POSTAL AND TELECOMMUNICATION REGULATORY AUTHORITY OF ZIMBABWE

STAKEHOLDER CONSULTATION

PROPOSED NEW (CONVERGED) LICENSING FRAMEWORK FOR THE ICT SECTOR	
CONSULTATION COMMENCEMENT DATE	26 OCTOBER 2015
CONSULTATION CLOSING DATE	26 NOVEMBER 2015

Postal and Telecommunication Regulatory Authority of Zimbabwe (POTRAZ)
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PREFACE

Zimbabwe has taken great strides towards a knowledge-based information society. The liberalisation of the telecommunications industry, ushered in by the promulgation of the Postal and Telecommunications Act [Chapter 12:05] in 2000, helped the country leapfrog development in the telecommunication sector and achieving increasingly meaningful accessibility of telecommunication services throughout the country. This commendable achievement however needs to be bolstered with continuous review of the legal and regulatory frameworks in order to keep pace with technological developments and evolving consumer needs, tastes and expectations. Regular reviews are also vital in fostering a positive investment environment in keeping with the national thrust of making Zimbabwe a competitive destination for both domestic and foreign direct investment. The last review of the licensing framework for the ICT industry was done in 2009. The review ushered in Mobile Broadband (3G) and Voice over Internet Protocol (VoIP) among a raft of changes that were meant to engender growth and sustainability in the ICT sector.

The pervasive use of Information Communication Technologies (ICTs) is widely acclaimed as a cross-cutting enabler for achieving the three pillars of sustainable development which are *economic growth*, *environmental balance* and *social inclusion*. It is thus pertinent for POTRAZ to come up with a licensing framework that is in sync with technological developments and which spurs growth of the economy through attracting new investment, creation of new employment opportunities and opening up the postal and telecommunication sector for the participation of grassroots players.

In keeping with its values of transparency, responsiveness and predictability, POTRAZ wishes to consult on changes it proposes to make to the current Licensing Framework in order to accommodate recent advances in technology and changes in consumer needs, tastes and expectations.

An extensive international benchmarking exercise done by POTRAZ identified that the existing licensing regime falls short on flexibility; stifles innovation and is also not in line with current international practice. Furthermore, the existing framework which is service specific is restrictive in nature as it does not allow operators to take full advantage of the possible economies of scope that are exploitable under a Converged Licensing

Framework (CLF). In view of these findings, POTRAZ is proposing changes to the current licensing framework to cater for evolving consumer needs; the advent multimedia services (triple play and quad-play); Next Generation Networks (NGNs) and contemporary business models for the fast changing ICT sector.

Recognising the valuable role that can be played by stakeholders in the ICT sector, POTRAZ is inviting written input contributions and comments from stakeholders regarding the proposed introduction of a Converged Licensing Framework (CLF) meant to replace the current multi-service Licensing Framework. The consultation paper seeks to solicit the views of concerned stakeholders on licence categories, fees, and duration as well as modalities of the migration process.

Stakeholders wishing to respond to this consultation should do so in writing to the Director General, POTRAZ, on or before the closing date stated on the front cover of this document, or such other date as POTRAZ might publish on its website and in accordance with instructions given herein. Responses should be addressed to:

The Director General
POTRAZ
Block 'A' , Emerald Business Park, 30 The Chase
Box MP 843
Mt Pleasant
Harare

Responses provided electronically should be in Microsoft Word or Adobe PDF format and must be accompanied by the full contacts details (contact name, email address and phone and fax numbers) of the respondent.

Responses may be sent via email to:

CLF @potraz.gov.zw

Respondents are advised that it will be the general intention of POTRAZ to publish in full the responses received to this consultation. However, POTRAZ recognises that

certain responses may include commercially sensitive and confidential information, which the respondent may not wish to see published. In the event that a response contains confidential information, it shall be the responsibility of the respondent to clearly mark any information that is considered to be of a confidential nature and advise the Authority as appropriate.

It should be noted that none of the ideas expressed or comments made in this consultation will necessarily result in formal decisions by the POTRAZ and nothing contained herein shall limit or otherwise restrict POTRAZ's powers to regulate the telecommunications sector at any time.

