TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY, PART III, SECTION 4

TELECOM REGULATORY AUTHORITY OF INDIA

NOTIFICATION

New Delhi, the 17th April, 2012

No. 305-27/2011-QoS - In exercise of the powers conferred by section 36 read with sub-clauses (i) and (v) of clause (b) of sub-section (1) of section 11 of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), the Telecom Regulatory Authority of India hereby makes the following regulations, namely:-

THE MOBILE BANKING (QUALITY OF SERVICE) REGULATIONS, 2012 (8 OF 2012)

CHAPTER I

PRELIMINARY

1. **Short title and commencement.** — (1) These regulations may be called the Mobile Banking (Quality of Service) Regulations, 2012.

(2) They shall come into force from the date of their publication in the Official Gazette.

2. Definitions.— In these regulations, unless the context otherwise requires,-

(a) "Access Providers" includes the Basic Telephone Service Provider, Cellular Mobile Telephone Service Provider and Unified Access Service Provider;

(b) "Act" means the Telecom Regulatory Authority of India Act, 1997 (24 of 1997);

(c) "Authority" means the Telecom Regulatory Authority of India established under sub section (1) of section 3 of the Act;

(d) "banking services" means the services provided by the bank to its customer;

(e) "Cellular Mobile Telephone Service",--

(i) means telecommunication service provided by means of a telecommunication system for the conveyance of messages through the agency of wireless telegraphy where every message that is conveyed thereby has been, or is to be, conveyed by means of a telecommunication system which is designed or adapted to be capable of being used while in motion;

(ii) refers to transmission of voice or non-voice messages over Licensee's Network in real time only but service does not cover broadcasting of any messages, voice or non-voice, however, Cell Broadcast is permitted only to the subscribers of the service;

(iii) in respect of which the subscriber (all types, pre-paid as well as post-paid) has to be registered and authenticated at the network point of registration and approved numbering plan shall be applicable; (iv) includes both Global System for Mobile Communications (GSM) and Code Division Multiple Access (CDMA) Technology;
(f) "Cellular Mobile Telephone Service Provider" means a licensee authorized to provide Cellular Mobile Telephone Service under a licence granted under section 4 of the Indian Telegraph Act, 1885 (13 of 1885), in a specified service area;
(g) "customer" means a customer of a service provider to whom these regulations apply and includes its consumer and subscriber;
(h) "IVR" or "Interactive Voice Response" means a technology that allows a computer to interact with a person through the use of voice and Dual Tone Multi Frequency keypad inputs;
(i) "mobile banking" or "m-banking" means delivery of banking services through mobile phones;
(j) "message" shall have the meaning assigned to it in clause (3) of section 3 of the Indian Telegraph Act, 1885 (13 of 1885);
(k) "regulations" means the Mobile Banking (Quality of Service) Regulations, 2012;
(l) "SMS" means a message which is sent through short message service and includes a Multimedia Message which is sent through Multimedia Message Service (MMS);
(m) "STK" or "SIM Application Tool Kit" means a standard of GSM system which enables SIM to initiate actions which can be used for various value-added services;
(n) "subscriber" means a person or legal entity who subscribes to telecom service provided by an Access Provider;
(o) "Unified Access Services", -- (i) means telecommunication service provided by means of a telecommunication system for the conveyance of messages through the agency of wired or wireless telegraphy; (ii) refers to transmission of voice or non-voice messages over licensee's network in real time only but service does not cover broadcasting of any messages, voice or non-voice, however, Cell Broadcast is permitted only to the subscribers of the service; (iii) in respect of which the subscriber (all types, pre-paid as well as post-paid) has to be registered and authenticated at the network point of registration and approved numbering plan shall be applicable;
(p) "Unified Access Service Provider" means a licensee authorised to provide Unified Access Services under a licence granted under section 4 of the Indian Telegraph Act,1885(13 of 1885), in a specified service area;
(q) "USSD" or "Unstructured Supplementary Service Data" means a real-time

IndiaCode

or instant session-based messaging service;

(r) "WAP" or "Wireless Application Protocol" means an open protocol for wireless multimedia messaging;

(s) all other words and expressions used in these regulations but not defined, and defined in the Indian Telegraph Act, 1885 (13 of 1885) and the Telecom Regulatory Authority of India Act 1997 (24 of 1997) and the rules and other regulations made thereunder, shall have the meanings respectively assigned to them in those Acts or the rules or such other regulations, as the case may be.

CHAPTER II
MODE OF DELIVERY OF MOBILE BANKING MESSAGES AND ITS QUALITY OF SERVICE STANDARDS

3. Mode and Time frame for delivery of message for mobile banking. — (1) Every Access Provider, acting as bearer, shall facilitate the banks to use SMS, USSD and IVR to provide banking services to its customers and deliver the message generated by the bank or the customer within the time frame specified in sub-regulation (5).

