

**LICENSING IN THE ERA OF LIBERALIZATION AND
CONVERGENCE**

**THE CASE STUDY OF
THE REPUBLIC OF TANZANIA**

INTERNATIONAL TELECOMMUNICATION UNION

The Case study was conducted by Simon Moshiro.

During the field study the author met and interviewed the Tanzania Communications Regulatory Authority, Ministry of Communications and Transport and some industry representatives. It is hoped that this study will be useful not only to regulatory authorities but also those concerned with the communications market.

The author wishes to sincerely thank the Tanzania Communications Regulatory Authority and in particular Mr. Goodluck Olemmedeye and Mr. S. Gundula for their invaluable assistance. The author wishes to thank everyone in the public and private sector who gave him their valuable time.

The views expressed in this report are those of the author and do not necessary reflect the views of the ITU or its members or the Tanzanian Government.

1 Introduction

1.1 Purpose of the study

This case study forms part of a series on licensing in the era of liberalization and convergence. Conducted by the Regulatory Reform Unit (RRU) of the Telecommunications Development Bureau (BDT) of the International Telecommunication Union (ITU), this series of case studies aims to respond to a growing demand from the ITU Membership for best practices guidelines on this crucial policy and regulatory aspect that could be of assistance to regulators who are considering a shift from a monopoly or limited competition environment to a fully liberalized one. The case study will also form part of the 6th edition of the ITU publication of “Trends in Telecommunication Reform 2004 – Licensing in an Era of Convergence” and will be showcased at the 5th annual Global Symposium for Regulators (Geneva, 8-10 December 2004).

Tanzania was chosen because it is one of the countries in Africa that started implementing private sector participation sector policies, in particular liberalization, through different licensing approaches. Recently Tanzania adopted a policy and regulatory framework that specially addresses convergence.

Situated in East Africa, bounded by the Indian Ocean and the Great African lakes, Tanzania is a member of the East African Community comprising of Kenya, Uganda and Tanzania. It has a landmass of 937,762 square kilometers and an estimated population of 35.31 million. Its GDP was US\$ 9,957.42 million in 2002.



At the end of August 2004 there were 141, 835 fixed telephone subscribers plus 100,000 unsubscribed fixed telephone lines and about 1.600,000 cellular mobile subscribers. This compares with 121,769 main telephone lines and 37,940 cellular mobile lines at the end of 1998.

2 Development objectives and structure

This section summarizes Tanzania’s telecommunication development objectives appearing in policy statements.

2.1 Policies

2.1.1 National Telecommunication Policy 1997

The overriding aim of the policy is to ensure accelerated development of an efficient telecommunications network that can provide an info-communication network for the provision of information and communication infrastructure and universal access to telecommunication services by all sectors of the national economy and segments of the population. The NTP has two main specific objectives. One, to ensure the provision of adequate, sustainable and efficient telecommunications services in all the sectors of the economy. Two, to put in place a reliable telecommunications infrastructure and ensure service inter-connectivity nationally and with other countries. The NTP set the optimization of the contribution of info-communications sector to national economic development as the overall target. The specific target is to raise teledensity from the then 0.34 to 6 telephones per 100 persons by 2020.

The NTP identified competition as the main strategy for achieving the targets. To facilitate competition, the government will divest its share in the state-owned operator, TTCL, gradually. As part of the liberalization programme, the NTP divided the telecommunications market into six segments. Customer equipment provision and wiring were already fully liberalized. Local long distance and international services would continue to be provided by licensed operators and be interconnected through the public switched telephone network (PSTN). Limited exclusivity would be allowed to the then existing basic service providers, TTCL and ZANTEL. Radio paging, data communications and value-added services would remain liberalized and continue to be provided by licensed operators.

In order to expand access to services, the NTP encouraged resale of services by the operators and provided for the establishment of a Telecommunications Development Fund.

2.1.2 National Information and Communications Technologies (ICT) Policy

Subsequent to the publication of the National Telecommunication Policy 1997, the Government adopted a national Development Vision 2025. The vision envisages a national imbued with high quality livelihood, peace, as well educated and learning society and a strong and competitive economy capable of producing sustainable growth and shared benefits. In 2003, the government adopted the National ICT Policy which will contribute to the realization of the aspirations of the Development Vision 2025. The broad objectives of the ICT policy are to:-

- 1) Provide a national framework that will enable ICT to contribute towards achieving national development goals; and
- 2) Transform Tanzania into a knowledge-based society through the application of ICT.
- 3) Provide a national framework to accommodate the convergence of information, communication and technology including media¹.

The Policy articulates 10 main areas of focus in harnessing ICT towards development. Those that are of direct relevance to the theme of this study are ICT infrastructure, ICT industry, regulatory framework, and universal access.

a) ICT Infrastructure:

The national ICT policy notes that public switched network is over 95% digital paving the way for provision of new services enabled by ICT. But the confinement of the coverage of the network infrastructure to urban areas and the lack of suitable telecommunications and other infrastructure in the rural areas remain the basic

¹ National Information and Communications Technologies (ICT) Policy, 2003 p.14

impediments to the provision of new ICT services. The lack of inexpensive and high capacity connections to the global internet is a further hindrance to harnessing ICT opportunities. Therefore, the National ICT Policy sets the objectives for infrastructure development, namely to:

- i) encourage the regulator to investigate and respond to the challenges of convergence and newly emerging technologies in collaboration with the general public and stakeholders
- ii) The strategies for achieving those objectives include the development of reliable state of the art ICT infrastructure, with adequate capacity, high speed and country wide coverage; encouraging public and private partnership to mobilize funding for ICT development and ensuring that all installed ICT infrastructure is utilized effectively.