1 INTRODUCTION

1.1. Technological Developments

While a decade ago it was far more likely that consumers would have different service providers and different equipment for their landline phone, mobile phone, Internet and data services, the situation has dramatically changed over the past few years. Technological changes and advancements now enable the delivery of multimedia services that is voice, data, and video on one network platform with the user receiving all the services on a single converged device such as smartphone, laptop, iPad, etc. It is now a well-established fact that advent of IP-based transmission and core-network platforms has ushered in an era of convergence in which the end-to-end value chain is capable of handling multimedia services.

1.2. Convergence defined.

A comprehensive definition of Convergence is given in the ITU publication *"Trends in Telecommunications Reform - 2004-05: Ch 5: licensing approaches in an era of convergence" (ITU; 2004).* In the above mentioned ITU document, it is pointed out that convergence can either be:

- Integration of customer end terminal equipment/access devices such as the telephone, television and personal computer.
- Provision of various communication services like text, data, image, multimedia and video over the existing infrastructure or over a single transmission medium.
- Capability of the same technology to offer various services.
- Different services under converged licensing regime.
- Fixed – mobile substitution/convergence.

Question 1: Do you agree with the definitions of convergence stated above? If not, please give reasons. Suggestions are also welcome.

2. BACKGROUND

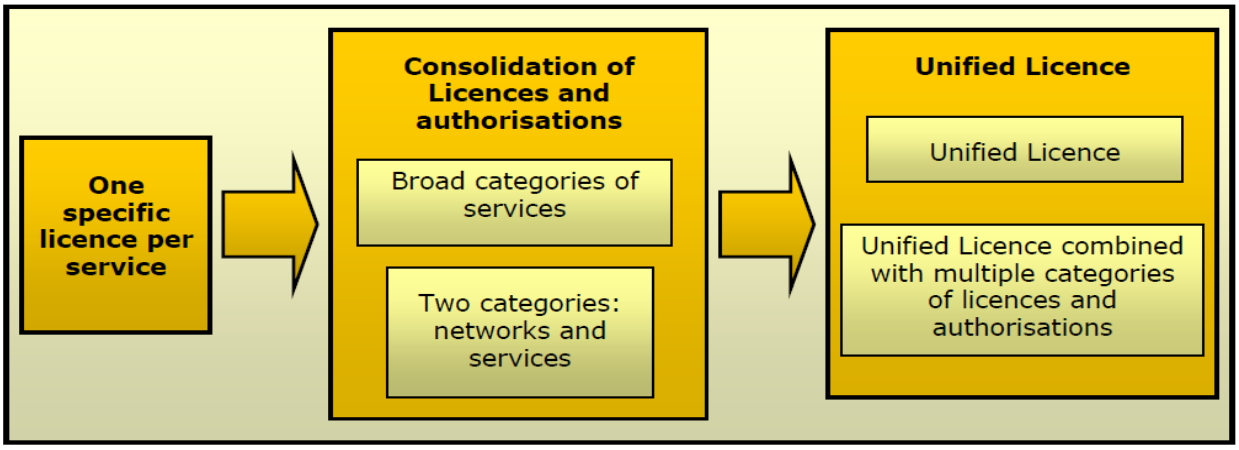
2.1. International Trends

The past decade has witnessed phenomenal growth of telecommunications accompanied by significant reviews in the licensing frameworks applied in various

administrations across the Globe. The reviews have essentially been driven by technological developments, evolving consumer needs, long-term sustainability of telecommunications service providers and optimum utilisation of scarce resources.

Different nations and institutions are adapting their policies, regulations, and institutional frameworks to keep pace with an increasingly converging communications sector.

The International Telecommunications Union - Development Sector (ITU-D) identified the need for service and technology neutral licensing and tasked its Study Group 1 (SG1) to prepare a simplified roadmap to assist regulatory authorities with convergence and the transition to the next generation network (NGN) environment. Below is the ITU roadmap that has been universally accepted and adopted by most administrations within the ITU family of nations:



Migration pathway: *Source ITU*

The roadmap comprises three stages, the first being one specific-licence per service, the second being the consolidation of closely related service-based licence categories with the final stage being that of technology and service neutral licences (unified licence). Zimbabwe moved from stage one to stage two in 2009 and is now ready to move to the final stage (unified licensing).

Trends in Tanzania, Nigeria, Malaysia, India, Zambia, Kenya, among others confirmed that most developing countries have adopted the ITU roadmap. Mature markets such as USA, Japan, France, UK are already at the last stage of the ITU roadmap and they are now implementing light touch regulation.

