LICENSING IN THE ERA OF LIBERALIZATION AND CONVERGENCE

THE CASE STUDY OF

THE REPUBLIC OF UGANDA

INTERNATIONAL TELECOMMUNICATION UNION

The Case study was conducted by Simon Moshiro.

During the field study the author met and interviewed the Ugandan Communication Commission, Ministry of Works, Housing and Communications, industry and consumer representatives. This study will be useful not only to regulatory authorities but also to every one concerned with the telecommunications market.

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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 Ugandan 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).

Uganda was selected because of its rapid development in the telecommunication sector through the implementation of a private sector participation policy including innovative licensing approaches in promoting access to telecommunications in rural areas. This transformation has seen Uganda's telephone service provision expand from 68,000 to over 840,000 customers from 1998 to 2003, thus increasing penetration rates from 0.24 to 3.5 total telephone subscribers per hundred inhabitants over the same period. This reflects not only the policy changes that are taking place in African countries but also in telecommunication markets world-wide. Uganda is one of the many African countries that have adopted a clear policy, including a specific rural telecommunications policy, for the development of the telecommunication sector.

This case study report looks at Uganda's progress from a monopolistic telecommunication market towards a substantially liberalized market. The report will particularly examine Uganda's policy and regulatory framework and its implementation through flexible licensing approaches. It will also highlight benefits and challenges.

Country background

Situated in East Africa, Uganda is a member of the East African Community comprising of Kenya, Uganda and Tanzania.

It has a landmass of 241,038 square kilometers and an estimated population of 25.6 million. The country is endowed with rich natural resources and Africa in the exportation of tin and cobalt. Its GDP was US$ 6,220.8 million in 2002[1].

At the end of 2003 there were 65,793 fixed telephone lines and 843,356 mobile subscribers. This compares with 57,366 telephone lines and 12,500 mobile lines at the end of 1998[2].

[1] Source: ITU (African Telecommunication Indicators, 2004)

[2] Source: UCC

2 Development objectives and structure

This section summarizes Uganda's telecommunication development objectives appearing in policy statements and legislation. It also looks at the industry structure adopted for the implementation of these policies.

2.1 Policy objectives and strategies

The transformation of the telecommunications sector in Uganda started with economic reforms that began in 1987, following nearly two decades of civil war and political instability. In line with the private sector participation strategies, the first mobile operator, Celtel (U) Limited, which was also privately owned, was licensed in 1993 to supplement the services of the then state-owned monopoly operator, Uganda Posts and Telecommunications Corporation (UPTC). But it was the telecommunications sector reforms initiated in 1996 that effectively changed the telecommunications landscape.

The sector minister published the Telecommunications Policy in 1996. The overarching objective of the policy was to increase the level of telecommunications service penetration and availability at affordable prices. Specific objectives included increasing tele-density from 0.26 to 2 lines per 100 persons within a 5-year period and the introduction of additional services; increasing quality and meeting un-satisfied customer demand. The other objectives included increasing geographical coverage and ensuring access to telecommunications services in rural areas. The policy statement also defined an implementation strategy. The strategy entailed the privatization of the incumbent monopoly operator, Uganda Telecom Limited (UTL); the establishment of an enabling regulatory framework and the introduction of competition. As part of the regulatory framework the Uganda Communications Act was passed in 1997 and the Uganda Communications Commission (UCC) was established in 1998.

The policy and the Act mandated UCC to promote access to communications in rural areas and to set up a fund for that purpose.

In 2001 UCC issued a Rural Communications Development Policy. The thrust of the policy was to expand access to telecommunications infrastructure and services to rural communities.

In November 2003 Uganda also adopted a National Information and Communications Technologies (ICT) Policy. The policy deals with information and electronic communications in a holistic manner. Currently, implementation is in a very early stage and most of the issues that are currently dealt with already fall within the scope of the 1996 Telecommunications Policy, the Rural Communications Development Policy and associated legislation.

3 Industry structure

3.1 Policy and Regulatory Institutions

In line with the 1996 Telecommunications Policy, a well defined policy and regulatory structure has been put in place. The structure comprises the Ministry of Works, Housing and Communications and the Ugandan Communications Commission.

3.1.1 Responsibilities of the Minister

The Minister is responsible for the formulation, determination and monitoring of policy; the negotiation of international treaties and the representation of the country in international organizations and fora. The Minister grants major licences.

3.1.2 The Communications Commission

UCC is responsible for the regulatory oversight of the communications sector. It may be noted that UCC is responsible for the regulation of both telecommunications and postal services. The functions of UCC relating to telecommunications are summarized in Box 1

Box 1: The functions of UCC (summarized from section 4 of the Uganda Communications Act, 1997)

(a) to monitor, inspect, licence and regulate communications services;
(b) to allocate and licence the use of radio frequency spectrum;
(c) to make recommendations to the Minister in relation to the issuance of major licences under this Act;
(d) to supervise and enforce the conditions of those licences;
(e) to establish a tariff system to protect consumers from excessive tariff increases and avoid unfair tariff competition;
(f) to set national communications standards;
(g) to ensure compliance with national and international communications standards;
(h to receive and investigate complaints relating to communications services and to take necessary action upon them;
(i) to promote the interests of consumers and operators as regards the quality of communications services and equipment;
(j) to promote research into the development and use of new communications techniques;
(l) to improve communications services generally and to ensure equitable distribution of services throughout the country;
(m) to construct facilities for the provisions of services regulated by UCC;
(n) to promote competition, including the protection of operations form acts and practices of other operators that are damaging to competition, and to facilitate the entry into markets of new and modern systems and services;
(o) to regulate interconnection and access systems between operators and users of telecommunications services;
(p) to comply with policy guidelines on sector policy given by the Minister, in accordance with section 12 of this Act;
(q) to advise the Government on communications policies and legislative measures in respect of the Provision and operation of communication services;
(r) to represent Uganda's communications sector at national and international fora and organizations relating to its functions and to coordinate the participation of any interested groups;
(s) to represent the Government at international conferences and other organizations in the field of communications services to which Uganda is a member;
(t) to collaborate with educational institutions in order to promote specialized education in the field of communications;
(u) to establish, manage and operate a communications services training centre.

3.2 Operators and Service Providers

Uganda adopted limited competition initially as the key strategy for achieving its telecommunications policy objectives. Licensing was the instrument that was used in putting in place an appropriate market structure. Services are provided by three major operators and several minor operators. Two of the major operators and some of the minor operators were licensed before UCC was established. But regulatory oversight of the market by UCC ensured the benefits of competition.

3.2.1 Major Operators

(a) Uganda Telecom Limited (UTL)

The Uganda Telecom Limited (UTL) is the First National Operator. It was incorporated in 1998 upon the restructuring of its predecessor, the Uganda Posts and Telecommunications Corporation, which was the monopoly provider of posts and telecommunications services. UTL was privatized in 2000. A consortium, UCOM, consisting of Telecel Limited of Switzerland, Detecon of Germany and Orascom of Egypt acquired 51% of UTL's shareholding, while the Uganda Government retained 49%. Subsequently, Orascom sold its shares to Telecel.