b) Legal and Regulatory Framework

The relevant policy objective of the National ICT Policy under this heading is to establish an enabling legal framework, legislative and regulatory, that is consistent with the national constitution, regional and global best practices. Specific actions include review of existing laws and regulations and adjust them or enact new ones that take into account the convergence of the telecommunications, broadcasting and information system.

c) Universal access

The national ICT Policy notes the existing digital divide within the country and the fragmented initiatives that try to address it. It therefore places specific emphasis on Universal Access. Among the objectives of the national ICT Policy for this area are to provide the population with universal access to ICT; to provide special incentives to investors to deliver broadband connectivity hitherto deprived and isolated populations in the country. The strategies include operationalising the Rural Communications Development Fund; offering special incentives to investors for provision of services in rural areas; supporting the construction of rural telecentres and involving local government authorities in utilization and promotion. Others are encouraging and facilitating the optimal use of existing capacity and infrastructure in order to facilitate affordable access nationally and especially in rural and disadvantaged communities.

d) Institutional Regulatory Framework

The National ICT Policy notes the existence of several institutions charged with ICT regulatory matters, including the former Tanzania Communications Commission, the Tanzania Broadcasting Commission, and the Tanzania Competition Commission. The policy emphasizes coordination policy monitoring and the regulatory functions to ensure rational and speedy enhancement of ICT. The Policy envisages continued regulation in ICT hardware and software production, operations, service provision and consumption.

Reference is still made to the National Telecommunication Policy but for most practical purposes it has been superseded by the National ICT Policy.

3. Information Communications Sector Structure

3.1 Ministerial and Regulatory Institutions

In the old institutional framework, the communications sector and broadcasting sectors were each supervised by regulators, each reporting to the relevant Minister. Under the new institutional set-up, there has been a merger at the regulatory level, with separate but closely coordinated ministerial oversight. The Tanzania Communications Regulatory Authority (TCRA) Act, 2003 gives legislative effect to the institutional aspects of the ICT Policy.

At present the Union Minister of Communications and Transport has overall responsibility for policy and TCRA on some issues which are not sector-specific, with a requirement to consult with the relevant sector ministers in identified areas including the appointment of Board members of TCRA. The Act assigns responsibility to relevant sector ministers on sector-specific matters. Below is a summary of the ministerial and regulatory oversight arrangement under the converged institutional framework.

3.1.1 Functions of Minister responsible for TCRA

The main functions are:

- Overall responsibility for ICT policy
- Gives to TCRA specific directions or general directions on specific issues relating to the effective performance of its functions but not relating to the discharge of the regulatory functions². This enables the Minister to give guidance to the Authority without intervening in its day-to day regulatory work. Such directions have to be in writing and published in the Government Gazette.
- Appoints members of the TCRA Board in consultation with the relevant sector minister (s)
- Presents the TCRA annual report to parliament

3.1.2 Functions of sector Minister responsible for Broadcasting and Content

- The Minister is responsible for broadcasting policy
- Establishes and appoints the Content Committee.
- Gives directions of a general or specific nature to the Content Committee.

3.1.3 Functions of the Tanzania Communications Regulatory Authority (TCRA)

The Governing body of TCRA is a Board consisting of a Chairman and a Vice-Chairman appointed by the President, four other members appointed by the Minister in consultation with relevant sector Ministers; and a Director General appointed by the Minister. All members except the Director General are non-executive. The Authority has a wide range of responsibilities and powers.

² TCRA Act,2003 Section 6 (4)

Box 1: Responsibilities and Functions of TCRA

Duties: To enhance the welfare of Tanzania society by-

- (a) promoting effective competition and economic efficiency;
- (b) protecting the interest of consumers;
- (c) protecting the financial viability of efficient suppliers;
- (d) promoting the availability of regulated services to all consumers including low income, rural and disadvantaged consumers;
- (e) enhancing public knowledge, awareness and understanding of the regulated sectors
- (f) taking into account the need to protect and preserve the environment.

Functions include :

- (a) to perform the functions conferred on the Authority by sector legislation;
- (b) subject to sector legislation –
 - (i) to issue, renew and cancel licences;
 - (ii) to establish standards for regulated goods and regulated services;
 - (iii) to establish standards for the terms and conditions of supply of the regulated goods and services;
 - (iv) to regulate rates and charges;
 - (v) to make rules for carrying out the purposes and provisions of this Act and the sector legislation;
- (c) to monitor the performance of the regulated sectors including in relation to -
 - (i) levels of investment;
 - (ii) Availability, quality and standards of services;
 - (iii) the cost of services;
 - (iv) the efficiency of production and distribution of services, and
 - (v) other matters relevant to the Authority;
- (d) to facilitate the resolution of complaints and disputes;
- (e) to take over and continue carrying out the functions formerly of the Tanzania Communications Commission and Tanzania Broadcasting Commission.

The Act requires the authority to consult the Minister and the relevant sector Minister before rewarding a licence that has an exclusivity period or universal service obligations or one that has a term of five or more years³. This is a new requirement.

3.1.4 Functions of Content Committee

The TCRA Act 2003 requires the Minister responsible for broadcasting and content matters to establish a Content Committee. The Committee advises the sector Minister on broadcasting policy. It monitors and regulates broadcast content. It handles complaints from consumers and operators and monitors broadcasting ethics and compliance. Although established by the sector Minister, the Committee functions like any other committee of the Authority. Therefore, the Act authorizes the Authority to assign some of its functions to the Committee, except those responsibilities that the authority is not allowed to delegate. The Authority cannot, for example delegate its responsibility to grant, renew or cancel a license; make a rule to fix the method for calculating rates and charges⁴. So, although the Content Committee reports directly to the sector Minister in providing advice on policy and some issues relating to monitoring performance, the TCRA retains responsibility for major substantive matters.