(2) Every Access provider shall ensure that in case SMS is used for mobile banking transaction, a report confirming the delivery of the message is sent to the customer or the bank, as the case may be:

Provided that every service provider shall, establish, if network permits, through mutual agreement with the bank, a system to ensure that if SMS sent by the bank is not delivered to the customer, the system shall trigger USSD communication to the customer confirming the completion of the transaction.

(3) An Access Provider may allow the bank to use WAP or STK to provide banking services to its customers and shall comply with the time frame for delivery of the messages generated by the customer or the bank specified in sub-regulation (5):

Provided that the Authority may, from time to time, specify any other means of communication and its quality of service parameter for delivery of message.

(4) Every Access provider shall ensure that for availing the banking services such as cash deposit, cash withdrawal, money transfer and balance enquiry, the customer is able to complete the transaction in not more than two stage transmission of message in the case of SMS or not more than two stage entry of options in the case of USSD and IVR.

Indiacode

(5) Every Access Provider shall meet the following time frame for delivery of the messages generated by the customer or the bank relating to banking services provided to the customers, namely:-

Sl.No.	Means of communication	Time Frame
1.	SMS	Response time <= 10 seconds
2.	USSD	Response time <= 2 seconds
3.	IVR	Response time <= 10 seconds
4.	WAP	Response time <= 10 seconds
5.	STK	Response time <= 10 seconds

Provided that the expiry time for SMS shall be seventy two hours;

Provided further that in the case of an USSD communication triggered by the system referred to in sub-regulation (2), the time frame shall start from the time USSD is triggered by the system.

(6) Every Access Provider shall ensure that if SMS is used for mobile transaction the SMS, sent by the bank, shall be sent as transactional messages through separate telecom resources, as provided in the Telecom Commercial Communications Customer Preference Regulations, 2010 (6 of 2010) dated 1st December, 2010.

(7) The measurement methodology in respect of the means of communication provided in sub-regulation (5) is specified in the Schedule-I.

(8) Every Access Provider shall ensure that the equipments installed in its network are capable of delivering messages within the time frame fixed under sub-regulation (5).

4. Quality of service parameters for m-banking communication. — (1) The Network Service Quality Parameters for Cellular Mobile Telephone Services as specified in the Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service Regulations, 2009 (7 of 2009) shall apply to all m-banking messages.

IndiaCode

(2) Every Access Provider shall meet the following customer centric quality of service parameters, namely:-

Sl.No.	Name of Parameter	Benchmark
1.	Time taken to deliver error and success confirmation message	99.5 % within 2 minutes.
2.	Transaction update on the system	100 %
3.	Success of delivery of financial transaction messages	99.5 %

(3) Every Access Provider shall measure its quality of service in respect of each parameter against their benchmark in accordance with the measurement methodology specified in the Schedule-II.

5. Security requirements for m-banking communication. — (1) Every Access Provider shall protect privacy and security of m-banking communication and ensure the confidentiality of end-to-end encryption, integrity, authentication and non-repudiation of such communication.

(2) The end-to-end encryption, integrity, authentication and non-repudiation of m-banking communication in the network of the Access Provider shall be in accordance with the standards certified by International Telecommunication Union (ITU) or European Telecommunications Standards Institute (ETSI) or Telecommunication Engineering Centre (TEC) or International standardization bodies such as Third Generation Partnership Project (3GPP) or Third Generation Partnership Project 2 (3GPP2) or Internet Engineering Task Force (IETF) or American National Standards Institute (ANSI) or Telecommunications Industry Association (TIA) or Interim Standard (IS) or any other international standard as may be approved by the Central Government.

CHAPTER III
MISCELLANEOUS

6. Reporting. —Every Access provider shall submit to the Authority its compliance reports of benchmarks in respect of each Quality of Service parameter specified under sub regulation (5) of regulation 3 and sub regulation (2) of regulation 4 in such manner and such format, at such intervals and within such time limit, as may be specified by the Authority by an order or direction.

7. Obligation of the Access Providers. — (1) Every Access Provider shall maintain record of mobile banking messages for six months for audit purposes.

(2) In case the message generated by the customer or the bank, in the process of m-banking transaction is not delivered due to any reason, the Access Provider shall immediately send an error message intimating the non-completion of the process to the customer or the bank, as the case may be.

Notified

(3) Every Access Provider shall maintain records of every m-banking communication in compliance of time frame for delivery of the messages specified in regulation 3 and benchmark of each of the quality of service parameters specified in regulation 4, in such manner and in such format, as may be specified by direction, by the Authority, from time to time.

(4) The Authority may, if it considers expedient so to do, and to ensure compliance of the provisions of these regulations, at any time, direct any of its officers or employee or any agency appointed by the Authority in this behalf, to inspect the records maintained under sub-regulations (1), (2) and (3).

(5) Every Access Provider shall maintain complete and accurate record of the consumers, using banking service through mobile phones.

8. **Interpretation.** — In case of any doubt regarding interpretation of any of the provisions of these regulations, the clarifications issued by the Authority in this regard, shall be final and binding.

IndiaCode

(Rajeev Agrawal)
Secretary

Note---- The Explanatory Memorandum explains the objects and reasons of the Mobile Banking (Quality of Service) Regulations, 2012.

