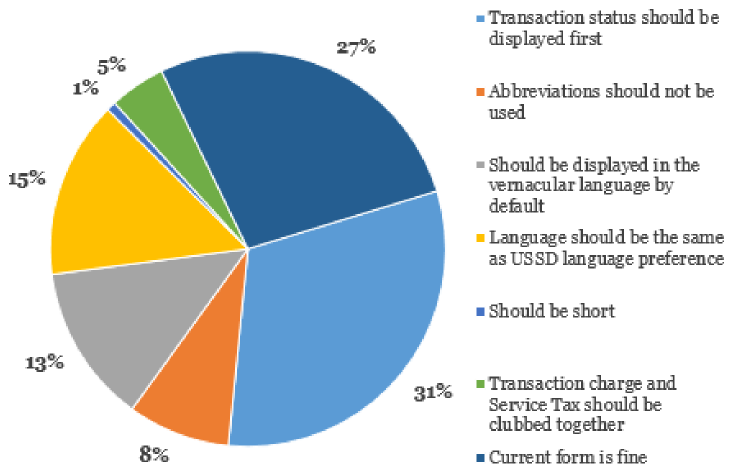


Figure 1: Typical transaction stages for bKash

Changes suggested by respondents in communicative messaging



Source: *MicroSave* study

A study done by the *MicroSave* on USSD-based user interfaces revealed that customers need better user interfaces that are easy to use. The navigation aspect of accessing Mobile Money via USSD needed to be simplified. One primary requirements for simplification involved breaking up composite input stages into simpler stages. However, this entails an increase in the number of stages with a trade-off of better understanding and ease of use.

Q2: Which of the following methods is appropriate for prescribing the tariff for USSD based mobile banking?
(i) Cost-based tariff for outgoing USSD session for mobile banking; or
(ii) Monthly (or periodic) subscription fee for the use of USSD for mobile banking services; or
(iii) Any other method

From the perspective of customers, USSD is just another access channel to get banking services. Typically, there are no specific charges for some / all of the transactions in self-usage mode. In addition, TSPs have been providing USSD for free, not only for telecom-related services, but also for Mobile Money services in India. However, setting up any infrastructure, including USSD, comes at a cost and someone has to bear that part. In this background, we would like to provide a different method for recovery of cost, which may start with free (for customer) or with some cap and, later on, with cost, that may be back-loaded, considering that this access channel has a potential to reach in deeper / un-connected areas of India and can help the cause of financial inclusion.

Q3: What methodology should be used for estimating the cost per USSD session for mobile banking service?

The TRAI should gather information from all TSPs about the fixed and incremental costs to them for delivering USSD services. A study should thus be commissioned employing a neutral third party to examine the issue in detail. This study with the TSPs would also seek to understand the potential impact (positive or negative) of providing USSD (at scale) on their core business.

CGAP research states that setting fair prices for USSD remains difficult due to the opacity of the true cost of a USSD session. A possible reason why TSPs are unable to provide a charge for the USSD channel can also be the lack of operational billing facilities to charge for USSD, since USSD was initially used for TSPs' internal operations, and not for customers. Without greater detail on the costs incurred by TSPs to offer the

USSD channel, it is not possible to determine if USSD sessions are priced fairly or enjoy exorbitant mark-ups.

On the other hand, there is a need to estimate the current usage level of USSD infrastructure and possible scenarios in case the transactions surge with various interventions. In case the current usage is low and there is idle capacity, all efforts should be made to optimise the usage by various stakeholders, as that comes without much further investment.

Q4: If your response to the Q2 is 'Any other Method', please provide full details of the method.

As mentioned in our response to Q2, there is cost involved in setting up and managing the infrastructure – USSD in this case. TSPs would like to be compensated for setting up and operating the access channel. Considering the charges given in Table 2.1 in the consultation paper, it looks like USSD is a cheaper channel and there is strong need to redefine the cost-based charges. To arrive at those numbers, one expert panel can be constituted to conduct detailed studies, as this would help the overall public good and deepen financial inclusion. In any case, the customer should not be asked to pay upfront and the charges, if any, should be first paid by the financial service provider and recovered later on from customer, if need be.

If we look at the history of banking in India, no customer was asked to pay using branch, ATM, Internet, etc. in the beginning. All access channels require some time (cool-off period) before customers become conversant with it, and go through the process of experiential learning. We can well imagine what could have been the fate of ATMs, if banks decided to charge the transactions from the date of their inception. Banks, at that time, rightly thought of ATMs as another way to service customers better and also decrease the operational cost by reducing dependence on brick and mortar branches. It created a win-win situation for banks and users. After a period of sustained usage, we are now at a stage where banks are charging customers for transactions beyond a certain specified number, and that too limited to urban areas.