³ Section 6 (3) of the Act

⁴ Section 21 (3) of the TCRA Act

3.1.4 Appeals

According to the TCRA Act a party that is dissatisfied with a decision of the TCRA may appeal to the Fair Competition Tribunal established and the Fair Competition Act 2003. An appeal may be on grounds of non-observance of procedure that materially affects the outcome of the proceedings, misapplication of the law or on factual evidence⁵. This is an improvement on the Tanzania Communications Act which permitted appeals on procedural grounds or wrong application of the law only.

3.2 Present Industry Structure

The Tanzania Communications Act, 1993 which governs licensing and most regulatory matters relating to telecommunications services permits the issuing of unified licenses. But the National Telecommunications Policy (NTP) 1997 broke the market into segments including fixed voice, mobile and valued added services. Owing to this segmentation together with the exclusivity given to TTCL and the general trend, the Tanzania Communications Commission (TCC) adopted a vertical integration approach to licensing. The result of the strategy has been the issuing of licenses for vertically integrated market segments including fixed voice, cellular mobile, data, paging and satellite services. This section highlights the major operators of fixed voice and cellular mobile services.

3.2.1 Fixed Telephony Service Operators

a) Tanzania Telecommunications Company Limited (TTCL)

TTCL is the historical monopoly telecommunications service provider. Under the liberalization that started in 1994, TTCL continued as the exclusive fixed telephone operator on mainland Tanzania and part of a duopoly on the Island of Zanzibar, which is an autonomous part of Tanzania. TTCL was privatized in 2001, through the sale of 35% equity to a consortium consisting of MSI International and Detcon of Germany⁶. The Government retained 65% of the equity. The former TCC issued a new license to the privatized TTCL, with roll-out commitments that had been made by the consortium through the privatization bid. This included the connection of 800,100 additional subscriber lines to the then existing 150,000 lines within a four-year exclusivity period. Also, the consortium had committed itself to installing 2 public payphones for every 3,000 inhabitants in any area with more than 3,000 persons, amounting to 23,000 payphones over the four year exclusivity period. The use of IP technology in expanding the network is another condition in the licence of TTCL.

If TTCL were able to meet these targets it would fundamentally alter the fixed telephony market. By the end of February, 2004, the third year of its exclusivity, TTCL had been able to install only 80,000 subscriber lines and 2,200 payphones. The reasons that TTCL has advanced for this inability to meet expansion obligations include declining revenues and protection by a formula which made the number of additional lines to be installed in a quarter proportional to the number of lines installed in the previous quarter and to the revenue earned per line. TCRA thinks TTCL has abused the formula and insists on the payment of fines it has imposed. The reasons for TTCL's shortfall in performance can only become clear in the future. What matters now is the steps that will be taken to expand fixed voice services after four year exclusivity period in February 2004.

⁵ Section 42 (1) and 42 (2), TCRA Act, 2003.

⁶ Detcon pulled out of the consortium early in the implementation of privatization agreement.

TTCL says it has a capacity of 100, 000 subscriber lines that have not been taken up. Some of these lines may be in areas where there are no persons able or willing to subscribe, particularly given the rapid expansion of cellular mobile services which are more flexible and user-friendly to the low-income population. This excess capacity raises the fundamental question whether the roll-out figures were based on a realistic assessment of the market at the time and what would have happened if TTCL had installed the required capacity. Another thing to consider is that people now increasingly want high speed fixed lines for dial-up Internet services. The speed of current telephone lines in most of Tanzania is slow and not suitable for dial services. It for this reason that the TCC stipulated the use of IP technology, a condition that TTCL has just started to implement.

b) Zanzibar Telecommunications Limited (ZANTEL)

ZANTEL was licensed in 1995 to provide fixed telephony services cellular mobile services on the Island of Zanzibar in competition with TTCL. ZANTEL is owned by a consortium of foreign and local investors in partnership with the Zanzibar Government, which holds 10% shareholding in the company. Since it came into the sector as a new entrant to compete with TTCL it has no roll-out obligations

3.2.2 Cellular Mobile Operators

The first cellular mobile operator, Millcom Tanzania Limited (operating as Mobitel) was licensed by the Tanzania Posts and Telecommunications Corporation, in 1993 before the Tanzania Communications Commission (TCC) was established. The TCC adopted a duopoly strategy for cellular mobile services initially. The country was divided into four zones. Two mobile operators were licensed for each zone and some took licenses for more than one zone. However, the arrangement did not work. The operators concentrated their efforts in the coastal zone, which included the commercial city of Dar es salaam and Zanzibar, as the other appeared not commercially viable at the time. The TCC quickly adapted to the situation and adopted national cellular mobile licenses.

Up to 1998 there were two cellular mobile operators, in Tanzania mainland, i.e. Mobitel and Tritel, and ZANTEL in Zanzibar. Until then there were only 37, 940 cellular mobile subscribers. Inspired by the objectives and targets set by the National Telecommunications Policy 1997, TCC licensed two more mobile operators, Vodacom (T) Ltd in 2000 and Celtel (T) Limited in 2001 respectively. As will be seen from Table 1 and Figure 1 below, it is the entrance of these two operators that accelerated the growth of the telecommunications market in Tanzania. Apart from having larger market shares than the others (refer to table 2 and Figure 3) the increased competition from Vodacom and Celtel pushed the two incumbents, Mobitel and ZANTEL, to roll out their networks faster than before in order to raise their subscriber bases.