SCHEDULE-I

(See regulation 3)

Measurement methodology for the time frame for delivery of messages generated by the customer or the bank relating to banking services

(1) SMS:

Measurement:

a. End to end delivery time =[Time of SMS for response received –Time of SMS send or triggered]

b. SMS for the basic financial services is to be stored for seventy two hours in case the customer mobile instrument is in "switch off" or "out of coverage area" or in such condition that customer's mobile instrument is not able to receive the SMS.

IndiaCode

(2) USSD:

Measurement:

Response time = Time at which USSD message received – Time at which USSD message triggered

(3) IVR:

Measurement:

Response Time = Time at which response received – Time at which button pressed during IVR

(4) WAP:

Measurement:

Response time = Time at which response received on WAP – Time at which message or communication triggered on WAP

(5) STK:

Measurement:

Response time = Time at which response received on STK – Time at which message or communication triggered on STK

SCHEDULE-II

(See regulation 5)

Measurement methodology for Quality of service parameters for m-banking communication

(1) Time taken to deliver error and success conformation message:

(i) This parameter signifies the efficiency in the delivery of error and success confirmation messages.
(ii) The formula for measuring performance with regard to this parameter shall be –

$$\text{Time taken to deliver error and success confirmation message} = 100 * \frac{\text{Total number of error and success confirmation message delivered within 2 minutes in a month}}{\text{Total number of error and success confirmation message generated in a month}}$$

(2) Transaction update on the system:

(i) Any message triggered by a consumer for m-banking services shall be updated in the system for any transaction on a real time basis.
(ii) The formula for measuring performance with regard to this parameter shall be –

$$\text{Transaction update on the system} = 100 * \frac{\text{Total number of messages triggered by consumers updated in the system for any real time transaction in a month}}{\text{Total number of messages triggered by consumers for mobile banking services in a month}}$$

(3) Success of delivery of financial transaction messages:

(i) This parameter signifies the efficiency in the delivery of financial transaction message.
(ii) The formula for measuring performance with regard to this parameter shall be –

$$\text{Success of delivery of financial transaction messages} = 100 * \frac{\text{Total number of financial transaction message delivered in a month}}{\text{Total number of financial transaction message generated in a month}}$$

IndiaCode

Explanatory Memorandum

1. Penetration of banking services in rural areas has been a major area of concern to the Government. The Government has been considering leveraging the growth of mobile service in rural areas to provide basic financial services to unbanked citizens of the country by riding on mobile infrastructure. An Inter Ministerial Group (IMG) was constituted on 19.11.2009 by the Cabinet Secretariat to workout relevant norms and modalities for introduction of a mobile based delivery model for delivery of basic financial services and to enable finalization of a framework to allow financial transactions using mobile phones. The report and recommendations of the IMG were examined by a Committee of Secretaries and accepted by the Government. The proposed system envisages sharing of the following elements:

IndiaCode

- A simplified common template for the KYC requirements for the Mobile linked No-Frills Accounts which is acceptable to all service providers.
- Cash-in / cash-out operations at the front end involving deposits and withdrawals into Mobile linked No-Frills Accounts.
- An Account Mapper that provides linkages between Unique Identification Number, mobile number and the mobile linked no-frills account details. Real-Time Micro Transactions (REMIT) connects to the Account Mapper to obtain details pertaining to a specific customer after he has been authenticated.
- An interoperable central payments switch, called REMIT Switch, that will facilitate real time transaction routing across Banking Correspondents (BCs), Banks (or associated Financial Institutions and outsourcing partners of Banks), Unique Identification Authority of India, Account Mapper and mobile service providers. INFAST (Interoperable Infrastructure for Accounting Small Transactions) can be created as an additional infrastructure for

creating and managing mobile linked no-frills accounts.

- The IMG framework based on mobile phones and biometric-based authentication will form the core micro-payment platform for transfer of benefits under various government schemes, micro-payment services and financial inclusion for the target groups of social sector programmes.

2. The IMG has, inter-alia recommended that TRAI may also draw up guidelines to ensure high availability of associated communication services. Mobile banking consists of banking transactions and the use of mobile networks for communicating through mobile phones by the customer for such transactions. The entire transaction depends on the capability of the mobile network to deliver a fast, reliable and cost effective method of communication with inbuilt audit trails and desired levels of security for transmission. These aspects were addressed through a consultation process by TRAI by issuing a Consultation Paper on 28th October 2010 seeking the views of stakeholders by 15th December 2010 to identify QoS parameters to meet such requirements. An Open House Discussion was held at Mumbai on 23rd March, 2011 and based on the stakeholders comments and study of the system, the Quality of Service for various parameters forming part of the mobile communication has been prescribed in these regulations.