Table 1 below summarises the various licensing frameworks implemented across the Globe.

REGION/COUNTRY	LICENSING FRAMEWORK
EU	Simple Authorisation Regime
Singapore	Facility Based and Service based Licensing:
Malaysian	Converged Licensing framework
Hong-Kong	Converged licensing regime
Argentina	Single License Regime
United States of America	No licence requirement; blanket grant of authority
Japan	Simple Registration/Notification
Australia	Carrier license and carriage service providers
India	Converged Licensing
Kenya	Converged Licensing
Nigeria	Converged Licensing
Uganda	Converged Licensing
Tanzania	Converged Licensing
SADC	SADC Policy Framework on Convergence (Draft – Awaits ministerial approval). The draft Policy advocates for Converged licensing.

A converged or unified licensing regime allows licensed operators to offer multimedia services, adapt to technological developments and track changing consumer

preferences without having to overcome administrative barriers imposed by the now obsolete technology/service specific licensing regime.

Below are the typical convergence scenarios that are driving dramatic changes in the telecommunication market structure globally.

Fixed-Mobile Convergence (FMC): This refers to the coming together of the previously distinct Fixed and Mobile services. The development of wireless technologies, in particular the introduction of International Mobile Telecommunications (IMT) in 2000, has made it possible for Mobile Networks to provide mobile broadband services at speeds and quality similar to those of fixed networks. The advent of these technologies has thus obliterated the distinction between Mobile and Fixed services. A sustainable response to this seemingly disruptive development has always been a review of the legacy licensing regimes to allow for flexibility and integration on the part of operators. One of the most visible outcomes of Fixed-Mobile Convergence (FMC) is its convenience and simplicity for consumers and business users, giving them highly featured, lower cost communications. In Zimbabwe Mobile Broadband is offered by a number of licensed Public Network Operators using Third Generation Mobile technologies (3G), LTE, WiMAX among others.
Voice/Data convergence: Digitalisation of the transmission segment, the mainstreaming of Internet Protocol (IP) and computerisation of consumer devices has led to the obliteration of the hitherto distinction between data and voice services.
Device Convergence: today's user devices such as smartphones, iPads, Laptop etc are capable of receiving and transmitting voice, video and data while on the move. That is the essence of Device Convergence
Access Network Convergence (3G, WIMAX, LTE, WIFI): The access network, whether wireline or wireless is capable of carrying voice, video and data.
Core Network convergence (All IP): Today's core network is predominantly all IP and is therefore capable of processing triple play or quadruple play in a manner transparent to the user.

3. STATUS OF LICENSING REGIME IN ZIMBABWE

3.1. The Legal Framework

Licensing of telecommunication services is provided for under Part VI of the Postal and Telecommunications Act [Chapter 12:05] as read with S.I 11A and 262 of 2001, as amended. In terms of the current licensing framework, Licensees are authorised to provide both infrastructure and the licensed services.

The current legal framework provides for licensing of multi-services and infrastructure in terms of Sections 31 and 34 of the Act. Section 37 provides for an option to licence either services only or infrastructure only or to combine both services and infrastructure. The need for amendment of the Act to remove the service specific classification of licences and provide for converged licensing is inevitable.

3.2. The Old Scenario

Pursuant to the aforementioned mandate the Government established a licensing framework that took into account technological and market conditions and anticipated future developments at the time. The adopted licensing framework was service specific and in some instances went further to prescribe the technology to be deployed (e.g. GSM900). The market and technological conditions at the time were suitable for service specific licensing.

The following licenses were issued under the framework:

- **Public Fixed Telecommunication Service** – the licensee was authorised to offer plain ordinary telephone services. Even if the equipment could offer a host of services, the licensee was restricted to fixed telephony only.
- **Public Mobile Cellular Telecommunication Service** – the licensee(s) was authorised to offer Mobile Telephony by means of Global System for Mobile (GSM) communications only.
- **Public Data Network Services** – the licensee(s) was authorised to offer point-to-point or point-to-multipoint data connectivity for individual citizens and organisations. The licensee was not allowed to carry voice traffic.

