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

TELECOM REGULATORY AUTHORITY OF INDIA

THE TELECOMMUNICATION TARIFF (FIFTY SIXTH AMENDMENT) ORDER, 2013

No. 5 of 2013

NOTIFICATION

New Delhi, the 26th November, 2013

No. 301-26/2012-ER — In exercise of the powers conferred upon it under sub-section (2) of section 11, read with sub-clause (i) of clause (b) of sub-section (1) of the said section, of the Telecom Regulatory Authority of India Act, 1997 (24 of 1997), the Telecom Regulatory Authority of India hereby makes the following Order further to amend the Telecommunication Tariff Order, 1999, namely:

1. (1) This Order may be called the Telecommunication Tariff (Fifty Sixth Amendment) Order, 2013.

(2) This Order shall come into force on the 1st day of January, 2014.

2. In clause 2 of the Telecommunication Tariff Order, 1999 (hereinafter referred to as the principal tariff order), after sub-clause (r), the following sub-clauses shall be inserted, namely: ---

"ra. "USSD" or "Unstructured Supplementary Service Data" means a real-time or instant session-based messaging service;

rb. "USSD-based mobile banking services" means delivery of banking services through mobile phones over USSD;

rc. "USSD session for USSD-based mobile banking services" means a session over USSD between the mobile subscriber and the bank or its agent;"

3. In the Schedule II to the principal tariff order, the item (8) shall be numbered as item (9);

4. In the Schedule II to the principal tariff order, after item (7A), the following items and entries relating thereto shall be inserted, namely:

ITEM	**TARIFF**
"(8) Use of USSD for USSD-based mobile banking services	
(8.a) Charge for outgoing USSD session for USSD-based mobile banking services	Ceiling of Rs. 1.50 per USSD Session
(8.b) Other matters related to USSD-based mobile banking services	Forbearance."

(Manish Sinha)

Advisor (F&EA)

Note.1. – The Telecommunication Tariff Order, 1999 was published in the Gazette of India, Extraordinary, Part III, Section 4 under notification No.99/3 dated 9th March, 1999, and subsequently amended as given below:

Amendment No.	**Notification No. and Date**
1st	301-4/99-TRAI (Econ) dated 30.3.1999
2nd	301-4/99-TRAI(Econ) dated 31.5.1999
3rd	301-4/99-TRAI(Econ) dated 31.5.1999
4th	301-4/99-TRAI(Econ) dated 28.7.1999
5th	301-4/99-TRAI(Econ) dated 17.9.1999
6th	301-4/99-TRAI(Econ) dated 30.9.1999
7th	301-8/2000-TRAI(Econ) dated 30.3.2000
8th	301-8/2000-TRAI(Econ) dated 31.7.2000
9th	301-8/2000-TRAI(Econ) dated 28.8.2000
10th	306-1/99-TRAI(Econ) dated 9.11.2000

11th	310-1(5)/TRAI-2000 dated 25.1.2001
12th	301-9/2000-TRAI(Econ) dated 25.1.2001
13th	303-4/TRAI-2001 dated 1.5.2001
14th	306-2/TRAI-2001 dated 24.5.2001
15th	310-1(5)/TRAI-2000 dated 20.7.2001
16th	310-5(17)/2001-TRAI(Econ) dated 14.8.2001
17th	301/2/2002-TRAI(Econ) dated 22.1.2002
18th	303/3/2002-TRAI(Econ) dated 30.1.2002
19th	303/3/2002-TRAI(Econ) dated 28.2.2002
20th	312-7/2001-TRAI(Econ) 14.3.2002
21st	301-6/2002-TRAI(Econ) dated 13.6.2002
22nd	312-5/2002-TRAI(Eco) dated 4.7.2002
23rd	303/8/2002-TRAI(Econ) dated 6.9.2002
24th	306-2/2003-Econ dated 24.1.2003
25th	306-2/2003-Econ dated 12.3.2003
26th	306-2/2003-Econ dated 27.3.2003
27th	303/6/2003-TRAI(Econ) dated 25.4.2003
28th	301-51/2003-Econ dated 5.11.2003
29th	301-56/2003-Econ dated 3.12.2003
30th	301-4/2004(Econ) dated 16.1.2004
31st	301-2/2004-Eco dated 7.7.2004
32nd	301-37/2004-Eco dated 7.10.2004
33rd	301-31/2004-Eco dated 8.12.2004
34th	310-3(1)/2003-Eco dated 11.3.2005
35th	310-3(1)/2003-Eco dated 31.3.2005
36th	312-7/2003-Eco dated 21.4.2005
37th	312-7/2003-Eco dated 2.5.2005
38th	312-7/2003-Eco dated 2.6.2005
39th	310-3(1)/2003-Eco dated 8.9.2005
40th	310-3(1)/2003-Eco dated 16.9.2005
41st	310-3(1)/2003-Eco dated 29.11.2005
42nd	301-34/2005-Eco dated 7.3.2006
43rd	301-2/2006-Eco dated 21.3.2006

