Inspiring development

RWANDA
UTILITIES
REGULATORY
AUTHORITY

ICT

TRANSPORT

WATER & SANITATION

ENERGY

ANNUAL REPORT
2012 - 2013

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ABBREVIATIONS

3G/LTE	Third Generation/Long Term Evolution
ADS	Australian Development Scholarship
AFUR	African Forum for Utility Regulators
ATAK	Airport Taxi Drivers of Kigali
ATU	African Telecommunications Union
BBC	British Broadcasting Corporation
BSC	Broadband System Corporation
CA	Certification Authority
ccLTD	country Code Top-level Domain
CDMA	Code Division Multiple Access
CDR	Call Drop Rate
CHUK	University Central Hospital of Kigali
COCTAKI	Cooperative des Chauffeurs de Taxi voiture
CODACE	Cooperative de Developpement des Anciens Chauffeurs de l'Etat
CoK	City of Kigali
COKITA	Cooperative Kisimenti taximen-voitures
COMESA	Common Market for Eastern and Southern Africa
COOCHATAVORU	Cooperative de Chauffeurs de Taxi voiture de Rusizi
COTAHAMA	Cooperative des taxi men de l'Hôtel Amahoro
COTAMOGI	Cooperative de Taxi Moto de Gikondo
COTAVOKA	Cooperative de Taxi Men-Voitures-Kacyiru
COTIMIN	Cooperative Taxi Moto Intiganda Nyagatare
COTVK	Cooperative pour Taxi Voiture de Kigali
CREPA	Centre Régional pour l'Eau Potable et l'Assainissement
CSSR	Call Setup Success Rate
CST	Call Setup Time
CTVRB	Cooperative des Taxi-men Voiture Rusizi – Bugarama
DG	Director General
DRC	Democratic Republic of Congo
DW	Deutsche Welle
EAC	East African Community
EAC	East African Community
EACO	East African Communications Organisation
EAPP	Eastern Africa Power Pool
ECA	Economic Consulting Associates
EDPRS	Economic Development and Poverty Reduction Strategy
E-GSM	Extended GSM
EMF	Electromagnetic Field
Eng.	Engineer
EREA	Energy Regulators Association of East Africa+
ERF	Enterprise Rutagarama Fidele
ESAWAS	Eastern and Southern Africa Water and Sanitation Regulators Association
ESI	Electricity Supply Industry
ESI	Electricity Supply Industry
EWSA	Energy, Water and Sanitation Authority
EWURA	Energy and Water Utilities Regulatory Authority
FM	Frequency Modulation
Gbps	Gigabits per Second

GDP	Gross Domestic Product
GHz	Gigahertz
GoR	Government of Rwanda
GSM	Global System for Mobile
HF	High Frequency
HPP	Hydro power Plant
ICANN	Internet Corporation for Assigned Names and Numbers
ICT	Information and Communications Technology
ID	Identity
IGTVS	International Gateway Traffic Verification System
IPPs	Independent Power Producer
IPv	Internet Protocol version
ISP	Internet service provider
ISPC	International Signal Point Code
ITU	International Telecommunication Union
KFH	King Faisal Hospital
KHz	Kilohertz
KPI	Key Public Infrastructure
KW	Kilowatt
LPG	Liquefied Petroleum Gas
Ltd	Limited
Maj.	Major
Mbps	Megabit per second
MINAFET	Ministry of Foreign Affairs and Cooperation - Rwanda
MINALOC	Ministry of Local Government - Rwanda
MINEDUC	Ministry of Education - Rwanda
MoU	Memorandum of Understanding
MPs	Management Prescriptions
MTN	Mobile Telecommunication Network
MW	Megawatt
MYICT	Ministry of Youth and ICT - Rwanda
NIDA	National ID Project - Rwanda
NISR	National Institute of Statistics
ORINFOR	Rwanda Information Office
OUR	Office of Utilities Regulation
PABX	Private Automated Branch Exchange
PGD	Post Graduate Degree
PM	Prime Minister
PPA	Power Purchase Agreement
PPP	Public-Private- Partnership
Qos	Quality of Service
RBA	Rwanda Broadcasting Agency
RBC	Rwanda Biomedical Center
RCIP	Regional Communications Infrastructure Program
RDB	Rwanda Development Board
REC	Rwanda Energy Company
REFIT	Renewable Energy Feed-In-Tariff
RFI	Radio France Internationale
RINEX	Rwanda Internet Exchange
RS	Rwanda Standard
RUB	Rwanda Union of Blinds
RURA	Rwanda Utilities Regulatory Authority

RwEdNet	Rwanda Education Network
Rwf	Rwandan Francs
SARL	Société à Responsabilité Limitée
SIM	Subscriber Identity Module
SME	Small and Medium Enterprise
SMMS	Spectrum Monitoring and Management System
Solar PV	Solar Photovoltaic
SP	Société Petrolière
SUMATRA	Surface and Marine Transport Regulatory Authority
SWH	Solar Water Heater
UAF	Universal Access Fund
UAFE	Universal Access Fund for Electricity
USA	United States of America
USAID	U.S. Agency for International Development
VAT	Value added tax
VHF	Very High Frequency
VHF	Very high frequency
VSAT	Very Small Aperture Terminal
WCDMA	Wideband Code Division Multiple Access
WDA	Workforce Development Authority
WiMax	Worldwide Interoperability for Microwave Access
WRC	World Radio Communication Conference
WSIS	World Summit on the Information Society
WSREB	Water Services Regulatory Authority

Acknowledgement

The Rwanda Utilities Regulatory Authority recognizes and appreciates the hard work that went into developing this Annual Report. The Management and the Regulatory Board therefore wish to thank the following individuals for their devotion, dedication and professionalism in developing this Annual Report.

Eng. Alfred Byigero - Chairman

Mr. Justin Nizeyumukiza – Vice Chairman

Mrs. Consolée Umulisa

Mr. Deo Muvunyi

Ms. Yvonne Umutoni

Mr. Aaron Ndizeye

Mrs. Annick Muhama

THE REGULATORY BOARD

Activities included in this report have been championed by the following Regulatory Board Members

Mr. Kazige Eugene
Chairman

Mr. Bagamba Innocent Muhizi
Vice-Chairperson

Ms. Umutoni Gatsinzi Nadine
Member

Dr. Twagira Elias
Member

Mr. Sarabwe Pierre Damien
Member

Ms. Kente Liliane Sandra
Member

Mr. Sudadi Senganda Kayitana
Member

THE REGULATORY BOARD PROFILES

Kazige Eugene

KAZIGE Eugene is the Vice Rector in Charge of Administration and Finances of Kigali Health Institute, He holds a Master in Economics (with Specialization in Industrial economic) from the Tashkent State University of Economics (Uzbekistan Republic- Ex U.R.S.S). He was appointed by the Cabinet as the Chairman of the Regulatory Board of RURA in April 1, 2010

Mr. Bagamba Innocent Muhizi

Innocent Bagamba Muhizi is a Technology and Business Executive with 10 years of industry experience both in the Public and Private sector. He has enormous skills and capabilities in managing and delivering business strategies under complex corporate change environments. He is currently Head of IT & Transactional Banking Services at Banque Commerciale du Rwanda where he has been employed since January 2008. Innocent Was the Vice Chairperson of the outgoing (2010-2013) RURA regulatory Board

Innocent holds a Master's and (Hon) Degrees in IT and Informatics respectively from the University of Pretoria, South Africa. He is also a Graduate of La Roche College, in Pittsburgh PA, USA where he obtained double degrees; BSc. Computer Information Systems and BSc. Business Management.

Umutoni Gatsinzi Nadine

Mrs UMUTONI Gatsinzi Nadine was appointed in April 2010 as a member of RURA Regulatory Board. Since March 2012, she is also the Head of Corporate Services and Special Programs in Rwanda Governance Board (RGB). She holds a Master's Degree in Public Law and Good Governance from Utrecht University (The Netherlands). Previously she was a Lecturer at National University of Rwanda in the Faculty of Law and Coordinator of NUR Master's Program in Business Law.

Dr. Twagira Mathaniya Elias

Dr. Twagira is the transport infrastructure professional and former Director General of Rwanda Transport Develeopment Agency (RTDA). He holds a PhD and Master's in Transportation Engineering from the University of Stellenbosch in South Africa and Bachor's Degree in Civil Engineering from University of Dar es Salaam, Tanzania. He joined RURA in June 2011.

Kente Liliane Sandra

Eng. Kente Liliane is a board member of the Rwanda Utilities Regulatory Board since 2009. She is currently a private consultant and she mainly intervene in the design, implementation and follow up of projects related to water, wastewater and Environmental related issues; either for government or international organization. Prior to this she was the Vice Dean, Faculty of Engineering and a Lecturer in the Civil and Environmental Technology department at Kigali Institute of Science and Technology (KIST).

Eng. Kente Liliane Sandra obtained her Bachelor's Degree in Civil Engineering and Environmental Technology at KIST and her Master's degree in Sanitary Engineering at UNESCO IHE in 2004 and 2007 respectively.

Sudadi Senganda Kayitana

Sudadi is a practicing Accountant with wide experience in Finance and Audit. He is currently General Manager of Inyange, a leading beverage company in Rwanda. He has served in the Public and Private sector, and the international community organisations including UNDP. Sudadi also serves as a director on the Regulatory Board of Rwanda Utility Regulatory Agency (RURA) and RwandaAir. He is a member of the Governing Council of the Institute of Certified Public Accountants of Rwanda (ICPAR)

FOREWORD

The Law No 09/2013 of 01/03/2013 establishing the Rwanda Utilities Regulatory Authority and determining its functions, powers and organization, gives it an obligation to report to the public about the status of the Authority's achievements for each year. It is in this framework that I take this opportunity to present to you on behalf of the Regulatory Board, the Authority's annual report for the fiscal year 2012-2013.

The Rwanda Utilities Regulatory Authority has a mandate to regulate certain public utilities by building an environment that promotes fair competition and quality of public utility service in a transparent, independent and reliable manner.

The year 2012/2013 was characterized by a number of emerging issues across the regulated sectors. To better address these issues, a comprehensive Authority's strategic plan was prepared, discussed, adopted and implemented. The plan enabled the Authority to align the regulated utilities in relation to its mission, vision, values and strategic orientations.

During the year under review, the Telecom sector recorded tremendous developments by issuing a good number of radio communication licenses and approving the cancellation of others as shall be depicted in the following pages of this report. In a bid to protect the public from poor services, the companies that did not comply with their license obligations were warned and in cases of persistent sub-standard services, enforcement notices were issued to them.

In order to facilitate the telecom service providers to give quality services as well as catering for the security of telephone users, RURA issued the regulations governing the quality of service of cellular mobile and fixed network services and launched the much need SIM card registration exercise that kicked off in February, 2013.

Furthermore, in order to ensure that Rwanda's education system gets access to high speed connectivity and links to other education and research institutions in the Eastern and Southern Africa region, RURA through the Universal Access Fund has funded different initiatives aimed at promoting ICT usage in Rwanda's education system.

In energy sector, the year under review was characterized by significant efforts to uplift service delivery, search ways of improving production capacity, expanding and rehabilitating transmission and distribution networks. To effectively manage safety in electrical networks, the Regulatory Authority stepped forward and adopted the Electricity Safety Regulations.

More so, in order to achieve an efficient, effective, sustainable and orderly development and operations of electricity supply in Rwanda, there was a need to have a comprehensible licensing framework in energy sector. It is in this line that during the year under review, regulations governing the whole value chain of electricity industry ware initiated.

In Water and Sanitation sector, a need for the public to enjoy at least minimum required service level of water provision was felt. Consequently, regulations setting the basis on which the Quality of Service in the subsector shall be assessed were established to ensure that the Quality of Service is guaranteed.

Pertaining to the road transport sub-sector regulation, the fiscal year 2012/2013 was characterized by a number of initiatives aimed at improving transport services countrywide. The initiatives included decentralizing the authorization services, computerizing the transport licensing system, monitoring the commercial transport operators' compliance with regulations as well as taking part in the elaboration of Rwanda's Public Transport Policy and Strategy which was later adopted by the Cabinet of 10th October 2012.

In waterways regulation, during the financial year 2012/2013, ninety five (95) operators were licensed and one hundred and fourteen (114) boats were registered out of 142 boats numbered during the boats inventory exercise of October, 2011. In addition, monitoring and site visits were performed on lake Kivu, Cyohoha Sud, Muhazi, Mugesera, Burera and Rohondo.

Regarding the Authority's staff capacity, RURA trained a number of its staff to equip them with required skills to steadfastly carry out their mandate with full knowledge and capacity. RURA also participated in several National, Regional and International meetings and forums, which have kept it at a breast of new development in the regulation of public utilities.

Allow me to crown it all by extending my sincere gratitude to all outgoing and incoming members of the Regulatory Board, the Director General and the entire management and staff of RURA for tireless efforts that they portrayed to have the planned activities for the year 2012/2013 achieved at a very good overall performance above 85%. My appreciation also goes to the Government of Rwanda, stakeholders and the general public for their continued support rendered throughout the fiscal year 2012/2013.

Thank you!

Eugene KAZIGE

Chairperson of the Regulatory Board

EXECUTIVE SUMMARY

The adoption of the revised RURA Law No 09/2013 of 1/3/2013 has been one of the key milestones in utilities regulation in Rwanda. This Law that came into force in March 2013 brought clarification to many operational aspects and broadened the mandate of RURA as the multi-sector Regulatory institution. This Law further paved a path to the elaboration of the long awaited five year strategic plan of the Authority which in return was adopted in June 2013. Based on the new mandate of RURA, the adopted strategic plan clarified the Authority's role and responsibility as a multi-sector utilities regulator and highlighted strategic goals and objectives for the forthcoming five years.

The year under review has also been marked by rewarding dedicated effort to strengthen ties with international partners; on the 13th May 2013 among more 64 countries, Rwanda received an award from WSIS Project Prizes 2013 organized by International Telecommunication Union (ITU) where the Africa Digital Media Academy was voted as the best project in media category. At the same event, the report submitted by RURA on implementation of the 11 points agenda of the WSIS action plan won the first place conferring to Rwanda the first award to have submitted a comprehensive report on the same.

Apart from the above recognition awards, RURA continued to play an important role in regional regulatory associations/ forums and actively contributed to the development of utility regulation in the region and abroad. It equally supported the knowledge and learning exchange initiatives.

On the Social Responsibility side, RURA was not left behind; it organized a mourning event for all staff to commemorate the 19th Genocide against Tutsi. In the same view, RURA staff built one house for genocide survivor at RUKUMBERI-NGOMA District and provided preliminary necessities to five (5) identified poor genocide survivors at the same location.

Capacity building initiatives were given due consideration because we believe that the targeted high quality standards service delivery will be based on well trained and equipped staff. In this regard 4 employees were facilitated to acquire post graduate degrees in the field of their activities, 15 were facilitated to follow short term training programs, and 10 went for benchmarking and study tours in the region and beyond.

As for sector achievements are concerned, the ICT sector continued to be the most vibrant sector among the four regulated sectors. Few among many achievements registered in this year include the enactment of two crucial laws; The Media Law N°02/2013 enacted in February 2013 and the Law N° 09/2013 of 01/03/2013 which gives RURA the mandate to regulate, among others, broadcasting, convergence of electronic technologies and postal services. With the already existing sector laws, namely the law N° 44/2001 of 30/11/2001 governing telecommunications and the Law N° 18/2010 of 12/05/2010 relating to Electronic messages, electronic signatures and electronic transactions, it is expected that the regulatory operations and operators' performance in this sector will be geared to another level of momentum. The ICT Bill is however still awaiting the parliament approval.

The repatriation of ccTLD (.rw) was another registered great achievement by the Authority. After several negotiations on the level of Internet Corporation for Assigned Names and Numbers (ICANN), the country Top Domain Name was eventually repatriated and the management of its registry was assigned to Rwanda Information and Communication Technology Association (RICTA).

Different regulatory mechanisms put in place to eliminate the anti-competitive behavior on the utility services market and attract investors have borne significant fruits for both the general public and utility service providers. In ICT sector further, while the fixed telephony continues to remain stagnant, the mobile telephony registered an increase of 34.8% compared to the last year.