3. **The modes for delivery of messages for mobile banking:** During consultation process, most of the stakeholders opined that SMS (Short Messaging Service), IVR (Interactive Voice Response), WAP (Wireless Access Protocol) platform can be used across both CDMA and GSM and methods like JAVA/ BREW applications and STK may also be preferred. It is seen that various modes of communication that can be used for mobile financial transactions offer different functionality and has its own merits. Some of the methods of communication may not be suitable for low-end handsets. The Authority felt that, considering

IndiaCode

the ease of use and availability across all the mobile handsets, SMS, USSD and IVR need to be mandated. The Authority also felt that WAP and STK could be optionally allowed for such communications. Accordingly, provisions have been made in the regulations. The Authority may also prescribe, from time to time, any other methods of communications.

4. Being a financial transaction the consumer would like to receive confirmation of the outcome of the transaction at the earliest. In the case of SMS, there could be a possibility that the SMS is not delivered due to customer related issues or network related issues. To address this issue it has also been mandated that in such cases an USSD communication is also sent to the customer confirming the completion of transaction. Wherever the network permits, the service provider, through mutual agreement with the bank, should implement such a system where the confirmation message shall be sent with a request for delivery report confirmation to Access Provider's SMSC. Access Provider's SMSC will try to deliver such messages immediately within the time limit prescribed in these regulations and inform back the delivery status with proper error code towards application hosted at the backend. In case the SMS delivery fails, the error code received from the SMSC can be used by the system in the backend to trigger an USSD towards the customer. Considering the fact that USSD messages cannot be stored, it has also been provided in the regulations that the expiry time for SMS will be a minimum of seventy two hours.

5. **The time frame for delivery of messages for mobile banking:** Most of the stakeholders had suggested different time frames for different methods of communication. After considering various suggestions in this regard, the Authority decided the time frame for delivery of the messages for mobile banking transaction. Measurement methodology for the time frame for delivery of the messages generated by the customer or the bank relating to banking services provided to the

IndiaCode

customers are prescribed in Schedule-I. These time frames are for the first delivery attempt.

6. **QOS parameters:** During consultation process most of the stakeholders agreed with the present quality of service parameter for the network which are already prescribed by the TRAI in accordance with Standards Of Quality Of Service Of Basic Service(Wireline) and Cellular Mobile Telephone Services, Regulation, 2009. The Authority considered the matter and felt that the quality of service standards already laid down by the Authority would be sufficient to address network related quality of service parameters. However, for protecting the interest of consumers the Authority has prescribed the following three Customer Centric parameters:

(a) Time taken to deliver error and success confirmation message:

This parameter signifies the efficiency in the delivery of error and success confirmation messages. As per this parameter the error messages and successful confirmation messages sent by the banking system based on customer action shall be delivered to the customer within 2 minutes. The regulations further provide that in case a message generated by the customer or the bank cannot be delivered due to any reason the access provider shall immediately send an error message intimating the non-completion of the process to the customer or the bank, as the case may be.

(b) Transaction update on the system:

Any message triggered through a consumer action for mobile banking services shall be updated in the system for any transaction on a real time basis.

(c) Success of delivery of financial transaction messages:

This parameter signifies the efficiency in the successful delivery of financial transaction message.

7. **Periodical reporting system:** The regulations provide for periodical reporting of performance of service providers against the quality of

service benchmarks prescribed in these regulations in such format and at such interval as may be prescribed by the Authority.

8. **Security requirements:** During consultation process, all the stakeholders opined that security is a critical issue. The most important security components are stated to be Authenticity and authorization, Integrity, Non-repudiation, and Confidentiality. The GSM/CDMA system architecture takes care of End to End Encryption, Authentication, Authorization, Integrity and Non-repudiation, which are governed by international standard bodies.

9. Accordingly, the Authority has prescribed in these regulations that the confidentiality of end to end encryption, integrity, authentication and non-repudiation of communication shall be in accordance with the standards certified by ITU/ETSI/TEC/ International standardization bodies such as 3GPP/3GPP2/IETF/ANSI/TIA/IS or any other international standard as may be approved by the Central Government.

IndiaCode

TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY,

PART III, SECTION 4

TELECOM REGULATORY AUTHORITY OF INDIA

NOTIFICATION

New Delhi, the 26th November, 2013

THE MOBILE BANKING (QUALITY OF SERVICE) (AMENDMENT) REGULATIONS, 2013 (13 OF 2013)

No. 305-27/2010-QoS - In exercise of the powers conferred by section 36, read with sub-clauses (i) and (v) of clause (b) of sub-section (1), of section 11 of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), the Telecom Regulatory Authority of India hereby makes the following regulations to amend the Mobile Banking (Quality of Service) Regulations, 2012 (8 of 2012), namely:-

1. (1) These regulations may be called the Mobile Banking (Quality of Service) (Amendment) Regulations, 2013.

(2) These regulations shall come into force from the date of their publication in the Official Gazette.