3.2.3 Broadcasting Market Structure

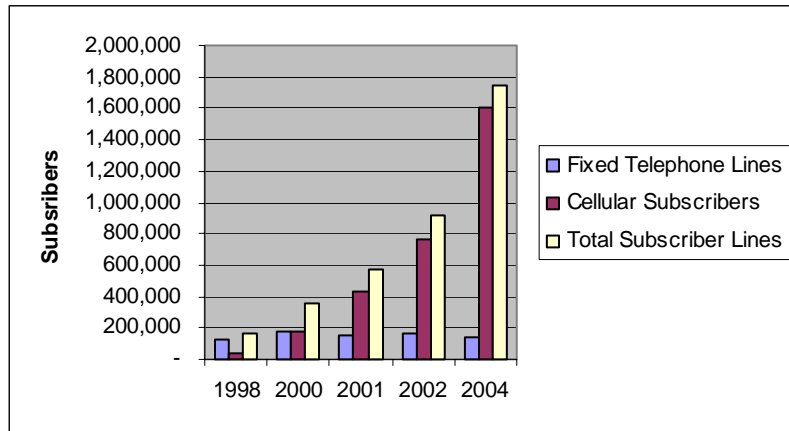
As a result of liberalization of the broadcasting market in 1993, there are now 30 licensed radio stations, 15 television stations, 17 low power television stations and 17 cable television stations. During the post-monopoly period licenses were based on broadcast activity, for example, radio, television, cable television and dealing in broadcast apparatus. The Information and Broadcasting Policy, 2003 divides broadcasting into two major branches- public broadcasting and commercial broadcasting services.

Table 1: Telephone Growth 1998 – 2004 (August)

Indicator	1998	2000	2001	2002	2004
Population (in millions)	30.84	32.65	33.596	34.44	35.00
a) Fixed Telephone subscribers operations (TTCL) ⁷ - fixed lines per 100	121,769 0.39	173,591 0.53	148,464 0.44	161,590 0.47	141,835 0.4
b) Mobile subscribers lines Cellular subscriber per 100 persons	37,940 0.12	180,200 0.55	426,964 1.27	760,000 2.21	1,600,000 4.53
Total telephone and cellular mobile lines	159,709	353,791	575,428	921,590	1,741,835
Total telephone lines per 100 persons	0.51	1.08	1.71	2.68	4.93

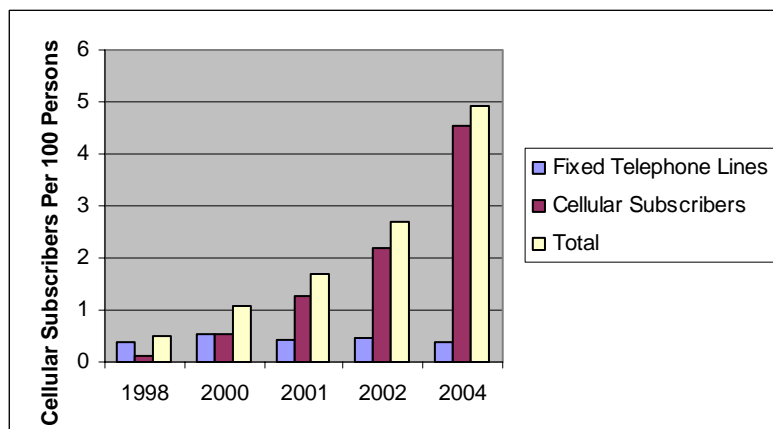
Source: Adapted from ITU and TCRA

Figure 1: Growth of Fixed Telephone & Mobile subscribers lines.



Source: ITU - TCRA

Figure 2: Growth of Fixed Telephone & Mobile Subscribers per 100 persons



Source: ITU - TCRA

⁷ Large fluctuations in numbers due to disconnections of no-active subscribers and periodic clean up of records of disconnected customers

Table 2: Market shares by Active Telephone Subscribers

Operator	Number of Subscribers (31 st August 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	100.00

Source: TCRA (Interconnection Determination No.1 of 2004)

Figure 3: Market Shares of Operators

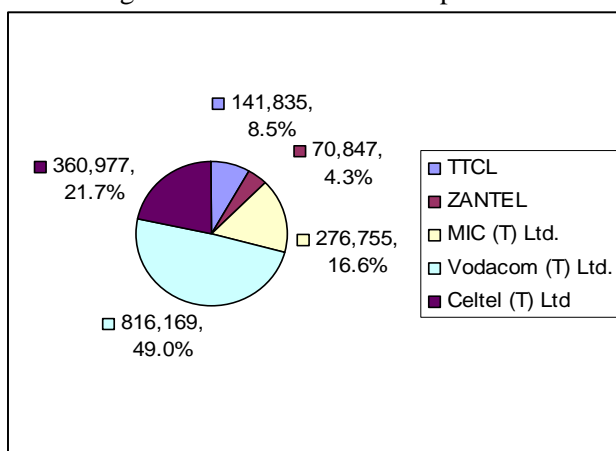


Figure 3 Source: Data from TCRA

4 Regulatory Framework

4.1 Legislation

As indicated in section 2 of this report, the Tanzania Communications Regulatory Authority (TCRA) Act, 2003, set up the converged institutional regulatory framework. The Act touches on a few basic issues concerning regulation. The detailed regulatory regime is set out in the Tanzania Communications Act, 1993 and the Tanzania Broadcasting Commission Act, 1993. The Competition Act 2002 deals with general competition issues information and communications matters. Having established a converged institutional framework the Government is working on a single piece legislation that will consolidate and update the existing sector legislation to facilitate application of the law in the converged environment. Reference will be made to the relevant legislation in this report as appropriate. This section of the report looks at competition and interconnection issues.

