



## **DETERMINATION OF USSD PRICING**

**Issued by**

**The Nigerian Communications Commission**

**On this 23<sup>rd</sup> Day of July, 2019**

# DETERMINATION

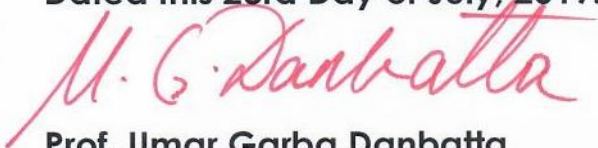
The Commission hereby determines that:

- a) A USSD session is 20 Seconds.
- b) The Cost of a USSD session is N1.63K
- c) The price floor for a 20 Seconds USSD service is N1.63k
- d) The price cap for a 20 Seconds USSD Session is N4.89k
- e) Telecoms Operators are to price at cost plus margin.
- f) This determination does not apply to the currently zero rated USSD services such as customer service, balance enquiry, purchase of airtime and data services, etc. related to Telecommunications services.
- g) This shall take effect from this 1st Day of September, 2019 and remains valid and binding on Licensees.
- h) The Commission reserves the right to amend and review this Determination at any time, as well as to consider other options to incentivize the Communications industry. Such review may be necessitated by major change in the market conditions and/or the underlining principles of this Determination.
- i) In this Determination, unless the context requires otherwise, the following expressions shall have the meanings set out below.

USSD	Unstructured Supplementary Service Data is a service that allows mobile phone users to interact with a remote application from their device in real time. A predefined session is started once a user dials in to facilitate the transfer of information between the application
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	and the user. It is a highly scalable service as it does not require an internet connection and is supported by both feature and smartphones
MNO	Mobile Network Operator: a company that has a valid license to provide telecommunications services through mobile devices
Digital financial services	Digital financial services include methods to electronically store and transfer funds; to make and receive payments; to borrow, save, insure and invest; and to manage a person's or enterprise's finances. The broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances and insurance. The digital financial services (DFS) concept includes mobile financial services (MFS)

**Dated this 23rd Day of July, 2019.**



**Prof. Umar Garba Danbatta**  
**Executive Vice-Chairman**  
**Nigerian Communications Commission**  
**Abuja – Nigeria**

# USSD PRICE DETERMINATION PROCESS BY THE NIGERIAN COMMUNICATIONS COMMISSION

## INTRODUCTION

1. Today's global economy is increasingly dependent on mobile technology. This is not just for telecommunications services but also for a number of other services offered by adjacent industries. In this regard, USSD services are playing an increasingly important role in the implementation of value added services across multiple platforms.
2. The Commission, in line with its mandate, is committed to promoting the provision of modern, universal, efficient, reliable, affordable and easily accessible communications services.
3. As part of its effort to create an enabling environment for competition among operators in the industry, and ensure the provision of qualitative and efficient Communications services throughout the country, the Commission engaged PricewaterhouseCoopers (PwC) to assist it understand, and determine the cost of USSD services

## LEGAL BASIS FOR THIS DETERMINATION

4. The Commission's functions and duties are set out in the Nigerian Communications Act 2003 (the "Act"). Section 4 of the Act lists the Commission's functions, to include the facilitation of investments in and entry into the Nigerian market for the provision and supply of communications services, equipment and facilities (section 4(a)); the protection and promotion of the interests of consumers against unfair practices, including but not limited to matters relating to tariffs and charges; and availability and quality of communications services, equipment and facilities (section 4(b)); and the promotion of fair competition in the communications industry; protection of

communications services and facilities providers from the misuse of market power, or anticompetitive and unfair practices by other service, or facilities providers (section 4(d)).

5. The Commission has general responsibilities for the economic and technical regulation of the communications industry (section 4(w)).
6. Section 4(2) of the Act requires the Commission to carry out its functions, meet its duties, and exercise its powers efficiently, effectively and in a non-discriminatory and transparent manner, and in a way that is best calculated to ensure that there are provided throughout Nigeria, subject to the regulatory controls specified in the Act, all forms of communications services, facilities and equipment on such terms and subject to such conditions as the Commission may from time to time specify.