UTL operated under statutory authorization until June 2000 when it was issued a licence. The licence authorizes UTL to provide all telecommunications services. The licence requires UTL to add 100,000 subscriber lines including 3000 payphones to its network within five years. At the end of August 2004 UTL had 65,000.fixed line subscribers and 250,000 mobile subscribers[3].

(b) MTN (U) Limited

MTN (U) Limited, a wholly private-owned company, was licensed in 1998 as the Second National Operator. Its licence authorizes the provision of all telecommunications services. Its roll-out obligation is 89,600 lines including 2,000 payphones within five years. The licence was issued by the sector ministry, before UCC was established. When UCC came on the scene it specified that the 89,600 lines roll-out obligation referred to fixed telephony. Eventually UCC was persuaded to accept the interpretation that the figure applied to voice telephony regardless of mode of delivery. This compromise took into account the increasingly acceptable notion of cellular mobile telephony services substituting for fixed telephony, especially in Africa. Furthermore, MTN argued that technological advances make it possible for cellular mobile technologies to provide the same services as fixed telephone technologies, for example data. Also, because of their flexibility mobile services serve more people than fixed access.

MTN has installed 15,000 fixed lines using fixed wireless, optical fibre, traditional copper and fixed cellular terminals (FCT). They are intended primarily for dial-up Internet services. The mobile subscriber base of MTN was 600,000 in August 2004[4].

(c) Celtel (U) Limited

Celtel (U) Limited, a private-owned company, is currently the only operator with a licence that limits its activities to the provision of cellular mobile telephone services only. It was the first company that was licensed to provide cellular mobile services in the country. Licensed in 1993, it started operations in 1995. UCC re-issued the licence in 2001.

3.4 Network growth and service penetration

Telecommunications services have been expanded all over the country since 1998. Then coverage was concentrated in cities and major towns. Now all the country's 56 districts have a point of presence for the delivery of telecommunications services. More than 520 of the 931 sub-counties have a point of presence.

Mobile lines have increased from 12,500 in 1998 to 872,704 in 2004. Fixed lines have increased from 57,366 lines in 1998 to 67,234 in 2004. Total teledensity (fixed and mobile) is estimated at 3.5 and fixed line teledensity is 0.27. (See Table 1 and Figures 1 and 2)

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[3] Source: UTL
[4] Source: MTN (U) Limited

Table 1 Telephone service provision 1998- 2004. Source: UCC

Years	1998	1999	2000	2001	2002	2003	2004
Fixed Lines	57,366	57,239	61,678	56,149	57,239	65,793	67,234
Mobile Lines	12,500	72,602	188,568	236,034	494,095	777,563	872,704
Total fixed & mobile	69,866	129,841	250,246	292,183	551,334	843,356	939,938

Figure 1: Telephone service provision 1998- 2004: Source UCC

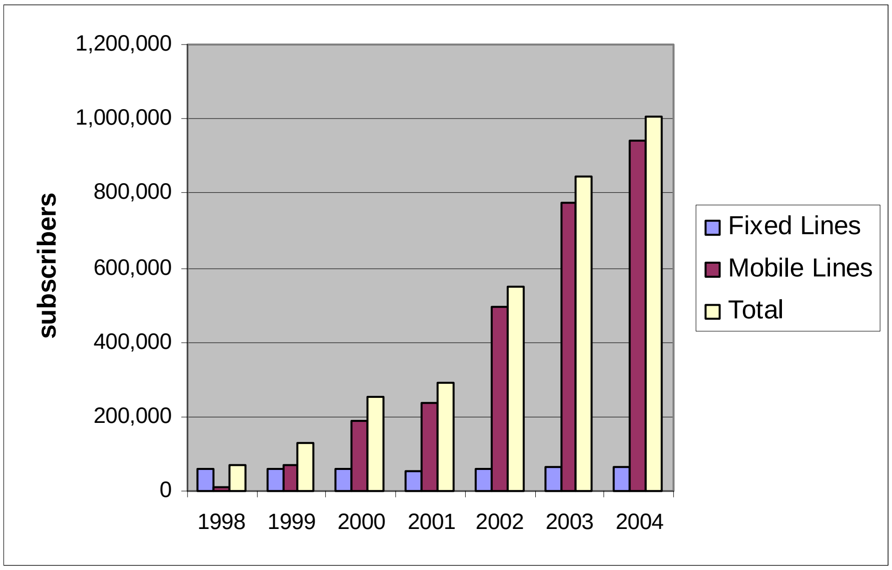
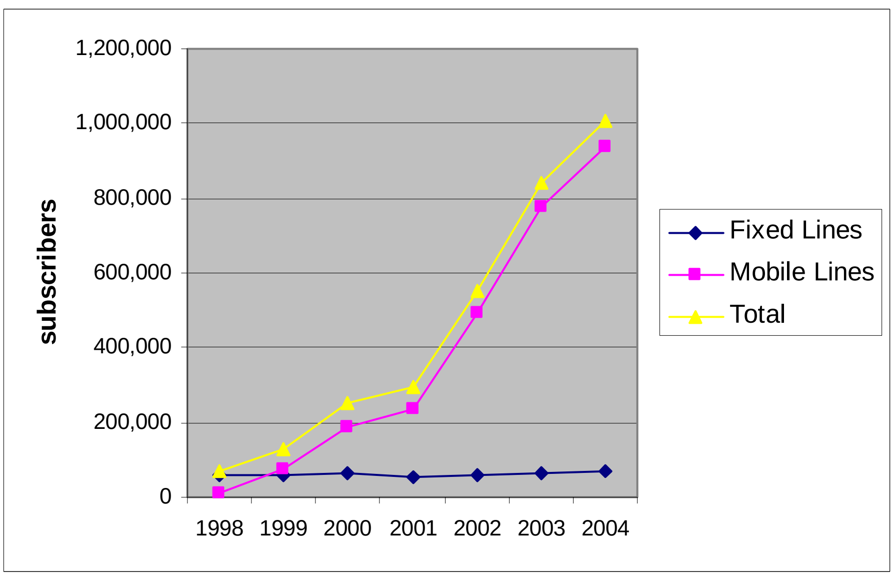


Figure 2: Telephone service provision 1998-2004 Source: UCC



In general, lower tariffs for end-users are among the most important benefits of competition (see Figures 3 and 4). Like other countries, Uganda has experienced a decline in rates for international calls over the fixed line network. This trend has also been experienced in East Africa and the Common Market for Eastern and Southern African (COMESA) countries.