The increased competition and improved interconnection framework has constituted a good enabler for the affordability of telephone services; the retail market has steadily scaled down for both voice and data, especially through various promotional packages offered by all telecom operators. These developments shifted the teledensity to 61.3%. With ten (10) licensed Internet Service Providers, Internet penetration raised from 7% to 12.2% representing a 74% increase as compared to the last fiscal year.

In addition to that, RURA championed the assessment of the readiness of the migration status from IPv4 to IPv6 in Rwanda. It is expected that the assessment results contained in the final report will be taken into consideration while elaborating related policy and strategy. Furthermore, RURA managed to acquire more TV frequencies as part of the digital dividend whereby the number of TV channels increased to 70 from 35 of last year. RURA further assigned 4 International Signaling Point Codes (ISPCs) to MTN to expand its network and facilitate the interconnection with other international gateways.

The SIM card registration project, which started in February 2013 and ended in July 31st 2013, registered a remarkable success because by end of June 2013, an average of 83.3% SIM Card was registered.

In broadcasting sub-sector, in line with the analogue to digital migration move, efforts were devised to lay down a comprehensible licensing framework, which would allow licensing each operator through the whole broadcasting value chain. In the vision 2020, the GoR explicitly committed itself to take ICT as an enabler of the economic growth. The expected development cannot be attained, however, without foreseeing and mitigating online security issues. It is in this regard that the GoR supported the deployment of Public Key Infrastructure (PKI) as an essential tool to secure e-business. This important infrastructure will assist in managing and handling issues of authentification, security

of e-transactions, digital certificates issuance, smart card governance, etc. RURA in collaboration with RDB are championing the implementation of this project.

Furthermore, in August 2012 Rwanda inaugurated the International Gateway Traffic Verification System (IGTVS), which is designed to enable the monitoring and management of national and international interconnections of telecommunication/ ICT networks.

In addition, regular inspections were conducted to check compliance with technical specifications, especially for frequency spectrum users using transmitter of HF, VHF, FM, TV, WiMAX and VSAT. Quality of Service (QoS) monitoring on cellular mobile networks also was conducted to verify compliance with the quality of the license obligations and service level.

The Universal Access Fund contributed much to speeding up the attainment of the Government targets of transforming Rwanda into a knowledge based society. Programs including the provision of Internet connection to all districts in remote and rural areas, provision of broadband connectivity to Telecenters all over the country, provision of Internet connectivity, network devices and installation fees to Rwanda National Police offices in rural and remote areas, provision of Internet connectivity to army sites in remote and rural areas and Internet connectivity to Rwanda immigration boarders were initiated and successfully implemented. Furthermore, by July 2012, a total of 112 sites were switched from VSAT to Optic Fiber network whereby VSAT remains used only in a place where wireless broadband and fiber optic network backbone are not available.

The transport Sector also registered remarkable developments despite the very pending challenge of lacking a sector law. RURA had to resort to secondary legislations to regulate the sector. RURA contributed to the development of Rwanda public transport policy and strategy and put in place enforcement procedure manual for road transport inspection to guide inspection programs to be conducted by the Authority. The authority also put in place measures to streamline activities of local transport operators, cross border transport operators, car rental licenses; taxi cabs companies and cooperatives, driving schools operators.

Inspections were done to monitor operators' compliance with regulations, and where necessary penalties were imposed. The most prominent and long-lasting result of the transport sector reform experienced in this year under review was the grouping of transport operators into companies or Cooperatives. This initiative was further coupled with the computerization of the Road Transport licensing system to make sure that customers get uplifted transport services. This automated system facilitates a quick authorization and license issuance, records necessary information and generates reports concerning road transport licenses and authorization management.

Before the end of the year under review, a new program was initiated targeting the identification of new routes within Kigali city to serve more areas and hence increase the public transport service accessibility.

Because RURA is also involved in performance of driving schools, it took steps to monitor driving examinations (theory and practice) conducted by driving Schools Country wide. This exercise is one of means of monitoring the overall performance of driving schools in Rwanda.

In transportation of goods sub-sector, since the adoption of the goods transport licensing framework, only a hand full (12) operators have turned up to apply for a license during the year 2012/2013. This performance therefore shows that more efforts are still needed to bring all stakeholders on board to streamline the transport of goods industry.

Despite its early state, the regulation of the waterways transport subsector witnessed great achievements. By the end of the financial year 2012/2013, ninety five (95) operators were licensed and one hundred and fourteen (114) boats were registered from the 142 boats that were numbered in boats inventory conducted in October 2011.

A survey and site inspections of registered boats were conducted and it was noticed that a good number of them complied with technical requirements; others were urged to make effort to meet the standard requirements.

The energy sector is considered as the backbone of Rwandan economy. The Government of Rwanda (GoR) is strategising the diversification of energy sources in order to increase power generation mix by promoting the use of locally available renewable resources while at the same time improving transmission and distribution networks.

Over recent years, there has been an aggressive program to increase access to the electricity services by all sectors of the economy especially industry and small & medium enterprises. The current strategy is set to increase electricity access generation from the current 110.44 MW of installed capacity to around 563 MW and connectivity from the current 17% (as of end June 2013) to 70 % percent in 2017/2018.

The electricity supply industry has remained vertically integrated with EWSA, being a major player with its own electricity generation and having a monopoly in the transmission and distribution of electricity. Currently, 7 IPPs are selling bulk electricity to EWSA under long-term and short time contracts.

Operationalization of the Electricity Law enacted in July 2011 is on track to pave the way for an efficient and sustainable regulation of the electricity sub-sector. As supplementary tools to regulate the sector, RURA introduced new regulations including the Electricity Licensing Regulations, Electrical Installations Regulations, Electricity Safety Regulations, grid code and has embarked on the developing a number of second legislation such as the review of renewable energy Feed-In-Tariff (REFIT), Development of Power Purchase Agreement (PPA), Light-handed regulation for Off-grid system and Universal Access fund for Electricity (UAFE).

In Gas and Petroleum subsector, the Authority has so far developed, in collaboration with relevant stakeholders, the Aboveground Petroleum Storage Facilities Regulations. The licensing framework, which became effective in June 2013, is mainly targeting LPG big dealers and will shortly be followed by LPG retailers.

The Authority continued further to monitor the performance of the power sector in terms of quality of services rendered to customers and compliance to set standards.

In a bid to monitor the infrastructure

development and evaluate the progress of ongoing projects, sites visits were carried out on a quarterly basis to ten (10) Hydropower projects around the country.

On market performance side, EWSA submitted a request to increase the electricity tariff and the Authority approved new end-user tariff with a 20% increase effective 1st July 2012.

Further to the request from some investors, RURA commissioned a study to review the current Renewable Energy Feed-in-Tariffs (REFIT) for hydro and other renewable sources of energy. The study is currently being conducted.

In water and sanitation sector, like in most developing countries, the water sector in Rwanda is subdivided into urban and rural water systems. Urban water operations and management are under the monopoly of the Energy, Water and Sanitation Authority (EWSA) while rural water supply service is provided under various management types.

In a bid to strengthen the sector legal and regulatory framework, RURA has developed regulations and guidelines to provide some legal back up to the sector regulation, consisting of: Regulations on Minimum Required Service Level for water service provision, Water Services Licensing Regulations; Regulations on Decentralized wastewater treatment systems, Regulations on cleaning services; Regulations on solid waste collection and transportation.

In the same vein, 27 district dumping sites across the country were visited to assess the status of waste management and especially waste disposal sites in rural districts. With regard to licensing, 25 licenses were granted to Operators in cleaning services and solid waste collection and transportation operators (3) during the year under review.

Even though the regulation of utility services has encountered several challenges, including lack of monitoring equipments and tools to collect data on content quality, software tools and necessary hardware equipments for Internet content quality monitoring, lack of sector laws, and low level of investment in some sectors, we are committed to the development of the regulated sectors by actively contributing to finding solutions to those challenges.

We obviously could not be able to accomplish the above, without engaging and interacting with our unconditional strategic stakeholders. That is why, as we celebrate the last year's achievements and look forward to stepping in the next fiscal year, we thank all our esteemed stakeholders for their continued contributions in the attainment of the Authority's objectives and targets. In particular, our heartfelt gratitude is addressed to all RURA staff members and the Regulatory Board for their sustained efforts to build an environment that promotes fair competition and quality of public utility services in a transparent, independent and reliable manner in Rwanda. Our gratitude is further extended to the Government of Rwanda for its resolute support as well as public utility operators together with consumers for their usual cooperation, unwavering support and contribution to the development of the country.

To all of you we say thank you!

Maj. François Régis GATARAYIHA

Director General

CORPORATE AFFAIRS

1. CORPORATE AFFAIRS

1.1 RWANDA IN CONTEXT

Rwanda is a landlocked country within the East Africa Community (EAC) political sphere (commonly known as the land of thousand hills) and has a surface area of 26,338 Square kilometres with a population of about 10.5 million, one of the highest in the world in terms of density (NISR, 2012). In Rwanda, Agriculture employs about 78.8% of the active population, contributing to about 36% to the GDP and has a GDP per capita of about U$ 600 (as of 2012).

The policy documents of the Vision 2020 and the Economic Development and Poverty Reduction Strategy [EDPRS II] 2013-2018 set the 2020 target to achieve income status with an annual growth rate of 11.5% and the GDP per capita of USD 1,200 by 2020. In line with its policy of economic development and good governance, the Government of Rwanda (GoR) has established the Rwanda Utilities Regulatory Authority (RURA) so that it contributes to the achievement of its socio-economic goals.

1.2 OPERATIONAL FRAMEWORK

RURA is a multi-sector regulatory entity which has the mandate of regulating four sectors of the economy to wit; ICTs, Media & Postal, Energy, Water & Sanitation and Transport. With a very high tele-density, lower GDP per capita and highly agrarian economy, the role of this Regulatory Authority in the much-needed transformational development is both crucial and strategic. The effective execution and fulfilment of its mandate will to a great extent depend on a clear and effective strategic alignment of its operations.

Rwanda Utilities Regulatory Authority (RURA) was initially created by the Law N° 39/2001 of 13 September 2001 as an agency with the mission to regulate certain public Utilities, namely: telecommunications network and/ or Telecommunications services, electricity, water, removal of waste products from residential or business premises, extraction and distribution of gas and transport of goods and persons.

This Law was further reviewed and replaced by Law N° 09/2013 of 01/03/2013 establishing Rwanda Utilities Regulatory Authority (RURA) and determining its mission, powers, organization and functioning. This Law gives RURA the mandate to regulate:

1. Telecommunications, information technology, broadcasting and converging electronic technologies including the Internet and any other audiovisual information and communication technology;
2. postal services;
3. Renewable and non-renewable energy, industrial gases, pipelines and storage facilities;
4. Water;
5. Sanitation;
6. Transport of persons and goods; and
7. Other public utilities, if deemed necessary.

The same Law gives the Authority a legal personality, financial and administrative autonomy in the fulfilment of its mandate. The Authority plays a pivotal role between the policy maker, licensed service providers and consumers. The Authority reports to the Office of the Prime Minister and it coordinates with line ministries responsible for each regulated sector in executing its functions.

In addition to the law creating RURA, there are a number of other legal and regulatory instruments which help RURA discharge its responsibilities in each specific regulated sector.

In the same vein, the Authority has the mission to ensure fair competition, promoting and protecting consumers' interests and rights in all regulated sectors.

1.3 MISSION AND POWERS

The Law N° 09/2013 of 01/03/2013 gives the Authority the following missions and power:

- to set up necessary guidelines in order to implement laws and regulations in force;
- to ensure compliance by public utilities with the provisions of laws and regulations governing the regulated sectors in an objective, transparent and non-discriminatory manner;
- to ensure the continuity of service delivery by the licensed or authorized service providers and the preservation of public interest;
- to protect users' and operators' interests by taking measures likely to guarantee effective, sound and fair competition in the regulated sectors within the framework of applicable laws and regulations;
- to protect and promote consumers' interests;
- to promote the availability, accessibility and affordability of regulated services to all consumers including low income, rural and disadvantaged consumers;
- to promote efficient development of regulated sectors in accordance with Government economic and financial policy;
- to promote and enhance general knowledge, sensitization and awareness of the regulated sectors including but not limited to:

- to Promote and protect the rights and obligations of consumers and service providers;
- to issue permits, authorizations and licenses required for regulated sectors, in accordance with the relevant laws and regulations;
- to monitor and ensure compliance by regulated network or service providers with their licenses, permits and concession obligations;
- to ensure fair competition in all regulated sectors.

For public interest and consumers protection in particular, and in order to effectively fulfil this mandate, RURA has been vested by the Law the following powers:

1° to carry out investigations including inspections at service delivery sites of the regulated service providers in the purpose of ensuring compliance with their obligations;

2° to impose administrative sanctions in case of a violation of this Law and other

Laws and regulations governing regulated sectors;

3 ° to settle and facilitate the settlement of disputes related to regulated services;

4° to issue directives to the regulated service provider whose license to operate has been cancelled, suspended, modified or revoked, and appoint an administrator

5° Power to regulate tariffs and charges

6° Power to obtain information

7° Judicial police power and RURA's representation before courts

As per the Law, RURA may have access to any commercial premises of any natural person or legal entity, at any time, in accordance with the law, either with or without notice, to inspect and obtain any necessary information when there are reasonable grounds to believe that there is a violation of provisions of the law governing the concerned regulated utility or the Law creating the Authority.

1.4 RESPONSIBILITY AND ACCOUNTABILITY

In the conduct of its mission, RURA is supervised by the Prime Minister's Office and it coordinates with line ministries responsible for each regulated sector in executing its functions. An Order of the Prime Minister shall determine modalities of which Ministries in charge of regulated sectors shall coordinate activities with RURA in the implementation of their respective mandates.

RURA submits an annual activity report to the Prime Minister's office and provide copies to the Parliament, both chambers, Ministry in charge of finance and Ministries in charge of regulated services within three (3) months after the close of the budget year.

RURA finances are audited by the Auditor General of the State finances at the end of the budget year and whenever considered necessary.

1.5 RURA'S VISION, MISSION, VALUES AND MOTO

From the above statutory mission, RURA has delivered five-year strategic vision, mission, and goals stated as depicted in graph bellow:

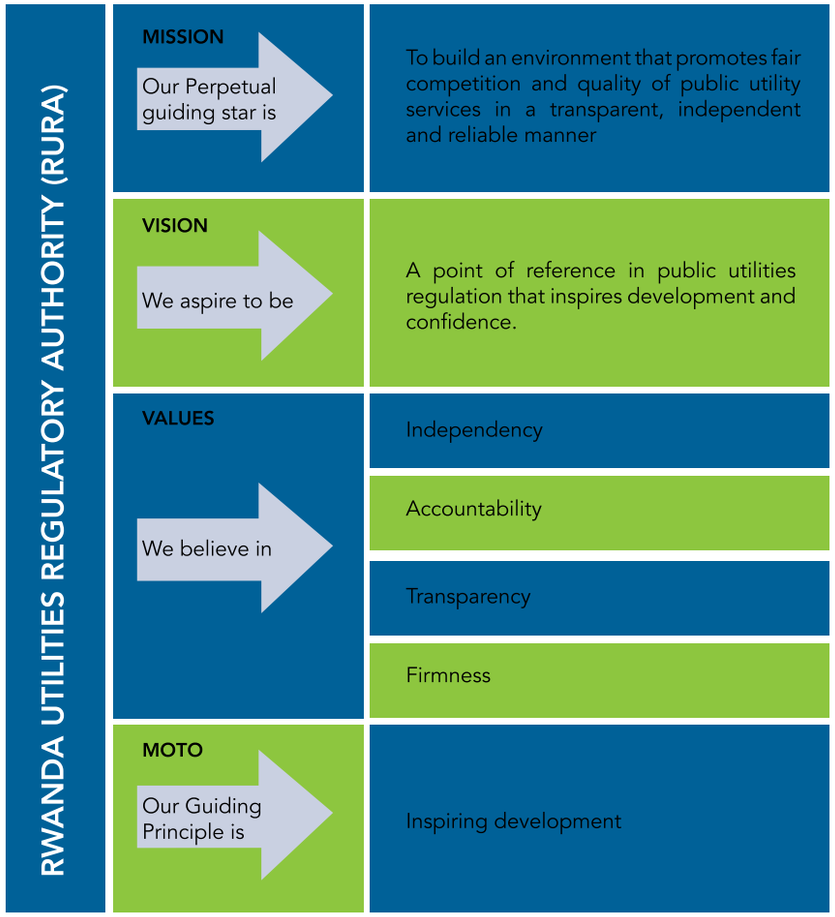


FIGURE 1: RURA MISSION, VISION AND VALUES

1.6 RURA ORGANISATIONAL STRUCTURE

On the administrative side, the Authority's management has a flexible Organizational structure which is currently based on a two organs: the Regulatory Board and the General Directorate. At the apex is the Regulatory Board, which by virtue of the law is the supreme management and decision-making organ. The Regulatory Board consists of seven (7) members including the Director General who equally serves as a secretary. The functioning and duties of the Regulatory Board are determined by Law.

