

THE UNITED REPUBLIC OF TANZANIA
TANZANIA COMMUNICATIONS REGULATORY AUTHORITY



**DETERMINATION ON INTERCONNECTION RATES AMONG THE FIXED AND
MOBILE TELECOMMUNICATIONS NETWORKS**

INTERCONNECTION DETERMINATION NO. 1 OF 2004

1. INTRODUCTION

This Determination is made under the Tanzania Communications Regulatory Authority Act No.12 of 2003 and the Second Schedule of the Tanzania Communications Act No.18 of 1993.

This determination annuls Determination No.1 of 2004 that was issued by the Tanzania Communications Regulatory Authority (herein after referred to as the Authority) on 30.6.2004, that was to become effective from 1.8.2004 but was later deferred and stayed pending an Inquiry process. The Determination is being annulled because an Inquiry had not been conducted in accordance with Tanzania Communications Regulatory Authority Act No.12 of 2003 (TCRA Act) prior to its issuance. In compliance with the requirements of the TCRA Act an Inquiry was conducted by a Panel of Inquiry from 8th to 27th September 2004, and a Report of Inquiry was submitted to the Authority on 27th September 2004.

This new Determination shall be known as the Determination No.1 of 2004 on Cost based Interconnection Rates for Fixed and Mobile Telecommunication in the United Republic of Tanzania. This Determination is effective on the 1st day of October 2004 and is binding to all the Fixed and Mobile Telecommunications Network Operators operating in the United Republic of Tanzania.

2. CONFORMITY WITH THE LAW

2.1. Factors Considered

This Determination was made taking into consideration all the factors listed under section 16(2) of the TCRA Act. In compliance with section 16 (2)(g), the Authority also considered factors specified in Section 5(1) (b), (c), (k), (m) and (n) of the Tanzania Communications Act No. 18 of 1993.

Further, the Authority considered other factors relevant in accordance with section 16(h) of the TCRA Act No.12 of 2003.

2.2. Preliminary Objection to the Inquiry

There was Preliminary Objection raised by Vodacom (T) Ltd. that the procedure of Inquiry was flawed. The Panel of Inquiry found that the procedure laid down in Section 18 of the TCRA Act, and the Tanzania Communications Regulatory Authority (Procedure for Rules of Inquiry) Rules, 2004 was complied with.

There was also raised an issue by Vodacom (T) Ltd. that there was breach of natural justice. The Authority is satisfied that no principle of natural justice was breached in view of the fact that all procedural requirements were complied with and every interested party was afforded an opportunity to be heard, thus the Panel of Inquiry correctly proceeded with the Inquiry process.

Having gone through the Report of Inquiry the Authority is satisfied that the Panel of Inquiry rightly ruled out the objections by Vodacom (T) Ltd. There is ample evidence on record that all operators and other stakeholders were afforded enough opportunity to make their submissions written and oral, and the Inquiry process was carried out to the letter of the Tanzania Communications Regulatory Authority (Procedure For Rules of Inquiry) Rules, 2004. Accordingly, the Authority dismisses the objections.

2.3. The Inquiry Due Process

The inquiry was conducted on the directive of the Minister responsible for Communications (hereon after referred to as the Minister) issued on 1st September 2004 pursuant to Section 18(3) of the TCRA Act.

The Inquiry was conducted as a condition precedent to the issuance of interconnection rates determination as required by Section 18(2) of the TCRA Act.

The Inquiry was conducted in a transparent manner involving all the five (5) Telecommunications operators and other stakeholders including the general public in accordance with the TCRA (Procedure for Rules of Inquiry) Rules of 2004.

The Inquiry process involved literature review, consultations, written submissions and public hearing to get views from operators, consumers and other stakeholders including the general public.

Finally the Panel of Inquiry produced the Report that was submitted to the Authority on 27th September 2004.

The Panel of Inquiry established that all the Telecommunications network operators i.e. TTCL, Celtel, Mobitel and Zantel with the exception of Vodacom (T) Limited were in favour of the proposed rates and urged for immediate implementation of the same.