4.2 Fair Competition

One of the responsibilities of the former Tanzania Communications Commission was to promote and maintain effective competition in the provision of telecommunications services⁸.

⁸ Section 5(i) (b) (k) and 5(2) (d) Tanzania Communications Act, 1993.

Guided by the telecommunications Policy, 1997 TCC introduced a multi-operator environment particularly in the cellular mobile market through licensing. The ensuing competition issues have been handled through the regulation of interconnection rates. More in section 4.3 below.

The TCRA Act, 2003 set parameters within which TCRA should handle competition policy issues and its relationship with fair competition institutions. The Act authorizes the TCRA to deal with all competition issues that arise in the discharge of its responsibilities; to carry out investigations on such issues and to make recommendations to the fair Competition Commission or any other relevant authority. Findings and recommendations may include contravention of the Fair Competition Act, actual or potential competition in markets regulated by TCRA or additional costs in the market likely to be detrimental to the public.⁹

4.3 Interconnection and Tariff Regulation

The Tanzania Communications Act, 1993 does not address interconnection issues directly. It does so indirectly by authorizing the regulator to promote competition, to ensure that services are provided efficiently, in accordance with recognized standards and at rates consistent with efficiency and financial viability; and to regulate tariffs with a view to preventing unfair business practices among operators.¹⁰ The (TCC) regulated interconnection issues using these provisions and regulations made under the Act.¹¹ The Tanzania Communications Regulatory Authority (TCRA) Act, 2003 requires the Authority to carry out reviews of rates of charges and provides guidelines for doing so. The guidelines include taking into account costs, promoting competitive rates to attract the market and relevant bench markets for prices, costs and return on investments. Others guidelines are financial implications of determinations by the TCRA, consumer and investor interests, return on investments in the regulated sector and any other relevant factors.¹²

In Tanzania cellular mobile retail tariffs are not regulated directly. They are regulated indirectly through interconnection charges. Considering that the cellular mobile market accounts for about 90% of the entire telecommunications market such regulation is essential. In the substantially liberalized telecommunications market interconnection disputes are bound to occur. In early 2002 disputes between the fixed and mobile operators reached new levels. Some mobile operators were reluctant to interconnection with the then newly-licensed Celtel (T) Limited. There were also problems between the fixed operator TTCL and mobile operators on agreeing on interconnection terms. After a rate determination process, the TCC set an interim termination rate of 17.5 US cents per minute for fixed to mobile and mobile to mobile traffic, from a previous rate of 25 US cents. Following a detailed study that was carried out in 2003, and a public inquiry in September, 2004 TCRA set the interconnection rates shown Table 3.

Table 3: Interconnection Rates in US cents.

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

Source: TCRA (Interconnection Determination No... of 2004

⁹ Section 19(2) TCRA Act, 2003.

¹⁰ Tanzania Communications Act, 1993, Section 5(1)(b), (c) (k) and (w)

¹¹ Tanzania Interconnection Regulations, 2003 and Tariff Regulations.

¹² Section 16(2) TCRA Act, 2003.

In making the above determination the TCRA considered all the requirements of the law mentioned above. TCRA adopted the Long Range Incremental Cost (LRIC) rate calculation methodology which was used by the Consultant, Analysis UK, as being the appropriate methodology because it reflects modern equivalent costs of networks; it is forward looking and encourages economic efficiency and new entrants into the market. TCRA noted that all the operators except Vodacom Tanzania had confirmed the Consultant had taken into account all their costs for provision of service and agreed with the proposed interconnection rates. Vodacom had claimed high network roll-out costs which the Inquiry found were associated with the use of a turkey foreign contractor while operators who used local contractors had less network roll-out costs. TCRA found that it would have been unacceptable to use interconnection charges to compensate for inefficient investments.

TCRA concurred with the findings of the Inquiry Panel. The lower interconnection rates would lead to a decrease in retail tariffs; expand the market and subscriber base as a result of increased competition. The Panel had rejected arguments by Vodacom (the de facto dominant operator) that the reduction of interconnection rates would result in high retail tariffs and hinder network expansion.

TCRA considered other rate determination methodologies including bench marking. It noted that bench marking was not suitable because it is subjective and presupposes that countries or operators compared have identical economic and operating environment. TCRA observed that The Consultant had examined interconnection rates from Botswana, Burkina Faso, Gabon, Malawi, Uganda and Zambia. TCRA noted the rates from these countries were lower than those set out in its current determination.

5 Licensing Regime

5.1 New Arrangement

The existing licensing arrangement for electronic communication services is technology based. Telecommunications infrastructure and services are vertically integrated and licensed separately from broadcasting facilities and services which are also vertically integrated. The very limited electronic communications infrastructure and low service penetration referred to in the preceding sections indicate a need for requires a paradigm shift in regulation, in order to optimize the benefits that accrue from the convergence of broadcasting, computing and telecommunications technologies. This shift started at the institutional level with the merger of the communications and broadcasting commissions that resulted in the establishment of TCRA and closer coordination at the level of relevant ministries. The next step, now underway, is the enactment of new electronic communications and postal communications legislation to replace the existing separate communications and broadcasting Acts. Also ongoing is the articulation of a licensing regime by TCRA that will be technology neutral and horizontally integrated in response to the convergence of technology. The aim of the new licensing arrangement is four-fold. One, to enable the utilization of capacity that exists in other sectors and the installation of additional capacity that may be required. Two, to accelerate the sustainable development of a National Communication Infrastructure with adequate bandwidth capacity to meet the short, medium and long term knowledge needs of the country and neighbours. Three, to stimulate service provision through increased liberalization of the telecommunications sub-sector; the broadcasting is fully liberalized already. Four, to ensure universal access to electronic services and applications private partnerships.