The second organ is the General Directorate headed by the Director General. The Director General is entrusted with executive powers. He/she coordinates and directs the Authority's daily activities and is answerable to the Regulatory Board on how its decisions are implemented.

The Director General is assisted by four Heads of Departments heading respectively 1) Communications & Media Regulation, 2) Transport Regulation, 3) Energy, Water & Sanitation Regulation and 4) Corporate, Legal &Industry Affairs Departments. The entire organizational structure can be found in annex 1.

1.7 RURA'S WORKFORCE

Compared to the year 2011/2012, RURA staff have increased from 104 at the end of June 2012 to 118 at the end of June 2013. The increase of the staff was dictated by the need to align RURA structure with the new mandate as per the law N° 09/2013 of 01/03/2013.

By June 2013, the percentage of male and female employees in RURA was respectively 61% and 39%.

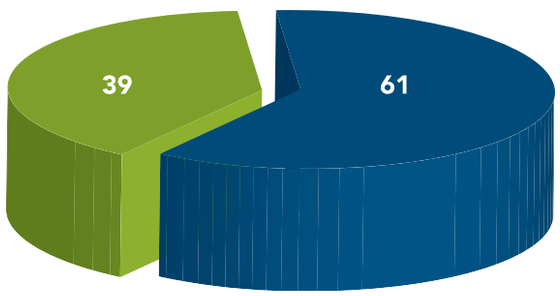


Figure 2: Distribution of RURA Staff by Gender as of June 2013

As indicated in Human Resource Development policy, RURA regularly develops the capacity and trains its staff to meet the needs of a continually changing regulatory environment, while responding to the factors that may have an influence on both the Authority and staff. It is in this regard that RURA invested in the development of its staff by providing them with opportunities for on-job trainings, study visits to other regulatory authorities as well as for academic programs.

The classification of RURA Staff based on education is as follows: 35% of the staff hold post graduate degrees (Masters and PhD, 59% hold bachelor's degrees, 6% hold Diplomas and 2% hold secondary School certificates.

The graph below shows the RURA staff qualification, their levels and nature of their academic specialization.

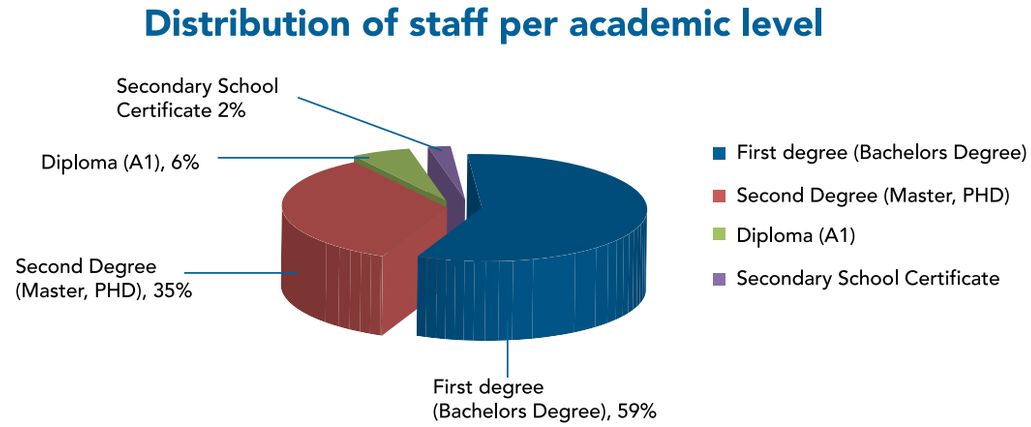


Figure 3: Distribution of RURA Staff per Academic Level

Compared to the last year, the number of staff holding bachelor's degrees has increased from 41% to 59%, due to the newly recruited staff and long term training for some of existing staff, while the number of those holding secondary school decreasingly shifted from 7% to 2%.

Distribution by Age

RURA is also reputed of having a young and dynamic workforce. Statistics shows that, the majority of RURA staff is between the ages of 30-40 years, representing (70%) whereas the average age of RURA staff by June 2013 is 35 Years.

From the above mentioned figures, we can conclude that RURA has young staff to serve for the next 20 years. The workforce of this nature constitutes an invaluable asset to the attainment of RURA's mission.

1.8 CAPACITY BUILDING

It is the Institution's policy to equip its staff with relevant regulatory, managerial and operational compentences to enhance their service delivery to the public.

The table below represents the strategic areas of training conducted during the year under review;

TABLE 1: CAPACITY BUILDING INITIATIVES

Type of training	Number of Beneficiaries
Long term training	4 Staff
Short term training	15 Staff
Study tours and Attachments	10 Staff
Workshops, Meetings and Conferences (International)	40 Staff

1.9 REGIONAL AND INTERNATIONAL PARTERSHIPS

In line with its statutory mandate, RURA continued to represent the country in regional and International meetings on issues pertaining to the regulated utility sectors.

RURA could not attain its achievements without the partnership with local and International Organisations. Those organisations include; International Telecommunications Union (ITU), East African Communications Organisation (EACO), Common Market for Eastern and Southern Africa (COMESA), African Forum for Utility Regulators (AFUR), Australian Development Scholarship (ADS), United States Agency for International Development (USAID), African Telecommunications Union (ATU), East African Community(EAC), Centre Régional pour l'Eau Potable et l'Assainissement (CREPA), Workforce Development Authority (WDA), etc.

The Authority was actively involved in the activities of the Energy Regulators Association of East Africa (EREA) whereby its staff participated in three portfolio committees (i.e., technical, legal and economic) and general assembly meetings, including information sharing study tours and capacity building programmes. The Regulator also participated actively in the various events as a member of different regional organizations, including the Regional Association of Energy Regulators for Eastern and Southern Africa (RAERESA) and the Eastern Africa Power Pool (EAPP).

RURA also successfully hosted the 6th Annual General meeting of Eastern and Southern Africa Water and Sanitation Regulators Association (ESAWAS) in September 2013.

During the year under review, RURA sent and received delegates from other sister regulatory authorities with the aim of sharing experiences in different fields such as QoS monitoring, broadcasting regulation and digital TV migration, consumer protection, Water and Sanitation and complaints handling. The visited regulatory authorities include Office of Utilities Regulation (OUR) of Jamaica; Surface and Marine Transport Regulatory Authority (SUMATRA) in Tanzania, Energy and Water Utility Regulatory Authority (EWURA), of Tanzania, Water Services Regulatory Board (WSREB) of Kenya, etc.

1.10 CORPORATE SOCIAL RESPONSIBILITY

While commemorating the 19th anniversary of Genocide against Tutsi, RURA started a project of constructing houses for genocide survivors whereby one house was built in Rukumberi – Ngomba District. Two other more houses were planned to be inaugurated in 2014. Furthermore, RURA provided preliminary necessities to the 5 identified poor genocide survivors .This action was also held in RUKUMBERI-NGOMA District.

FIGURE 4: SURVIVORS' HOUSES UNDER CONSTRUCTION

1.11 FINANCIAL PERFORMANCE REVIEW

This report shows the level of performance in terms of income generated and its allocation to different activities as they were defined in annual work plan 2012/2013.

The Authority's operations were financed mainly through collection of fees from regulated service providers in different sectors i.e. ICT, Transport and Energy.

The level of performamance for the financial year 2012/2013 is quite satisfactory compared to the set strategies/objectives. During the year under review in the flow of funds to the Authority amounted to 5,764,882,703 Rwf from both ICT, Transport and Energy sectors. This represents a rate of performance of 80% compared to the projected revenues of 7,179,290,535 Rwf.

On the expenditure side, RURA spent a total amount of 5,764,882,703 Rwf which resulted into an execution rate of 67% compared to the total budget drawn from 2012/2013 planned activities. In comparison to the 2011/2012 budget execution, there was a decrease of 13% on the level of the amount spent and this was brought about by

the decrease of number of staff following the restructuring made in November, 2011. This resulted into the reduction of the amount spent on staff salaries and social benefits. In addition to that, some activities are still undergoing, a number of public tenders are still in process. These are the main reasons for the delay in timely implementing the 33% pending planned programs.

As far as Universal Access Fund (UAF) is concerned, an amount of 2,933,230,784 Rwf were collected from Telecommunication operators. This represents a performance rate of 124% compared to the projected revenues of 1,749,610,738 Rwf. The increase in revenues is mainly due to increase of increased financial performance of licensed operators.

TABLE 2: FINANCIAL PERFORMANCE IN RWF/RECURRENT BUDGET

ITEM	2012/2013	2011/2012	VARIATION
Income from ICT Sector	4,737,712,484	2,286,530,532	2,451,181,952
Income from Energy sector	155,636,031	81,494,676	74,141,355
Income from Transport sector	615,163,118	697,342,917	-82,179,799
Other revenues	256,371,070	128,993,451	127,377,619
Total Revenues	**5,764,882,703**	**3,194,361,576**	**2,570,521,127**

TABLE 3: FINANCIAL PERFORMANCE IN RWF/UNIVERSAL ACCESS

ITEM	2012/2013	2011/2012	VARIATION
Universal Access Contribution from Telecommunication operators	2,933,230,784	2,100,441,757	832,789,027
Expenditure	1,749,610,738	899,329,913	850,280,825

Note: The financial figures above are subject to audit confirmation.

ICT SECTOR

2. ICT SECTOR

2.1 SECTOR PROFILE

In the last few years, Information and Communication Technologies have been used more and more extensively for the social and economic development. Considering the revolutionary changes that ICTs are bringing to our global society, institutions worldwide continue to develop more sophisticated ways to digitize their operations and processes so that they can offer to the public access to their services in more effective and efficient ways.

Increase in the use of ICT requires proper regulatory framework to create an environment that promotes public confidence and ensure stability, transparency, competition, investment, innovation, and growth in the ICT sector.

In addition to the classic mandate of regulating ICTs, the Government of Rwanda broadened the mandate of RURA by reviewing the media sector and assigning to the Authority the mandate of taking overall media regulation.

The new mandate was materialised by the enactment of the Law N° 09/2013 of 01/03/2013 which gives RURA the mandate to regulate, among others, broadcasting, converging electronic technologies and postal services. In the same way, the Law N°02/2013 governing media was enacted in February 2013 and it gives RURA the responsibility of regulating audio, audio visual and Internet media.

The Rwanda telecommunication market/industry is dominated by three mobile phone operators: MTN Rwanda, Tigo Rwanda, and Airtel, with a combined mobile and fixed telephony penetration rate of 61.3% while the Internet penetration reached 12.2% by June 2013.

The rural area is not yet fully provided with Wireless Broadband network services. The rural and remote areas are connected to Broadband since 2012 using Optic fiber network which is only limited to districts and other Public institutions operating in rural area.

The availability and connection of Rwanda to submarine optic cable allowed a reduction of cost per MBPS from 1200 USD in 2011 up to 60 USD Dollars per MBPS (current) and the connection through Mombasa and Dar Es salaam brought more reliability of the connectivity in the region. However the terrestrial link still suffers from cuts during civil works and agriculture activities. Due to the civil works including road construction or farming activities, many cases of fiber cut are being experienced in the country. This often results in tampering the Internet usage in Rwanda and neighboring countries.

The current bandwidth available for the country is 1.2 GBPS from RCIP purchased capacity and 1 GBPS capacity purchased by Operators and ISPs.

Following the adoption of regulations on SIM card registration which were approved by the Regulatory Board, the registration process of SIM cards started in February, 2013 was followed by aggressive awareness campaign throughout the country so as to meet the deadline of July 31st 2013 after which all SIM cards not registered were to be disconnected from the network.

The regulation of ICT sector in Rwanda was recently marked by the repatriation of ccTLD .rw of which the Management of .rw registry was assigned to RICTA.

2.2 LEGAL AND REGULATORY FRAMEWORK

The ICT sector regulation stems from the Law N° 44/2001 of 30/11/2001 governing telecommunications and the Law N° 18/2010 of 12/05/2010 relating to Electronic messages, electronic signatures and electronic transactions.

With the current transformational developments in technology and their impacts on the definitions and the nature of the various service delivery platforms, a need was felt to review both the existing legal and regulatory framework and the institutional framework so as to address the new challenges brought about by the revolutionary changes being witnessed in ICTs.

In March 2013, the No 39/2001 of 13/09/2011 establishing RURA as an Agency with the mandate to regulate telecommunications networks and services was revised and replaced by the Law No 09/2013 of 01/03/2013 establishing Rwanda Utilities Regulatory Authority (RURA) and determining its mission, organization, and functioning making it a Converged ICT Regulatory Organ. In its article 2, it is stipulated that among the sectors to be regulated by RURA, there will be broadcasting and converging electronic technologies and postal services, while Article 5 of the same Law gives RURA the mandate to regulate Media to some extent.

In February 2013 the Media Law N°02/2013 of 08/02/2013 was enacted. It highlights that RURA shall be responsible for regulating audio, audio visual media and Internet media.

By end of June 2013, among laws in pipeline to regulate the sector include, the ICT Bill which covers five (5) parts namely; ICT legislative framework, electronic communication, information society and broadcasting as well as postal services. The ICT Bill has been and is still followed closely by RURA and necessary technical support is provided to the Parliament throughout its adoption process. Once this law is promulgated, it will repeal the current law n°44/2001 of 30/11/2001 governing telecommunications, and the law n° 43/76 of 01/12/1976 on the organization of the postal services.

Furthermore, RURA has put in place the following regulatory tools to promote the use of ICTs as shown by the list below:

a. Regulations on Quality of Service of Mobile and Fixed Networks and Services
b. Regulations on SIM card registration

c. Public Notice on Minimum Technical Specifications for STBs and iDTVs
d. Public Notice on the Actual Radiations at the Measured Sites
e. The Memorandum of Understanding (MoU) on efficient and effective performance of the .rw registry was renewed and signed by the RURA and RICTA.

2.3 MARKET PERFORMANCE AND STATISTICS

2.3.1 MOBILE & FIXED TELEPHONE SERVICES

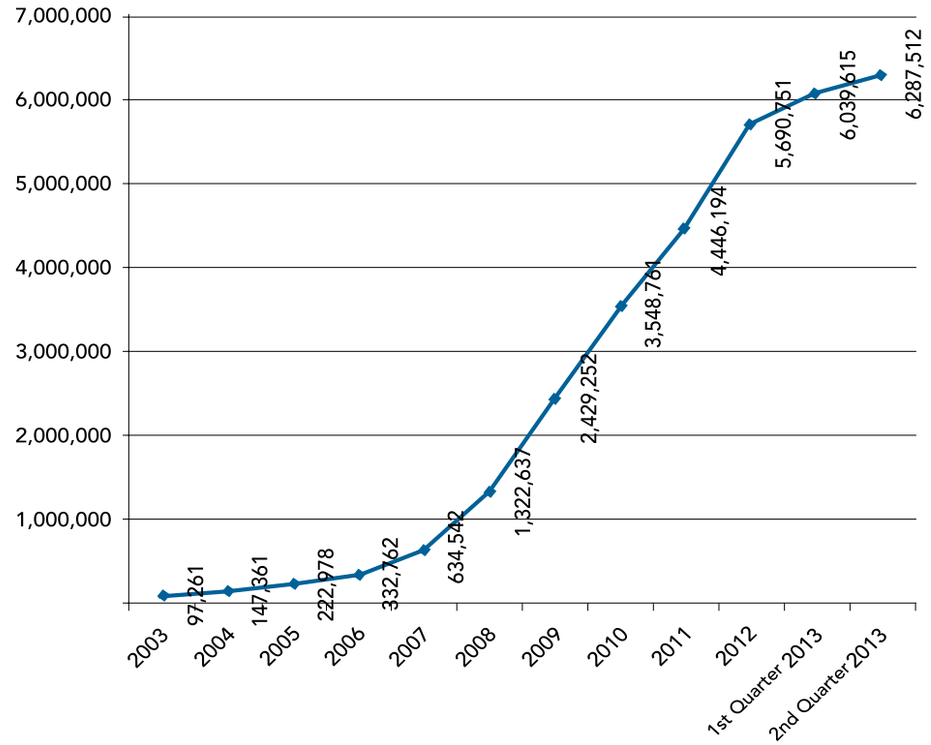
As of June 2013, the major players in mobile telephony included MTN Rwandacell, TIGO Rwanda Ltd and AIRTEL Rwanda Ltd. The penetration rate continues to grow while the fixed telephone subscriptions growth has remained almost stagnant. Telephone subscribers increased from 4,759,310 as of June 2012 to 6,415,343 as of end of June 2013. This portrays a 34.8% increase. The table No 4 depicts the situation.