- **Internet Access Provider (IAP) Class 'A'** (which allows VoIP) – the licensee(s) was authorised to offer internet infrastructure and connectivity, and was also allowed to carry voice. The licensee was, however, restricted to Internet Protocol (IP) traffic only.
- **Internet Access Provider (IAP) Class 'B'** (which does not allow VoIP). Similar to IAP class 'A' with the exception of VoIP.

3.3. The Current Scenario

Zimbabwe adopted the ITU convergence roadmap In 2009, by consolidating closely related service- based licences as follows:

- **Public Data and Internet Service Licence:** Merged the Public Data Network Licence and the Internet access Provider Class B licence.
- **Internet Access Provider Class 'A' Licence:** Authorised the provision of Internet Access Services. Licensed services include the provision of Voice Over Internet Protocol (VoIP)
- **Public Cellular Mobile Licence:** Widened the scope of Public Mobile Cellular Telecommunication licence to include Mobile Broadband services provided by means of Third Generation Mobile Technologies (3G).
- **Integrated Public Fixed and Mobile Network Services Licence:** Widened the scope of Public Fixed Telecommunication Service licence to include mobility.

The purpose of the interim arrangement was to provide Government with time to study the situation and come up with an appropriate Framework and implementation strategy The measure to extend the scope of existing service specific licence categories was only interim as it could only partially resolve some of the challenges identified under the service specific licence categories.

Question 2: Do you agree with the above overview of the telecommunications legal framework in Zimbabwe? If not give reasons to prove otherwise.

4. STATEMENT OF THE PROBLEM

The current scenario where we still have service-specific licensing is no longer sustainable in a converged environment. The current licensing framework has been rendered obsolete in addressing the market conditions and market definitions emerging due technological innovations. Traditional market boundaries are increasingly getting blurred. Multiple services can now be offered over a single platform opening up opportunities for operators to exploit economies of scope and scale to offer services at lower costs. All this can be achieved through a single licence. From a service provider's perspective, this means that service specific licences are no longer sustainable as they hamper their ability to take advantage of efficiencies engendered by technological innovation and to respond to consumer demand. This state of affairs has resulted in some service providers finding loopholes to extend the scope of their licences beyond the stipulated scope or resort to litigation in order to force the regulator to include certain provisions and flexibilities in their respective licences.

In view of these unfolding developments, it has become pertinent for Zimbabwe to review the current licensing regime in order to adapt to the changing technological environment, allow operators and consumers to leverage on global economies of scale and promote convergent technologies.

Question 3: Do you agree with the above-stated problems of a service-specific licensing regime and the Authority`s view on the need to review the current licensing regime? If not please provide detailed reasons.

5. OBJECTIVES OF THE REVIEW

The major objectives of the new licensing framework include the following;

- To create a framework which is future proof (relevant for the next 20 years at least) and allows the sector to embrace the benefits offered by cutting edge technologies such as next generation networks (NGNs);
- To ensure a strong sector growth anchored on innovation, fair competition, affordability and good quality of services;

- To encourage free growth of new applications and services leveraging on the technological developments in the Information and Communication Technology (ICT) area;
- To simplify licensing and enforcement procedures in the telecommunications sector;
- To ensure flexibility and efficient utilisation of Spectrum and Numbering resources taking into account technological developments in the sector and the need to maintain a level playing field.

Question 4: Do you agree with the above stated objectives of the new licensing framework? If not please provide reasons or any additional objectives that need to be included.

6. PROPOSED ROADMAP FOR CONVERGED LICENSING FRAMEWORK

In keeping with the ITU roadmap and in line with international best practice, **Converged Licensing** which is technology and service neutral is recommended for Zimbabwe. The adoption of the new licensing framework would be done through the promulgation of new Licensing Regulations using section 99 of the Postal and Telecommunications Act Chapter 12:05.

The proposed framework has four license categories as follows:

6.1. Network Facilities Licence (NFL)

This licence authorises construction, installation, ownership and control of communication infrastructure comprising types as prescribed from time to time. Such infrastructure may include Optic Fibre Links, Radio Site, Towers, poles, ducts and pits used in conjunction with other network facilities.

6.2. Network Services Licence (NSL)

This licence gives authorization to operate communication networks in order to deliver services, including but not limited to, bandwidth services, cellular mobile services, access applications services, space segment services, internet service provision, payphone services, Public Switched Telecommunication Network (PSTN) services, Public cellular services, Internet Protocol (IP) telephony, and Public data service.

