

DETERMINATION ON INTERCONNECTIONS RATES FOR FIXED AND MOBILE TELECOMMUNICATIONS NETWORKS, INFRASTRUCTURE SHARING AND CO-LOCATION; AND BROADBAND INTERCONNECTION SERVICES IN KENYA

INTERCONNECTION DETERMINATION NO.2 OF 2010

1. INTRODUCTION

This Determination is made under the Kenya Information and Communications Act of 1998 as amended (hereinafter referred to as the Act) and the Kenya Information and Communications Regulations, 2010 (hereinafter referred to as Regulations).

This Determination shall be known as the Determination No.2 of 2010 on pure Long Run Incremental Cost (LRIC) based Interconnection Rate regime. The Determination is effective on the 1st day of July 2010 and is binding to all fixed and mobile telecommunications network operators in the Republic of Kenya. It will also provide a framework for infrastructure sharing and co-location, and for broadband interconnection, and supersedes the previous Rulings made by the Communications Commission of Kenya.

Interconnection is considered a critical tool to the proper functioning of a competitive communications market in Kenya. This is recognized in the Act, which requires network facilities providers and network service providers to provide other licensees with interconnection on request at any technically feasible location.

The current regime of interconnection rate regulation was implemented through the Commission's Determination No. 1 of 2007 issued on 22nd February 2007 that provided a three year glide path. Since then, the communications market has witnessed further market developments that, inter alia, include entry by two new operators, introduction of a Unified Licensing Framework (ULF), the landing of three undersea cables and rollout of a terrestrial cable network; and tremendous growth in both subscriber numbers as well as call (and data) volumes.

In the light of these developments, the Commission decided to undertake a detailed review of the rates set in its 2007 determination.

2. OBJECTIVES OF THE REVIEW

The primary objective of the Review of the Network Cost Study was to develop a new competitive interconnection rate framework that took cognizance of the new developments in the communications market including the introduction of the ULF, licensing of two additional mobile service providers and the landing of three fibre optic cables as stated herein above.

The Commission, through consultations with the main telecommunications operators specifically developed and updated the cost, market and pricing models, and generated a new interconnection framework in a converged market covering mobile and fixed telecommunications services in the country and the interconnection envisaged therein.

In the light of these developments, the Commission decided to undertake a detailed review of the rates set in its 2007 determination.

3. CONFORMITY WITH THE LAW

This Determination is guided by the results of the Review of the 2006 Network Cost Study conducted by the Communications Commission of Kenya through M/S Analysys Mason, a UK based independent consultancy firm, between the months of March 2010 and July 2010. The Determination is in accordance with Sections 23 (2) (a), (b) & (c) and 25 (3) (b) of the Act and the Kenya Information and Communications (Interconnection and Provision of Fixed Links, Access and Facilities) Regulations, 2010 respectively.

Section 23 (2) of the Act obliges the Commission to protect the interests of all users of telecommunication services in Kenya with respect to the prices charged for and the quality and variety of such services provided; maintain and promote effective competition between persons engaged in commercial activities connected with telecommunication services in Kenya in order to ensure efficiency and economy in the provision of such services; promote research and development in relation thereto; encourage private investment in the telecommunication sector; promote the provision of international transit services by persons providing telecommunication services in Kenya; and enable persons providing telecommunication services or producing telecommunication apparatus in Kenya to compete effectively in the provision of such services or apparatus outside Kenya.

Regulation 12 of the Kenya Information and Communications (Interconnection and Provision of Fixed Links, Access and Facilities) Regulations, 2010 provides the basis for interconnection charging structure and the principles to be followed.

4. BASIS FOR SETTING BINDING RULES

Interconnection is central to the provision of a wide range of services to consumers and is critical towards facilitating the development of modern, universally accessible, reliable and affordable communications services in Kenya. In line with economic efficiency principles and international best practice, interconnection rates should, of necessity, be based on the economic costs of providing such interconnection services. Cost based interconnection rates were determined in Kenya in 2007 and have now been updated in view of the market and technological developments highlighted herein above.

In addition, an in-depth analysis of the competitive landscape in the retail mobile and fixed voice markets reveals instances of market failures where the on-net to off-net price spread is perpetuating a “club effect” which arises when consumers tend to have a preference for a network with a large pool of subscribers in order to benefit from the possibility to call and be called at a lesser calling rate by the largest possible number of subscribers. Further, the Short Messaging Service (SMS) market reveals huge disparities between the SMS termination rates currently prevailing in the market and the incremental costs of providing such interconnection thereby impacting negatively on the ability of licensees to charge lower SMS retail rates.

Moreover, it is important to develop an equitable access framework for co-location, infrastructure sharing and broadband services in order to curb anti-competitive practices in the provision of such essential facilities and services.

For the foregoing reasons, and guided by its mandate as provided under the Act, the Commission considers it in the public interest to intervene in instances of market failures in both wholesale and retail voice markets as well as provide a framework for infrastructure sharing/co-location and broadband interconnection.

5. NETWORK COST REVIEW PROCESS

The study adopted a highly transparent and consultative process which included receipt of written and oral submissions by operators, review and consideration of comments made and provision of appropriate responses to those comments.