TABLE 4: NUMBER OF MOBILE AND FIXED TELEPHONE SERVICE SUBSCRIBERS PER TELECOM OPERATOR

Operators	Active subscribers		Fixed Teledensity	Mobile Teledensity	General teledensity
	Mobile Active subscribers	Fixed Telephony			
MTN Rwanda	3,599,540	10,925	0.40%	60.9%	61.3%
TIGO Rwanda	1,900,693	-			
AIRTEL RWANDA LTD	915,110	-			
RWANDATEL	-	31,875			
Total	6,415,343	42,800			

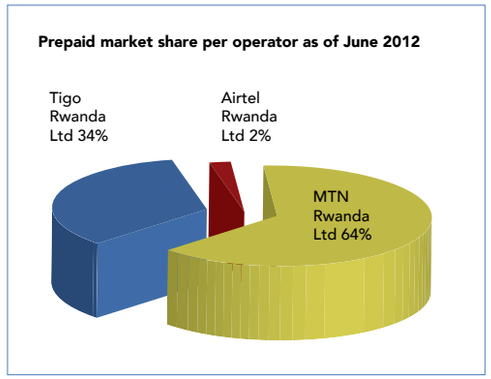
Over the last ten years, the mobile telephony industry witnessed a spectacular growth. This growth has been mainly attributed to increased competition on the market which resulted into a continuous decrease of retail mobile telephone services tariffs coupled with a number of promotional packages from licensed telecom operators. The figure No 5 visualizes the trend in mobile telephony subscription from 2003 to June 2013.

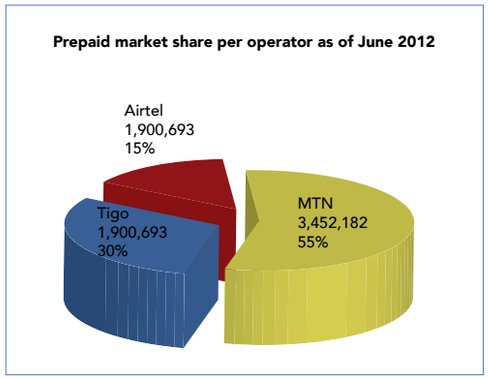
FIGURE 5: DEVELOPMENT OF THE MOBILE TELEPHONE SUBSCRIBER BASE FOR THE PERIOD 2003-2013



MTN Rwanda is still leading in terms of mobile subscribers but has a decreasing market share of 56% as of June 2013 against 64% by June 2012. Tigo Rwanda comes at the second level with a decreasing market share of 30% as of June 2013 against 34% by June 2012 while Airtel Rwanda, the new entrant in the telecom sector, has the lowest but increasing market share of 14% as June 2013 against 2.3% by June 2012.

FIGURE 6: EVOLUTION OF MOBILE TELEPHONE SERVICE MARKET SHARE PER OPERATOR





The coverage for each network is depicted from the table below

TABLE 5.MOBILE TELEPHONE NETWORK COVERAGE PER OPERATOR AS OF JUNE 2013

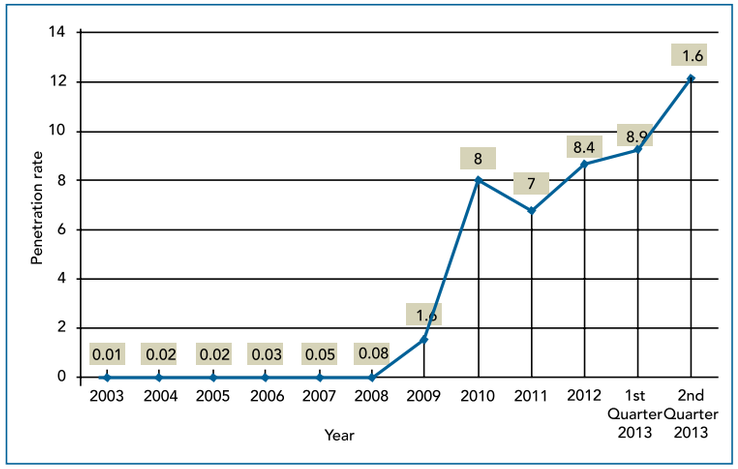
Geographic coverage	2G	3G and 2.5	3.5G
MTN Rwanda Ltd	98.83%	98.83%	19.07%
TIGO Rwanda Ltd	78.97%	5.3%	5.3%
AIRTEL Rwanda Ltd	73.5%	-	3%
Population coverage			
MTN Rwanda Ltd	98.74%	98.74%	22.12%
TIGO Rwanda Ltd	98.99%	5.3%	5.3%
AIRTEL Rwanda Ltd	-	-	-

2.3.2 INTERNET SERVICE PROVISION

As of June 2013, there were ten (10) licensed Internet Service Providers (ISPs) in the country including National Telecommunication Service Operators (fixed and mobile). From June 2012 up to June 2013, the Internet penetration raised from 7% to 12.2%; representing a 74% increase as compared to June 2012.

Though the above figures show a significant increase rate in the Internet subscriptions, it is important to note that the penetration rate is still low. The low penetration is attributed to the high cost of Internet compared to the purchasing power of the population. Compared to the applicable Internet rates in the region, Rwanda Internet rates are still high. The graph below depicts the Internet penetration rate trend from the year 2003.

FIGURE 7: TREND IN INTERNET PENETRATION RATE



2.3.3 RETAIL SERVICE PRICES

Prices in retail services are freely set by licensed service providers. RURA reserves however the right to intervene if it is established that the operator with Significant Market power abuses its market position. Such an intervention is yet to happen. With more competition within the ICT sector especially after the licensing of AIRTEL-Rwanda Ltd, the prices on the retail market have steadily scaled down for both voice and data, especially through various promotional packages.

Another important point to note is that the off net calls rate has also continued to scale down due to the continuous downward review of the interconnection rates by the regulator as well as competition forces.

Below is the summary of the applicable mobile voice communication tariff per minute in Rwf as of June 2013.

TABLE 6: MOBILE TELEPHONE VOICE TARIFF STRUCTURES, PER OPERATOR AS OF JUNE 2013

Tariff category	MTN Rwanda Ltd	Tigo Rwanda Ltd	Airtel Rwanda Ltd
Onnet Tariff	36	25	20
Offnet tariff	60	60	60
Promotional tariff	22 (onnet calls)	45 (offnet calls), 30 (USA, Canada, China and India)	10 (onnet calls)
East Africa tariff	120	165	120
Rest of Africa tariff	165	240	
USA/Canada/China/India	49.8	40	35
International Tariff	250.2	195	240

2.3.4 INTERCONNECTION RELATIONSHIP AMONG OPERATORS

Technical and commercial arrangements for interconnection are freely negotiated amongst licensed operators. However, RURA has the mandate to ensure that operators apply similar conditions to all organizations with which they are interconnected.

Following the review of applicable interconnection rates by the Regulator, the licensed telecom operators reviewed their interconnection agreements accordingly to reflect the glide path for applicable wholesale rates as approved by the Regulatory Board. The Interconnection Tariff Study of 2011 recommends the projected interconnection rates for the period 2011-2015 as shown below.

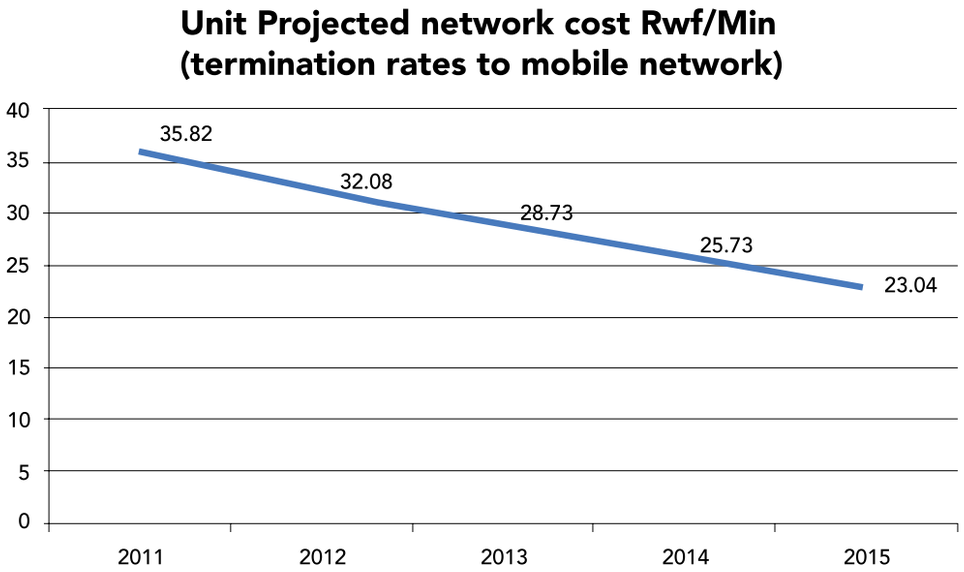


FIGURE 8: INTERCONNECTION RATES GLIDE PATH FOR THE PERIOD 2011-2015

As per the figure above, the currently applicable interconnection rate is Rwf 28.73 per minute which started to be applied from January 2013.

2.4 MANAGEMENT OF ICT SCARCE RESOURCES

2.4.1 MANAGEMENT OF FREQUENCY SPECTRUM

RURA has updated the national table of frequency allocation to include the outcome of the ITU World Radio-communication Conference 2012 (WRC-12) especially for digital dividend and accordingly organized consultative meeting with the Rwandan stakeholders so as to inform them on the WRC – 12 resolutions.

Due to the resolutions of the WRC-07 (ITU World Radio-communication Conference 2007), Rwanda was allocated only 35 TV channels. Therefore during the 2012 – 2013 fiscal year, RURA organized several meetings with neighbouring countries in order to acquire more TV frequencies to compensate the frequencies left by digital dividend and RURA managed to raise the number of TV channels up to 70 from 35.

The available TV frequencies have been reserved to the two signal distributors (Rwanda Broadcasting Agency and the private signal distributor) on an equal basis.

RURA carried out a survey to ascertain the coverage of digital broadcasting in the country and predict the customers who will not get signal after the switch off from analogue to digital. The survey further showed that the digital TV broadcasting signal outweighs the analogue TV signal in Rwanda.

Lastly, a series of monitoring and enforcement exercises were conducted and resulted into revocation of some licenses due to the licensees' failure to comply with their obligations. Other licenses were cancelled based on the requests of licensees.

The following table gives the list of all licenses issued and revoked.

TABLE 7: LICENSES ISSUED IN DIFFERENT SERVICES

Services	Number of Operators by December 2012	Licenses issued in 2013	New Licenses	Renewed Licenses	Not renewed licenses	Revoked or Cancelled
HF	9	6	1	5	4	0
VHF	59	22	4	18	41	4
UHF	4	4	3	1	3	0
VSAT	23	9	2	7	16	- 2 licenses - 6 world vision stations
SATPHONE	2	1	0	1	1	0
BROADCASTING	FM: 23, TV:3	FM: 12	FM: 6	FM: 6	21	2
ISPs	9	3	3	0	9	1
MOBILE OPERATORS	4	0	0	0	4	E-GSM for Airtel band
AMATEUR RADIO	2	4	4	0	2	0
TOTAL	139	61	23	38	101	9

2.4.2 MANAGEMENT OF NUMBERING RESOURCES

During the fiscal year 2012-2013, RURA conducted an audit of all numbering resources in use by telecom operators with the aim of finding misused resources. The audit culminated into the allocation of numbering resources as follows:

ISPC (International Signalling Point Code)

RURA assigned 4 ISPCs to MTN Rwanda, and this will allow MTN to expand the network and facilitate the interconnection with other international gateways.

Short Code

RURA improved the service delivery by developing an online short code application system. Through this web application, anyone wishing to apply for a short code selects

a short code among the available ones. This online application system facilitated the public and helped to handle efficiently all short code related queries. Consequently, during the last fiscal year, 210 short codes were assigned to public and private entities.

SIM card registration

Due to recent development of applications using mobile phone, many countries all over the world have embarked on project of registering mobile customers to establish a link between the SIM card and identification details of its holder.

With this trend RURA in collaboration with National Identity Agency (NIDA) and Mobile Service Providers (MTN, TIGO and AIRTEL) established an infrastructure that will allow mobile operators to perform online verification of demographic data (Name, Sex, Date of birth, ID Number and Place of Issue) via National ID database and proceed with electronic registration and activation of new and existing mobile subscribers.

The SIM card registration project started on 4th February 2013 and was expected to end on July 31st2013, after the deadline all SIM cards not registered would be disconnected from the network.

Below are figures which showing the percentage of registration by the end of June 2013:

TABLE 8: SIM CARD REGISTRATION STATISTICS AS OF JUNE 2013

Item	Company	Registered Number	Total active subscribers (30/06/2013	Percentage
1	MTN	2,929,486	3,599,540	81%
2	TIGO	1,665,767	1,900,693	88%
3	AIRTEL	746,874	915,110	82%
	TOTAL	5,342,127	6,415,343	83.3%

2.4.3 MANAGEMENT OF INTERNET RESOURCES

Domain Name Management

RURA spearheaded the repatriation of the Country Top Level Domain ccTLD. This top level domain was managed by NIC Congo Limited, a company registered in Switzerland for a long time. The decision of repatriation of .rw to be managed by Rwanda was taken by the Board of ICANN on 28th August 2012.

The Management policy, procedures and registration procedures have been jointly agreed between RURA and RICTA. The policies provide general rules for the management of Internet resources and specific regulations for management and assignment of domain names under .rw Country Code Top Level Domain (ccTLD).

Migration from IPv4 to ipv6

Concerning the Internet resources management, during the reporting period, RURA carried out consultative meetings aiming at assessing the readiness of migration status from IPv4 to IPv6 in Rwanda. The assessment results contained in the final report point to further policy and strategy considerations.

Management of RINEX (Rwanda Internet Exchange)

The assessment of the management and governance of Rwanda Internet Exchange Points was completed during this period under review. The focus of this consultancy was to define the best model for managing the RINEX and facilitate the access to Internet exchange point, enable domestic bandwidth utilization, encourage development of local contents and web hosting, attract international content providers to locate their servers in Rwanda and promote broadband Internet access and cost affordability. RINEX will be managed by Rwanda ICT association (RICTA), a neutral body.

2.5 LICENSING, MONITORING AND ENFORCEMENT OF LICENSE OBLIGATIONS

During the year under review, the Regulatory Board approved the transfer of Rwandatel's Fixed Telecommunication License to Liquid Telecom Rwanda Ltd upon completion of liquidation of the former and purchase of its business and assets by Liquid Rwanda Ltd. A part from individual license of Rwandatel Transferred to Liquid Rwanda, during the year under review, a good number of licenses were issued in ICT sector. Most of them were for radio communications operators. Requests for additional frequency bands by some operators were also processed. Further to licensing operators, RURA also monitored and enforced the license obligations during the entire year under review.