The Government and TCRA are taking the exclusivity of TTCL in February 2005 as an important turning point in this transformation.

The Minister has directed TCRA to license existing operators to operate in previously restricted market segments, as well as new operators, immediately upon the expiry of the exclusivity given to TTCL. As part of the preparations TCRA is working on a new licensing regime based on activities rather than on technologies. There will be separate licenses for infrastructure and for services. Owing to political and cultural sensitivity content will be regulated separately. Finally the regime takes into account splitting of markets along the lines indicated in Table 3.

5.1.1. Classes of Licence

In the present regime services, including internet provision are licensed individually. Radio frequencies are assigned under a general authorization via regulations. In the proposed regime all applications services and support facility-based services will be provided under class licenses. Initially all other facilities based services and network services will be licensed individually. Services that will require individual licenses are core services. Therefore the licenses will confer specific rights and impose obligations e.g. universal access provision and tariffs for such will be controlled. Services that will be authorized under a class license are non-basic services like Internet services, payphones, and value added services. These services will be required to adhere to minimum conditions, mainly of an operational nature. The Regulator has discretion to determine conditions of licences including modifying the conditions. The Communications Act 1993 provides for compensation where modification of terms and conditions of a licence affects an operator adversely. This requirement will be retained in the proposed legislation.

5.1.2 Market Structure

The existing market structure comprises basic telephone service i.e. local, national long distance and international; radio mobile services; and value added services (including data). The proposed licence regime envisages the split of markets along the lines outlined below and summarized in the Annex to this report.¹³

a) Network facility-based service provision

Network facility-based service provision will be a carrier of carriers' market segment. Network facilities will be provided under three (3) clusters of licenses as follows:-

- (i) A carrier facility licence will authorize the construction and provision of carriage facility for transmission such as earth satellite, VSAT, submarine cable, and fiber optic cable and microwave links.

The licensing of transmission facilities will enable the harnessing of excess capacity of companies/organizations which currently own communications facilities for their operations, e.g. railways, gas and electricity companies as well as the military. Some people have raised concern over this proposal. They argue that licensing facilities which were built with public funds or are otherwise heavily subsidized and owned by companies whose core business is not electronic communications, would distort the market to the detriment of communications operators. The Government has been urged to find a way of using this idle capacity without upsetting the market.

¹³ Source TCRA. Presentation by Mr. John A. Mpalika to stakeholder workshop held on 29th October 2004 in Dar es Salaam.

Another dimension of this issue is what appears to be an understanding among stakeholders that the government and public entities should assume the responsibility for building a national ICT backbone with adequate bandwidth capacity and geographic coverage for the needs of all sectors and ICT service providers

(ii) Switching/Connectivity Facility Licence

A switching connectivity licence authorizes the construction and provision of connectivity facilities such as exchanges, nodes, servers and routes.

(iii) Support Facility Licence

A support facility-based provision licence authorizes the construction and provision of support or non-core facilities like towers and ducts. The licensing of such facilities aims to solve the environmental problem arising from the proliferation of towers and other support structures especially in urban areas.

b) Network Services

Network services will be provided under a set of two clusters of licences, of fixed and cellular mobile services. The licence for fixed services will authorize the operation of networks and provision of voice and data services. Fixed markets will also be split geographically into international, national, regional and district segments. There will be only one type of licence for operating and providing cellular mobile services nation-wide.

c) Network Applications Services

These will be mainly retail services. They include all valued added services like Internet, payphones, e-applications, Internet telephony, tracking services, mobile virtual network services and trunked radio services and value added services. They will be provided under general authorization.

d) Content Service Provision

Although the Information and Broadcasting Policy, 2003 categorizes broadcasting into two major branches, public and commercial services, in the proposed licence regime content licences will be based on activity, geographical segmentation and community factors. The TCRA considers this approach to be more conducive to universal access to services. Content services will be provided under six (6) clusters of licenses. These are terrestrial television broadcasting, free to air terrestrial sound broadcasting, free to air terrestrial television and terrestrial television subscription broadcasting. Others are cable television; satellite television subscription broadcasting and satellite free sound broadcasting.

5.1.3 Liberalization/Competition

After the expiry of the exclusivity of TTCL in February, 2005 the level of competition in the electronic communications market will be increased. Existing operators will be free to compete in all markets and segments. Domestic markets will be open to competition in all services and areas. The licensing of new GSM 900 cellular mobile operators and 3G frequencies will depend on the availability spectrum resources. International gateways will be licensed on the basis of conditions that will be determined by TCRA. TCRA will invite and process applications so that the new licensing regime will implemented as soon as possible after the expiry of the exclusivity.

5.1.4 Migration to New Regime

Existing operators will be given a period of one year to migrate to the new regime. They will have an option to continue operating on the existing terms and conditions until expiry of the old licences.

5.2 Licence Process

The existing sector legislation gives the regulator discretion to decide on the appropriate procedure for licensing new entrants. The current licence regulations were made under the sector legislation. They are equally flexible on procedures. They enable the regulator to issue licenses on tender invitation or on submission of an application by a prospective service provider. The TCRA Act introduced a new dimension. It requires the TCRA to conduct an inquiry before issuing, renewing or canceling an individual licence¹⁴. The proposed Electronic and Postal Communication Act retains this procedure, except that it requires TCRA to publish detailed regulations on the licensing procedures including registration forms for class licenses. The renewal of individual licenses under the proposed Act will be dependent on the fulfillment of licence and statutory obligations as well as continued financial viability.