2. In regulation 2 of the Mobile Banking (Quality of Service) Regulations, 2012 (hereinafter referred to as the principal regulations), after clause (b), the following clause shall be inserted, namely:-

"(ba) "agent" means a person authorized by the bank to provide banking services through mobile phone;

3. In regulation 3 of the principal regulations, ----

(a) in sub-regulation (1), for the words "shall facilitate the banks", the words "shall facilitate the banks and its agent" and for the words "generated by the bank or the customer", the words "generated by the bank or its agent, or, the customer" shall be substituted;

26/11/13

राजीव अग्रवाल/RAJEEV AGRAWAL
सचिव/Secretary
भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India
नई दिल्ली-110002/New Delhi-110002

IndiaCode

(b) in sub-regulation (2), for the words "the customer or the bank", the words "the customer, or, the bank or its agent" shall be substituted;

(c) for sub-regulation (3), the following sub-regulation shall be substituted, namely:----

"(3) An access Provider may permit the bank and its agent to use WAP or STK to provide banking services to the customer of the bank and a message generated by the customer, or, the bank or its agent shall be delivered within the time frame specified in sub-regulation (5);"

(d) in sub-regulation (4), for the words "two", wherever it occur, the word "five" shall be substituted;

(e) in sub-regulation (5), for the words "the customer or the bank", the words "the customer, or, the bank or its agent" shall be substituted;

(f) in sub-regulation (6), for the words "sent by the bank" the words "sent by the bank or its agent" shall be substituted;

4. In regulation 7 of the principal regulations, in sub-regulation (2), for the words "the customer or the bank", wherever they occur, the words "the customer, or, the bank or its agent", shall be substituted;

IndiaCode

26/11/13

(Rajeev Agrawal)

Secretary

Note.1.—The principal regulations were published in the Gazette of India, Extraordinary, Part III, Section 4 dated the17th April, 2012 vide notification number No. 305-27/2011-QoS dated the 17th April, 2012.

Note.2.—The explanatory Memorandum explains the objects and reasons of the Mobile Banking (Quality of Service) (Amendment) Regulations, 2013.

26/11/13

राजीव अग्रवाल/RAJEEV AGRAWAL
सचिव/Secretary
भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India
नई दिल्ली-110002/New Delhi-110002

EXPLANATORY MEMORANDUM

1. The purpose of this amendment is to establish a framework to facilitate the aggregation platform providers as agents of the banks to interface with the access service providers for use of SMS, USSD and IVR channels to provide mobile banking services.
2. TRAI had issued the Mobile Banking (Quality of Service) Regulations, 2012. These regulations, *inter-alia*, mandate that every Access Provider, acting as bearer, shall facilitate the banks to use Short Messaging Service (SMS), Unstructured Supplementary Service Data (USSD), Inter-Active Voice Response (IVR), Wireless Access Protocol (WAP) and SIM Tool Kit (STK) to provide banking services to its customers and deliver the message generated by the bank or the customer within a stipulated time frame.
3. In some of the mobile banking solutions already deployed in the market, banks are utilising the services of their aggregation platform providers for channelling and processing the banking transactions, and interfacing with the Access Service Providers. The issue of 'facilitating authorized agents of banks acting as the aggregation platform providers to use SMS, USSD and IVR to provide banking services' was raised in the Consultation Paper on USSD-based Mobile Banking Services for Financial Inclusion, issued by TRAI on 20.09.2013.
4. On this subject, stakeholders have said that allowing the aggregation platform providers of banks to use SMS, USSD and IVR channels will reduce technology and transactions costs. These agents could play an important role in expanding the network of banks and reaching the customers. Such agents would play a vital role in the creation of common platform to connect banks and Access Service Providers and in provision of innovative solutions for mobile banking. The participation of aggregation platform providers of banks in the eco-system would foster the development of new products and enhance the quality of user experience. The Authority is of view that every access service provider, acting as bearer, should

IndiaCode

26/11/13

राजीव अग्रवाल/RAJEEV AGRAWAL
सचिव/Secretary
भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India
नई दिल्ली-110002/New Delhi-110002

facilitate not only the banks but also the authorized agents of the banks to use SMS, USSD and IVR to provide banking services to the bank's customers. The access service providers should also provide to the banks or their agents, appropriate interface with their network. For providing banking services through USSD channel, the access provider should at least provide a Hypertext Transfer Protocol Secure (HTTPS) connection. However, if the bank or its agent requires dedicated telecom resources like leased line connectivity, the same could be through a separate demand on the Access Providers viz. the bank or its agent should bear the cost of such resources.

5. The service provider's associations had raised its concern about the provision in the Mobile Banking (Quality of Service) Regulations, 2012, which mandates the Access Service Providers should ensure that the transaction of mobile banking is completed in not more than two-stage transmission of message in the case of SMS or not more than two-stage entry of options in the case of USSD and IVR. The completion of transaction in two stages may not be possible for every kind of transaction on a mobile banking menu. It will become more difficult to complete transactions in two stages as more facilities are provided on a mobile banking menu. The matter was checked with banks and their agents who are implementing the payment gateway for mobile banking. They have also expressed that it is difficult to capture multiple parameters in two stages. The Authority has examined the matter and increased the completion stages for completing the transaction to five stages.