Figure 3: Movement of Fixed Tariffs in Uganda: Source: UCC

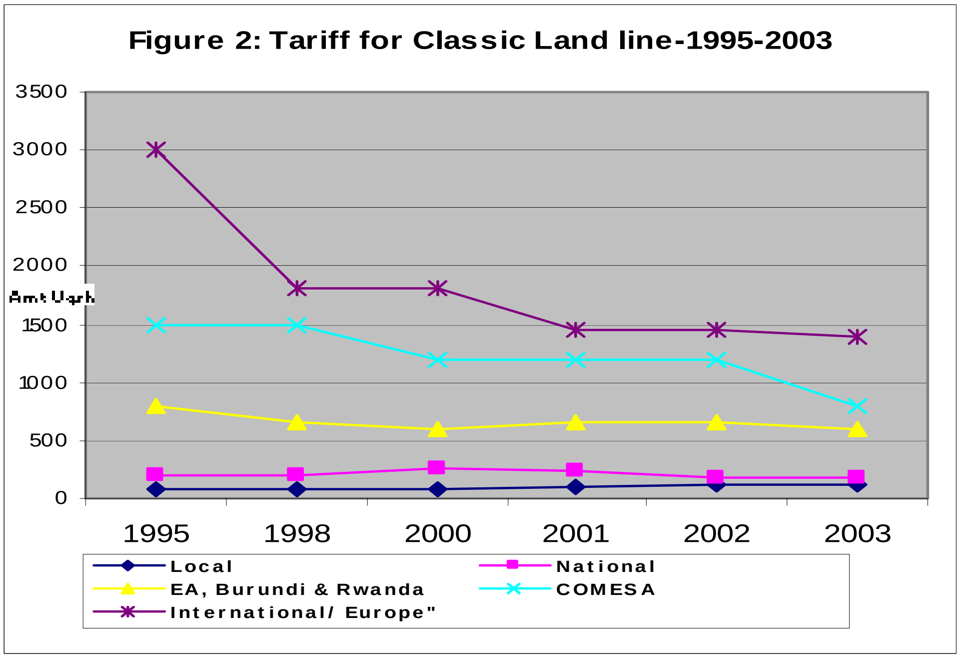
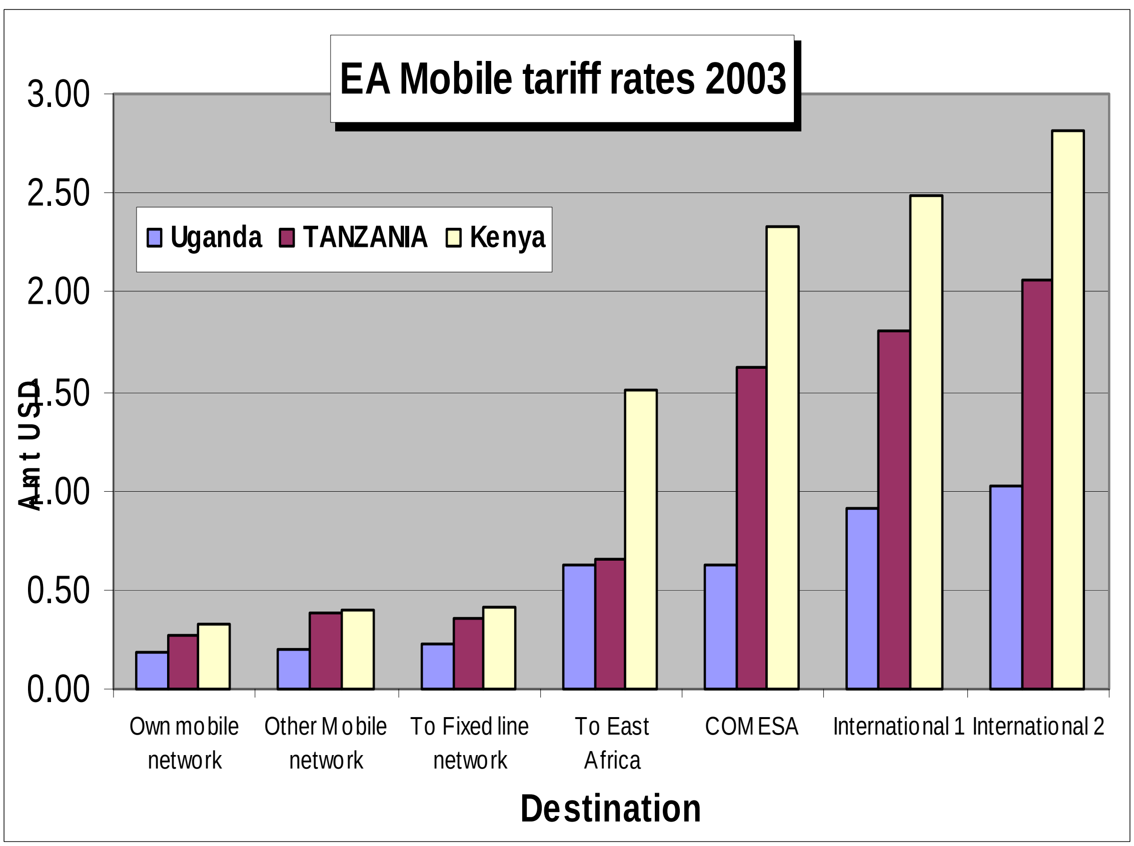


Figure 4: East Africa mobile tariffs rate 2003. Source: UCC



4.1 Legislation

The key elements of a regulatory regime are an enabling legislation, regulatory institutions and regulatory instruments that a regulatory institution use in exercising their mandates. The functions of the regulator, UCC, have been summarized in Box 1 above.

The Communications Act 1997 is the central piece of legislation that gives legal effect to the Telecommunications Policy 1996. The Act deals with both the postal and telecommunications sectors. For the purpose of this report, reference is made only to the telecommunication sector whenever it is practical to effect such a separation. This section looks at the enabling provisions of the legislation and some of the key areas of regulatory intervention it deals with.

The Act covers a wide range of policy and regulatory issues on the development of the telecommunication sector. The objectives of the Act are reproduced in Box 2.

Box 2: Objectives of the Communications Act 1997

Section 3

The objectives of this act are to develop a modern communications sector and infrastructure by:-

(a) enhancing national coverage of communications services and products, with emphasis on provision of communications services;
(b) expanding the existing variety of communications services available in Uganda to include modern and innovative postal and telecommunications services;
(c) reducing Government direct role as an operator in the sector;
(d) encouraging the participation of private investors in the development of the sector;
(e) introducing, encouraging and enabling competition in the sector through regulation and licensing competitive operators to achieve rapid network expansion, standardization as well as operation of competitively priced, quality services; and
(f) minimizing all direct and indirect subsidies paid by Government to the communications sector and for communications services;
(g) establishing and administering a fund for rural communications development.

4.2 Regulatory and related institutions

The functions of the Communications Commission (UCC) have been summarized in Box 1 above. The role of the Minister in policy making as well as in issuing major licences has been alluded to above . In addition to these institutions, the Act establishes a Tribunal constituting of a Judge and two other members appointed by the country's President on the recommendation of the Judicial Service Commission. The Tribunal has jurisdiction to decide appeals from decisions of the Minister and UCC and to adjudicate on all matters pertaining to the communications sector. The only exception is criminal cases. The Tribunal is yet to be operationalised.