Other stakeholders and most members of the public were of the view that the proposed interconnection rates are reasonable and adoption of the same rates would induce reduction of retail tariffs.

3. SUBMISSIONS BY OPERATORS AND OTHER STAKEHOLDERS

Written and Oral submissions by operators, other stakeholders and the public are summarised on Pages 19 to 29 of the Inquiry Report which shall be made available by the Authority.

4. CONSIDERATION OF THE FINDINGS OF THE PANEL OF INQUIRY

After thorough scrutiny of the Report of Inquiry on appropriate cost based interconnection rates, the Authority concurs with the findings of the Panel of Inquiry that:

4.1 Constitution of the Panel of Inquiry

The Minister properly directed the Authority to conduct the Inquiry under section 18(3) of the TCRA Act and the Authority properly appointed the Panel of Inquiry in accordance with Rule 6(1) of the Tanzania Communications Regulatory Authority (Procedure for Rules of Inquiry) Rules, 2004 made by the Minister under Section 18(6) of TCRA Act.

4.2 Time of Inquiry

The Panel of Inquiry conducted the Inquiry within the time frame as directed by the Minister. All operators, except Vodacom, were of the view that the time given was sufficient especially considering that all operators were involved effectively in the Cost Study undertaken in the year 2003 by Ms Analysys of UK (hereafter referred as the Consultant) on appropriate cost-based interconnection rates for the fixed and mobile networks in the United Republic of Tanzania. The Panel of Inquiry established that meetings were held between the Consultant and the operators in which interim cost model outputs were discussed, and the Consultant incorporated comments from operators. It is the Authority's considered opinion that all operators were sufficiently exposed to the subject and in the course of the Inquiry they all made detailed, well informed and substantive submissions to the Panel of Inquiry on this issue of great importance to their businesses.

4.3 Involvement of Stakeholders

The Authority is satisfied that all stakeholders were involved in the process of the inquiry in a transparent manner. The Authority noted with satisfaction that the Panel of Inquiry received written submissions, and all stakeholders made oral submissions during the public hearing on 22nd and 23rd September 2004. The public hearing was well attended and a number of well reasoned comments were received. The major finding of the public hearing was that the telecommunication tariffs are very high and they need to be reduced as soon as possible.

4.4 Studies on interconnection Rates in Tanzania

The Authority is satisfied that the Panel has reviewed Analysys Report (2003), Goulet Report (2002), Ovum Reports (2002; 2004), Arup Report (2001) and PriceWater House Coopers (2004) on interconnection rates in Tanzania. The Authority is satisfied that the Analysys study is by far the most comprehensive cost study done in the Telecommunications Industry in Tanzania and hence provides the most authoritative results on appropriate cost based interconnection rates in Tanzania. Furthermore, the Analysys cost study is in compliance with Regulations 5(1)(c) and 12(1)(a) of the Interconnection Regulations, 2001 made under Tanzania Communications Act No.18 of 1993 and published as Government Notice No. 323.

4.5 The LRIC Methodology

The Authority is satisfied that the LRIC methodology, which was used by Analysys, is the appropriate basis for determining interconnection rates because it reflects Modern Equivalent Costs of networks, is Forward Looking, encourages economic efficiency and encourages new entrants to enter the market.

4.6 Other Methodologies Considered

The Authority has noted that the Panel of Inquiry considered other methodologies particularly benchmarking. It is the Authority's considered view that benchmarking is unsuitable because it is very subjective and presupposes that countries/operators being compared have exactly the same economic and operating environment. Nevertheless, the Authority has looked at benchmarks of selected African countries which have undertaken some form of cost studies.

The Authority observes that the interconnection rates in all the six countries considered, i.e. Uganda, Botswana, Burkina Faso, Gabon, Malawi and Zambia, are lower than the proposed interconnection rates for Tanzania.