IndiaCode

26/11/13

राजीव अग्रवाल/ RAJEEV AGRAWAL
सचिव / Secretary
भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India
नई दिल्ली-110002 /New Delhi-110002

TO BE PUBLISHED IN THE GAZETTE OF INDIA, EXTRAORDINARY,

PART III, SECTION 4

TELECOM REGULATORY AUTHORITY OF INDIA

NOTIFICATION

New Delhi, the 22nd November, 2016

No. 305-27/2010-QoS - In exercise of the powers conferred by section 36, read with sub-clauses (i) and (v) of clause (b) of sub-section (1) of section 11, of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), the Telecom Regulatory Authority of India hereby makes the following regulations, namely:-

IndiaCode

THE MOBILE BANKING (QUALITY OF SERVICE) (SECOND AMENDMENT) REGULATIONS, 2016

(7 OF 2016)

CHAPTER I

Preliminary

1. Short title and commencement. — (1) These regulations may be called the Mobile Banking (Quality of Service) (Second Amendment) Regulations, 2016;

(2) These regulations shall come into force from the date of their publication in the Official Gazette.

2. In regulation 2 of the Mobile Banking (Quality of Service) Regulations, 2012 (hereinafter referred to as the principal regulations),-----

(a) after clause (b), the following clause shall be inserted, namely:-

"(ba)" "authorised entity" means the entity authorised by Reserve Bank of India for delivery of banking and payment services";

(b) after clause (q), the following clause shall be inserted, namely:-

"(qa)" "USSD based banking and payment services" means delivery of banking and payment services through mobile phones over USSD".

3. In regulation 3 of the principal regulations, ----

(a) after sub-regulation (1), the following sub-regulation shall be inserted, namely:-

"(1a) Every Access Provider shall facilitate the authorised entity to provide USSD based banking and payment services to its customers and deliver the message within the time frame

specified in sub-regulation (5)";

(b) in sub-regulation (4), for the word "five", wherever it occur, the word "eight" shall be substituted.

(c) in sub-regulation (5), for the words "customer or the bank or its agent" the words "customer or the bank or its agent or authorised entity" and for the words "banking services", the words "banking and USSD based banking and payment services" shall be substituted.

4. In regulation 4 of the principal regulations, in sub-regulation (1), for the words "m-banking messages" the words "m-banking and USSD based banking and payment services messages" shall be substituted.

5. In regulation 7 of the principal regulations, ----

(a) in sub-regulation (1), for the words "mobile banking messages", the words "mobile banking and USSD based payment services messages" shall be substituted;

(b) for sub-regulation (2), the following sub-regulation shall be substituted, namely:----

"(2) In case the message generated by the customer or the bank or its agent or authorised entity in the process of m-banking transaction is not delivered due to any reason, the Access Provider shall immediately send an error message intimating the non-completion of the process to the customer or the bank or its agent or authorised entity, as the case may be.";

(c) in sub-regulation (3), for the words "m-banking communication", the words "m-banking or USSD based banking and payment services communication" shall be substituted;

IndiaCode

(Sudhir Gupta)
Secretary

Note.1 - Hindi version of the Mobile Banking (Quality of Service) (Second Amendment) Regulations, 2016 will follow.

Note.2 - The principal regulations were published in the Gazette of India, Extraordinary, Part III, Section 4 dated the 17th April, 2012 vide notification No.305-27/2011-QOS dated the 17th April, 2012.

Note.3 – The principal regulations were amended vide notification No. 305-27/2010-QoS and published in the Gazette of India, Extraordinary, Part III, Section 4 dated 26th November, 2013.

Note.4 – The Explanatory Memorandum explains the objects and reasons of the Mobile Banking (Quality of Service) (Second Amendment) Regulations, 2016.

Explanatory Memorandum

1. The purpose of the present amendment to the Mobile Banking (Quality of Service) Regulations, 2012 is to lay down a revised framework for mobile banking transactions and USSD based mobile banking and payment services. The amendment prescribes a revised QoS Regulation for conducting a financial transaction including banking transaction through a mobile phone over USSD. This explanatory memorandum aims to provide the rationale for this regulatory action.

2. In addition, in its endeavour to encourage digital transactions and move towards 'less cash' society, Government of India (GOI) has announced a number of steps. In February 2016, GOI initiated a drive towards promotion of payments through cards and digital means The Guidelines have, *inter-alia*, provide that the Department of Telecommunications/ Department of Financial Services/ RBI shall make a provision for a unified USSD platform which can support transactions across all payment mechanisms. Further, RBI Vision-2018 too seeks to encourage greater use of electronic payments by all sections of society so as to achieve a 'less-cash' society. The vision, *inter-alia*, seeks to orient policies for mobile banking for facilitating faster payment services by way of enhancing options for customer registration for mobile banking services, enabling wider access to mobile banking services in multiple languages for non-smartphone users and encouraging innovative mobile based payment solutions. In April, 2012, TRAI mandated that through the Mobile Banking (Quality of Service) Regulations, 2012 that every TSP shall facilitate the banks to use SMS, USSD and IVR to provide banking services to its customers and deliver the message generated by the bank or the customer in not more than two stage transmission of message in the case of SMS or in not more than two stage entry of options in the case of USSD and IVR. The Authority through the Mobile Banking (Quality of Service) (Amendment) Regulations, 2013 dated 26.12.2013, increased the maximum number of stages for completing a mobile banking transaction from two to five.