4.3 Licensing Regime

4.3.1 A licence is necessary for the operation of telecommunications facilities and the provision of services. There are two categories of licences. A major licence may authorize the provision of one or a combination of the following services: local, long distance or international telephone services; trunk capacity resale; rural telecommunications; cellular or mobile services. A minor licence authorizes the provision of other services such as store and forward messaging services; paging services and private telecommunications services. The Act allows UCC to establish classes of licences and, by regulations, to exempt services from licensing.

The Minister grants major licences, on the recommendation of UCC. UCC grants the minor licences. However, UCC determines the terms and conditions for all licences. In practice, UCC initiates the licensing process and submits recommendations to the Minister. After approval by the Minister the licence documents are signed by both the Minister and UCC The close ministerial involvement in the implementation of liberalization was necessary during the initial stages of the reform process. But the sector has now been substantially liberalized and strategies for achieving telecommunications policy objectives well defined and tested. There would appear to be no need for continued ministerial involvement in the purely regulatory activity of licensing especially if Uganda steps up its liberalization process. Policy guidelines by the Minister to UCC on licensing and related issues would be sufficient. Nevertheless, the current practice has not raised any significant problems.

4.3.2 Major Licences

Some of the operators were in the market before the licence regime envisaged by the Act was in place. But judicious oversight by UCC and the licensing of new operators and service providers ensured order and efficiency in service provision. The types of major licences that have been issued are summarized below.

a) National Telecom Operator
   Holders of this type of licence are allowed to provide the full range of telecommunication services. The licence has only been issued to two companies, the partially privatised Uganda Telecom Limited (UTL) and MTN (U) Ltd.

   An exclusivity period was granted to these two operators as an incentive to attract investment. This provision limits competition in basic telephony, cellular telecommunications services and satellite services to these operators and other existing service providers for a period of five years expiring on 25th July 2005. In addition to the roll-out obligations mentioned earlier, the licences contain service quality and other requirements.

b) Cellular Telecommunications Service Provider
   The initial licence was issued in 1993 to Celtel (U) Limited. The company remains the only holder of this licence. UCC noted that although cellular mobile service was common to the two national operators and Celtel their conditions for operating were not uniform. This licence was reviewed in 2001 to bring it in line with the provisions of the Act to ensure fair competition. Roll-out obligations and other important conditions that had been omitted from the initial licence were included.

c) Third Party Network Service Providers.
   These provide private voice and data services for businesses and organizations. The issuance of these licences has been suspended for the exclusivity period granted to the National Telecom Operators. At present there are 3 providers who were licensed before the commencement of the exclusivity period. They are International Telecom Limited, Afsat Communications (U) Limited and Pan African Communications Network (U) Limited. Their licences authorize them to provide service in Uganda and to destinations beyond Uganda. The existing licensees continue to enjoy their rights, to the extent that they do not unduly encroach on the rights of the operators who have exclusivity. This one of the challenges that faced UCC, to assist in reaching compromises acceptable to all the operators concerned.

d) Data gateways
This is the licence issued to Internet Access Providers (ISPs) who prefer to have their own gateways. However, due to the exclusivity period restrictions, the licensing of independent international data gateways has been suspended. Therefore, the ISPs who were licensed before the exclusivity period that had no gateways and those who were licensed during the exclusivity period are required to establish links to the international backbone through licensed providers.

e) Rural Communications Licence
This is a new licence intended for the implementation of the Rural Communications Development Policy. Refer to section 5 below.

4.3.3 Minor Licences

a) Internet Access Service Licence.
This is the licence issued to Internet Access Providers (ISPs). One of the challenges that UCC encountered has been ensuring fair competition between ISPs and the national operators who provide the same service. Such efforts have resulted in the introduction of flat rate dial-up access available country wide to all customers of different ISPs using the networks of the national operators.

Dial-up Internet access services have faced significant competition from wireless access especially among corporate and business clients. UCC currently authorises ISPs to use the 2.4GHz band for commercial service provision. However, disputes have often occurred over the use of amplifiers by some of the ISPs, which have caused problems to others. To foster the use of Internet services UCC has allowed the ISPs freedom of choice of technology to access their clients within the terms of the exclusivity period.

An Internet exchange point (IXP) has been established in the country to improve bandwidth utilization; encourage local Internet applications and reduce the costs of accessing the Internet. To support the IXP UCC has developed guidelines for its operation and waived licence fees.

b) Other Service Providers
Service providers in the category include the public pay communications services. These are essentially resale operators providing payphone, fax bureaux and cyber café services. These operate on different scales with some having only one phone or a computer while others having as many as twenty computers and/or several phone lines. Growth in this type of service provision has been phenomenal due to the low level of capital required to start up and the high demand for the services countrywide. Originally, UCC licensed these services but later they were deregulated and exempted from paying fees. However, UCC mandates operational guidelines to these service providers.

4.4 Economic Regulation

Ensuring fair competition, network interconnection and tariff regulation are essential for the achievement of telecommunication policy objectives. This section looks at these aspects in the context of legislation and practice

4.4.1 Fair Competition

There is no general competition law in Uganda. The Communications Act acts as the basic law on competition for the sector for the time being. The Act enjoins UCC to promote, develop and enforce fair competition and ensure the equality of treatment among all operators and service providers. It makes the standard prohibitions regarding abuse of dominant position, agreements or concerted conduct that restricts or distorts competition and anti-competitive mergers or acquisitions. The Act specifically prohibits cross-ownership between the two national operators, or their affiliates. The Act gives UCC the usual flexibility to permit anti-competitive conduct if it is indispensable to the achievement of the telecommunication development objectives and does not lead to a substantial reduction in competition.[5]

As part of the implementation of the requirements of the Act, clauses prohibiting the abuse of dominant position and unfair cross-subsidies have been included in the licences of major operators. Unbundling requirements for equipment and services for basic telephone service have been included in the licences of the two national operators. Also stated in those licences is a clause requiring equal or identical treatment between the rates, terms and conditions for national operators own resale services to its affiliates and those that it offers to other telecommunications operators and service providers

UCC is empowered to investigate in a transparent manner, and on its own initiative, acts of anti-competitive conduct. It is allowed to to make appropriate orders including the imposition of a fine of up to 10% of an operator's annual turnover. UCC has also published competition regulations.

Nevertheless, there have been concerns by Internet Access Providers (ISP) about anti-competitive behavior by the two national operators who also provide Internet access and services. The concerns centre on cross-subsidization by the two operators and resale prices to the ISPs which are priced at the same rates as dial-up rates to end-user customers. UCC is currently dealing with these issues. However, it will take time for UCC to establish the mechanisms and the necessary capacity for promoting and monitoring fair competition.