44th	301-34/2006-Eco dated 24.1.2007
45th	301-18/2007-Eco dated 5.6.2007
46th	301-36/2007-Eco dated 24.1.2008
47th	301-14/2008-Eco dated 17.3.2008
48th	301-31/2007-Eco dated 1.9.2008
49th	301-25/2009-ER dated 20.11.2009
50th	301-24/2012-ER dated 19.4.2012
51st	301-26/2011-ER dated 19.4.2012
52nd	301-41/2012-F&EA dated 19.09.2012
53rd	301-39/2012-F&EA dated 1.10.2012
54th	301-59/2012-F&EA dated 05.11.2012
55th	301-10/2012-F&EA dated 17.06.2013

Note.2. – The Explanatory Memorandum explains the objects and reasons for the Telecommunication Tariff (Fifty Sixth Amendment) Order, 2013.

Explanatory Memorandum

A- Introduction and Background

1. The purpose of the present amendment to the TTO is to design a mechanism and determine the terms and conditions under which mobile banking for financial inclusion can be facilitated. The amendment prescribes a ceiling tariff for conducting a banking transaction through a mobile phone over USSD. This explanatory memorandum aims to provide the rationale for this regulatory action.

2. Availability of banking services to the entire population of the country without any discrimination is a major objective of public policy. Banking services are in the nature of a public good. Financial inclusion based on the principle of equity and inclusive growth has been engaging the attention of policy makers around the world. The United Na tions broadly describes the main goals of financial inclusion as access to services such as savings, credit, insurance, remittance and other banking/ payment services to all 'bankable' persons at a reasonable cost.

3. However, a large section of the population in India has no access to banking services today. The barriers to financial inclusion in India include (a) the poor accessibility of banking services, mainly due to the reluctance on the part of the banks to invest in infrastructure and human resources in remote areas; and, (b) when accessible, the high costs incurred by households to access such services. There is an increasing realization that a sustainable solution to the problem could lie in technology-driven service delivery models. The mobile phone is evolving into another transaction mode for customers with bank accounts. The ease of use of a mobile phone could potentially draw the unbanked into opening bank accounts and undertaking banking transactions. On 30.09.2013, there were about 87 crore mobile subscribers in the country of which about 35 crore were in the rural areas. The fact that a large number of mobile subscribers in rural areas do not have access to banking facilities

presents an opportunity for leveraging the mobile telephone to achieve the goal of financial inclusion.

4. Technology adoption in India is proceeding apace. A large scale digitization of India is becoming visible. While there are about 87 crore mobile subscribers in the country, the number of subscribers who access Internet by wireless phones has grown to about 14.3 crore. With crores of people transacting faster, quicker and better, there is likely to be productivity improvement and GDP growth. With growth in household incomes, the demand for monetary and banking transactions is also likely to rise. The Government-to-citizen cash payments such as direct benefits transfers are also bringing in the unbanked population into the banking system. With bank accounts becoming universal and planned 80 crore Aadhar cards easing the Know Your Customer (KYC) norms, there is going to be an increase in the demand for banking services in the next few years. Even if the banks were prepared to invest heavily into building physical branches, it may be difficult to serve the requirements of the large and widely dispersed rural population. With a significant penetration of mobile telephony in rural India, the mobile phone has the potential to help provide basic banking and payment services to citizens on a model that supplements the conventional banking system.