2.5.1 LICENSING OF TELECOMMUNICATION SERVICE PROVIDERS

The table below shows the 11 RURA licensed service providers.

TABLE 9: LICENSED TELECOM OPERATORS IN RWANDA

1	MTN Rwanda	Mobile, Fixed and Internet	2006
2	Liquid Telecom	Fixed and Internet	2013
3	Tigo Rwanda	Mobile, Fixed and Internet	2008
4	Airtel Rwanda Ltd	Mobile, Fixed and Internet	2011
5	New Artel	ISP	2004
6	ISPA	ISP	2006
7	Altech Stream	ISP	2007
8	4G NETWORKS	ISP	2009
9	Broadband System Corporation Ltd (BSC)	ISP	2010
10	4G Rwanda	ISP	2011
11	Rwanda Towers Limited	Network Facilities Provider (confirm the type of the licence)	2012

2.5.2 LICENSING OF BROADCASTERS

The Licensing of TV Broadcasting is under review due to the ongoing process of Migration from Analogue to Digital. Accordingly, RURA will initially give licenses to Signal Distributors, namely the Public signal distributor (Rwanda Broadcasting Authority) and Private signal distributor. Afterwards, RURA will also award licenses to Content Providers.

Besides, during the year under review, RURA managed to process and issued authorizations for studio construction of some applicants (content providers) who applied for starting television services; those are Tele 10 TV, Lemigo TV, Light TV and Nation Holdings Rwanda TV.

TABLE 10: LICENSED BROADCASTERS

1	Radio 10	19	DW
2	Flash FM	20	RFI
3	City Radio	21	Authentic Radio
4	Voice of Africa	22	BBC
5	Contact FM	23	Sana radio
6	Radio Maria RWANDA	24	Izuba radio
7	Voice of hope	26	Voice of America
8	Umucyo Radio	27	Radio NURU
9	Isango Stars amended	28	Radio One
11	National Holding Media	29	MSG radio
12	Isangano	30	CPR
13	Orinfor	31	KT radio
14	Huguka	32	Transformation
15	Amazing Grace Radio	33	Kiss FM
16	Salus Radio	34	Global Venture
17	Parliamentary	35	Mount Kenya University-University training radio
18	Ishingiro		

TV Operators

1	RBA
2	Tele 10
3	Star Africa Media

Only Studio

1	Super TV
2	Lemigo TV
3	Tele 10/TV 10
4	Contact TV

2.5.3 LICENSING OF ELECTRONIC TRANSACTIONS

RURA started the process of developing a framework for licensing Certification Authorities (CAs) /service providers. In line with the above, RURA as the controller of Certification Authority in Rwanda signed a Memorandum of Understanding with Rwanda Development Board (RDB) to partner in designing and implementing the

National Public Key Infrastructure (PKI) as a single project comprising of Root CA and Government CA. This project is designed to guarantee the confidentiality, integrity and authenticity of electronic communication and transactions. The Certification Authority (Root CA) will be operated by RURA and Government root CA will be operated by RDB.

The certification scheme shall be established on the basis of Rwanda's electronic signature regulations, legislations and international technical standards considering interoperability of certification authorities.

2.5.4 FREQUENCY SPECTRUM MONITORING

The monitoring of the frequency spectrum usage was done using the Spectrum Monitoring and Management System (SMMS) that is capable of measuring frequency range from 9 KHz to 7 GHz and microwave links up to 40 GHz.

Below is a summary of activities performed during the period of 2012 - 2013:

TABLE 11: FREQUENCY MONITORING ACTIVITIES IN 2012-2013

Activities	Status
Inspection of all radio- communication equipment holders to verify compliance with technical specifications (these included HF, VHF, FM, TV, WiMAX and VSAT)	Countrywide inspection was done and non-compliant licensees were issued warning letters.
Field work to handle interference among Operators or broadcasters	The interferences occurred include: • Four (4) cases of interference among the broadcasters were received and solved. • One (1) case of interference between regulator and telecom operator was received and solved. • One (1) case of interference between broadcaster and Civil Aviation Authority (CAA) was received and solved. • Interference occurred to one (1) ISP was received and solved.
Regular inspection of transmitters to measure human exposure to EMF radiations	The public notice on actual radiations at the measured sites are accessible from RURA website .

2.5.5 MONITORING OF QUALITY OF SERVICE

According to the Law N° 44/2001 (Telecom Law), RURA has the mandate to ensure that Telecom Operators provide required Quality of Service to their customers. It is in this line that RURA conducted QoS monitoring on cellular mobile networks from July 2012 to June 2013 period so as to verify their compliance with the quality of service targets. The evaluated Quality of Service (QoS) parameters experienced by customers are call setup success rate, call drop rate and call setup time.

In the period from 7th to 21st of August 2012, RURA conducted QoS monitoring on MTN and TIGO mobile networks in Kigali City. The Call Setup Success Rate (CSSR) in MTN networks was found to be 92.6% which is below the licence obligations (threshold of CSSR ≥ 95%). While the call drop rate (CDR) was found to be 0.6% which is reasonable compared to license obligations (threshold of CDR ≤ 2%). On TIGO side, the CSSR was 93.2% while the CDR was 2.3% which is slightly less than the required threshold.

In addition, starting from 31st of January to 18th of March 2013, RURA conducted QoS monitoring in Eastern Province on both MTN and TIGO mobile networks. As summarized in the table below, MTN network performed well in terms of both Call Setup Success Rate (CSSR = **96.92%**) and Call Drop Rate (CDR= **1.66%**) while the QoS results in TIGO network were found below the licence obligations. The Call Setup Success Rate was equal to 89.89% with a high margin from the license threshold whereas the Call Drop Rate was 2.10%.

Finally, the results of the QoS monitoring which were conducted in the Northern Province in the period of 19th to 29th of March, illustrated that on one side the Call Setup Success Rate in MTN network was slightly below the license required threshold (CSSR = **94.51%**) while the Call Drop Rate was at acceptable level (CDR= **1.53%**). On the other side, in TIGO network, the Call Setup Success Rate was at acceptable level (CSSR = 95.17%) while the Call Drop Rate was below the required threshold (CDR= 2.62%).

TABLE 12: CALL STATISTICS FOR CELLULAR MOBILE NETWORKS IN KIGALI CITY AND EASTERN AND NORTHERN PROVINCES

Quality of Service Parameters	Threshold value	Kigali City (From 7/08/2012 to 21/08/2012)		Eastern Province From 31/01/2013 to 18/03/2013		Northern Province From 19/03/2013 to 29/03/2013	
		MTN	TIGO	MTN	TIGO	MTN	TIGO
Call Attempts	-	1363	1375	252	249	420	419
Call Successful Attempt	-	1262	1282	248	216	416	414
Call Completed	-	1254	1253	246	216	416	414
Call Setup Success Rate (CSSR)	≥95%	92.59%	93.24%	98.41%	86.75%	99.05%	98.81%
Call Drop Rate (CDR)	≤2%	0.63%	2.26%	0.81%	0.00%	0.00%	0.00%
Call Setup Time (CST)	>90% should have a Call Setup Time of 9 seconds or less	-	-	In MTN network 96% of samples fall in a call setup time of 9 seconds or less. The average CST is 6.2 seconds.	In TIGO network only 85% of samples fall in a call setup time of 9 seconds or less. The average CST is 7.2 seconds.	In MTN network 95%of samples fall in a call setup time of 9 seconds or less. The average CST is 6.83 seconds.	In TIGO network only 89.6% of samples fall in a call setup time of 9 seconds or less. The average CST is 6.4 seconds.

2.5.6 VERIFICATION SYSTEM FOR INTERNATIONAL GATEWAY TRAFFIC

In August 2012, RURA inaugurated the International Gateway Traffic Verification System (IGTVS). This is an Interconnection Management System (IMS) solution which consists of a set of tools designed to enable RURA to monitor and manage national and international interconnections of telecommunication/ICT networks. Through this system, RURA is able to perform the following main functions:

- Control national and international traffic;
- Monitor international gateways;
- Have an accurate billing and collection of taxes and contributions;
- Monitor, on real time basis, the quality of service indicators of international and national traffic such as average seizure ratio, average length of call, volume of calls, connected calls and answered calls.
- Detect and manage Telecommunication Frauds: with the anti-fraud system, RURA identifies illegal international traffic which bypasses the licensed operators' gateways by using SIMBOX, PABX or VSAT.

The anti-fraud system targets suspicious wholesale carriers by checking the quality of service and prices which are the main indicators of fraudulent calls. The anti-fraud gateway generates call detail records to the suspicious wholesale carriers with the aim of tracking the paths of fraudulent calls.

2.5.7 INSPECTIONS AND AUTHORIZATIONS TO TELECOM OPERATORS

Telecom Infrastructure installation authorization

During fiscal year 2012-2013, RURA issued authorizations/permits to Telecom Operators and ISPs operating in Rwanda for "Tower & Rooftop site installation" and "Fiber Optic installation" as follows:

TABLE 13: FIBER OPTIC INSTALLATION AUTHORIZATION

Operators/ISP	Sites Requested	Sites Authorized
BSC	157	137
MTN	14	10
Rwandatel /Liquid Telecom	22	19
TIGO	11	10

TABLE 14: TOWER AND ROOFTOP AUTHORIZATION

Operators/ISP	Sites Requested	Sites Authorized
MTN	25	25
TIGO	27	27
Airtel	1	1

2.5.8 TYPE APPROVAL

During the course of 2012-2013 year, 1,800 type approval applications were processed and 1,780 type approval and clearance letters were issued for ICT equipment imported to Rwanda while around 20 were rejected.

In order to ensure the quality of imported radio communication and electronic communication equipment, random inspections were conducted to ensure that clearance issued or type approval letters reflect the physical inspection:

- Twenty (20) physical inspections were conducted to the radio communication equipments importers.
- Two (2) inspections on importation of STBs (Tele 10 and DE AMICITIA GENERAL TRADING)
- Two (2) inspections on importation of mobile phone (FADAR and Paul KAFERO)

2.6 DEVELOPMENTS RELATED TO CONSUMER ISSUES

2.6.1 CONSUMER EDUCATION

RURA used different approaches to educate and empower consumers. TV and radio emissions on different topics were conducted. Approaches like TV and radio commercial (spots), scrolling messages on TV, display messages on banners and pull up banners were used to sensitize consumers on their rights and obligations. Particularly, consumers were educated on counterfeit phones, characteristics of genuine ICT equipments, SIM card registration, Digital Migration, etc.

Three consumer forums gathering both consumer representatives and operators took place. The topics discussed in the forums were about the Quality of Service in ICT sector, SIM card registration as well as Digital Broadcasting Migration.

2.6.2 REVIEW OF CONTRACTS BETWEEN CONSUMERS AND OPERATORS

Contracts between operators and consumers were analyzed and amended where necessary. This aimed at improving the quality of service and reducing consumer complaints. The following contracts were analyzed:

1. Tigo Contract on post paid services
2. Altech Stream Rwanda Internet subscriber contract
3. Contract between Hotels and ISP's (Internet services provision)

2.6.3 COMPLAINTS IN ICT

The table below indicates the number of complaints that were registered from July 2012 to June 2013.

TABLE 15: REGISTERED COMPLAINTS IN ICT SECTOR

Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Total
11	18	20	543	539	666	1239	1009	646	366	661	248	5966

The above graph indicates that a higher number of complaints were received for the period starting from October 2012 to March 2013 whereby the number of registered complaints increased from 20 in September to 543 by October 2012. The main reason for that increase is that in October, RURA conducted a TV and radio emission on counterfeit phones and the public was eager to know about the new move. As such, people eager to know how they would be compensated after the banning of their counterfeit phones from the market. The shooting observed in January follows the sensitization programs and the SIM card registration campaign preparing for the official launch of the exercise in February.

The diagram below shows the nature of other complaints that were received during the period under review:

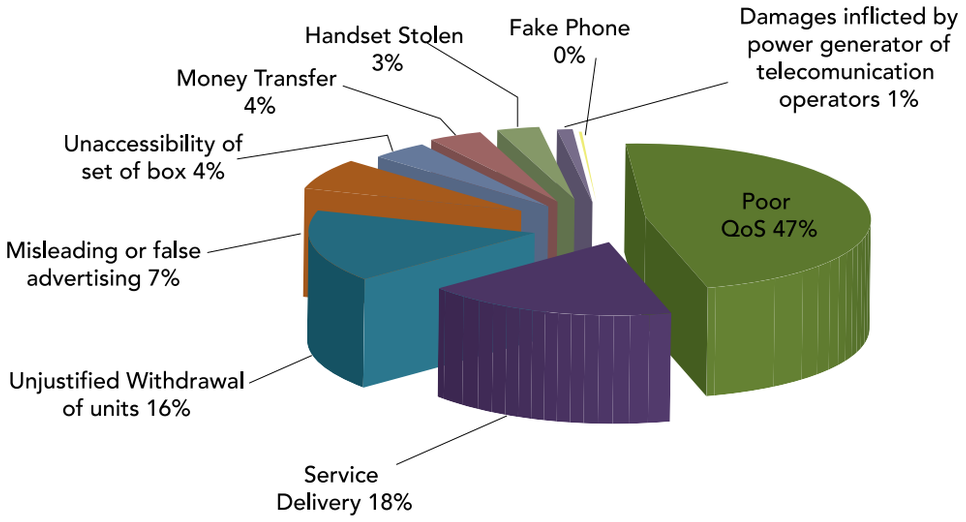


FIGURE 9: REGISTERED COMPLAINTS BY TYPE

2.7 UNIVERSAL ACCESS

2.7.1 BACKGROUND

The term "Universal Services" was drawn from International Telecommunication Union (ITU) in its World Telecommunication Development report of 1998, as a paradigm that helps all telecommunication service providers to make their services available, accessible and affordable to all people.

On this basis, to have equal opportunity and access on telecommunication and ICT services or product to all people become the principle goal of the paradigm in the so-called "Universal Access (UA)". The first phase of the paradigm was to design the universal access policy that supports telecommunications infrastructure towards remote and underserved areas.

The Government of Rwanda (GoR) through its Law No 44/2001 of 30th November 2001 governing telecommunications established the Universal Access Fund (UAF) to accelerate the use of ICT in the country. The functioning and the source of funding of UAF are determined by the Presidential Order No 05/01 of 15/03/2004.

The fund is financed by contributions from licensed operators who contribute 2% of their annual turnover. The Regulatory Board has the mandate to manage this fund in a way that favours the spread and take-up of ICTs in designated remote and under-served areas of the country. Projects under Universal Access complement and integrate the overall NICI policy framework for Rwanda.

2.7.2 UNIVERSAL SERVICE CURRENT STATUS

RURA through its Universal Access Fund (UAF), has implemented a numerous of ICT initiatives that are contributing to the widest possible access, at affordable terms to telecommunication and ICT services in all parts of the country.

The Universal Access Fund focuses on voice and data penetration by connecting public and private institutions such as schools, health centers, army and police sites, hotels and local administration offices in rural and remote areas of the country by using VSAT technology and fiber optic.

In the era of convergence of technology, UAF has not only focused on the voice but also with much efforts on data penetration in the whole country. On this basis, as some projects require very important investments, the Government of Rwanda has also contributed to the deployment of a high capacity national optic fiber backbone network to serve the community with high Internet bandwidth capacity.

The following initiatives were carried out by the Government of Rwanda through Universal Access Fund (UAF) to promote the penetration of Internet access and its usage in the whole country:

1. Providing the Internet connection to all districts in remote and rural areas – (Up to now; all districts in the country are already connected to data and voice services).
2. Providing the broadband connectivity to 30 Telecentres all over the country; those telecenters are being managed by Rwanda Development Board (RDB).
3. Offering the Internet bandwidth connectivity to all Universities (Public and Private) using Rwanda Education Network (RwEdNet)
4. Connecting secondary schools in remote and rural areas on VSAT Internet connectivity:
   - All Technical Secondary schools are connected
   - All Technical Colleges are connected
   - Some secondary schools (private and public) -- located far away from Rwanda national optical fiber backbone network.
5. Providing the Internet connectivity, network devices and installation fees to 45 sites of Rwanda National Police in rural and remote areas.
6. Providing the Internet connectivity to 33 Army sites in remote and rural areas, including also the purchasing of network devices and installation fees to those sites.
7. Offering the Internet connectivity to Rwanda immigration boarders with Burundi, Tanzania, Uganda and Congo by using VSAT technology under UAF subsidy.