4.4.2 Interconnection

The Communications Act requires telecommunications operators to enter into interconnection agreements. Primarily, such agreements are negotiated between the interested parties, but they must be submitted to UCC for approval. The Act authorises UCC to arbitrate between the parties to facilitate agreement and to impose agreements or terms and conditions where the parties fail to agree. Additionally, the Act requires UCC to issue minimum guidelines to operators for negotiating interconnection agreements[6]. UCC has a prepared model interconnection agreement for this purpose. For the national operators the model agreement is attached to their licences and it serves as a default agreement. The model provides a starting point. Crucial and contentious terms and conditions like charges and technical requirements still have to be agreed upon between the parties or determined by the Commission.

The only major disagreement on some of the interconnection issues has been between UTL and Celtel (U) Limited and UCC is still handling the problem. They have been unable to agree on interconnection charges. Interconnection problems between the two operators pre-date the establishment of UCC. The intervention of UCC helped settlement of longstanding termination dues payments between them.

[5] : Sections 57-59, Communications Act, 1997.
[6] Section 63

4.4.3 Tariff Regulation

The Communications Act contemplates two approaches to regulating prices for telecommunications services. They are competition and regulatory intervention. The Act requires UCC to establish a system to protect consumers from excessive tariff increases and avoid unfair tariff competition among operators and service providers[7]

In services where there is sufficient competition, for example cellular mobile and trunk capacity resale, UCC does not regulate tariffs although they are part of services that enjoy exclusivity. Also services that are authorized under class licences, like public payphone, Internet and value added services, are not regulated. However, cellular mobile service operators are required to file their rates with UCC and to publish them.

Services provided on an exclusive basis, namely, installation and connection charges; monthly and exchange line rental local calls, national and long distance as well as international fixed telephone calls are regulated. These services are provided by the national telecommunications operators. Regulation is through price cap formulas, issued by UCC, based on three baskets.

Box 3: Telephone services Price Cap Baskets

Basket	Basket Composition
Basket 1: Local Service and Domestic Long Distance Service	Basket 1 includes the following services: Telephone service installation and connection charges (non-recurring) Exchange line rental charge (recurring) Local Calling unit charges (used-based) Domestic long distance switched voice and data services (usage-based)
Basket 2: International Long Distance Services – East Africa and COMESA*	Basket 2 includes the following long distance services for countries in the East African and COMESA groupings: International long distance switched voice data services (usage-based) This basket applies to all international long distance calls to countries in the East African and COMESA groupings regardless of the technology or medium used to originate the call, including traditional telephony, wireless telephony, and public telephony
Basket 3: International Long Distance Services to All Other Destinations	Basket 3 includes the following international long distance services for All Other Destinations: International long distance switched voice data services (usage-based)

Source: UCC ***** Common Market for Eastern and Southern Africa

This rate regulation mechanism will be reviewed after July, 2005 when the exclusivity period ends.

[7] Section 5 (f) of the Communications Act, 1997

It would appear that UCC has to intervene, if necessary informally, even where services have been deregulated, in order to protect service providers from unfair competition among themselves. For example, a major problem that has been encountered to date revolves around the management of tariff rate competition among public payphone/fax bureaux and cyber cafes. The numerous bureaux that operate on different scales and which have different modes of accessing network services result in varying costs of providing services. As a result, some are driven by competition to charge tariffs below cost. The mandate of UCC to regulate tariffs appears to extend to this situation although UCC believes that fair competition will take care of such problems and that its intervention through tariff regulation is not necessary.

Balancing the interests of consumers and of operators or service providers is often a challenge. One of the national operators proposed an increase in tariffs for basic service to take into account costs that included advertising and other promotional items. UCC was not convinced by the operator's arguments. Consumers on their part have concerns about operator rates. For example, an operator recently changed its billing system for their cellular mobile service. A representative of the consumers claimed that under the new billing system customers are charged on the basis of a 45-second minute instead of a 60-second minute. Although the service is unregulated UCC will have to find a way of intervening to fulfill its duty to protect customers.

4.5 Radio spectrum Licensing and Management

To ensure orderly development and efficient spectrum use, the UCC is the sole body that has the responsibility and duty under the Communications Act to plan, administer and monitor the use of the radio frequency spectrum. UCC issues licences for all radio communication services and stations, except for the national security forces and other state services.

The introduction of limited competition, changes in technology and full liberalization of the broadcasting sector presents challenges in the management of frequency spectrum. As a matter of priority, UCC has designed a national frequency allocation plan and put in place a monitoring system. UCC is progressively working on spectrum management policies that are responsive to the needs of an ever changing market.

Frequencies are allocated in accordance with the plan depending on the needs of operators and other users, on a pre-determined fees scheme. Operating licences for broadcasting services are issued by the Broadcasting Council. Broadcasting operators apply to UCC after obtaining an operating licence from the Broadcasting Council. Similarly, UCC issues operating licences and spectrum assignments for telecommunications services separately. The licensing process for telecommunications and broadcasting services are coordinated to ensure that an entity who is issued an operating licence does not face problems in implementation due to the lack of appropriate frequencies.

All spectrum assignment fees are paid to UCC and form part of its funds. The Broadcasting Council, however, is not given a share of the spectrum assignment fees. As a result, the broadcasting sector has concerns that high fees are charged for broadcasting operating licences in order to fund the operation of the Broadcasting Council. The issue of the broadcasters having to deal with two organizations could be addressed through the establishment of a converged regulator.

UCC used to license the 2.4 GHz Special Wireless Spectrum for commercial use. It was used mainly by ISPs for providing wireless access to their customers. In order to encourage the use of WiFi technology to promote the use of Internet services in rural and other under-served areas UCC has deregulated the use of this spectrum for the commercial provision of services

4.6 Licence Fees

Licence fees are the main source of funds for the activities of the Communications Commission including the financing of Rural Communications Development Fund (RCDF) projects.

a) Major licences

Payments for major licences comprise an initial fee, an annual fee and spectrum licence fees. The initial fee depends on the size of the operation and number of services included in the licence. For example, the initial fee that UTL paid for its national operator licence was US $200,000. But Celtel (U) Limited, paid US$ 50,000 for its new cellular mobile licence. All major operators pay an annual fee of 1% of gross revenue which goes to the Rural Communications Development Fund. The Communications Commission Act, 1997 provides for a levy of up to 2.5% of the annual gross revenue but the Minister decided to set it at 1% after negotiations with the operators.

b) Minor Licences

A modest annual fee and a processing charge are payable for this type of licence depending on the nature of service. For example, the fee for Internet Access Service (ISP) is US $2,000. The annual fee for an Internet Access Service and international data gateway is US$ 4,000. A processing fee of US $340 is also payable for most minor licences. Other services including payphone/fax bureaux and Internet cafes which previously attracted US $500 in annual fees and US $340 in administrative fees are now exempt from licensing and annual fees.

c) Spectrum Fees

The amount payable as spectrum fees depends on the type of service, the power of apparatus, bandwidth and other parameters. Annual fees range from US$ 2,000 for mobile trunked radio and VSAT (single user) to US$ 10,000 for a satellite earth station. For the last mentioned facility, a registration fee of US$ 15,000 is payable. Processing and type approval are also charged for each licence.