5. With a view to leverage the strengths of mobile telephony for financial inclusion, the Government of India constituted an Inter-Ministerial Group (IMG) to submit a report on the framework for delivery of basic financial services using mobile phones. The framework proposed in the IMG report has been accepted as the basis for delivery of basic financial services using mobile technology by a Committee of Secretaries under the chairmanship of Cabinet Secretary in April 2010. The IMG framework envisages the opening of mobile linked 'no-frills' accounts, which would be operated using mobile phones. The customer would be able to perform five basic transactions - cash deposit, cash withdrawal, balance enquiry, transfer of money from one mobile-linked account to another, and transfer of money to a mobile-linked account from a regular bank account.

6. The IMG framework also proposes compensation to the key players after taking into account the actual costs incurred by them. One of the recommendations of the IMG is that the telecom service providers (TSPs) should provide prioritized secure communication for mobile banking and they should charge not more than Re. 1 per transaction from their subscribers viz. mobile linked 'no-frills' account holders/ Business Correspondents. TRAI has, however, been requested to devise a mechanism to support the operation of market forces for ensuring that telecom services of adequate quality are provided for mobile banking services at reasonable charges.

7. In countries where the financial services infrastructure is not sufficient to provide access to a large population, the mobile system can be an effective replacement mechanism to access the bank. The ecosystem in mobile banking thus comprises two distinct sectors i.e. the financial services sector and the telecom sector. The two sectors are governed by two separate sets of regulations.

8. To make financial services available for the unbanked population, USSD-based mobile channels can be effectively deployed. USSD based mobile banking services have already been launched by some banks in the country viz. State Bank of India, Canara Bank and ICICI Bank in partnership with some TSPs. However, the extent and scope of the USSD-based mobile banking services offered by these banks are limited on the following counts:

   (i) These services are, at present, not available to the subscribers of all TSPs.

   (ii) These services are limited to the provision of value added banking services to the banks' existing customers and are <u>not</u> designed to meet the objective of providing banking services to the unbanked/ under-banked population i.e. financial inclusion.

9. On the other hand, the IMG framework envisages mobile banking services to cater to the banking needs of the masses in general and the unbanked/

under-banked population, in particular. This would require creation of an enabling environment where subscribers of <u>all</u> TSPs and customers of <u>all</u> banks would be able to avail of mobile banking services as per their requirement and at affordable prices. The business framework required for this purpose would have to transcend the simple model of one-on-one partnerships between banks and TSPs in areas of mutually perceived pecuniary advantage.

10. As a follow-up to the IMG report, the Department of Telecom (DOT) , through their letter no. 20-1/2011-AS-III/43/7/6 dated 09.12.2011, allocated the USSD code *99# to the Department of Financial Services for mobile banking services through the gateway of the National Payments Corporation of India (NPCI). TSPs were directed to connect to the gateway of the NPCI as per requirement of service and in consultation with NPCI. A copy of the letter is placed as **Annexure**. Perceiving that a certain extent of hand-holding would be required for the project to take-off, TRAI made concerted efforts to bring the banks and TSPs into a technical and commercial partnership model by evolving a mutually acceptable consensus regarding the terms and conditions of such a partnership. TRAI's efforts in this direction stretched over a period of 10 months. However, this attempt did not lead to the desired result, for two reasons. Firstly, the banks were not able to clearly articulate the business case embodied in the proposed venture. Secondly, it is also true that the TSPs view the IMG model as being in competition with their own efforts to diversify into the mobile money space. The lack of cash-out facility in the mobile money solutions has remained a sore point with the TSPs. Since the collaborative effort, focused as it was on business-to-business relationships, did not take off, the Authority decided to go in for a fresh round of consultations for enabling mobile subscribers to have an option to access financial services through the technology of their choice at an affordable price.

11. With a view to devising a framework for use of USSD for delivery of basic financial services through the mobile phone, a Consultation Paper (CP) on 'USSD-based Mobile Banking for Financial Inclusion' was issued on 20.09.2013. Stakeholders were invited to submit written comments by 04.10.2013 and counter-comments by 11.10.2013. The comments and the counter-comments received from the stakeholders were placed on TRAI's website– www.trai.gov.in. The issues raised in the CP and the views of the stakeholders thereupon are being examined in the succeeding paragraphs.