The licensees shall be obliged to facilitate interoperability and compatibility with other networks including interconnection. Licensees will also be obliged to provide essential and emergency services free of charge. These include emergency, operator assistance, customer assistance, crime stoppers, child helpline, health help line, fire services, ambulance, anti-corruption; human safety & life among others.

6.3. Application Services licence

The Application Services Licence shall allow the provision of electronic communication services to end-users such as Internet services, VoIP, messaging services, video conferences, payphone mobile money among others. Under the same licence, a licensee can offer as many application services as he/she can at no additional licence

fees. The Application Service Licence shall be issued as an Individual Licence or a Class Licence as follows:

6.3.1. Application Services licence Category A: caters for Application Service Licensees who are also licensed to offer network services at national or international level. The licence duration is 10 years for category A which will be issued as an Individual Licence with a scope to operate at international and national levels.

6.3.2. Application Services Class licence category B: This will be an electronic communication licence entitling the holder who neither owns any network facilities nor operates any telecommunications network but leases capacity to provide one or more application services. Examples are internet services providers (ISPs), Mobile Virtual Network Operator (MVNO), Fixed Virtual Network Operator (FVNO), Value Added Services providers. The duration for this licence will be 5 years.

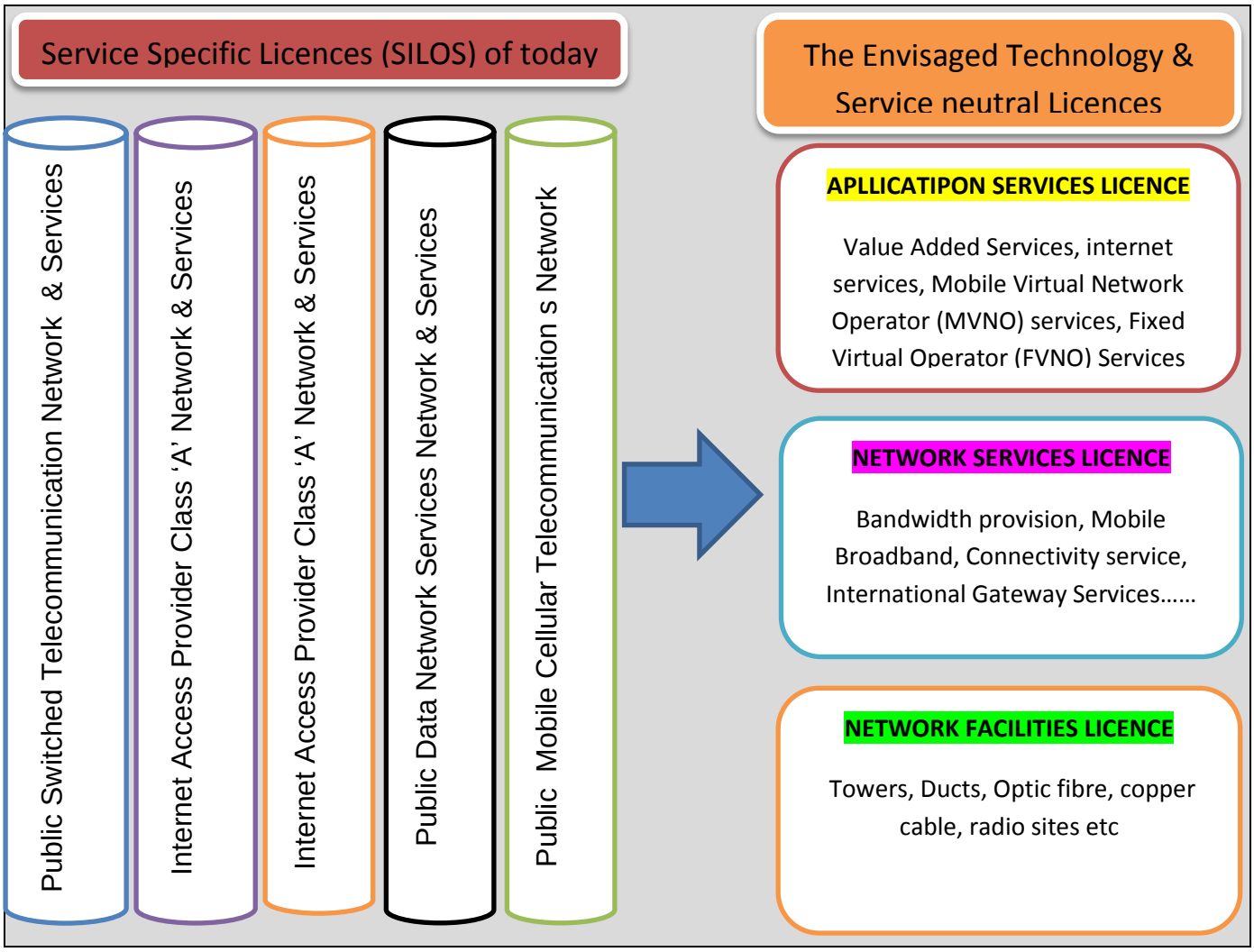
6.4. UNIFIED LICENCE

The new licensing framework shall also provide for a Unified Licence which combines the Network Facilities Licence, the Network Services Licence and the Application Services into one. This means that licensees under this category are allowed to construct, install, own and maintain network facilities and also provide network and application services under the same licence. Unified Licences will be valid for 20 years.

6.5. International Gateway(s) Licence

Allows for the establishment and operation of international switches/gateways and international transmission facilities for purposes of aggregating and distributing incoming and outgoing international voice and data traffic. Transmission facilities may include, *inter alia,* microwave radio, satellite and optic fibre communication links.

The following schematic maps the current licences into the envisage Converged Licensing Framework.



Schematic 1: Mapping the SILOS into the converged Framework

6.6. MARKET SEGMENTATION

The above mentioned main licence categories are further categorized per market segments as follows:

- International Market Segment
- National Market Segment

6.7. Regional Market Segment Spectrum Licence

The licence authorises a service provider to access spectrum in a specified band, for a specific period, under specified terms and condition as may be prescribed from time to time.

6.8. CLASS LICENCES

Class licences will be issued to persons who undertake the following activities:

- Construction, installation and maintenance of electronic communication equipment.
- Distribution of electronic communication equipment licence at wholesale level.
- Importation of electronic communication equipment.
- Selling of electronic communication equipment.
- Provision of courier services.

6.9. The above Class Licences are to be further segmented into national, regional and district licences. Licensees involved in distribution, importation and selling of electronic communication equipment are to be subjected to the following conditions:

- Importers are required to bring into the country genuine products.
- Products must have a warranty of minimum 12 months (1 year).
- Sellers of Radio calls must ensure customers are already assigned frequency by the Authority.

Question 5:

a) **Do you agree with the Authority`s recommendation for a converged licensing framework for Zimbabwe`s telecommunications sector? If not please provide reasons.**

b) **Do you agree with the license categories of the proposed framework as stated above? If not please provide reasons.**

7.0 MIGRATION PLAN

The proposed changes to the licensing framework are expected to come into effect when the incumbent licences are at various stages in their tenure. Cognisant of the need to ensure a seamless migration to the new framework, a Migration Plan is proposed as follows:

7.1. Recently Renewed licences

The recently renewed cellular mobile licences will be converted to unified licences. The fees paid by the affected licensees will be apportioned between spectrum and licence fees accordingly. The apportionment of fees will be done in terms of tables 1 and 3 which shall be prescribed in a government gazette

7.2. Licences that are about to expire:

Licensed Public Network operators whose licences are about to expire will be required to migrate to the new licensing framework at the time of expiration of their respective licences. They will have the option to choose the licence class(es) under which they would want to operate subject to their capacity to pay the required fees.

7.3. Licences with more than a Year to expiration:

Licensed Public Network operators with licences with a residual term will have the option to continue under the existing licence or migrate to the new licensing framework on condition they pay the requisite fees for the new licence(s). The licence fees for the remaining tenure of the existing license will be credited towards the initial licence fees using a formula to be determined by the Authority.

7.4. New Entrants

New entrants will be licensed under the converged licensing framework.

Question 6: Do you agree with the proposed migration plan as stated above? If not in agreement please provide reasons.

7.5. Licence Fee Structure

7.5.1 Annual Fees

The following annual fees shall be applicable to all licensed public operators:

(a) Annual Spectrum Usage Fees (as prescribed by the Authority)

(b) Number Usage Fees (as prescribed by the Authority)

(c) Annual Licence Fees (2% of Adjusted Annual Gross Turnover)

(d) A contribution to the Universal Service Fund of 1.5% which is collectible from consumers by licensees on behalf of the Universal Service Fund Trustees and is calculated as an equivalent percentage of licensees' Adjusted Annual Gross Turnover.