4.7 Relevant Costs for Interconnection

The Authority is satisfied that the report of the Panel of Inquiry has established that all the mobile and fixed operators, with the exception of Vodacom, positively confirmed that the M/S Analysys model took into consideration all their costs for provision of interconnection services and agree with the proposed interconnection rates. The Panel of Inquiry observed that the higher network rollout costs claimed by Vodacom are associated with the fact that Vodacom used a turnkey foreign contractor, thus was unable to make savings associated with local contractors which other operators used effectively to lower rollout costs. While this was a strategic business decision with obvious payoffs for Vodacom, it would be unacceptable to use interconnection charges to compensate for inefficient investments.

The Authority notes with approval the Panel of Inquiry agreement with Analysys' consideration of costs which are relevant for the provision of interconnection services, namely Long Run Incremental Costs, Equi-Proportionate Mark-Up and location updates. The Authority notes that

considering the above relevant costs for mobile Telecommunication operators in Tanzania, the total economic costs including location, updates ranges between 5.8 and 7.5 US cents for year 2004.

4.8 Desire to Promote Competitive Rates and Attract the Market

The Authority notes the Panel of Inquiry's observation that all operators, fixed or mobile, have a monopoly on terminating calls into their networks. It is the Authority's considered opinion that in order to promote fair competition on retail tariffs there is a need for regulating interconnection rates when the market fails.

The Authority has noted and concurs with the Panel of Inquiry's finding that lowering interconnection charges will lead to decrease in retail prices, expand the market and subscriber base and that lower retail prices will result from competition which is likely to result from a well regulated interconnection regime preventing operators with Significant Market Power (SMP) in the interconnection service market from abusing their dominance.

The Authority concurs with the Panel of Inquiry's considered opinion that switching equipment prices are decreasing, network optimization under the consideration of the rising demand will proceed, higher volumes and better utilization of capacity will all lead to lower costs and lower prices in the future.

4.9 Financial Implications

The Authority accepts the view that in the short run there will be less revenue to be realized from interconnection by operators who are currently net receivers. However, net payers will experience a reduction in costs by paying less interconnection charges to other operators and the considered view of the Panel of Inquiry that traffic patterns will change through increase of subscribers and talk time.

The Authority notes Vodacom's submission that Weighted Average Costs of Capital (WACC) should be in the range of 25% - 30% instead of the 20% initially proposed by the Consultant, quoting an International Cost of Capital Perspectives Report (2003) by Ibbotson Associates. The Authority agrees with the figure of 22% as used by the Consultant in the final model, who argued that the report quoted by Vodacom relates to a simple model based on overall country credit ratings of countries in Africa, Asia, etc. and

it is, therefore, not directly relevant to the mobile telecommunications sector in Africa. The Consultant's figure based on recent African mobile telecommunications reports produced by investment banks, is considered to be more relevant to the telecommunication industry in Tanzania.

4.10 Consumer and Investor Interest

The Authority concurs with the Panel's agreement with the majority of operators and other stakeholders that reduction of interconnections rates will lead to a reduction of retail tariffs. The Authority dismisses arguments by Vodacom (T) Ltd. that reduction of interconnection rates will result in high retail tariffs and hinder the rollout and expansion of networks in the country. This argument could only be valid if the customer base would remain unchanged.

The Authority notes the Panel's considered opinion as expressed by stakeholders that high interconnection rates and retail tariffs add to the operating costs of businesses and increase the cost of goods and services thus making the Tanzanian economy uncompetitive.

The Authority notes the Panel's support of the views expressed by stakeholders that the proposed interconnection rates should be implemented without further delay.

4.11 Other Relevant Factors Specified in the Specific Sector Legislation

The Authority is pleased that the Panel of Inquiry considered all other relevant factors as specified in the relevant sector legislation. From the Report of Inquiry, it is evident that the proposed interconnection rates comply with the provisions of section 5(1) (b, c, k, m and n) of the Tanzania Communications Act No.18 of 1993.