B- Analysis of the Key Issues Raised in the Consultation Paper

12. A summary description for each issue together with the comments of stakeholders and further analysis thereon is presented below:

(1) Suitability of USSD for mobile banking for financial inclusion

13. A majority of TSPs and their industry associations have not favoured USSD as the most appropriate mode for mobile banking service for financial inclusion. The primary concerns of these stakeholders are based on the following premises:

    (i) USSD is not a main-stream commercial service.

    (ii) USSD menus are currently available only in English.

    (iii) USSD is not supported by CDMA.

14. These stakeholders have argued that USSD has primarily been deployed in a limited way in telecom networks for delivering various value added services (VAS) which do not need to follow the stringent and rigorous specifications for a financial transaction such as audit trail of transaction, storage of transaction data, interface with multiple third-party applications, and stringent quality-of-service (QoS) parameters; in order to make USSD as a main-stream technology for mobile banking services, significant investment in billing systems, transaction data storage, retrieval systems, dedicated USSD platform and the radio access network (RAN) would be required. Further, they have

contended that the fact that USSD menus are currently available only in the English language would act as an adoption barrier for financially excluded customers. They have also pointed out that a significant portion of mobile users would not be able to use USSD-based mobile banking services since CDMA does not currently support USSD. Owing to these issues, such stakeholders have favoured Interactive Voice Response (IVR) and SMS in place of USSD for mobile banking services for financial inclusion.

15. On the other hand, some TSPs and a majority of consumer advocacy groups, organizations and individual stakeholders have favored USSD as the most appropriate mode for mobile banking service for financial inclusion. These stakeholders have cited the following features of USSD in support of their view:

    (i) <u>Ubiquitous</u> (Available across mobile handsets): A significant proportion of mobile phone users are still using ultra-low-cost-handsets (ULCH). USSD is available on nearly all GSM mobile handsets.

    (ii) <u>Inexpensive</u>: USSD uses an inexpensive resource (signaling channel) of the TSPs.

    (iii) <u>Secure</u>: USSD is the most reliable channel for making financial transactions because there is no potential risk of misuse of mPIN.

    (iv) <u>Convenient</u>: USSD offers better user experience as it is menu-based and provides a continuous session for the transaction(s).

    (v) It also supports vernacular/ regional languages.

16. In view of the fact that USSD has all the essential features required in a communication channel for mobile banking services for financial inclusion viz. it is ubiquitous, inexpensive, secure and convenient, the Authority is of the view that USSD is an appropriate channel for mobile banking service for financial inclusion.

17. The successful use of USSD for mobile banking transactions is likely to open a significant revenue stream for TSPs. They are already deploying USSD-based

services in their networks. Some of them are also using it to provide mobile banking services in partnership with banks. In existing USSD-based mobile banking models, one or more entities interface between the banks and the TSPs in channeling and processing transactions. On the TSPs' side, the requirement is for compiling the USSD messages and interfacing with the banks. On the banks' side, the requirement is for compiling transactions and interfacing with the TSPs. The entities which perform these functions for the TSPs and banks are generally referred to as aggregators. The TSPs and banks can have a common, single aggregator, or separate aggregators. For the sake of clarity, in this explanatory memorandum, the TSPs' aggregator is referred to as the gateway operator. The gateway provider provides equipment and services to TSPs who do not own the necessary infrastructure i.e. the USSD gateway and the capability to generate Call Data Records (CDRs) for USSD transactions. (The banks' aggregator has already been termed as the USSD aggregation platform provider in the CP dated 20.09.2013).

18. Some TSPs have contended that the use of USSD for mobile banking transactions would necessitate huge investments. However, the Authority observes that a large amount of capital expenditure can be avoided by employing the services of gateway operators who, *inter-alia*, can provide capability for billing USSD messages to the TSPs. The records that are created for billing will also help to satisfy the information needs of the customers. Besides, some TSPs are already making use of SMS-MT (Short Message service-Mobile Terminating) upon completion of USSD session for billing their subscribers.

19. To sum up, no excessively large capital expenditure is involved in extending the use of USSD-based channels for mobile banking services. It can be done economically, as has been demonstrated. Further, in most models where gateway operators are working for TSPs, the same gateway operator provides the required CAPEX for enhancing capabilities.