5.3 License Fees

The TCRA has wide discretion under the existing legislation to determine license fees. There have been concerns by some of the operators on the fees that the former Tanzania Communications Commission set using this discretion. Provisions in the proposed new legislation, stipulates strict parameters and criteria for setting fees. For example, license application fees should be no more than necessary to process the filing of an application. License grant fees are confined to the costs of granting the application. TCRA will be required to issue rules for determining annual fees payable by a licensee. These must be limited to the cost of monitoring the compliance of the licensee with license conditions.

These requirements are intended to ensure transparency in the determination of fees. This is an improvement on the current situation. The determination of fees using the new system is bound to be elaborate and complex and, therefore, quite demanding on the Regulator. The proposed legislative stipulates a similar procedure for determining fees for spectrum and electronic number assignments. An exception is where TCRA considers that an individual spectrum license ought to be under a restricted procedure. In such circumstances the proposed legislation requires the TCRA to publish in advance objective criteria for that purpose. A reasonable interpretation of these provisions would permit the use of auctions although this procedure has never been used in Tanzania.

6. Universal Access

To date the Regulator has implemented universal access provision through license obligations that it has imposed on TTCL as indicated in Section 3.2.1 above. In accordance the National Telecommunication Policy 1997 and the National ICT Policy, in future a. Telecommunication Development Fund will be the main instrument for the implementation of universal access. In the planned legislation it is proposed to establish the Fund as a Universal Access/Service Fund that will cover electronic and postal communications.

¹⁴ TCRA Act, 2003 Section 18 (2)

The Fund will be under the supervision of TCRA. According to proposal a levy on electronic communications and postal operators based on relevant criteria will be among the sources of funds for the Fund. The organization, management and operation of the fund will be articulated in a regulation to be issued by the Minister after consultation with TCRA.

7 Consultation

7.1 General

The TCRA Act 2003 requires TCRA to consult the public and stakeholders in the ICT sector on a wide range of issues. Public inquiries are the predominant form of public consultations. For instance, TCRA must hold public inquiries before issuing or renewing a license with an exclusivity period or universal service obligation; or regulating any rates.¹⁵

TCRA has to hold a public inquiry when the Minister directs it to do so. The Minister issued such a direction in September 2004. TCRA had made a determination on interconnection charges through a process that had been started by the former Tanzania Communications Commission. TCRA completed the process and published the determination without holding an inquiry. Vodacom Tanzania Limited raised an objection on the non-fulfillment of this procedural requirement. The Minister intervened by ordering TCRA to hold the inquiry that led to the Determination on Interconnection charges referred to earlier in this report. The result remained the same. But the technical requirements had been fulfilled and Vodacom had another opportunity to argue its case on a substantive issue regarding costs although unsuccessfully.

The TCRA Act requires TCRA to establish annually a programme for consultation with consumers and industry aimed at enhancing effectiveness in the performance of its functions.¹⁶ These provisions underline the importance that the policy makers place on transparency and involvement of the public in regulatory decision-making. They also highlight the high standard that the law has set for the Regulator in these matters. That these requirements are a challenge to the Regulator is apparent from the above-mentioned event where TCRA had to repeat an interconnection rate determination process to correct a procedural defect.

7.2 Consumer Consultative Council

The TCRA Act has established a forum called the TCRA Consumer Consultative Council. The Council consists of between seven and ten members representing the interests of the private sector and consumers. The members are appointed by the Minister from a list of nominees recommended by members of the business community or an organization recognized as representing private sector interests. The Act requires the Minister to consult widely before making the appointments. The functions of the Council encompass representing the interests of consumers through submissions to and consultations with TCRA, the Minister and sector Ministers; receiving and disseminating information and views of consumers on communications goods and services. Additionally, the Council is required to consult with industry, the Government and other consumer groups. Allocations by parliament, contributions from TCRA and donations are among the sources of funds for the Council.

With the trend towards full competition in the Tanzania electronic communications market, the Council will be an important vehicle for assisting the regulator in looking after the interests not only of consumers but of the suppliers as well. The Council is less than a year since it was set up. It is too early to have had significant impact.

¹⁵ Note: Section 18(2) of the TCRA Act 2003.

¹⁶ Note: Section 22, TCRA Act, 2003.

However, in accordance with the TCRA Act, the Council made a nomination to the Minister for appointment to the TCRA Board of Directors. The Council is an active participant in the stakeholders meetings, and other public consultations process of TCRA.

8 Conclusion

Private sector participation in telecommunications development has worked reasonably well and shows enormous promise. Competition especially in data and cellular mobile services has produced better measurable results than privatization of TTCL. Privatization has not been such failure as some people think. One of the objectives of the Government in privatizing was to reduce its participation in the sector in order to encourage competition; this is being realized gradually.

While the National Telecommunication Policy, 1997 lay emphasis on increasing access to basic services, the overarching aim of the National ICT Policy is access to broadband services applications to drive development in all social and economic sectors given the current low availability of ICT infrastructure and services. A paradigm shift in promoting telecommunications development and ICT applications is necessary. A number of steps in this direction, including the merger previous communications and broadcasting regulators into a converged electronics and postal services, regulator have been taken. Others for example, the adoption of a converged legislation and regulations, and preparations by the TCRA to increase competition through an innovative licensing approach are ongoing.

The current legal and regulatory framework provides greater transparency, and stakeholder participation in regulatory policy and rule- making as well as greater accountability for the regulator's actions than the previous one. It also gives the Minister for TCRA and other communications sector Ministers greater say in regulatory policy in line with the National ICT Policy, which requires the Government to closely monitor the implementation in order to obtain timely feedback and to make adjustments to strategies where necessary. But it increases the risks of eroding regulatory independence and delays in regulatory decision-making. In October 2004 stakeholders endorsed a recommendation that a provision be included in the proposed legislation that the views of the Ministers in response to consultation by the TCRA on licensing matters and on rules should not be binding. If this proposal is adopted it will reduce such risks.