3. The various initiatives taken by the Government, RBI and TRAI did not lead to the desired result. In May 2016, only about 37 lakh mobile banking transaction attempts (over USSD channel) reached NPCI's platform (*99#), out of which about 54% were successful. Also, during 2015, there were references to TRAI from Department of

IndiaCode

Financial Services and RBI to consider following steps to increase the use of USSD based mobile banking financial services:

- Permit up-to 8 steps in one USSD session from the current limit of 5
- Increase in session timer limitation
- Reduce the ceiling tariff of Rs. 1.50 per USSD session for USSD-based mobile banking
- Enable USSD push messages for dropped USSD sessions
- Make provisions for a unified USSD platform-which can support transactions across all payment mechanism

4. A series of discussions/meetings were held with the relevant stakeholders' viz., NPCI, TSPs and DFS over a period of few months to reach a consensus on the above mentioned points that required regulatory intervention. However, no common ground could be reached and thus the Authority decided to hold a full-fledged public consultation exercise. A Consultation Paper on the "Review of regulatory framework for the use of USSD for mobile financial services" was issued on 02.08.2016 and place in public domain on TRAI website and mygov platform of GOI. Stakeholders were invited to submit written comments by 14.09.2016 and counter-comments by 28.09.2016. The comments and the counter-comments received from the stakeholders were placed on TRAI's website– www.trai.gov.in. An Open House Discussion (OHD) for the stakeholders was organized on 27.10.2016 at New Delhi. The issues raised in the CP and the views of the stakeholders thereupon on the issue of permitting up-to 8 steps in one USSD session from the current limit of 5 and making provisions for a unified USSD platform-which can support transactions across all payment mechanism were deliberated by the Authority and are being examined in the succeeding paragraphs.

IndiaCode

Adequacy of the present ceiling of five-stages for entry of options in a USSD session

5. Majority of TSPs and their industry associations did not favour increasing the present ceiling of five-stage for entry options in a USSD session. They have stated that if number of stages is to be increased from 5 to 8 then the ceiling tariff should also be increased proportionately as increase in the number of stages will load their signalling infrastructure. It has also been contended that number of stages per session may require reconsideration and review in case there is a sudden surge in volumes. They have further

opined that any increase from the present 5 stages should be on the basis of mutual agreement between the banks and TSPs. Some TSPs however, are agreeable to increase the number of sessions from 5 to 8 as some transactions may require more than 5 stages.

6. Most of the banks including Reserve Bank of India (RBI) have supported increasing the number of steps to 8 and some have even proposed to have unlimited stages per USSD session. It has been contended by these banks that the current 5 stages per USSD session are not enough for certain transactions like fund transfer, which are prone to input errors and are time-consuming. On the other hand few banks have suggested to keep it at 5 stages only as increasing the stages may make the process cumbersome and user unfriendly.

7. Some organizations have also advocated for unlimited stages per USSD session as it would help in addressing the needs of that consumer group, which is characterized by lower levels of literacy and awareness. It has also been highlighted that USSD is used by a majority of large-scale mobile money deployments across the world. Most of the individual stakeholders have also supported either 8 stages or unlimited number of stages per USSD session for mobile banking services.

8. The Authority is aware of the fact that USSD based mobile banking services were meant to drive the agenda of financial inclusion targeting that section of the population that is semi-literate and not very adept at the use of technology. Thus, the inputting by the consumer has to be kept to the minimum as human intervention leads to errors. Interface with the consumer has to be through a simple, minimalistic menu high on functionality. At the same time, in current scenario the current ceiling of 5 stages per USSD session poses a major handicap in undertaking certain transactions where the input errors are bound to happen. The input errors lead to failed/unsuccessful transactions and such customers are less likely to use USSD based mobile service again based on their poor service experience. NPCI and the banks therefore have to constantly strive to improve the software features and design to create a more user friendly menu for such USSD based mobile banking services as it would help in improving the customer experience and also the success rate of mobile banking transactions. Notwithstanding these facts the Authority believes that at this inflection point there is merit in increasing the number of stages per USSD session for giving an impetus to this service. Eight is the ceiling on the

number of stages per USSD session and improvement in the software design can lead to further reduction in the stages for consumer convenience. Keeping this in mind, the Mobile Banking (Quality of Service) (Amendment) Regulations has been issued increasing the maximum number of stages for completing a mobile banking transaction from 5-8.

Requirement of a Unified USSD platform which can support transaction across or payment platforms.

9. At present, only mobile banking transactions are permitted to be carried out on USSD aggregation platforms of the National Unified USSD Platform operated by NPCI. In the consultation paper, question was raised on whether all variety of mobile payment services, including merchant payments, utility bill payments, mobile/ DTH recharges etc., should also be permitted on USSD aggregation platforms.