## **PROCESS ADOPTED**

7. The determination of cost of USSD was one of the deliverables of the consultancy study on Mobile Termination Rate concluded in June 2018.
8. The following principles were adopted for the cost study:

<b>Topic</b>	<b>Recommendation</b>
Cost modelling approach	Hybrid costing model; Modelled network is based on a scorched node approach; Modelled network takes the actual and planned coverage of a typical operator and the specific factors of Nigeria into account; Calculation of cost of efficient service provision
Cost model concept	LRIC( Long Run Incremental Cost) plus mark-up for joint and common costs; Allocation of common costs by using an equi-proportionate mark-up; Retail costs are excluded from interconnection rates

Cost basis	Forward-looking costs; The model reflects the years 2018, 2019 and 2020.
Depreciation	Tilted annuity is used as depreciation methodology
Cost of capital	Estimation of the current Cost of Capital based on CAPM (Capital Asset Pricing Model) model and current market information.
Quality of Service	Model reflects the targeted quality of service
Exchange rate	Exchange rates were based on forecasted inflation rates by the IMF.

9. To determine the provisioning cost for USSD services, the methodology used was the calculation of the cost of the network components used to provide the service. Costing components used to provide the service are typically the USSD platform and the network facilities used to connect to customers.
  
10. Details of the process adopted for the study, including data collection and industry consultations can be found in the Determination of Mobile (Voice) Termination Rates Issued by Nigerian Communications Commission on 1st June, 2018. The document is available on the Commissions Website (<https://www.ncc.gov.ng/docman-main/legal-regulatory/legal-determinations/805-determination-of-mobile-voice-termination-rate-2018/file>)
  
11. In March 2019, the Operators were again invited to review and provide comments on the study on USSD. Afterwards, a stakeholder engagement was held in May 2019, with relevant Telecoms Operators and representatives from CBN, WASPAN, EFiNA AND NIBSS

12. In carrying out the review, the Commission subsequently took into consideration, the indicative results and recommendations of the consultancy, the aggregated operators' comments, and its understanding and characteristics of the USSD usage/services ecosystem to determine the cost of providing USSD Services on Nigerian telecommunications networks
13. The Commission notes that one of the widest uses of the USSD platform is for the delivery of Digital Financial Services (DFS). However, USSD charge is just one of the many cost components of DFS;
14. It is expected that other players in the DFS ecosystem (such as banks and licensed mobile financial services providers etc.) would equally be transparent and ensure that their charges reflect their true cost structures. It is expected that this determination will enable such transparent cost application in that sector. The Commission looks forward to action by the other regulators in this regard to achieve fair pricing to the benefit of consumers, the different players in the ecosystem, and Nigeria as a whole.

## **CONSIDERATION OF SUBMISSIONS MADE BY OPERATORS**

15. The purpose of this section is to provide an overview of the comments received from stakeholders as well as the responses of the Commission to these comments.
16. The comments received have been summarised and grouped by subject area. The names of the operators making the individual comments have not been included.

### **The following were comments and concerns by Operators on the recommended Cost of USSD from the Study:**

17. That the recommended cost may not be a true reflection of the total costs for the provision of USSD services.

18. That the recommended cost for a USSD session represents a significant reduction from the going industry rate and could be a disincentive for future investments towards supporting the evolving digital financial service ecosystem.
19. That the determination of an accurate operative cost for the provision of USSD service would be impossible because USSD platforms, unlike call termination which involves the use of similar resources, is typically bespoke to each Operator in line with their commercial and technical objectives.
20. That the estimated cost is not an accurate representation of actual cost of USSD service because it does not reflect current economic indices such as the year 2017 exchange rates used in the cost model.
21. That opportunity costs effect arises due to the fact that USSD sessions use the same signalling channel for a Voice Call or SMS set-up. Operators also described the additional costs linked to the cost of network elements underpinning provision of USSD services and recommends that the Commission stipulate a pricing regime that allows for sufficient margin between cost and retail rates. In view of this, a margin of 64% which reflects the same margin between Mobile voice call termination and price floor for Voice was recommended.
22. That some additional cost elements may not have been duly captured in the cost model. These additional costs are said to have been incurred by the MNO in upgrading its USSD gateway and establishing fibre optic connectivity to ensure provision of resilient and reliable USSD services including indirect costs incurred in the provision of USSD service. The aforementioned cost would not have been incurred if the gateway was solely used for telecommunications.