The fees are reasonable. They are at a level that allows operators and service providers to provide their intended services at affordable prices. As can be seen from Figure 4 above, tariffs in Uganda are lower than in any of the other two East African countries (Kenya and Tanzania) and COMESA countries.

UCC reviews these fees periodically to align them with market conditions. For example, in deregulating the 2.4 GHz spectrum UCC has also waived the annual licence fee of US$ 2,000. On the other hand UCC has raised the annual fees for bigger facilities but has still kept them within reasonable market levels. Nevertheless, some of the bigger operators find the new annual fees of US$ 300 per base station to be overly high. Moreover, some of them claim that the more they use the more they pay for spectrum bandwidth. They have sought incentives, like volume discounts. This is another challenge facing the regulator; balancing the need for fund raising for regulatory oversight and the promotion of universal access on one side and the interests of investors on the other side.

For further information on licence fees refer to Annex A.

4.7 Licence Process and Conditions

UCC has wide discretion under the Communications Act to decide on the appropriate licensing process. Major licences are usually issued via tender. After evaluating the tenders UCC makes a recommendation to the Sector Minister for approval. UCC has adopted a reverse auction procedure for the issuance of rural communication licences, which fall under the major licence classification. This is discussed in section 5 below.

UCC awards minor licences through a tender or on fist-come -first-served basis depending on the nature of service to be provided. Services that have been exempted from individual licensing, for example Internet access or payphone service provision are authorized under a class licence. UCC has the discretion under the Act to stipulate licence conditions. The areas where conditions may be stipulated have been listed in the Fourth Schedule to the Act. Refer to Box 4.

Box 4: Guidelines on Licensing Conditions: Fourth Schedule, Communications Act, 1997

A licence issued under Part IV of this Act may include the following conditions:-

(a) the payment of sums of money calculated as a proportion of the rate of the annual turn over of the operator's licensed system or otherwise;
(b) the payment by the operator a contribution toward any loss incurred by another operator(s) as a result of such other operator(s) obligation imposed on the operator(s) by UCC regarding the provision of uneconomic service in pursuance of the objectives of the Act;
(c) the provision of services to disadvantaged persons;
(d) interconnection of an operator's telecommunications system with any other system and permitting the connection of telecommunications apparatus to an operator's system;
(e) prohibiting an operator from giving undue preference to or from exercising undue discrimination against any particular person or class of persons (including any operator;
(f) furnishing UCC with such documents, accounts, returns or such other information as UCC may require for the performance of its functions under this Act;
(g) requiring an operator to publish in such manner as may be specified in the licence a notice stating the charges and other terms and conditions that are to be applicable to facilities and services provided;
(h) provision of service on priority service to the government or specified organizations;
(i) requiring an operator to ensure that an adequate and satisfactory information system including billing tariff, directory information and directory enquiry services are provided to customers.
(j) conditions specifying the criteria for setting tariffs;
(k) requiring an operator to comply with such technical standards or requirements including service performance standards as may be specified in the licence;
(l) any other conditions as UCC may consider appropriate or expedient

The Act requires operators to submit a report annually to UCC indicating how they have fulfilled the conditions of their licences.

The renewal of major licences is dependent on the good performance of the licence. The licensee gives UCC 12 months notice of its intention to renew the licence. This period allows sufficient time for the publication of a notice to the public, the hearing of any objections, an evaluation of the performance of the licensee by UCC and approval by the minister.

4.8 Service & Technology Neutrality and Convergence

The Communications Act does not prescribe any technology in the provision of services by a licensee. As indicated elsewhere in this report, the Act allows the provision of all telecommunications services under a single licence for National Telecom Operators. The only exception is broadcasting services for which operating licences are issued by the Broadcasting Council. The licences of the two national operators refer to the use of some technologies, for example cable, microwave, radio and satellite transmissions, but in a way that shows that the list is not meant to be exhaustive. Therefore this should not cause any problem as a liberal interpretation will accommodate new technologies. It would nevertheless be tidier to avoid mention of specific technologies in future licences.

Due to the exclusivity for fixed voices services given to UTL and MTN (U) Ltd, UCC cannot authorize the provision of VoIP by other operators except by the independent operators that are licensed to provide services in rural areas not covered by the two national operators. The removal of restrictions on the use of this cost-effective technology immediately upon the expiry of the exclusivity in July 2005 would enhance the achievement of the telecommunications development objectives.

4.9 Legacy Issues

There are some legacy issues that have been alluded to earlier in this report. This section highlights some of the areas that might be of interest. Because of the worldwide trend in the telecommunications sector toward private sector development Uganda, among other African countries, found it necessary to start opening up the sector before having a regulatory framework in place. The mobile operator, Celtel (U) Limited and data service providers were licensed in 1993 by the then incumbent operator, the Postal and Telecommunications Corporation. The Communications Commission Act became effective only in September 1997. The Act had envisaged the incorporation and privatization of Uganda Telecom Limited before the licensing of a second National Operator. But the privatization process did not progress as planned. The Government licensed the Second National Operator, MTN (U) Limited in April 1998. UCC started operating in August 1998 and UTL was privatized in 2000. UTL had, until then, been operating under statutory authorization. It was issued a licence as the First National Operator in June 2000. Although the two national operators enjoyed a large measure of *de facto* exclusivity earlier, the five-year exclusivity period officially started on 25th July 2000. All these events affected the actors in the field in different ways.

UCC had to supervise existing operators under licences that were not issued by a professional regulator, except for the licence to UTL. Even then, UTL's licence had to take into account some of its statutory rights. For instance, the Communications Act authorized UTL to retain its radio frequencies with the provision that UCC was allowed the possibility of modifying the assignments if it became necessary.

The Second National Operator was licensed to compete with the incumbent, the former Posts and Telecommunications Corporation (UPTC). Although threatened by the introduction of competition, the management could not object to the entry of the new competitor who was licensed by the Government. The Government then was also the sole owner of the incumbent. The incumbent was obliged to provide interconnection and trunk capacity to its competitor.

Celtel (U) Limited and ISPs who had installed data gateways, were allowed to continue carrying their own traffic but could no longer carry third-party traffic, until the expiry of the exclusivity period. This is a matter of concern to them as it impacts negatively on their businesses. But Celtel, benefited from the privatization of UTL. A new management at UTL and the intervention of UCC enabled Celtel to be paid a long-standing debt for termination charges owed by UTL and its predecessors.

The Act also provided for an orderly transfer of staff from UPTC to UTL. Because of that, UTL continues to carry more staff than perhaps they would have wished to.