It is hard to believe that we want to charge right from the inception of a newer access channel, and that too from the people who have hardly used formal financial services. Hence, we would strongly suggest the following staggered approach:

a. Customers should not be charged for first three years. It can start from the current FY.
b. In the second phase, the customers may be charged after exhausting some free transactions. These can be pegged at, say, five successful financial transactions per month for next two years.
c. In the third phase, banks can think of charging the customer in one of the following two ways (or a combination thereof):
    i. Fixed monthly charges, like SMS alert. It can include both financial and non-financial transactions;
    ii. A cost on the basis of value of successful financial transaction.

Please note that we are not proposing that TSPs are not required to be compensated for costs / any other appropriate method, to arrive at price. On the other hand, TSPs need to agree on Quality of Service (QoS) parameters, jointly defined by representatives of banks and TSPs.

Given the focus on reaching out to the rural populace and financial inclusion, it would also be prudent to tap into the Financial Inclusion Fund (FIF) of NABARD / RBI to support the above model in first two stages.

The overall financial implication of our proposal may be less than Rs 10 crore, going by the rate of only 3.7 million sessions reaching the NPCI's platform in May 2016 and at current rate.

Looking at the global practices, mobile financial service providers share (not customers directly) 0.8% of the fees charged for a successful USSD transaction with MNOs. Hence, the cost per session increases with the transaction amount.

Rates in Kenya vary as per the contract between the MNO and the service provider (bank). Third-party service providers are able to negotiate for better rates.

	MNO 1		MNO 2		MNO 3		MNO 4	
Provider	Cost (Kshs)	Duration (seconds)	Cost (Kshs)	Duration (seconds)	Cost (Kshs)	Duration (seconds)	Cost (Kshs)	Duration (seconds)
Bank 1	5	180	Monthly access fee		Monthly access fee		Monthly access fee	
Bank 2	4	120	1	180	Not used		No charge to customer	
Bank 3	5	180	No charge		Not used		Not used	
Bank 4	5	180	3	180	Not used		Not used	
Bank 5	5	180	Not used		Not used		Not used	
Bank 6	5	180	Not used		Not used		Not used	
Third party 1	5	180	3	180	3	180	2	180
Third party 2	10							
Third party 3 - Prepaid	10	180	3	180	3	180	2	180
Third party 3 - Postpaid	0.5-1.5	180	3	180	3	180	2	180
Set-up costs	100,000		75,000		30,000		50,000	
Monthly costs	100,000		50,000		10,000		20,000	

Source: CGAP study

Q5: Whether it would be appropriate to mandate the service providers to levy charges for USSD session for mobile banking only if the customer is able to complete his/her transaction? If yes, please describe the method to implement such an arrangement technically.

In our opinion, charges for USSD sessions (if any) should be levied **only on completion** of a successful **financial** transaction, and not just a successful transaction.

In financial services, a transaction can be bifurcated into a financial and non-financial transaction, based on its nature. The customers find it easier to correlate with and pay for a successful financial transaction as that provides the intended benefit that he/she is seeking from a mobile financial service provider. On the other hand, even non-financial transactions (like balance enquiry) put a load on to the IT infrastructure / system. We have seen that the ratio of non-financial to financial transactions declines over a period of time, as customers develop trust in the system and with robust communication on various transactions.

Given the nature of USSD session and its current limitations, the quality of the USSD session has been an area of concern from customer's perspective. Quality issues are typically in the form of a high proportion of dropped USSD sessions that abruptly end before the transaction is completed. This impacts the customer experience and trust, hence the concept of having a successful transaction would be important.

On the other hand, introducing minimum quality standards for USSD is not very easy. *MicroSave*'s discussion with TSPs in Bangladesh suggests that selectively identifying the 'culprit' for session drops is technically possible, but is reportedly difficult to do and extremely difficult to prove. Even if a discrepancy in quality of USSD is proven, it is not straightforward to identify the cause of the inferior quality. The point of failure could, for example, be with the mobile financial service provider (bank), the USSD gateway operator of the TSP, or the aggregator, NPCI.

A successful financial transaction is registered with both the aggregator (NPCI) and partner bank. It will not be difficult to publish that data with respective TSPs and can be in a standard file format / protocol, as acceptable to both the parties. It can provide all the details for both successful and non-successful transactions. There would be, however, some complications in terms of some transactions failing at the end of NPCI / bank due to technical issues or business logics (e.g., insufficient funds, wrong details, etc.) which otherwise could become a successful transaction. This model can be refined with more and more information, as we move ahead.

Q6: Whether the present pricing model for USSD-based mobile banking in which consumers pay for the use of USSD should continue?

It is our opinion we should discontinue this practice at the earliest possible. We feel that the charges for access of USSD should not be borne by the customer up-front.

As highlighted in our response to question 4, USSD is another access channel. Typically, customers have not been charged for self-usage and that includes banking at the branch, which otherwise is quite costly to administer.

Let us take the example of ATMs – one of the most widely used channels for cash withdrawal. As per the current guidelines of RBI, savings bank account holders in metropolitan cities are allowed only three transactions from the ATMs of other banks and five from the same bank in a month. For any ATM transaction above the stipulated limit, a transaction fee of a maximum of Rs 22 is charged to the account holder. The transaction fee is applicable only for people living in the six metropolitan cities, including Mumbai, Delhi, Bengaluru, Chennai, Hyderabad, and Kolkata.