## **Responses:**

23. The cost determined in this study took into consideration all the relevant cost elements required to perform a USSD service. The cost is modelled after an “efficient operator” and not intended to be direct reflection of the cost of any individual operator.
24. While the Economic Indices used in the study were the current indices at the time (2017), the key cost components have not changed and adjustments have been made, taking forecasted inflation and exchange rates into consideration.
25. As stated above, the cost determined applied forecasted indices that in some cases are above the current rates. This difference has provided adequate allowance for any additional cost margins arising from “additional cost or opportunity cost” that may not have been included in the model.

## **The following were comments and concerns on the need for Regulatory intervention:**

26. That there is stiff and healthy competition among the Mobile Network Operators in the USSD Segment of the market. The intense competition has resulted in innovative and unique price options such as revenue share arrangements with the Digital Financial Service Providers. The Commission is therefore urged to allow market forces determine USSD pricing.
27. That this study of USSD costs is motivated by allegations of excessive prices by Financial Institution against Telecommunications Operators and not by any identifiable market failure in the segment that would necessitate Regulatory intervention.
28. That the challenges affecting the acceptance of USSD services by the unbanked/under-banked in Nigeria are the inflated and untenable charges of the Financial Institutions for such transactions.

29. For the reason stated in (28) above, It was suggested that the Commission averts its focus from attempting to determine USSD costs to engaging with the Central bank of Nigeria towards securing fair charges for the users of USSD based financial services.
30. That in line with the licencing of digital financial service providers and emergence of the evolving digital financial ecosystem, MNOs are required to grant access to DFS on a non-discriminatory basis for the purposes of carrying out their operations. The Commission was therefore urged to ensure that the proposed determination does not place MNOs at a disadvantaged position in the evolving digital financial services ecosystem, considering that there are instances where financial institutions receive greater financial benefits from USSD-based transactions.

**Responses:**

31. The Commission aligns with the assertion that there is no obvious market failure in terms of Competition amongst the MNOs in the USSD service market segment. However, the Commission has elected to intervene pursuant to its statutory obligations to promote affordable Communications services and to ensure that the charges reflect the underlying costs of service provision as required by the Nigerian Communications Act, 2003. This consideration also supports the appropriate pricing of USSD, being a resource critical to the attainment of Nigeria's social and economic inclusion imperatives.
32. The Commission will continue to collaborate with all stakeholders in the USSD ecosystem. With particular reference to Digital Financial Services, the Commission notes industry stakeholders' concerns that the charges by banks and other financial services providers are often high and arbitrary, and encourages the Central Bank of Nigeria to look into, and conclusively address these concerns.

**The following were comments and concerns on a suitable definition of a “session” for purposes of billing for USSD services:**

33. An Operator noted that the efficiencies made possible by USSD services with direct strings as opposed to traditional models- whereby the consumer had to navigate through a multi-step menu to get to the particular service they required, is more consumer friendly and is also a benefit in terms of positive impact on critical network resources which are held up during a USSD session. Therefore it recommended that since these efficiencies have reduced USSD sessions to an average of 15 seconds that it be adopted as the definition of a USSD session for the purposes of determining retail billing for USSD services.

**Response:**

34. A session has been defined as “20 Second” in line with the current industry practice.

**CONCLUSIONS**

35. The Commission has carefully considered the data/information provided by stakeholders and taken into view its understanding of the USSD platform and associated cost components, the impact of USSD services on other ancillary services critical to Nigeria's socio-economic growth objectives and the Nigerian macroeconomic environment.

36. The process of this Determination has been conducted in a climate of openness, with a view to providing maximum transparency to all parties without compromising the confidentiality of commercially sensitive information.

37. With reference to USSD charges as a component of high charges for Digital Financial Services in Nigeria, it is our expectation that the Central Bank of Nigeria will look into, and conclusively address alleged high and arbitrary

charges by financial service sector players, and that all other players in the ecosystem will be more transparent with their charges. The Commission encourages the adoption of a revenue sharing model aimed at reducing the overall cost of the service for consumers. We also encourage financial services providers to seek other ways to collaborate with the MNOs to ensure that charges for all DFS platform components are set at reasonable price points which encourage the attainment of financial inclusion objectives

38. The Commission appreciates the cooperation received from the MNOs who submitted information relating to the costing models, and who actively participated in the processes leading to this Determination.

39. Finally, the Commission also appreciates the key industry stakeholders, and the consultant for their commitments in this study which made possible this critical determination.

## **APPENDIX 1**

For this study data was collected from the following Operators:

1. Airtel Networks Limited
2. Emerging Markets Telecommunications Services Limited
3. Globacom limited
4. MTN Nigeria Communications Limited