The new institutional, policy and regulatory framework poses a number of challenges to all major actors in the ICT sector. Owing to the cross-cutting nature of ICT, coordination at ministerial level and between the TCRA and relevant ministries is complex, with potential for conflict. The challenge is to minimize conflict and to it well it occurs to avoid adverse effects on the achievements of the set objectives. There are areas under the National ICT Policy, for example universal service/access, in which the Government must define strategies and targets to enable the TCRA to act effectively. Delays in articulating such strategies will further affect operationalization of the Universal Access Fund which was first contemplated in 1997.

The proposed licensing regime, which takes into account convergence but splits markets not only geographically but also along service lines, will encourage the entrance of operators and service providers into niche markets. There is a need to keep the regime flexible to enable the TCRA. make timely adjustments planned the arrangements does not work as intended. There will not be such flexibility if a proposal to reflect the split of markets in into facilities, network services and applications services in the planned legislation is not couched properly.

Although it is not specifically stated in the proposed legislation the understanding is that a company may be issued licences for carrying out operations and services in several market segments. This approach will enhance the exploitation of convergence of technologies by promoting the convergence of services. A unified licence would be ideal for a company which wishes to operator in a number of market segments, as it would minimize the costs and logistical implications of obtaining multiple licences. If provisions in the proposed legislation which limit licence fees to the regulatory costs of specific licence activities are adopted they will go a long way in addressing the issue of multiple licences.

The proposed license regime resembles those recently adopted by Malaysia and Mauritius. Both countries are among developing countries that are at an advanced stage of liberalizing their telecommunications markets and addressing convergence. The similarity in licensing approaches reflects the ongoing sharing of experience among ITU members

The enhanced transparency required of the regulator is couched in mandatory terms rather than in a permissive manner, which would give flexibility to the Regulator to build up the required skills and capacity progressively. This is a great challenge to the regulator. TCRA is addressing the challenge through a recruitment drive to fill staff positions in a converged internal organization structure as well as intensive training programmes. The TCRA also needs to ensure institutional stability, credibility and ability to secure the retention of competent staff in which it will have invested heavily.

The existing operators will be under great competitive pressure as the level of competition is likely to increase rapidly after the expiry of the exclusivity as the old operators are allowed to compete in all market segments and new operators are licensed.

If all the stakeholders discharge their respective roles well, the prospects for the achievement of the aspirations and the ambitious objectives of the National ICT Policy are high.

Annex Tanzania's Proposed Electronic Communication Services Licences					
Facilities-based Service Provision Licence ¹⁷	Network Service Provision Licence ¹⁸	Network Service Licence ¹⁹	Application Provision	Content Service Licence ²⁰	Application Provision
1. International Carrier - Facilities include Earth Satellite; VSAT; Submarine Cable	1. International Fixed Service Provider - PSTN; Data	1. Internet Service Provider (Data, Internet Services)		1. International Subscription TV Satellite BC ²¹	
2. National Carrier - Facilities include: Microwave links; Cable; Fiber Optic	2. National Fixed Service Provider - PSTN; Data	2. Pay Phone Operator		2. International Free Sound Satellite BC	
3. Regional Carrier - Facilities include: Microwave links; Cable; Fiber Optic	3. Regional Fixed Service Provider - PSTN; Data	3. Internet Telephone (VoIP) Service Provider		3. International Terrestrial Free TV BC without POP ²²	
4. District Carrier - Facilities include: Microwave links; Cable; Fiber Optic	4. District Fixed Service Provider - PSTN; Data	4. Trunked Radio Service Provider		4. International Terrestrial Free Sound BC without POP	
5. International Connectivity Provider - Facilities include Exchange; Node; Server	5. National Mobile Service Provider – Cellular Mobile	5. Mobile Virtual Network Service Provider		5. International Terrestrial Subscription TV BC	
6. National Connectivity Provider - Facilities include: Exchange; Nodes; Access facilities		6. E-applications Service Provider		6. International Terrestrial Subscription Sound BC	
7. Regional Connectivity Provider - Facilities include: Exchange; Nodes; Access facilities		7. Directory Service Provider		7. National Terrestrial Free TV BC	
8. District Connectivity Provider - Facilities include Exchange; Nodes; Access facilities		8. Radio Frequency License		8. National Terrestrial Subscription TV BC	

¹⁷ Individual licences except for Nos. 9, 10 and 11

¹⁸ All licences to be issued individually, initially

¹⁹ Authorization under class licence or regulations

²⁰ All licences to be issued individually, initially

²¹ BC: Broadcasting

²² POP: Point of Presence

9. National Support Provider - Facilities include: Towers; Ducts		9. Tracking Service Provider	9. National Subscription Satellite TV BC
10. Regional Support Based Facility Provider - Towers; Ducts		10. Non-Commercial Internet Service Provider	10. National Free Sound Satellite BC without POP
11. District Support Provider - Facilities include: Towers; Ducts			11. National Terrestrial Free Sound BC
			12. Regional Terrestrial Free TV BC
			13. Regional Terrestrial Free Sound BC
			14. Regional Terrestrial Subscription TV BC
			15. Regional Terrestrial Subscription Sound TV BC
			16. District Terrestrial Free TV BC
			17. District Terrestrial Free Sound BC
			18. District Terrestrial Subscription TV BC
			19. District Terrestrial Subscription Sound BC
			20. National Cable TV BC
			21. Regional Cable TV BC
			22. District Cable TV BC