5.1. Consultations with Industry Stakeholders

The study adopted a participatory methodology, wherein all telecommunications operators and other stakeholders were involved through face-to-face interactions and through telephone and email consultation from inception to finalization of the study. The study was officially launched during the inception workshop on 9th April 2010. During the launch, individualized consultative meetings with the licensees were convened that among other things, agreed on the methodology and data collection schedules.

At the preliminary stage, the study involved literature review, benchmarking, consultations, and written submissions to get views from the operators. A draft final report was then presented to the stakeholders on 17th June 2010 upon which additional focused consultative meetings with operators were held and specific issues on costing and pricing models for each operator were discussed.

Further, after the stakeholders' dissemination workshop, an abridged version of the draft final report complete with the specific operators' model was prepared and shared with the industry on 24th June 2010. The operators were also given another opportunity to make their final written submissions.

5.2. Oral and Written Submissions

During the entire cycle of the review, stakeholders were given adequate opportunity to make both oral and written submissions with respect to the study methodology, the study assumptions, data collection and the proposed interventions. The comments raised by industry stakeholders revolved around the following thematic areas:

- a) Potential impact of low termination rates associated with pure LRIC on rural coverage;
- b) Consideration for network externality surcharge to support mobile penetration;
- c) Merit of price cap of off-net tariffs to on-net tariffs;
- d) Modeling voice termination rates on the basis of 2G instead of 3G;
- e) SMS termination charges; and
- f) Correct glide path to attain pure LRIC cost for termination rates.

5.3. Consideration of Comments by Stakeholders

The Commission notes that the study has addressed all the above comments as follows:

- a) ***Impact of pure LRIC Model:*** The low termination rates associated with pure LRIC will improve the competitive landscape and provide operators with greater retail tariff price flexibility, helping to support effective competition. In addition, the pure LRIC model sets efficient termination rates that are close to the opportunity costs of providing termination service by operators;

- b) ***Network externality surcharge to support penetration:*** There is no best practice on inclusion or exclusion of network externality surcharge and there is no guarantee that any additional surcharge would be used to support penetration. The increased effectiveness of competition arising from lower termination rates would guarantee benefits to all stakeholders;
- c) ***Cap on off-net to on-net tariff:*** The intervention of reducing the off-net price for the large operators in mobile voice market will have a small negative impact on their voice revenues, since the bulk of traffic volumes are on-net. In addition, there is no significant cost differential in cost burden to the operators as the cost of providing an off-net call per minute is lower than the cost of providing an on-net call per minute;
- d) ***Modeling on 2G:*** 2G is primarily used for voice service while 3G will be used for data services in the Kenyan market in the foreseeable future. Therefore, the proportion of 3G voice traffic in the Kenyan mobile market was too insignificant, if any, at the time of conducting the study and hence did not warrant consideration in the modeling exercise. Moreover, due to its better spectral efficiency propagation characteristics, the implications of using 3G in modeling would be to lower the termination rates even further;
- e) ***SMS termination charges:*** While termination rates for SMS are significantly above the pure LRIC level, the review encourages commercial negotiations to lower the termination rates to competitive levels within a specific time frame and intervention effected only if the negotiations do not yield optimal results; and
- f) ***Glide path to attain pure LRIC costs:*** The glide path is a balance between the regulatory objectives to attain the efficient (pure LRIC) costs as soon

as possible and the desire to maintain stability in the business plans of the operators by according them a reasonable amount of time to adjust their plans.

5.4. Submission of Final Report

Upon consideration of all the comments submitted by the industry stakeholders, the Final Report of the study was submitted to Communications Commission of Kenya on 16th July 2010.

6. CONSIDERATION OF THE FINDINGS OF THE NETWORK COST REVIEW

After a thorough and exhaustive review of the findings of the Network Cost Study, the Commission notes the following important issues arising from the study:

- a) ***Mandate:*** That the Review of the Network Cost Study was undertaken within the mandate of the Commission as stipulated in the Act and Regulations;
- b) ***Stakeholder Involvement:*** That the review was undertaken in a consultative and transparent manner and all stakeholders were, to the extent possible, adequately involved in the process;
- c) ***Response to Comments raised by Stakeholders:*** That all the comments raised by the stakeholders were considered and adequately addressed during the review exercise;
- d) ***Costing Methodology:*** That the pure LRIC methodology is the most efficient method for setting termination rates as it sets termination rates close to the marginal cost of providing termination services to third parties;

- e) ***Stakeholder Impacts of the Review:*** That the lower termination rates associated with the pure LRIC model pose no significant financial risks to the operators while the indirect benefits associated with increased competition such as lower retail prices would generate significant benefits to consumers;

- f) ***Wholesale Intervention:*** That monopoly power enjoyed by all operators in voice termination combined with the Calling Party Pays (CPP) principle employed in Kenya provides incentive structures for operators to price their termination services way above the cost of providing termination services. Therefore, there is plausible justification to maintain wholesale regulatory interventions through price caps on mobile and fixed termination rates;