5 Implementation of Rural Access

5.1 Rural Communication Development Policy Objectives

One of the objectives of UCC is to promote rural access through a Rural Communications Development Fund (RCDF). The licences issued to the two national telecommunications operators require them to install a payphone at each County Headquarters. In addition, the Uganda Communications Commission (UCC) has licensed payphone and Internet service providers. After some experience in supervising the sector UCC realized that universal access obligations and competition alone would not achieve the telecommunication policy objectives of expanding access to rural areas. A major rural access initiative was needed.

A UCC/IDRC Rural Communication Development study showed that 200 sub-counties would not have coverage by 2002 due to low population density and remoteness. Based on this study UCC developed a Rural Communications Development Policy. The study and policy covered telecommunications services but this section deals principally with the telecommunications services aspects. The objectives of the policy are to:

a) Achieve universal access to basic telecommunications, which is defined as making voice telephony available in all 926 rural sub-counties and to achieve one public access telephone per 5,000 inhabitants by the year 2005 at the sub-county level.

b) Promote Internet and ICT use in Uganda.

c) Ensure effective utilization of the resources of the RCDF to leverage investment for rural communications development as a viable business

In order to achieve the universal access objective, UCC first requested the two licensed national operators, UTL and MTN Uganda, to declare sub-counties in which they would be able to achieve the target level by mid-2002. Their declarations showed that their services would not reach each of the 154 sub-counties. In accordance with the provisions of their licences, the declarations of the national operators amounted to giving up their right of exclusivity in those sub-counties.

5.2 Management, Administration and Source of Funds of the Rural Communication Development Fund (RCDF)

In accordance with its statutory mandate, UCC has set up an RCDF Board to oversee the management of the RCDF. The Board is composed of members drawn from the UCC Commissioners, the public and private sectors. It is responsible to the Commission.
The major sources of funds of the RCDF include UCC budgetary allocations from the 1% levy on the gross revenues of the operators, donations and grants from development partners and Government inputs. RCDF funds are disbursed in the form of non commercial grants for the provision of basic communications and Internet Services in rural areas. Disbursement for access projects are by tender or direct disbursement depending on the size of an individual project or project “package”. Funds for pilot projects and small individual projects or “packages” are disbursed directly. The main criteria for the consideration of direct disbursements are a business plan demonstrating financial profitability and / or self sustainability after the start-up contribution.

5.3 Licensing of Rural Communications Operators

UCC decided to offer the 154 sub-counties that were left ‘unprotected’ by the national operators for competitive entry.
In addition, UCC is offering subsidies towards the net cost of providing services to meet the universal access target in the 154 sub-counties. The subsidies are being offered through a “reverse auction”, in which UCC will establish specific subsidy caps and will award a RCDF Service Agreement and Licence to the bidder(s) requiring the least subsidy within the specified cap level and whose bid(s) has been determined to be substantially responsive to the bid requirements.

The 154 sub-counties have been packaged as three separate geographical licence areas (the “Universal Access Regions”). The Universal Access Regions combine sub-counties expected to require minimal subsidies together with some of the most remote sub-counties which are expected to be operationally challenging and which are expected to carry higher subsidy requirements. The Universal Access Regions offer contiguous territory to the extent possible.

5.4 Licence Terms, Conditions and Additional Incentives

Winning bidders will have the right to offer Universal Access services and private voice and data services in all sub-counties within the Universal Access Region they win but not on exclusive basis. Although the Universal Access Regions were without service in July 2002, UCC assessed that at least half of the sub-counties they contain now have some network signal presence through one or more of the two national operators and/or by the third (cellular) operator.

Therefore UCC advised potential bidders to assess for themselves the existing infrastructure, the competitive opportunity, as well as the potential for leasing or sharing backbone and existing station facilities to reach each Universal Access Region. UCC undertook to encourage existing operators to share their sites, buildings, masts, etc. on commercially negotiated terms with the winning bidder(s) wherever possible. Universal access licensees may provide universal access services (basic telephony) and private voice and data services over network facilities that are owned and operated by them or provided in whole or in part on a resale basis (i.e. over networks of other telecommunications operators).

Winning bidders, other than the two existing national operators, will be offered a 10 year, non-exclusive licence to provide voice and data services in all of the sub-counties in the Universal Access Region(s) they win, renewable for an additional 10 years. Where a winning bidder is an existing operator, the current licence will be amended to take into account the conditions of the rural access service provision requirements.

Interconnection arrangements will be negotiated with the incumbent major network and cellular operators in the usual manner with UCC intervening to impose an interconnection agreement if the operators fail to agree or if UCC determines that such agreement will promote fair competition.

The imposition of asymmetrical interconnection termination charge for calls terminating in public access phones in the 154 sub-counties is under consideration by UCC. Also under this arrangement, a “Calling Party Pays” tariff increase for calls to designated public access phones in the 154 sub-counties would be permitted to enable the originating operator to cover the cost of the higher interconnection rate.

If the winning licensee is a new entrant, it will not be given an international gateway licence during the exclusivity period of the two national operators but it will be able to apply or compete for a full national telecommunications licence, including international gateway, upon expiry of the exclusivity period.

The technical and operational requirements in licences will be technologically neutral. The winning bidders will be allocated the necessary spectrum or numbering resources.

The UCC has established universal access services in regions in Uganda that are unlikely to be commercially viable in the long run in the event that the operator provides only the minimum level of public access telephones required by the universal access target. Therefore the UCC has made it a requirement that all offers must include the capability to meet a specified level of private demand in all sub-counties, in addition to public access telephones, within three years from the date of Service Agreement signature.

6 Next Steps after Exclusivity Period

As stated earlier in this report the five-year exclusivity period that the two national telecommunication operators enjoy ends in July 2005. Their licences state explicitly that the exclusivity period will not be extended. What is not so clear is what will happen immediately after July 2005. UCC is carrying out an assessment that will assist in determining the market's direction in the post-exclusivity period. The options include opening the sector to full competition or to increase the level of liberalization without completely opening the market immediately.

Opinions differ on which approach is most appropriate for Uganda. There are people who think that the Ugandan telecommunications market is too small to accommodate additional major operators immediately. One of the major operators observed that the small players in the market resort to illegal acts like providing services that are not authorised by their licences. The operator added that opening the sector to greater competition, could lead to price wars.
Nevertheless, existing minor operators, for example the ISPs, who already have data gateways would like to be authorised to provide the full range of telecommunications services, including VoIP, upon the expiry of the exclusivity period. But some of them are concerned that, as there had been no indication yet on the direction, nine months to the end of exclusivity period, the period might be extended by default. All these point to an increased challenge for UCC. It is under pressure to complete the sector performance assessment and to make a statement, either on its own behalf or through the Minister, on the direction of liberalisation after the exclusivity period.

Freeing up the market more would enhance the advancement of the objectives of the policies currently in place. In particular, allowing existing licensees of data gateways to provide leased circuit services would assist Internet service provision which is said to be hampered by a lack of capacity and bandwidth.