4.12 Other Factors Considered

4.12.1 Network Externalities

The Panel of Inquiry has considered submissions on network externalities surcharge to the cost of termination. The Panel of Inquiry has taken into account the submission by Vodacom based on a study by PwC (UK) and the Analysys Report on the same.

Vodacom (T) Limited have argued that a mark-up should be added to costs to reflect the network externalities created for existing subscribers when new customers subscribe to the mobile network. Such an approach has recently been applied by the UK regulator whereas, so far, it has been rejected by regulators in Norway, Sweden and Australia. The International Telecommunications Union (ITU), the international body responsible for setting standards so far has ruled that the subject of Externalities should be further studied to be able to calculate or set standards.

The Panel of Inquiry has the considered view that the efficiency gains theoretically obtained by including a mark-up for network externalities created by subsidising the marginal customers do not justify the large disadvantages associated with the approach in the form of the large cross-subsides and demand distortions associated with subsidising all customers. Moreover, the approach has a number of other weaknesses as outlined above and is very subjective. The Panel of Inquiry recommended that network externalities be excluded from the determination of the interconnection rates.

The Authority is satisfied with Panel of Inquiry's review on the submissions of Vodacom on network externality. The Authority observes that the network externality is a complex subject, very subjective and with both positive and negative impacts on the industry.

The Authority concurs with the Panel of Inquiry's considered view that externality should be for now excluded from the interconnection rate determination and be considered in the future when standards are set by the ITU and or TCRA.

4.12.2 Market Environment

The Authority notes the market dynamics and the Panel's observation that there is increasing competition evidenced by new products and services. The Authority has noted with concern that despite the impressive high growth, customer base of about 1.7 million in a population of 35 million is very low.

The Authority has noted the market demand is estimated to be between 4 to 7 million. The Authority concurs with the considered view of the Panel that the proposed interconnection rates will create a level playing field, and promote fair competition in the interconnection and retail market segments.

The Authority has noted that if only the percentage of active subscribers is considered, the following table indicates the market share of each operator.

Market Share by Percentage of Active Subscribers

Operator	Number of subscribers (31st Aug 2004)	Market share (%)
TTCL	141,835	8.5
ZANTEL	70,847	4.3
MIC (T) Ltd.	276,755	16.6
Vodacom (T) Ltd.	816,169	49.0
Celtel Ltd	360,977	21.6
Total	1,666,583	100.0

Source: Submission from operators

Note: An active subscriber is a customer who has made or received a call within the past 60 days.

The Authority referred to section 5(6) of the Fair Competition Act Number 8 of 2003 which defines dominant position as having more than 35% of the market share. The Authority noted that in this regard Vodacom (T) Limited can be regarded as having a dominant position in the telecommunications market in Tanzania.

5. THE DETERMINATION

The Authority hereby determines Interconnection rates to be applied among the fixed and mobile Telecommunication operators in the United Republic of Tanzania as follows:

5.1 The appropriate cost-based interconnection rates shall be as per table below:-

Cost-based Interconnection rates with effect from 1st October 2004 in US Cents.

	1st October 2004	1st March 2005	1st January 2006	1st January 2007
Mobile Termination	10.0	8.9	7.9	6.9
Fixed Termination				
(a) Single Tandem	3.9	3.8	3.6	3.5
(b) Double Tandem	5.5	5.3	5.0	4.8

5.2 The glide path as shown in the table above shall be used for the implementation of the interconnection rates. A review shall be carried out in 2005 before introducing the new interconnection rates for January 2006.

5.3 Long Run Incremental Cost (LRIC) methodology is currently the most appropriate methodology in the determination of cost-based interconnection rates for an efficient operator. This method which is in compliance with current Tanzanian law and best practice should continue to be used.

5.4 All operators are required to enter into new Interconnection Agreements and submit the same to the Authority by 15th October, 2004.

Professor John S. Nkoma

DIRECTOR GENERAL

TANZANIA COMMUNICATIONS REGULATORY AUTHORITY

30th September 2004.