- g) ***Competitive Landscape at Retail Level:*** That upon review of the effectiveness of the wholesale interventions effected in 2007 in spurring competition at the retail level, the retail voice market is not effectively competitive and large operators are using the on-net to off-net pricing spread and product differentiation of voice services to sustain a “club effect” in the market with adverse cascading impacts on competition and consumer welfare. While retail intervention is considered intrusive, it is justifiable in cases of market failures such as the case in the retail voice market in Kenya;

- h) ***Introduction of Caps on Off-net to On-net Level:*** That considering the competition concerns with respect to the retail voice markets raised in 6(g) above, an introduction of price caps on the off-net to on-net tariff levels for dominant operators in both the mobile and fixed voice service markets is the appropriate and proportionate remedy for improving competition in these markets and for protection of consumer interest. This intervention will be regularly reviewed and may be withdrawn once there is sufficient evidence of effective competition at the retail level;

- i) ***Stakeholder Impacts associated with Price Caps of Off-net to On-net Tariff Levels:*** That there are no significant risk exposures to the licensees associated with this intervention as the cost for providing a one minute off-net voice service is lower than that of providing a one minute on-net service and the large on-net to off-net tariff spread by large operators in the Kenyan market are price distortions that are negatively affecting competition. In addition, off-net traffic account for small component of the entire traffic volume as most of the traffic (and therefore cash flows) is generated from on-net traffic;

- j) ***SMS Termination Rates:*** That the negotiated wholesale tariffs for mobile and fixed SMS services are way above the incremental costs of providing these services across networks and this limits the scope for passing cost benefits to consumers through lower retail SMS prices; and,

- k) ***Impact of Mobile Money Transfers on the Voice Market:*** That the mobile money transfer Services differentiates voice services and therefore strengthens and sustains a “club” effect through reduced churn rate primarily because the costs to non-registered users are very high.

7. THE DETERMINATION

Having considered all the above factors reviewed during the Network Cost Study and taking due regard to the mandate of the Commission to, among others, promote the development of a competitive market in the telecommunications sector in Kenya, the Commission hereby determines:

- 7.1. That all mobile and fixed telecommunication operators in the Republic of Kenya shall implement the mobile and fixed interconnection rates stipulated in **Table 1** below on the effective dates indicated therein;

Table 1: Interconnection Rates for Mobile and Fixed Operators

1. Call Mobile Termination Prices				
Nominal KES.	1st July 2010	1st July 2011	1st July 2012	1st July 2013
Mobile Termination	2.21	1.44	1.15	0.99
2. Fixed Termination and Transit for Existing Regulated Services				
Local Termination	1.67	1.33	1.06	0.99
Single-tandem Termination from Tandem Exchange				
Double-tandem Termination from Tandem Exchange	2.93	2.61	2.38	
Single-tandem Termination from Local Exchange				
Double-tandem Termination from Local Exchange				
Transit Local Exchange to Tandem (Single Tandem)	1.26	1.28	1.32	Not Regulated
Transit Local Exchange to Tandem (Double Tandem)				
Tandem to Tandem Transit				
Local to Local Transit (Single Tandem)				
Local to Local Transit (Single Tandem)				

- a. That all operators are at liberty to negotiate lower interconnection rates subject to the capped rates provided in Table 1 above;
- b. That any operator, upon being designated as a dominant/major telecommunication operator in either the mobile or fixed retail markets shall implement a price cap for off-net call prices to the level of their on-net prices. The effective date shall be immediately upon designation by the Commission of such operators as

- dominant/major telecommunication service provider in line with the Act and Regulations;
- c. That considering the prevailing high SMS wholesale termination rate of Ksh.2.00 per SMS relative to the pure LRIC cost of less than Ksh.0.01 per SMS, all operators shall re-negotiate and file with the Commission lower mobile and fixed SMS termination rates within three months from the date of this Determination to reflect the lower pure LRIC costs of offering SMS termination services;
 - d. That considering the impact of mobile money transfer services on the competitive landscape in the telecommunications market in strengthening and sustaining a “club effect” and the onerous charges imposed on non-registered users, the Commission shall support any operators’ request to enter into investigating the interconnectivity options for mobile money transfer services in line with convergence especially with regard to charges to non registered users;
 - e. That in the short to medium term, the Commission shall monitor the developments of the market for infrastructure sharing and co-location and allow pricing and other agreements to be reached through commercial negotiation. The Commission shall, however, intervene and apply the pricing models for infrastructure sharing and co-location developed as part of the review where commercial negotiations fail to yield competitive results;
 - f. That although the Commission considers broadband a nascent market, the Commission shall nonetheless closely monitor the development of the interconnection framework for the broadband market and allow pricing and other agreements to be reached through commercial negotiation. The Commission shall, however, intervene where commercial negotiations do not yield optimal results; and

- g. That all operators are required to enter into new Interconnection Agreements and submit the same to the Commission by 30th September 2010.

Dated this.....day of, 2010

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Charles J.K. Njoroge

DIRECTOR-GENERAL

COMMUNICATIONS COMMISSION OF KENYA