8. Providing the Internet connectivity to some private institutions and local business operating in rural and remote areas of Rwanda.

9. Providing the Internet connectivity to two orphanage centers in Rwamagana and Nyamata in Eastern province.

From 2004 to 2012 a total of 189 sites were connected using VSAT technology with a bandwidth of 110 Mbps.

UAF also supports all ICT telecenters in rural areas to spread the broadband Internet access to nearby communities/locations via Wi-Fi. These initiatives have led to business growth as well as improvements in education, healthcare, and other social services.

Due to high cost for VSAT connectivity, the current trend is to switch from VSAT connectivity to fiber optic.

2.7.3 IMPLEMENTED PROJECTS USING UAF FUNDS IN 2012-2013

Under the UAF, and in collaboration with other Institutions, the following projects were initiated and are under implementation:

» The ICT Literacy in rural areas to provide support to E-ICT by establishing e-learning and e-service centres in rural as a means to provide access to affordable ICT services to rural communities. The project stakeholders are MINADEF, MINEDUC, MINALOC, and MYICT.

» Affordable access to Internet services for wider penetration of ICT services in rural areas for private and public institutions. This is done by subsidizing bandwidth acquisition to the rural communities where fiber network is not yet operational. (Bandwidth subsidy).

» Equal Access and Equal Opportunity to Information by providing ICT support to people with Disability. The project implementer is Rwanda Union of Blinds (RUB)

» Support of RICTA in Operationalization and management of ccTLD Management (Country Code Top Level).

» RURA provided financial support for the implementation of Electronic Signature Infrastructure (Public Key Infrastructure) in Rwanda, a project which is run in collaboration with RDB and KISA.

» In collaboration with the Ministry of Youth and ICT (MYICT) support ITU McCaw Broad WiMax Project for broadband access to Education, Health and Local Administration in remote and rural areas.

» Support of implementation of Internet Exchange Point (RINEX)

» Implementation of Internet quality of service monitoring system by upgrading existing Epitro Solution.

» Electrification of sites in rural areas for Quality of Services Monitoring System and Spectrum management system.

2.8 SECTOR SPECIFIC CHALLENGES

i. The lack of monitoring equipments, tools to collect data on content quality, software tools and necessary hardware equipments for Internet content quality.

ii. Delay in expanding legal framework whereby the enactment of the Media Law took too long, with the ICT Bill still pending for the parliament's adoption.

iii. Absence of the Prime Minister (PM) Order specifying RURA mission in regards to media.

iv. For Rwanda to fully benefit from broadband services, there is a need to address some issues relating to:

- Habitat system by shifting from sparse habitat in rural areas to villages (Imidugudu)
- Extension of supporting infrastructure such as roads
- Extension and speeding up of the rural electrification
- Extension of Wireless broadband services to rural areas

TRANSPORT SECTOR

3. TRANSPORT SECTOR

3.1 SECTOR PROFILE

The transport sector of Rwanda's economy is a significant segment of the country's socio economic development whose role is paramount, hence the need to put in place a solid regulatory foundation for the sector. It is in this framework that the Rwanda Utilities Regulatory Authority was established to also regulate, the three modes of transport which are; air, road and waterways.

In this sector, the law establishing RURA gives it a mandate to ensure that transport services are available throughout the Country to meet, in transparency all reasonable demands of all natural persons and organizations. It also ensures that the interests of both present and future beneficiaries of transport services are catered for and that utility providers comply with laws and regulations in force.

3.2 SECTOR COMPONENTS

As aforesaid, the transport sector regulation embodies regulation of the three modes of transport which are; road, waterways and air. In Road Transportation mode, RURA regulates all providers of commercial transport services on Rwandan roads. These are:

1. Public bus and minibus Companies/Cooperatives,
2. Taxi cabs Companies/Cooperatives,
3. Special Vehicle Hiring Companies (JEEPS & PICK-UPS)
4. Motorcycle Companies/Cooperatives,
5. Driving schools,
6. Goods transportation.

In waterways, RURA regulates transportation activities that are carried out on the waterbodies of the Republic of Rwanda. Besides, the Air Transport sub-sector covers the regulation of economic activities in the air transport industry and the protection of consumer rights as well as tertiary services provided by agencies like Freight forwarders, Travel Agencies and the general sales representations.

3.3 LEGAL AND REGULATORY FRAMEWORK

For many years, the transport sector has been suffering from lack of sector laws. To fill that, RURA in close collaboration with other key stakeholders initiated and submitted to the Government for approval some policies and bills which would provide some basis to help streamline transport service activities.

In road transportation, the Rwanda's public transport policy and strategy was initiated, discussed among all the concerned stakeholders and it was adopted by the Cabinet on October 10, 2012. In addition, an enforcement procedure manual for road transport inspection was developed for approval of the Regulatory Board.

In waterways transportation, a bill governing inland waterways transport was prepared during this fiscal year and it currently awaits the approval of the Cabinet for its implementation.

3.4 LICENSING IN ROAD TRANSPORT SUB-SECTOR

During the year under review, a number of licenses were issued as new or renewed in all the five license categories; namely local transport licenses, cross-border transport licenses, car rental licenses, taxi cab companies and cooperatives licenses and driving schools licenses.

3.4.1 LICENSES ISSUED TO LOCAL TRANSPORT OPERATORS

The table below gives a picture on the number of licenses issued to local transport operators during the year under review:

TABLE 16: STATUS OF LICENSES ISSUED TO LOCAL TRANSPORT OPERATORS IN 2012/2013

RENEWED LICENSES FOR LOCAL TRANSPORT OPERATORS		NEW LICENSES ISSUED TO LOCAL TRANSPORT OPERATORS	
1	HORIZON EXPRESS LTD	1	KIGALI COACH AGENCY LTD
2	VOLCANO S.A.R.L	2	CRANERWA
3	OMEGA S.A.R.L	3	SELECT EXPRESS
4	KIGALI SAFARI S.A.R.L	4	CITY CENTER T/COOPERATIVE
5	VIRUNGA EXPRESS LTD	5	RUBAVU T/COOPERATIVE
6	INTERNATIONAL EXPRESS LTD	6	NGOMA T/COOPERATIVE
7	STELLA EXPRESS LTD	7	RUSIZI T/COOPERATIVE
8	YAHOO CAR EXPRESS LTD	8	KAYONZA T/COOPERATIVE
9	MATUNDA EXPRESS LTD	9	NYAGATARE T/COOPERATIVE
10	EXCEL TOURS &TRAVEL AGENCY LTD	10	MUSANZE T/COOPERATIVE
11	ROYAL EXPRESS LTD	11	HUYE T/COOPERATIVE
12	CAPITAL EXPRESS LTD	12	MUHANGA T/COOPERATIVE
13	SOTRA TOURS &TRAVEL AGENCY LTD	13	REMERA T/COOPERATIVE
14	PRINCE EXPRESS	14	NYABUGOGO T/COOPERATIVE
15	GASABO TRAVEL & TOURS AGENCY	15	GICUMBI T/COOPERATIVE
16	COOPERATIVE URUGENDO RWIZA	16	RUHIRE EXPRESS LTD
17	AFRICAN TOURS EXPRESS LTD		
18	IMPALA GROUP LTD		
19	KIGALI BUS SERVICES LTD		

3.4.2 LICENSES ISSUED TO CROSS BORDER TRANSPORT OPERATORS

Apart from local public transport service providers, there are other operators that were licensed during this year under review to provide public transport services across the Rwandan borders, namely;

1. Trinity Transporters & Distributors Co.ltd
2. Byamugisha Baby Coach & Sons Transport Co. Ltd
3. Jakobu Enterprises Limited
4. Kampala Coaches Ltd
5. Gaaga Coach
6. Cross Country Transport Company

Among the above mentioned companies only Trinity Transporters & Distributors Co.Ltd has the origin in Rwanda whereas the rest are owned by foreign operators from East African Community member States of Kenya and Uganda.

3.4.3 CAR RENTAL LICENSES

During the year under review, five (5) car rental companies were licensed to provide car rental transport services. These companies provide transport services using Jeeps, Pick-ups and other kinds of special vehicles. These companies are;

1. GORILLAND SAFARIS LTD
2. TOURS DES PAYS DES GRANDS LACS (TPGL)

3. SM TRANSPORT LTD
4. RWANDA TOURISM AND TRAVEL AGENCY (RTTA)
5. SGES/ATT.

Considering the capacity of the above categories, local transport operators possess a fleet of 1,683 vehicles; cross-border transport operators have 20 vehicles whereas the fleet for rental vehicle companies is 43 vehicles as depicted in the chart pie hereunder.

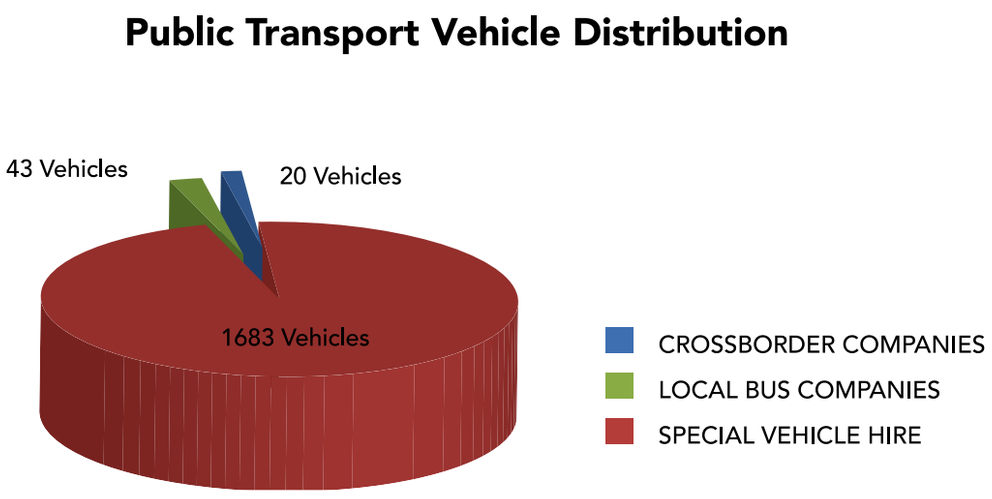


FIGURE 10: SUMMARY OF VEHICLE FLEET DISTRIBUTION PER CATEGORY

As can be seen from the chart above, fewer cross border vehicles were licensed during this year under review compared to the local operators. This is obvious because the number of local passengers is always bigger than those who need cross borders public transport services. However, it should be noted that not all cross border transporters are licensed for the service. This therefore calls for more inspections to make sure the cross border transport operators are in compliance with the licensing regulations in place.

3.4.4 LICENSED TAXI CABS COMPANIES AND COOPERATIVES

During the financial year 2012/2013, five (5) new companies were licensed to provide taxi cab public transport services, hence bringing the total number of licensed taxi cab operators to twenty two (22). Below is a comprehensive table indicating all the licensed taxi cabs companies and their corresponding fleet of vehicles.

TABLE 17: LICENSED TAXI CABS OPERATORS AND THEIR RESPECTIVE FLEET

S.N	NAMES OF COMPANIES	NUMBER OF CARS
1	AIRPORT TAXI DRIVERS OF KIGALI (A.T.A.K)	28
2	COOCHATAVORU	14
3	COCTAKI	14
4	CODACE	12
5	COKITA	15
6	CONDOR	10
7	COOPERATIVE DES TAXISMAN VOITURE RUSIZI-BUGARAMA(C.T.V.R.B)	53
8	COOPERATIVE POUR TAXI VOITURE DE KIGALI(CO.T.V.K)	20
9	COPERATIVE UMUBANO	9
10	COTAHAMA	15
11	COTAVOKA	8
12	COTAVONYA	32
13	EJO HACU HEZA	10
15	K.T.V CO	15
16	KIGALI TAXI SERVICE(K.T.S)	9
17	NYARUGENGE TRAVEL COMPANY Ltd	13
18	NYUNGWE CHIMPS	15
19	QUICK TAXIS SERVICES	13
20	QVTC LTD	7
21	ROCKY TRADERS LTD	7
22	SERENGETI TRAVEL AND TOURS AGENCY LTD	7

3.4.5 LICENSED DRIVING SCHOOLS OPERATORS

During the fiscal year 2012/2013, out of sixty four (64) licensed driving school operators, 46 secured their license renewals, 17 others are still under the process of renewing their licenses whereas one new driving school called DON BOSCO DRIVING SCHOOL was licensed during the year under review. Below is a comprehensive table showing the licensed driving schools, their licenses validity as well as the category of their operations.

TABLE 18: LICENSED DRIVING SCHOOLS AND VALIDITY OF THEIR LICENSES

N°	LICENSED DRIVING SCHOOLS	VALID UP TO	Category
1	AUTO ECOLE SAINTE FAMILLE	28th September 2013	A,B
2	UNITED DRIVING SCHOOL COOPERATIVE	30th November, 2013	A,B,D
3	NEW HOPE DRIVING SCHOOL LTD	07th November 2013	A,B,C
4	YOUTH DRIVING SCHOOL LTD	07th November, 2013	A,B,D
5	KACYIRU DRIVING SCHOOL COMPANY LTD	11th June 2013	B
6	BETTER DRIVING SCHOOL LTD	25th January2014	A,B
7	KARONGI NICE DRIVING SCHOOL LTD	31th July 2013	A,B
8	KIBUNGO DRIVING SCHOOL LTD	16th August 2013	A,B
9	IMENA DRIVING SCHOOL LTD	18th July 2013	A,B
10	AUTO ECOLE ETO KIBUYE(KARONGI)	09th August 2013	B
11	UMUGANDA DRIVING SCHOOL(RUBAVU)	18th July 2013	A,B
12	CFPRO DRIVING SCHOOL(RUHANGO)	05th October, 2013	B
13	KABUGA DRIVING SCHOOL	22th November, 2013	A,B
14	NYAGATARE DRIVING SCHOOL	27th September, 2013	A, B
15	AUTO ECOLE LA DIFFERENCE LTD	22nd January, 2014	A,B
16	AUTO ECOLE DU LAC KIVU(KARONGI)	27th September, 2013	A,B
17	ALPHA DRIVING SCHOOL LTD	18th July, 2013	A,B
18	AUTO ECOLE MIDLAND LTD	28th January 2014	B,D
19	AMANI DRIVING SCHOOL LTD	27th February 2014	A,B
20	NEW VISION DRIVING SCHOOL LTD	06th February 2014	B,D
21	CAMPUS DRIVING SCHOOL LTD	27th February, 2014	A,B
22	RUHANGO DRIVING SCHOOL LTD	08th March 2014	A,B
23	LA STAR CONFIDANTE LTD	25th February, 2014	A,B
24	LA DIFFERENCE CHEZ NOUS A MUSANZE LTD	08th March, 2014	A,B
25	AUTO ECOLE LA REFERENCE LTD	28th March 2014	A,B
26	ECONOMAT GENERAL	07th February 2014	A,B
27	APAFORME(KICUKIRO)	28th March, 2014	A,B
28	COTIMIN DRIVING SCHOOL(NYAGATARE)	28th March 2014	A,B
29	NYARUGENGE DRIVING SCHOOL(NYARUGENGE)	12nd February 2014	A,B,D
30	AUTO ECOLE MORIYA	22nd April 2014	A,B,D
31	DON BOSCO DRIVING SCHOOL	11th April 2014	A,B
32	SHILO DRIVING SCHOOL	24th April 2014	A,B
33	AUTO ECOLE NYAMIRAMBO LTD	16th May 2014	A,B
34	AUTO ECOLE GASTON & ASSOCIE	30th April 2014	B
35	NYAMATA DRIVING SCHOOL	14th May 2014	A,B
36	SAFETY ROAD DRIVING SCHOOL LTD	13th May 2014	A,B
37	AUTO ECOLE ISIMBI	16th May 2014	A,B
38	AUTO ECOLE LA CONNAISSANCE LTD	04th June 2014	A, B
39	PROFESSIONAL DRIVING SCHOOL LTD	27th May 2014	A, B
40	AUTO ECOLE BONNE ROUTE LTD	31st May 2014	A, B
41	RWANDA INITIATIVE CORPORATION	09th May 2014	A,B
42	KABARONDO DRIVING SCHOOL	02th July 2014	A,B

43	KORUJYIMBERE SCHOOL LTD	21st June 2014	A
45	SUPERIOR DRIVING SCHOOL LTD	18th June 2014	A,B
46	AUTO ECOLE LA CHARITE	12th June 2014	A,B
47	FRATERNITY DRIVING SCHOOL LTD	29th May 2014	A,B

3.5 DEVELOPMENTS IN AIR AND WATERWAYS TRANSPORT

During this year under review, RURA was able to identify unregulated services both in waterways and air transport subsectors and thereafter convened several consultative meetings with concerned stakeholders with the aim of establishing a regulatory framework for these services.

