CCAOI

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Shri. S.K. Gupta
Advisor (CN)
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhavan
J.L Nehru Marg
New Delhi

Sub: Comments on TRAI Consultation Paper on QoS requirements for delivery of basic Financial Services using mobile phone

Dear Sir,

This has reference to TRAI Notice dated 28th October, 2010 seeking stakeholders' comments on the Consultation Paper on QoS requirements for delivery of basic Financial Services, using mobile phone.

At the outset, CCAOI wishes to thank TRAI for this initiative seeking comments on the subject, which is very critical for not only the growth of financial inclusion in the country but also for the economic growth of the nation.

To connect with the rural citizen of the country who till date remains unconnected from the banking services, mobile phone can definitely be the way to connect them and facilitate basic banking services amongst them.

While formulating the process, we urge TRAI to also take into consideration the fact that majority of Indians use pre-paid services and keep alternating their mobile numbers, the same should not hamper the use of mobile banking by them.

Moreover, to ensure the banking services are used by these new users, they would have to be handheld and provided adequate **education and assistance.** This is being proposed primarily because majority of the citizens are prone to availing services through assistance.

The detailed response of CCAOI is submitted along with this letter.

Thanking you and looking forward to favorable consideration of our recommendations by the Authority, in the interest of growth of financial services over mobile phone in the country.

Thanking You,

Yours very truly,
for **CCAOI**

Amrita Choudhury
Director
+91 9899682701

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Response of CCAOI

To

TRAI Consultation Paper

on

QoS requirements for delivery of basic Financial Services using mobile phone

CCAOI
258 Okhla Industrial Estate, Phase III, New Delhi -110020 website www.ccaoi.in

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CCAOI's Response to Questions for Consultation

2.1. What method(s) of communication on mobile network (GSM and CDMA) would be suitable for enabling financial transactions using mobile phones? Please explain your answer

We at CCAOI believe, there should not be any restriction in the method of communication on the mobile network for enabling financial transactions using a mobile phone.

In the country where people use all kinds of technology (GSM/ CDMA), have different level of skill sets and education level and have different types of handsets (low end, WAP enabled, 3G enabled etc.), to ensure everyone can avail the services in more or less the same manner, all the methods of communication (IVR, SMS, WAP, Standalone Mobile Application Clients, USSD) as suggested by TRAI in the consultation paper should be propagated.

Therefore the ideal method of communication on mobile network for enabling financial transactions using mobile phones needs to be universal and as such device, operator and technology agnostic.

The lowest common denominators, for communication methods are IVR and SMS. And these should be promoted. The IVR services should definitely be promoted for all the enquiry based services since the user can be guided to get the information he seeks. To ensure there is some form of record, the information provided over the IVR should also been sent as an sms to the user for records.

For rural communities, however, the authorities would definitely have to decide on the language of the sms, as more than 75% India does not know English.

The government should also take into consideration the fact that, building a Financial Inclusion initiative based only on "elitist" technologies such as WAP, Java based clients etc. which do not work on low-cost handsets or which require users to subscribe to data plans defeat the very purpose of such an initiative. Further, using STK approach is not scalable and standardizing on USSD, where a substantial % of consumers are on CDMA and hence without access to USSD, is not inclusive.

2.2 What in your view would be appropriate time frames for delivery of messages and responses with respect to the method(s) suggested by you? What parameters need to be defined to ensure timely delivery of information to support financial transactions using mobile?

We believe, delivery should be instantaneous. In case of SMS, the QoS can be defined in terms of 2 primary parameters i.e. Delivery Time and Delivery Guarantee. Both are essential from a point of view of delivering effective financial transactions (E.g. In case of a cash out request at a BC, the confirmation needs to arrive within a reasonable period of time, else the customer might perceive it as a failed transaction; in the event the BC receives the confirmation alert after the customer has already left his premises, the BC could potentially pocket the money, leading to fraud.) Due to network congestion, however, none of the current SMS service providers guarantee delivery time (such as less than 60 seconds) for more than 85% of the messages or guarantee delivery for more than 95% of the messages.

Amongst all the 5 types of transactions, the Cash-in and Cash-out transactions involving 3rd parties i.e. BC or BC sub-agents need the highest level of QoS to protect against such frauds. It may be argued, that the only way to ensure high QoS for Delivery Time and Delivery Guarantee is to have IVR call back for completion of these requests. A cash-in or cash-out transaction may be initiated via SMS, which results in an IVR callback; customer enters his m-PIN and in realtime the BC is informed whether the transaction is successful or not. Moreover, IVR call back will reduce queuing time as compared to an end-to-end IVR service.

However, the other 3 services such as Account Opening, Balance enquiry and P2P money transfer are quite feasible using an end-to-end SMS service.

2.3 In the method suggested by you would it be possible to prioritize the transaction messages over other messages on the network? If yes what would be the cost implications? Please also reply this with reference to SMS as means for financial transactions.

As mentioned above, it might be possible for Operators and aggregators to set up dedicated “pipes” for financial transactions, to ensure Lower Delivery Time and Higher Delivery Guarantee. However, this is best answered by the Network Operators.

2.4 What do you think would be the security requirement using the method proposed by you for the five basic transactions i.e. no-frills account opening, cash in, cash out, checking balance, and money transfer?

Apart from checking balance, all 4 need to have secure PIN transaction. This can be done either via IVR call back or use of one-time-use encrypted PINS. Customers are given 50 or 100 encrypted PINs at the time of Account opening and are required to use them at the time of doing any SMS based transaction. Lastly, care has to be taken to ensure that in case of alerts going to 3rd parties such as during P2P money transfer, the third party is sure that it is getting authentic alerts to avoid frauds. This can be done by use of Service Provider Identification Numbers (SIN), which has been patented by ZipCash, whereby all messages to the user start with a 4-6 digit number known only to the user, which he can set at the time of opening an Account and can change at a later date.

The system should definitely be secured and the user should have to authenticate oneself each time they want to do any of the five basic transactions. However the authentication process should be easy.

2.5 What would be measurable QoS parameters for such networks? Please specify both network and customer centric parameters.

No Comments

2.6 Please list any other issue that you think is important and your comment thereon to finalize QoS parameters for facilitating financial transactions on mobile network?

No Comments