7.5.2. Initial Licence Fees

The initial licence fees will comprise the following:

1. Authorization (Initial licence) fees
2. Spectrum Access Fees (SAF) (where applicable, as calculated using table 4 below)

Question 11: Do you agree with the proposed components of licence fees for all licensed public operators as stated above? If not please provide reasons.

Table 1. NETWORK FACILITIES SERVICES

Category	Scope	Application Fee (USD)	Initial licence (Authorization)Fee (USD)	Annual licence Fee(USD)	Duration of Licence (Years)
NFS1/ National & International	i. *Jurisdiction:* National ii. *Services:* Allows the construction, ownership and renting out of passive telecommunication infrastructure such as: • Dark optical fibre cables • Copper cables • Coaxial cables • Towers and associated site equipment • Ducting and associated civil works • Radio sites, equipment housing and commercial power, access roads, etc.	1,000		2% of Annual Gross turnover	20
NFS 2/	i. *Jurisdiction:* Local (Provinces; Municipalities, Districts, Wards, Villages etc) ii. *Services:* as above	500	Pro- rated based on population density	AF	20

Question 7: Do you agree with the proposed license fee structure for a Network Facilities Service License (Infrastructure license) as stated above? If not please provide reasons.

Table 2: Network Services Licence

Market Segment	Scope	Application Fee (USD)	Initial licence /Authorisation Fees (AF) (USD)	Annual licence Fee (USD)	Duration of Licence (Years)
International	i. *Jurisdiction:* National with International connectivity facilities ii. *Services:* Allows the establishment and operation of active telecommunication infrastructure such as: • Base stations/Node B/eNodeB • Transmission equipment (microwave, satellite, optic fibre, copper, etc.) • International links or gateways • Core network including Circuit Switched and IP core. Connectivity Access Network including IP-CAN	1,000	AF + SAF	2% of annual gross turnover	20
National	*i.* *Jurisdiction:* National ii. *Services:* As above but without international gateway facilities or links.	1,000		2% of AGT	20
Local	i. *Jurisdiction:* National ii. *Services:* Local (Provinces; Municipalities, Districts, Wards, Villages etc)	1,000		2%of AGT	10

Question 8: Do you agree with the proposed license fees for a Network Services License as stated above? If not please provide reasons.

Table 3 : Application Services Licence

	Scope	Application Fee (USD)	Initial licence/Authorisation Fees (AF) (USD)	Annual licence Fee (USD)	Duration of Licence (Years)
Category A	i. *Jurisdiction:* National ii. *services:* Allows the provision of end user Telecommunication services including value added services such as: • Virtual Network Operation (mobile, broadband, etc.) • Value Added Service Provision (e.g., SMS Aggregation, SMS Gateway Operation, • Pay Phone Services, • Internet Telephone (VoIP), • Messaging Services, • Tracking Services, etc.	2,500		2% of Annual Gross turnover	10
Category B	i. *Jurisdiction:* National, Local (Provinces; Municipalities, Districts, Wards, Villages etc.) ii. *Services:* As above	250		2% of annual Gross turnover	5

Question 9: Do you agree with the proposed license fees for the two categories of Application Services License as stated above? If not please provide reasons.

Table 4: Spectrum Access

Spectrum Band	Total available	Typical Spectrum block	Price	Number of Blocks
700 MHz	30MHz (FDD)	5MHz (FDD)	TBA	6
800 MHz	30 MHz (FDD)	5 MHz (FDD)	TBA	6
900 MHz	35 MHz (FDD)	8 MHz (FDD)	TBA	4
1800 MHz	75 MHz (TDD)	25 MHz (TDD)	TBA	3
2100 MHz	60 MHz (FDD)	15 MHz (FDD)	TBA	4
2300 MHz	100 MHz (TDD)	20 MHz (TDD)	TBA	5
2500 MHz	70 MHz (FDD)	20MHz (FDD)	TBA	3
	50 MHz (TDD)	20MHz (TDD)	TBA	2
3500 MHz	200MHz	TBA	TBA	

Question 10: Do you agree with the proposed structure for spectrum access fees as above? If not please provide reasons.