Fortunately, the law is flexible enough. It will accommodate further liberalisation and deregulation by UCC without the necessity of immediate amendment. But the changes that are needed to fully accommodate convergence will require modification of the legislation.

7 Consultations

The Communications Act does not specifically require UCC to conduct public consultations. It gives UCC the discretion to conduct inquiries. It makes inquiries by UCC mandatory only when ordered by the Minister. The UCC, however, frequently consults the public as whole or interested parties on particular issues. Consultations are carried out informally, such as through seminars or workshops or they may be formal, such as through public hearings or the publication of notices calling for written comments. UCC provides information to the public on request, usually free of charge if no significant costs are involved. In addition, UCC makes extensive use of its website in disseminating information.

8 Conclusion

Uganda's strategy of private sector participation in developing the telecommunications sector has been largely successful. The adoption of clear policies and an appropriate regulatory framework at an early stage in the reform process are among the key factors contributing to this success. The other instrumental element is a flexible and innovative licensing approach in implementing limited competition and liberalization.

Flexibility was displayed in the licensing the Second National Operator, MTN (U) Limited, in April 1998, before the privatisation of UTL. This was after the Government realised that the privatisation process was not proceeding at the pace that had been planned. Significant subscriber growth started after the second national operator began operations. However, the correct choice of investor is an important factor as well, for there are countries that have taken a similar approach without equally positive results.

The privatisation of UTL in 2000 and its licensing with roll-out obligations further reinforced the success of strategy. The ensuring result has been that UTL is a truly major operator alongside MTN (U) Limited even in the cellular mobile market which UTL entered in 2000, two years after MTN.

At a current teledensity of about 3.5, the target penetration of 2 telephones per 100 persons by 2005 under the Telecommunication Policy 1996 has been surpassed. However, at the time when this target was adopted the full growth potential of cellular mobile services had not been widely foreseen. The policy must have envisaged fixed telephony contributing a big part to the realization of the target. Given the now proven possibilities of cellular mobile technology it would be advisable to review the target in order to set a more challenging one.

As well as being among the pioneers in Africa in licensing a Second National Operator and in privatising the incumbent operator, Uganda is one of the first African countries with a well thought-out rural access policy that is at an advanced stage of implementation. The combination of roll-out obligations in the licences of the major operators and the ongoing innovative licensing of independent rural communications operators, guarantee the achievement of the objectives of the Rural Communications Development Policy

All stakeholders have contributed to these results, including the Government in setting the policy and direction and the entrepreneurship of the investors in improving services rapidly. The dedication, professionalism and integrity of UCC in supervising the implementation of the policies have been crucial. This is acknowledged by all stakeholders.

The experience of Uganda so far shows that, when implemented through an appropriate licensing approach and supplemented with suitable universal access mechanisms, liberalization is a key strategy for achieving telecommunications development objectives. Increasing the level of competition and deregulation after the expiry of the exclusivity period will further enhance the achievement of policy objectives, including those in the recently adopted ICT Policy.

Alongside the achievements referred to above, there have been a number of challenges, some of which have already been mentioned. Like other regulators in Africa, the UCC started supervising a competitive market with little experience in regulation. With increased liberalisation and rapid changes in technology, capacity building will continue to be a challenge especially in the area of enforcement and compliance.

The concerns being raised about the way forward after the exclusivity period is an indication that the improvements in services are fuelling demand not only for further improvement but also for information on policy, regulatory and operational matters. As public awareness is important, the current challenge, given circumstances, is for policy makers and the regulator to ensure adequate information on a timely basis.

Requirements for applications for telecommunications services licensed / authorized by Uganda Communications Commission (UCC)

<table>
<tr><th>No.</th><th>Type of service</th><th>Application requirements</th><th>Licence fees</th></tr>
<tr><td>1.</td><td>Internet Access Service</td><td rowspan="3">a. Company Profile (to include certified photocopies of the Certificate of Registration or Incorporation of the company).
b. Business Plan (to include service description and objectives).
c. Technical applications (to include service technology, interfacing, equipment interface arrangements with licensed Telecom service provider in Uganda, network configuration, quality standards).</td><td>No. 1
Application processing fee US$340.00.
Annual licence fees US$2,000.00.
(NB. Being reviewed}</td></tr>
<tr><td>2.</td><td>2.4 GHz Wireless Spread Spectrum</td><td>No. 3
Application processing fee US$340.00.
Annual licence fees exempted.</td></tr>
<tr><td>3.</td><td>Internet Access and international Data Gateway</td><td>No. 4
Application processing fees US$340.00.
Annual licence fees US$4,000.00.</td></tr>
<tr><td>4.</td><td>Paging Services</td><td>a. Company Profile (to include certified photocopies of the Certificate of Registration or Incorporation of the company).
b. Business Plan (to include service description objectives).
c. Technical applications (to include services Technology, network configuration, equipment specification, quality standards, frequency plan and the network implementation schedule).</td><td>Application processing fee US$51.00.
Annual Licence fees US$300.00.
Frequency fee per transmitter per frequency:
US$30.00 for VHF</td></tr>
<tr><td>5.</td><td>Mobile Trunked Radio (MTR)</td><td>a. Company Profile (to include certified photocopies of the Certificate of Registration or Incorporation of the company).
b. Business Plan (to include service description and objectives).
c. Engineering brief to include MTR System configuration whose format shall give details on:
i. Equipment Technical Specifications giving the number of Radio Base Stations (RBS) and their locations.
ii. Frequency Plan in view of frequency Re-use. MTR network implementation</td><td>Application processing fee US$340.00.
Annual licence fee US$2,000.00.
Annual frequency fee per transmitter per frequency:
US$30.00 for VHF
US$340.00 for UHF</td></tr>
</table>

		network implementation schedule.	
6.	Customer Services and Internal Block Wiring	a. Company Profile (to include certified photocopies of the Certificate of Registration or Incorporation of the company). b. Business Plan (to include service description objectives, source of funding, article of association and memorandum of association). c. Technical applications (to include manpower and experience)	Application processing fee US$170.00. Annual Licence Fees US$1,000.00.
7.	Use of VSAT (Single user)	a. Company Profile (to include certified photocopies of the Certificate of Registration or Incorporation). b. Technical applications (to include equipment specifications and location, service technology and satellite capacity provider)	Annual licence fees US$2,000.00. Registration fee US$ 200.00 (payable once). Type approval fee US$ 20.00 (payable once).
8.	Satellite Earth Station (Multi-user)	a. Company Profile (to include certified photocopies of the Certificate of Registration or Incorporation of the company. b. Technical applications (to include equipment specifications and location, service technology and interfacing, equipment interface arrangements with licensed Telecom service provider in Uganda, quality standards and satellite capacity provider)	Annual licence fees US$10,000.00 Registration fee US$15,000.00 (payable once) Type approval fee US$ 20.00 (payable once)

Source: NCC, ITU