20. As regards the contention that a significant proportion of mobile users would not be able to use USSD based mobile banking service because USSD is not supported by CDMA systems, it is pertinent to point out that of the total wireless subscriber base of about 87 crore as on 30.09.2013, about 80.7 crore (92.77%) of the subscribers are GSM subscribers, and only about 6.3 crore (7.23%) are CDMA subscribers. The objective of financial inclusion is to cover a wide base of telephone users with mobile banking services. The Authority is of the view that this objective will be largely achieved if such a large percentage of wireless subscribers are enabled to use the USSD-based mobile banking service. Additionally, the possibility of work-around methods to cover CDMA subscribers can also be explored by banks and TSPs.

21. It is clarified that while considering USSD as an appropriate channel for mobile banking service for financial inclusion, the Authority, by no means, intends to exclude IVR and SMS-based mobile banking services. The use of USSD is only to supplement the already present IVR, SMS and mobile Apps-based offerings with a specific focus to cater to the needs of financially excluded citizens of the country.

(2) Should the access service providers collect charges from their subscribers for the use of USSD for mobile banking services?

22. A core issue is whether the customers should pay for the use of USSD for mobile banking services - the business-to-customer (B2C) pricing model or-should banks/ banks' agents pay for the use of USSD for mobile banking services- the business-to-business (B2B) pricing model.

23. A majority of TSPs, their industry associations, a few organizations, and a consumer advocacy group have not favored the B2C pricing model for the use of the USSD channel for mobile banking services. The primary concerns of these stakeholders are based on the following premises:

(i) Implementation of B2C pricing model for USSD-based mobile banking service would require a new billing system for which a huge investment would be needed. Without an assured USSD transaction volume, there can be no business case for investing in additional capacity.

(ii) In case charges are recovered by TSPs from their customers (B2C pricing model), they would be more inclined to contact the call centers of the TSPs instead of calling to banks. This would put an unnecessary burden on the call centre infrastructure of the TSPs.

(iii) Since the users are customers of the banks, the banks should recover charges from them directly or absorb the cost. However, the banks must compensate the TSPs for their cost in both the scenarios.

24. On the other hand, a few TSPs and a majority of consumer advocacy groups, organizations and individuals have favoured the B2C pricing model for the use of the USSD channel for mobile banking services. These stakeholders have cited the following reasons in support of their view:

(i) It is natural to expect the user of a service to pay to the providers of the service. In the present case, the TSPs are providing the service of 'air-time' through the USSD channel to their customers.

(ii) The USSD channel is just like any other channel of communication viz. voice, SMS and data. For USSD transactions, the TSPs should collect charges from subscribers as they do in the case of SMS-based, Mobile App-based and Internet banking.

(iii) As the customer is benefited both in terms of cost and convenience by using the USSD-based mobile banking service, he would be willing to pay a reasonable amount for the use of USSD. The customer reduces the risk of carrying cash and the service is available everywhere irrespective of the location of the Bank/ATM. A charge on the customer would encourage proper use and avoid misuse of the service.

25. From the stakeholders' comments, it is evident that a majority of the TSPs prefer a B2B pricing model. One of their apprehensions about the B2C pricing

model is that it may require a significant investment on a new billing system to support USSD transactions, which will not yield sufficient returns on investment (ROI). However, the present ecosystem provides a ready alternative solution. Many TSPs have already outsourced the USSD gateway service to gateway operators. The gateway operators can, in addition, help to build a billing and audit trail system to satisfy the customers and fulfill the regulatory requirement. The model of business that is currently in use incorporates a revenue share to the gateway operator that replaces the requirement of making fresh investments. The payment in exchange for the services provided by the gateway operator for the USSD channel ranges between 5-15% of the charges levied by the TSPs on their subscribers. The spread of the cost per transaction is very small and can easily be built into the end-user tariff.

26. In addition, the mobile banking service would add value to existing services and providing a new revenue stream, thereby increasing the average revenue per user.

27. The concern of TSPs that, in the event of adopting the B2C pricing model, they would be unnecessarily inundated with customer complaints of failed banking transactions at their call centers appears to be a misapprehension. The TSP is providing a communication channel to the mobile customer, <u>not the banking service per se</u>, which is provided by the bank. This situation applies equally to mobile banking through SMS, IVR or the Internet, which are also used as modes for mobile banking. As such, customers are fully aware that they are making transactions out of their own accounts in the bank, for which the TSP cannot be held responsible.