RURA also participated in a number of Regional consultative meetings that brought together EAC Partner States to discuss the facilitation and harmonization of Air transport policies and regulation. As a result, a consultative committee was established with the objective of facilitating the completion of border clearance formalities at airports with regard to aircrafts, crews, passengers, baggage and cargo.

In Waterways transport sub-sector, RURA carried out an assessment of the actual water transport situation through on-shore visits to see how boats operate, equipment used and how experienced the boat drivers are. The outcome of that assessment led to drafting guidelines to be later implemented by operators.

Following that, there has been an official registration of operators to help evaluate their capacity on water carriage. This was a very important step as most people have been operating informally. Coupled to this a registration of boat drivers and training on the code of conduct were undertaken.

During the financial year 2012/2013, ninety five (95) operators have been licensed and one hundred and fourteen (114) out of 142 boats numbered in boats inventory conducted in October 2011 were registered.

Later, both the survey and inspection of registered boats were conducted and a good number of them were found complying with technical requirements. Few others were requested to start complying before getting registered.

Site visits were also conducted on the lake Kivu, Cyohoha Sud, Muhazi, Mugesera, Burera and Ruhondo and that prompted licensed operators to comply with license obligations.

3.6 DEVELOPMENTS RELATING TO CONSUMER ISSUES

During the period under review, the transport sector ranks second after ICT with regards to the number of consumer complaints lodged in RURA. The table and charts hereunder show the monthly transport related complaints received throughout the entire fiscal year 2012/2013:

TABLE 19: REGISTERED COMPLAINTS IN THE TRANSPORT SECTOR PER THEIR NATURE

S.N	Nature of complaint in the transport sector	Number	Percentage
1	Violation of route assigned	28	3.80%
2	Leaving a passenger before reaching his or her final destination	48	6.51%
3	Over charging	251	34.06%
4	Requirement for transport authorization	146	19.81%
5	Inaccessibility or shortage of transport vehicles	92	12.48%
6	Unauthorized passenger transporters	35	4.75%
7	Transporters arrested by RURA officers	22	2.99%
8	Trip cancellations and delays	65	8.82%
9	Loss of Luggage	4	0.54%
10	Infrastructure	2	0.27%
11	Staff conduct or behavior (fight for passengers)	44	5.97%
	TOTAL	737	100.00%

These figures pin point over charging (34%) as a habit and real concern for public transport and people who use it.

Complaints relating to requirements for transport authorizations take the second rank; this was due to the new system that requires operators to work under cooperatives or companies.

3.7 MONITORING AND ENFORCEMENT OF TRANSPORT REGULATIONS

After realizing that transport regulations were not fully observed by some operators, a number of inspections were done to monitor the compliance with regulations, and where necessary penalties were imposed to the persistent erring operators by issuing enforcement notices to them. The table No 20 summarizes enforcement notices issued:

TABLE 20: ENFORCEMENT NOTICES ISSUED IN TRANSPORT SECTOR

Enforcement letter REF	Date of issue	Company penalized	Committed offence
2778/RURA/DG/2012	22/8/2012	KIGALI BUS SERVICES LTD	Use of Brokers @ RUBAVU
2779/RURA/DG/2012	22/8/2012	VIRUNGA EXPRESS	Use of Brokers
2780/RURA/DG/2012	22/8/2012	BELVEDERE LINES	Use of Brokers
2776/RURA/DG/2012	22/8/2012	URUGENDO RWIZA	Use of non-licensed vehicles
2777/RURA/DG/2012	22/8/2012	RFTC	Use of non-licensed vehicles
2777/RURA/DG/2012	22/8/2012	RFTC	Use of expired Authorizations
3512/RURA/DG/012	15/11/2012	STELLA	Use of Brokers
3511/RURA/DG/012	15/11/2012	VIRUNGA	Use of Brokers
2668/RURA/DG/012	13/8/2012	AFRICAN TOURS	Breach of rules &regulations
2669/RURA/DG/012	13/8/2012	YAHOO CAR EXPRESS	Breach of rules &regulations
2649/RURA/DG/012	10/8/2012	BAHAMA BLESSING	Operating without license
2650/RURA/DG/2012	10/8/2012	YAHOO CAR EXPRESS (Burundi)	Operating without license
2651/RURA/DG/2012	10/8/2012	HORIZON COACHES	Operating without license
2652/RURA/DG/2012	10/8/2012	BELVEDERE	Operating on expired license
2632/RURA/DG/2012	9/8/2012	TAQWA	Operating without license
2596/RURA/DG/012	7/8/2012	YAHOO CAR EXPRESS	Use of Brokers
2597/RURA/DG/012	7/8/2012	STELLA	Use of Brokers
2598/RURA/DG/012	7/8/2012	INTERNATIONAL EXPRESS	Use of Brokers
2443/RURA/DG/012	19/7/2012	RFTC	Breach of rules &regulations

In addition to the day-to-day inspections, there were other ad hoc inspections that were conducted in conjunction with the Ministry of Education and other stakeholders to ensure about for the smooth movement of students at the beginning and end of each term of study.

3.8 IMPROVEMENT OF TRANSPORT SERVICE DELIVERY PASSENGERS

In a bid to improve the service delivery in the passenger transportation service, a number of initiatives were undertaken during the fiscal year 2012/2013; awareness campaigns about operating under Companies or Cooperatives, computerization of the Road Transport licensing system and identification of new routes, establishment of a liaison office in Southern Province, to name but a few.

3.8.1 AWARENESS CAMPAIGNS ABOUT OPERATING UNDER COMPANIES OR COOPERATIVES

During the period 2012/13, the Rwanda's Public Transport Policy and Strategy was adopted by the Cabinet in October 2012. Following this adoption, there was a need to create awareness amongst operators about the policy and what was packaged therein. It is in that context that RURA conducted country wide sensitization campaigns about operating under Companies or Cooperatives and their related benefits. The campaign took five months from 1st October 2012 until 1st March 2013 when authorization issuance to individuals was stopped and replaced by licensing only Companies/Cooperatives.

As a result, 4 Companies and 12 Cooperatives have emerged and licensed while the already existing Companies and Cooperatives increased their fleet as individuals joined them for stronger partnerships. This has boosted competitiveness in the public transport market which would have otherwise been practically impossible with the former set up.

3.8.2 COMPUTERIZATION OF ROAD TRANSPORT LICENSING SYSTEM

In a bid to improve the service delivery in Road Transport regulation, a digitalised system was introduced during the course of the year under review. This system is a web-based application which can be accessed through any web browser on user side. The software and database reside on a central server rather than being installed on the desktop system and is accessed over a network and this system was developed in house.

The features of this automated system enable quick authorization and license issuance. This system helps in keeping necessary information and generates reports concerning road transport regulation. Besides, the system allows RURA to:

- Identify all stakeholders in Road Transport sector currently operating in Rwanda (Public transport and transport of goods),

- Collect and keep in data repository, i.e all data that may be needed by RURA and other Government Institutions for planning purposes.
- Improve the quality of services offered to road transport operators,
- To identify the penetration of road transport services across the country
- Reduce office paper related wastage.
- Generate reports according to desired needs
- Facilitate the access to the required information
- To reduce information checking delays.
- To easily track piracy in transport authorizations.
- To track, with high level of efficiency, the road transport operators history.

The figure below illustrates the information flow throughout the whole licensing process:

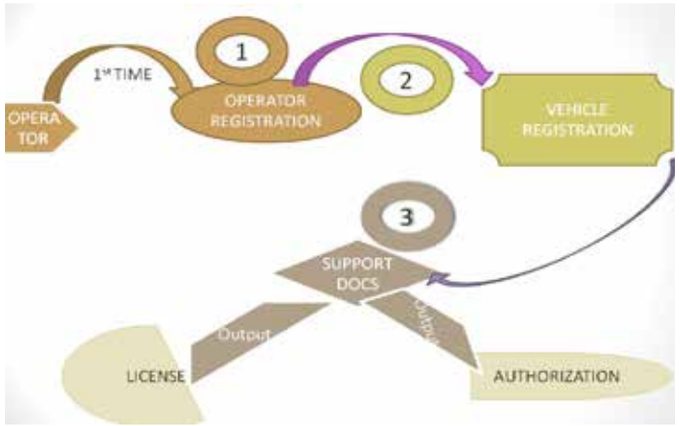


FIGURE 11: ROAD TRANSPORT LICENSING PROCESS

The new licensing system was launched on 1st March 2013 and has since then helped the users to quickly access the required data about any licensee which ceased to be puzzling exercise.

3.8.3 IDENTIFICATION OF NEW ROUTES

In order to increase the public transport service accessibility, there was a need to identify new routes to be added on the list of the already existing routes commonly used by public transport service providers. To achieve this, a tour was conducted all over the Country measuring the distances for the new and inaccessible routes.

During this exercise, about seventy six (76) routes were identified and distance measured. This bank of data will be used in the future in route allocation exercise.

3.8.4 ESTABLISHMENT OF A LIAISON OFFICE IN SOUTHERN PROVINCE

Initially, all operators were required to come to RURA headquarters in Kiyovu for their authorizations which was not only tiresome but also time and money consuming on the operators' side. It was therefore imperative for RURA to open liaison offices in Provinces to cater for the operators outside Kigali. During the year under review, a satellite office was opened in Huye, Southern Province considered as a second home for many public transport operators after Kigali City. An office was acquired, required staff was recruited, and the office managed to serve about 800 individual operators in a period of six months.

3.8.5 MONITORING OF DRIVING EXAMINATIONS ORGANIZED IN LICENSED DRIVING SCHOOLS

During the course of the current fiscal year, RURA undertook monitoring exercises for both theory and practical driving examinations organized in Driving Schools Country wide. This exercise not only contributed to raising and handling issues relating to driving practical exams, but also served as a good performance assessment tool of driving school.

FIGURE 12: PRACTICAL DRIVING EXAMINATION GOING ON AT NYARUGENGE DRIVING SCHOOL

3.9 GOODS TRANSPORT REGULATION

Since the adoption of the regulations governing goods transport licensing framework, only a hand full (12) operators have turned up to apply for license during the year 2012/2013. There was therefore a need to sensitize them about the licensing system in place. As such, RURA carried out a fact finding mission country wide to have first hand information about the goods transport operators. Some of the outcomes were:

- Regional operators have to be licensed by RURA.
- Transported commodities should be insured.
- There should be proper contract between transport operators and suppliers.
- Costs of transporting different commodities should be harmonized as per type of commodity and travel distance.
- Enhancing safety measures of loaded commodities.
- Transport Companies/cooperatives should organize themselves for a proper operation practices.
- Enforcement measures together with other stakeholders should be taken into considerations.

In a bid to address the above mentioned issues, a workshop was organized by RURA at CLASSIC HOTEL to further deliberate on the regulation of goods transport services.

3.10 MARKET PERFORMANCE AND STATISTICS

The period under review was mainly characterized by an increased number of licensed public transport companies and cooperatives. The following table illustrates the number of licensed operators per category:

TABLE 20: EVOLUTION OF THE NUMBER OF LICENSED RANSPORT OPERATORS PER CATEGORY

CATEGORY	June 2012	June 2013
DRIVING SCHOOLS	50	47
PUBLIC TRANSPORT COMPANIES AND COOPERATIVES	33	44
TAXI CABS COMPANIES AND COOPERATIVES	17	22
SPECIAL CAR HIRES	0	5
MOTOBIKE COOPERATIVE	0	4
INDIVIDUAL TAX CABS	612	794
INDIVIDUAL MOTOBIKES	18,502	25,560
INDIVIDUAL "VELO-MOTEURS"	1,973	2,013

The table above indicates an increase of licensed public transport companies and cooperatives from 33 in the previous year to 44 by June 2013. This 11% increase was a result of RURA's tremendous sensitization to form cooperatives throughout the country.

However, there has been a 6% decrease in the number of licensed driving schools. This is attributed to the four operators' delay to renew their licenses during the year under review.

3.10.1 MARKET SHARE BY TYPE OF LICENSED PUBLIC TRANSPORT COMPANY

As in the previous year, Minibuses remain the most used cars by the Transport companies. The graph below illustrates the market share by type of transport operator.

Types of cars used by transport companies and cooperatives as of June 2013

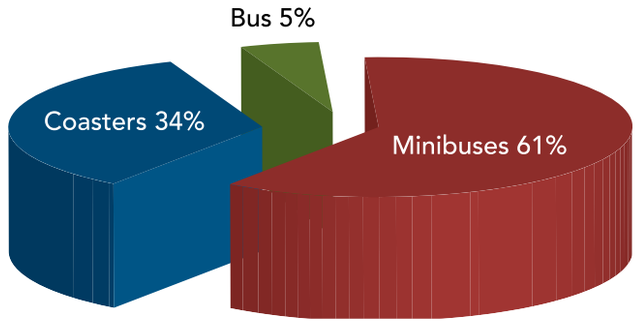


FIGURE 13: MARKET SHARE IN TERMS OF FLEET USED IN PUBLIC TRANSPORT

The above graph indicates that Minibuses are mostly used with 61% share followed by Coasters with 34% and 5% of buses; This is mainly due to individual operators who mostly used minibuses in their business that were instructed to operate under cooperatives or companies.

3.10.2 MARKET SHARE IN THE TYPE OF FLEET USED BY SPECIAL CAR HIRES

The following illustrates the market share among the licensed special car hire with respect of the number of cars detained in each company.

Market share in the number of cars used by special hire companies as of June 2013

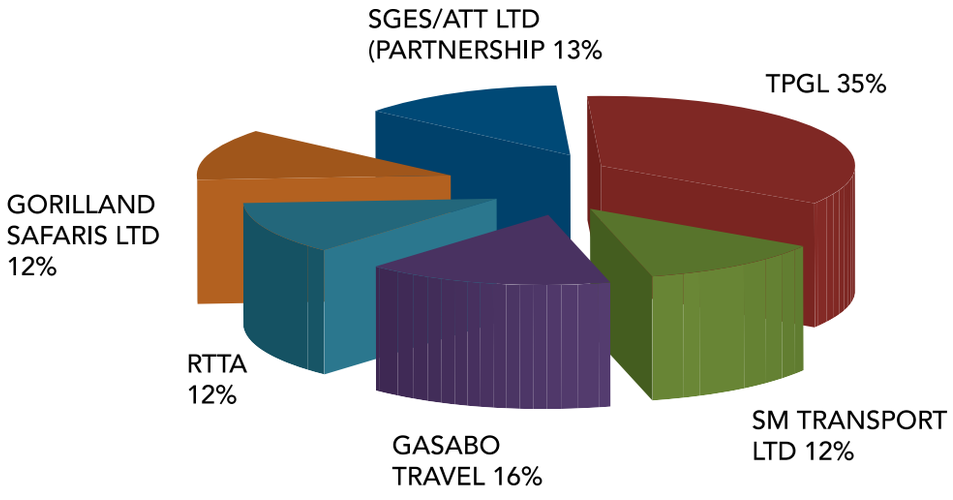


FIGURE 14: MARKET SHARE IN TERMS OF NUMBER OF FLEET BY SPECIAL CAR HIRE OPERATORS

The above graph shows that TPGL is the dominant operator with 35% of the total number of cars in operation followed by GASABO TRAVEL with 16%.