10. TSPs and their associations are of the view that only basic mobile banking should be allowed through USSD based platform as allowing other services would dilute focus as contemplated for providing basic financial services to the unbanked. It has further been stated that allowing other payment mechanism is beyond the purview of the goal of financial inclusion. It has also been argued that market forces should be allowed to determine the approaches on such opportunities rather than regulatory intervention as this may lead to suboptimal outcome. If payments beyond banking transactions are to be allowed through USSD platform then it should be a P2P decision between the TSPs and the aggregator platform. They are, therefore, of the view that inclusion of additional services should be on the basis of mutually negotiated arrangements between NPCI & TSPs.

11. On the other hand, other organizations are of the view that it is important to develop acceptance infrastructure and USSD aggregation platform being cashless/cardless can be used without card, merchant discount rate and internet and this would drive consumer behaviour to move to digital electronic payment via merchant acceptance and promotion. They have also suggested that important services like mobile recharge, utility bill payments, DTH payment, P2P money transfer should be allowed as they are the most popular payments by any category and would enhance the adoption of the USSD services.

IndiaCode

12. Similarly, most of the banks including RBI have supported the inclusion of merchant payments, the Bharat Bill Payments System (BBPS) on the USSD platform. Banks have also requested for inclusion of Pre-Paid Instruments (PPIs) on the *99#platform as they are important in the payment ecosystem. RBI has also requested that all entities that are governed under the Payments and Settlement Act, 2007 of RBI should be allowed to offer the services on *99# interoperable USSD platform.

13. This question of allowing variety of mobile payment services, including merchant payments, utility bill payments, mobile/ DTH recharges etc. on NPCI USSD aggregation platform is particularly important in light of the importance of promoting digital payments as a critical part of the financial inclusion agenda. The G. Padmanabhan Committee[1] set up by the Reserve Bank of India (RBI) to study the Feasibility of Implementation of GIRO based Payment Systems had estimated that over 30,800 million bills amounting to Rs. 6223 billion are generated each year in the top 20 cities in the country. Cash and cheque payments continue to be predominant form of payment of these bills, although other forms of payments are also being accepted. Demirguc-Kunt *et al*[2]. note that "*digitizing payments like these would enable account holders to make the payments in a way that is easier, more affordable, and more secure*". The authors note that this can have the following advantages:

- It can improve the efficiency of making payments by increasing the speed of payments and by lowering the cost of disbursing and receiving them.

- It can enhance the security of payments and thus reduce the incidence of crime associated with them.

- It can increase the transparency of payments and thus reduce the likelihood of leakage between the sender and receiver.

[1] Report of the Committee to Study the Feasibility of Implementation of Giro Based Payment System in India, 07 May2013,https://rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=701#R5

[2] Asli Demirguc-Kunt, Leora Klapper, Dorothe Singer, Peter Van Oudheusden, The Global Findex Database 2014: Measuring Financial Inclusion around the World, World Bank Group, April 2015, http://documents.worldbank.org/curated/en/187761468179367706/pdf/WPS7255.pdf#page=3

14. It is well-understood that a less cash society is not only more financially inclusive but also is beneficial from the point of view of enhancing the national output. Management of cash is a significant operational expense for any financial institution. This cost item for the banks eventually becomes a cost item for the individual and in turn to the whole economy. Such cost items harm most to the poor and therefore, the goal of financial inclusion is inseparably linked with the vision of a less cash society. Thus, there is merit in moving towards a less-cash and more digital payment transaction society as is being promoted by the Government through its various guidelines and initiatives.

15. As per the Consultative Group to Assist the Poor (CGAP), at present, USSD is the best-available option to serve the payments needs of low-income customers, taking into account the factors of reach (compatibility with handsets), user experience, security, cost, and ease of deployment for the provider[3].

16. Similarly, Bharat Bill Payment System (BBPS) an integrated and interoperable bill payment system to allow customers to pay a variety of bills in an efficient and convenient manner at a single point is being implemented by NPCI. It is expected to serve as an accessible bill payment system to the large segments of unbanked and under-banked population. It will also offer convenience to the billers. To begin with, only repetitive payments for everyday utility services such as electricity, water, gas, telephone and Direct-to-Home (DTH) have been covered within the scope of BBPS. Gradually, the scope would be expanded to include other types of repetitive payments, like school / university fees, municipal taxes etc. Allowing the use of USSD on the BBPS platform will ensure that users of basic phones, who do not have access to the Internet, are also able to participate in digital payments using this platform.

17. In view of the above, the Authority is of the view that usage of USSD channel should be allowed for offering payment services to all the authorized entities regulated under the Payments and Settlement Act, 2007 of RBI and payments being received on Bharat Bill Payment System (BBPS).

IndiaCode

[3] CGAP, Promoting Competition in Mobile Payments: The Role of USSD, CGAP, February 2015, https://www.cgap.org/sites/default/files/Brief-The-Role-of-USSD-Feb-2015.pdf