People living in smaller towns and other centres enjoy five free monthly transactions from the ATMs of their banks, as well as other banks. This makes it 10 free transactions per month in non-metros. The charges after that limit are a maximum of Rs 20 each for cash withdrawals and Rs 9 for non-cash transactions. These charges have come into effect only recently, after widespread uptake of ATM services by customers. As of now, zero balance account holders and other no-frills accounts in non-metros are exempted from such transaction charges. Thus, the key customer segment targeted by the service, which has very limited access to other channels, is still not impeded by an access charge, when it comes to ATM usage.

As mentioned earlier, at a nascent stage, it would not serve the purpose to charge the customer for these services. Until the channel is widely used and accepted, after repeated usage and building of trust, having a charge associated with the service presents a significant entry barrier.

Q7: In case your response to the Q6 is in the negative, what should be alternative pricing models? Please provide justification in support of your response.

A model wherein the charges are passed on to the customer gradually, through the financial service provider, should be introduced. This will enable first-time users to first experiment with the channel and go through the process of experiential learning. The alternative multi-stage pricing model has been discussed in detail while responding to question no. 4.

Let us be aware about the fact that with several options like bank branch, ATMs, cards, wallets, smartphone penetration, mobile banking, etc., most of the connected customers would anyway use one of those channels. With low level of data grade connectivity across a large part of the country, particularly in hinterlands, and limited penetration by digital channels due to various reasons, USSD has a possibility of becoming a default channel for rural and lower income groups, with very limited access to formal financial services. If a first-time customer is charged for using the service, it presents an immense entry barrier, which will not be easily surmountable.

It is noteworthy to mention that the model adopted in Bangladesh, where mobile banking has emerged as the leading financial service used by customers, puts the onus of payment on mobile financial service providers. It must be noted that the charges may be passed on to the customer; however, the customer is not directly charged for USSD access. This model has enabled mobile financial services to become widely accepted.

The cost of servicing a customer in a physical branch is much higher for the FSP. The channel has low costs and low overheads, which is not the case in brick and mortar branches. The cost of a USSD session is much lower in comparison and can be 'back-loaded' into the transaction charge, BUT only after the service gains popularity and widespread usage. The regulators and market players must come to an understanding about the timing of the introduction of such a back-loaded charge, which may be after a certain number or a certain volume of transactions is reached.

Q8: Keeping in view the concerns raised by the TSPs, whether there is a need for allowing USSD push sessions when customer-initiated USSD session is dropped due to some reason, so that the customer can complete his/her unfinished transaction? Please support your response with justifications.

We feel that there is definitely a need to introduce push sessions which will enable completion of dropped sessions. As mentioned earlier, the primary target group for the service will typically be low income, number literate individuals, with limited access and exposure to other refined channels. Initially, there will be higher incidences of session drops, as the user navigates the contents of the USSD menus, as well as providing inputs where necessary. This "experimentation" is vital for the user to gain confidence of using the channel and to be at ease while transacting.

To enable completion of the session, it is imperative that all efforts are made towards facilitating completion of a transaction from a customer's point of view. Repeat usage and trust are highly dependent on successful completion of any transaction. However, the technical implication of push sessions as well as cost implications will have to be checked with the TSPs. For cost, we would again like to go back to our earlier response.

Q9: Whether it would be appropriate to allow all variety of mobile payment services apart from the mobile banking services on the existing USSD Aggregation platform(s)?Please support your response with justification.

Mobile payment services, such as bill payments, are essential for attracting customers to any financial inclusion effort. A parallel may be drawn with the Business Correspondent (BC) model, wherein experts as well as industry players agree that sustained use of any financial inclusion channel must include utility payments, among other payment services. Most BCs as well as all Mobile Money players include bill payments among their service offering, as they realise that it is an essential need for customers.

The United Nations states that affordable, effective, and safe financial services—savings, insurance, payments, credit, and more—can play a transformative role, by fostering equitable growth and furthering vital development goals, such as poverty reduction, job creation, gender equality, and food security. It cannot be argued that payment services are not an essential part of financial inclusion in the current context. Offering bill payment solutions via the USSD channel will enable a low cost and convenient medium for rural populations to make various utility payments, which are essential to their day-to-day lives, and one of the most effective use cases across the population. It is also important to note that NPCI is soon going to provide Bharat Bill Payment services through its multiple operating units on pan-India basis.

Q10: Is there any other relevant issue which should be considered in the present consultation on the review of regulatory framework for the use of USSD for mobile financial services?

It is our opinion that the communication and marketing strategy for the use of USSD to customers has not been defined. It is of paramount importance that the target group for these services is aware that the service exists, is cognisant of the value proposition, and is mindful of the charges (if any) associated with the service. These points should be communicated to customers through a comprehensive marketing and communication strategy. Such a strategy must be tailor-made to consider heterogeneity and spread of rural areas, limited media reach to smaller pockets of the key target segment, as well as the behavioural aspects of the target segment.