28. The argument of TSPs that the banks should recover charges from citizens for the use of USSD because the citizens are customers of banks, does not appear to be reasonable. The mobile banking sector involves players from the financial services sector on the one hand and the telecom sector on the other.

Their respective roles in the process of delivering USSD-based mobile banking services are as follows:

(i) Banks facilitate their customers with banking over mobile. Thus mobile banking acts as another outlet of the banks.

(ii) TSPs provide their subscribers with a delivery channel (USSD) to execute banking transactions. Thus the USSD channel acts as a vehicle to help the customer reach the mobile banking outlet of the banks.

29. The Authority is of the view that the B2C model is logical. It is only appropriate that the TSPs receive adequate recompense from the customer for the facility of the USSD communication channel that they provide to help the customer (subscriber) access mobile banking services.

30. It is further observed that the B2C model has been successfully implemented in some of the existing mobile banking projects such as the partnerships between ICICI Bank and six TSPs, and that between SBI and five TSPs. A significantly strong argument in support of this model is that it is already working in the functioning systems.

31. Although the TSPs have argued strongly for a B2B model, it is a fact that the banks and TSPs have failed to reach agreement on terms and conditions of partnership, in spite of intensive parleys over the past year. In the meanwhile, the project of mobile banking for financial inclusion has been the casualty. The Authority is of the view that this situation cannot be allowed to continue indefinitely. As stated earlier, the present TTO is meant to fix the terms and conditions under which mobile banking for financial inclusion can be facilitated.

(3) Appropriateness of Rs. 1.50 per USSD session for mobile banking as a ceiling tariff

32. On the subject of the appropriate ceiling tariff for mobile banking service, significantly divergent views have been expressed by the stakeholders viz.

    (i) Tariff per USSD session for mobile banking should remain under forbearance.

    (ii) A ceiling tariff of Rs. 1.50 per USSD session for mobile banking would be appropriate.

    (iii) A tariff significantly higher than Rs. 1.50 per USSD session for mobile banking should be allowed.

    (iv) The ceiling tariff should be much lower than Rs. 1.50 per USSD session.

    (v) Subscription based pricing model instead of pay-per-use pricing model should be adopted.

33. Some TSPs and the industry associations have favoured the policy of forbearance in the tariff for the USSD session for mobile banking services. They have stated that mobile banking is at a very nascent stage of growth as the eco-system is still developing and, therefore, it would be premature to fix a ceiling tariff per USSD session at this stage.

34. On the other hand, many stakeholders have supported prescription of a ceiling tariff for the use of USSD for mobile banking services in view of the following:

    (i) A ceiling tariff is necessary for customer protection and to encourage innovation to enable scale and volume of transactions on the USSD channel.

    (ii) From the experience of usage of short codes in SMS-based banking, it seems necessary to prescribe a ceiling tariff for USSD-based mobile banking service. Since the TSPs charge Rs. 3 per SMS, the usage has not picked up in the lower end of the customer segment.

35. A few stakeholders have considered Rs. 1.50 per USSD session for mobile banking as an appropriate ceiling tariff in order to ensure that the TSPs do not charge an exorbitant or unreasonably high tariff per USSD session. They have also stated that voice and SMS services also operate near this price point.

36. A few access service providers have argued that they should be allowed to charge higher than Rs. 1.50 per USSD session (e.g. Rs. 3 or Rs. 5.50) in view of the following:

(i) Huge investment in the billing system and to meet the strict guidelines for quality of service for mobile banking;

(ii) USSD session for mobile banking service involves multiple hits which would engage the signaling channel and core network for a long time.

37. On the other hand, a majority of consumer advocacy groups, organizations and individuals have contended that the TSP should charge much lower tariff per USSD session. Some of the comments offered by these stakeholders are as below:

(i) The price per USSD session should be at par with GPRS service i.e. Re. 0.20 to Re. 0.30 per USSD session.

(ii) The customers should be able to pay as low as Re. 0.50 per USSD session with no additional charges.

(iii) The ceiling should begin with Re. 1 per USSD session.

These stakeholders have opined that the real growth of the service will come out of ‘large volume of transactions and small value charges’ rather than from ‘high value charges and small volumes of transactions’.

38. One TSP has stated that a subscription-based pricing model instead of pay-per-use pricing model should be adopted for pricing the use of USSD for mobile banking services so that the TSPs do not require any investment in their network.

39. Though there are divergent views on the issue, most of the stakeholders consider tariff of USSD session for mobile banking service an important determinant of the success of USSD-based mobile banking service. Besides, it is clear, from the comments of the stakeholders, that the principle that the person seeking the service must pay for the service, is widely acceptable.

40. As the use of USSD for mobile banking service is not a main offering of the TSPs, the pricing of these services is not likely to be subjected to the same competitive pressure which the main offerings of the TSPs (viz. voice call and SMS) have to face in the marketplace. Besides, the use of USSD for mobile banking for financial inclusion carries definite socio-economic benefits to the target group i.e. unbanked/ under-banked population and, therefore, the price for the use of USSD for mobile banking needs to be reasonable and affordable. In the USSD-based mobile banking solutions already deployed in the country, subscribers are charged a pay-per-use charge in the range of Rs. 1 to 1.50 per USSD session regardless of the duration of the session.

41. It is noteworthy that while voice calls travel over traffic channels, USSD messages and SMS messages travels over inexpensive signaling channels. The prevalent tariff of outgoing SMS in the tariff plans offered by the TSPs is generally Re. 1 per local SMS and Rs. 1.50 per national SMS.

42. In the light of the above, the Authority is of the view that a ceiling tariff of Rs. 1.50 per USSD session would be reasonable to compensate the TSPs to meet the expenses incurred in the use of USSD for mobile banking service and also it would be affordable to the subscribers. Ordinarily, a USSD session shall comprise one banking transaction e.g. balance enquiry, transfer of money (Fund transfer) etc. However, the TSPs and banks/ banks' agents may agree to accommodate more transactions in a USSD session. A pay-per-use charge within the ceiling tariff of Rs. 1.50 per USSD session would be payable by the subscriber upon establishment of an outgoing USSD session, regardless of whether the session results in a successful or a failed banking transaction.

Annexure

Government of India
Department of Telecommunications
(Access Services Wing)
Sanchar Bhawan, 20, Ashoka Road, New Delhi-110001

To

All Access Service Providers,

Sub: Allocation of USSD code *99# to Department of Financial Services for mobile banking service through National Payment Corporation of India (NPCI)

No. : 20-1/2011-AS-III/ 43/7/6 dated :09-12-2011

Undersigned has been directed to convey the approval of competent authority for allocation of USSD code *99# to Department of Financial Services for mobile banking service through the gateway of National Payment Corporation of India (NPCI). For the proposed service. Telecom Service Providers will connect to the gateway of NPCI as per requirement of service in consultation with NPCI.

K Mohan
(Ksitij Mohan)
US(AS-III)

Copy to :

1. Secretary, Department of Financial Services.
2. Secretary, TRAI
3. Sr. DDG(TEC), DoT
4. Dir (IT), DoT HQ for uploading on DoT web-site.

List of Acronyms

Sl. No.	Acronym	Expansion
1	ATM	Automated Teller Machine
2	B2B	Business-to-Business
3	B2C	Business-to-Customer
7	CAPEX	Capital Expenditure
4	CDMA	Code Division Multiple Access
5	CDR	Call Data Record
6	CP	Consultation Paper
8	DoT	Department of Telecommunications
9	GDP	Gross Domestic Product
10	GPRS	General Packet Radio Service
11	IMG	Inter Ministerial Group
12	IVR	Interactive Voice Response
13	KYC	Know Your Customers
14	m-PIN	Mobile Personal Identification Number
15	NPCI	National Payment Corporation of India
16	QoS	Quality of Service
17	RAN	Radio Access Network
18	ROI	Return on Investment
19	SMS	Short Message Service
20	SMS-MT	Short Message Service - Mobile Terminating
22	TRAI	Telecom Regulatory Authority of India
23	TSP	Telecom Service Provider
21	TTO	Telecommunications Tariff Order
24	ULCH	Ultra-Low-Cost-Handsets
25	USSD	Unstructured Supplementary Service Data
26	VAS	Value Added Services