3.10.3 MARKET SHARE IN TERMS OF THE NUMBER OF MOTORBIKES USED BY COMPANIES

The following graph illustrates the market share among the licensed motorbike cooperatives with respect of the fleet detained by each cooperative.

Market share motobike cooperatives as at June 2013

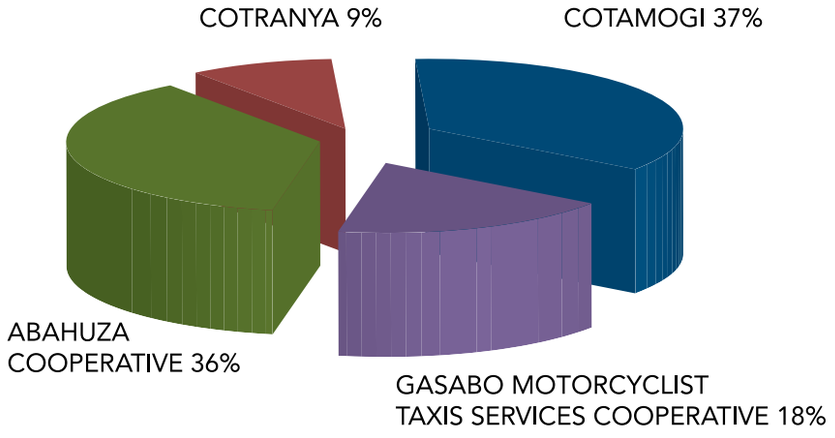


FIGURE 15: MARKET SHARE IN TERMS OF NUMBER OF MOTORBIKES USED BY COOPERATIVE

The above graph shows that, as of June 2013, COTAMOGI with 37% share and Abahuza cooperatives 36% are dominating the motorbikes market.

3.10.4 TARIFF REGULATION

During the period under review, the Regulator has received two tariff applications for consideration. As shown in Table 24 both ordinary and airport tariff applications were analyzed and determined by the Regulatory Board after consultation with concerned stakeholders during the meeting.

TABLE 21: ORDINARY AND AIRPORT TAXICABS FARE

Type of taxi cab	Basic fare(first 3 kilometers)	Additional Kilometers(Rwf/ Km)	Renting taxicab per day		
			Time / hours	Maximum distance(Km)	Price, VAT excluded
Ordinary	1,500	500	12	150	48,000
Airport	1,800	600			

The fare for additional kilometer increased by 14% for ordinary taxi cabs and 18% for the airport taxi cabs and the tariff for renting both ordinary and airport taxicab per day increased by 15% from 41,600 to 48,000 Rwf VAT exclusive.

The cost of waiting time will be agreed upon between a taxicab operator and a passenger. The new fares are set for a period of two years except if the fuel pump price exceeds one thousand two hundred Rwandan francs (1,200 Rwf) per litre or goes below one thousand Rwandan francs (1,000 Rwf) per liter.

3.11 SECTOR SPECIFIC CHALLENGES AND WAY FORWARD

In order to have a vibrant sector appropriate transport law and related legislations to enable the Regulator to eventually have the desired socio-economic impact of the regulation of the sector in all its modes have to be in place.

Also, to ensure compliance with regulations, concerned stakeholders should timely intervene in inspections to enforce rules and regulations. Hence the following concerns need to be urgently addressed:

- Lack of legal tools (sub-sector laws) that would serve as a foundation for regulating the sector.
- Resistance by some operators to abide by regulations due to some overlaps in the mandates of institutions.
- Lack of public investment in transport facilities.
- Inland waterways transportation also suffers from the negative impact of current hydro-meteorological conditions, as navigable waterways dramatically reduce in many parts of the country during the dry season.
- Insufficient Road transport service providers to meet the demand and failure by unprofessional operators to comply with the license obligations.
- An informal sector with a big number of illiterate operators,
- Non-compliance especially with the established transport fares;

ENERGY, WATER AND SANITATION SECTORS

4. ENERGY, WATER AND SANITATION SECTORS

4.1 ENERGY SECTOR

4.1.1 PROFILE OF THE SECTOR

Adequate energy service provision is a driving force of a country's socio-economic development and access to safe, reliable and cost effective energy is essential in order to achieve the ambitious levels of growth as targeted in the Economic Development and Poverty Reduction Strategy of Rwanda (EDPRS II).

The biggest share of the national energy balance is still allocated to biomass which accounts for 85% while petroleum products account for 11% and electricity for the remaining 4%.

The Government is strategising the diversification of energy sources in order to increase the power generation mix by promoting the use of locally available renewable resources while at the same time improving transmission and distribution networks.

A strengthened legal and regulatory framework is being foreseen by all concerned institutions so as to ensure efficient, reliable and affordable energy services in the long run.

As of June 2013, the total number of electricity subscribers was 374,056 which represent a 17% penetration rate. Out of the total subscribers, 39% are based in City of Kigali while 61% are in the other four provinces.

4.1.2 SECTOR COMPONENTS

4.1.2.1 ELECTRICITY SUB-SECTOR

Electricity is vital for the provision of modern services and an essential driver of the socio-economic development of the country. Electricity still represents a small portion of the total energy mix.

Over recent years, there has been an aggressive program to increase access to the electricity services by all sectors of the economy especially industry and small & medium enterprises. The current strategy is set to increase electricity access generation from the current 110.44 MW of installed capacity to around 563 MW and grid connectivity from the current 17% (end June 2013) to around 48 % percent in 2017/2018.

The Electricity Supply Industry (ESI) has remained vertically integrated with EWSA being a major player with its own electricity generation and having a monopoly in the transmission and distribution of electricity. Currently, 7 Independent Power Producers (IPPs) are selling bulk electricity to EWSA under long-term and short time contracts.

The Law N°21/2011 of 23/06/2011 governing electricity in Rwanda has established "Universal Access Fund" with the main purpose of optimizing access to electricity in all areas of the country through cost effective means and minimized support.

The operationalization of the Universal Access in Energy is anticipated through a Presidential order is to determine its functioning and contribution mechanisms to the said fund. The Presidential order is in the drafting process and is expected to be completed by end 2013. The current electricity market structure is as follows:

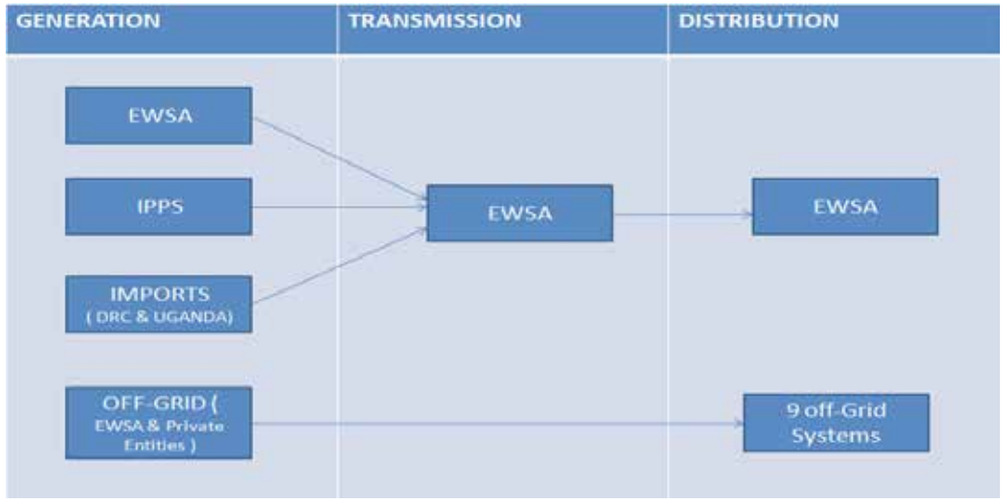


FIGURE 16: ELECTRICITY MARKET STRUCTURE

PRODUCTION

The electricity generation capacity has not increased as expected and remains low compared to the need of the country's growing economy. The total installed capacity in the national interconnected grid increased from 99.56 MW to 109,96 MW at the end of June 2013, the increase resulting from the commissioning of the new AGGREKO rental thermal power plant (10MW) located at Mukungwa and the MUSARARA micro hydro plant (0.4 MW) owned by SOGEMR. The current generation mix is dominated by thermal which accounts for 52.08 MW as shown in the chart below.

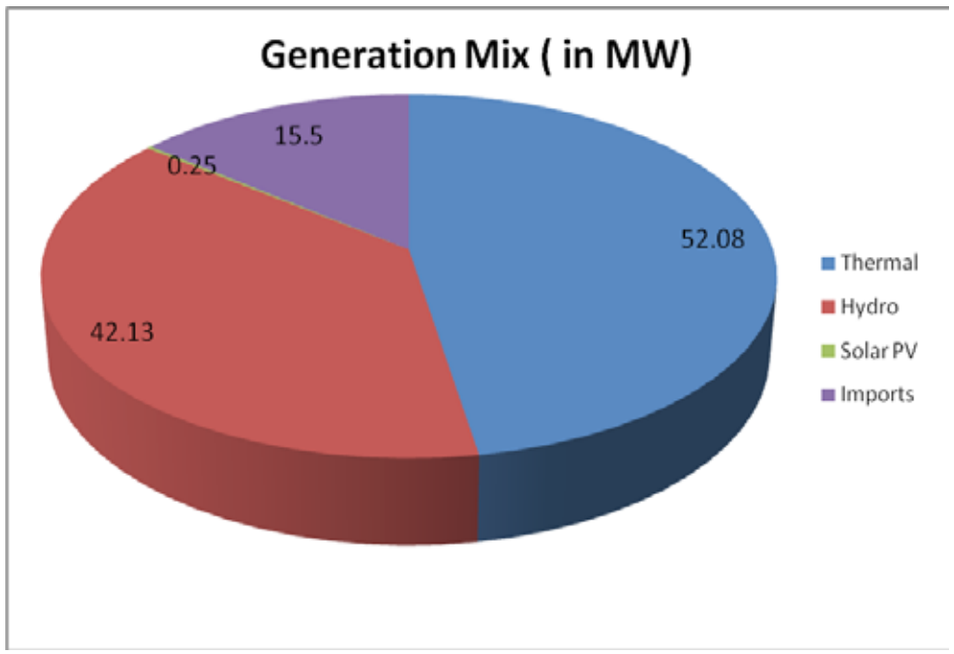


FIGURE 17: ELECTRICITY GENERATION MIX IN MW

Nonetheless, the available capacity was fluctuating between 80MW and 92 MW due to some power plants equipments breakdowns or insufficient water to run the existing hydro power plants to their full capacity. The peak demand for the period under review has reached 84.5 MW in the month of May 2013.

The Government, in collaboration with the private sector and development partners, is promoting small electricity projects as part of the general renewable energy framework. During the year under review, 5 micro hydro projects namely NYIRABUHOMBOHOMBO (0.5 MW), NYABAHANGA (0.2 MW), JANJA (0.2 MW), NSHILI (0.5 MW) and GASHASHI (0.2MW) have been completed and expected to be commissioned by the end of 2013. In addition, 3 hydropower projects are currently ongoing and due for commissioning by the end of 2013; these are GICIYE (4MW), MUKUNGWA II (2.2 MW), RUKARARA II (2.2 MW).

The above existing power plants will be complemented by a major ongoing methane-to-power project of 25 MW owned by Kivuwatt Ltd. and expected to be commissioned by end of 2013 early 2014. Furthermore, the NYABARONGO hydropower project with a design capacity of 28 MW represents another major lower plant which is under construction and due for commissioning by mid 2014.

TRANSMISSION AND DISTRIBUTION NETWORKS

Along with the expansion of the generating capacity, Rwanda has launched a rather extensive program to rehabilitate and expand the transmission and distribution networks. There are also a number of power interconnection projects between Rwanda and the neighboring countries (Burundi, Uganda and DRC) that are at different stages of development.

However, the power network remains characterized with high losses reaching 27 % in the month of January 2013. These losses are relatively high compared to the international acceptable standards of 10-12 %. In May 2013, EWSA commissioned a study on loss reduction audit in the Rwandan Electricity Network. The study identified the source of losses and came up with a strategic plan aimed at reducing losses in the near and long term future using loss-reduction targets.

4.1.2.2 GAS, PETROLEUM AND RENEWABLE ENERGY SUB-SECTORS

The regulation of the Gas, Petroleum and Renewable energy sub-sectors mainly deals with the following:

- Lake Kivu methane gas and others
- Industrial gases;
- Liquefied Petroleum Gas (LPG);
- Downstream Petroleum Industry (petrol service stations and oil depots);
- Biogas operations;
- Solar PV and Solar Water Heaters;
- Geothermal Resources.

GAS SUB-SECTOR

The Lake Kivu methane gas reserves are estimated at around 55 billion cubic meters with an estimated renewal rate of about 120 million cubic meters every year. Currently three ongoing projects are Kibuye Power (KP1) pilot project generating around 2 MW of electrical power, Rwanda Energy Company (REC) which is being rehabilitated and KivuWatt project, a subsidiary of Contour Global (US-based Company) that plans to generate 100 MW in two phases, the first phase is expected to produce 25 MW that will be followed by the second phase of 75 MW.

Industrial gases consist of medical gases, mainly used in hospitals and others gases used in industrial processes (Oxy-acetylene, acetylene, ammonia, carbon dioxide, sulfur dioxide, etc). Main manufacturers of industrial gases are: King Faisal Hospital (KFH), Centre Hospitalier Universitaire de Kigali (CHUK), Rwanda Oxygen Company and KALISIMBI Companies.

PETROLEUM SUB-SECTOR

Rwanda currently imports petroleum products from the central and the northern corridors. The cost of oil imports is on average 25% of total import costs and accounts for 55% of the entire export revenues (MINECOFIN, 2012). The demand for petroleum products is forecasted to grow at an average of 10% each year between now and 2020.

Rwanda has an ambitious target of increasing its strategic storage capacity to an equivalent of 4 months from the current 1.5 months of consumption, the target being to have a storage capacity of 150 million litres by 2017. Currently the total fuel storage capacity splits among 5 depots in Rwanda which is 31,700 m^3. Due this reason, the GoR has been encouraging the private sector to consider investing in oil storage depots to cater for the growing demand and supply security at times of necessity given the uncertainty surrounding the supply which comes exclusively overland. The following table indicates the location and the storage capacity of the existing fuel depots.

TABLE 22: LOCATION AND STORAGE CAPACITY OF THE EXISTING PETROLEUM DEPOTS

Location	Petrol (M^3)	Diesel (M^3)	Kerosene (M^3)	Fuel oil (M^3)	Jet fuel (M^3)	Total (M^3)
Gatsata	7,200	5,100	1,500	1,900	0	15,700
Kabuye	3,000	2,100	0	600	0	5,700
Bigogwe	3,000	2,000	0	0	0	5,000
Rwabuye	1,900	1,900	0	0	0	3,800
Kanombe	0	0	0	0	1,500	1,500
Total	**15,100**	**11,100**	**1,500**	**2,500**	**1,500**	**31,700**

The potential investors that have shown their interest in building oil storage depots are OILCOM which is planning to put up 19,000M^3 while Société Pétrolière (SP) is planning to construct oil storage depot of 16,000M^3 in phase one to be eventually upgraded to 40,000M^3 in the second phase.

Twenty active oil-marketing companies are currently involved in the importation, transportation, storage, distribution & wholesale of petroleum products operations: SP, KOBIL, ENGEN, MEREZ, GEMECA Petroleum, Source Oil, Hash Energy etc.

Petroleum products sold on the Rwandan market include white fuels (gasoline, diesel, kerosene, various industrial & auto lubricants, etc.); black fuels (bitumen, black oil, etc.) and other petroleum products such as Liquefied Petroleum Gas (LPG).

Since 2009, the GoR has exempted the VAT for LPG and related products in order to reduce the strong reliance on biomass in a deliberate move to replace wood and charcoal for domestic and institutional heating and cooking by LPG.

among other things, clarity on the types of licenses to be issued by the Regulator, the licensing application procedures, the criteria and requirements for license issuance and the rights and obligations of licensees.

Electrical Installations Regulations: In a bid to improve the safety and to reduce the danger and damages resulting from possible poor electrical installations in Rwanda, RURA stepped forward and developed the Electrical Installations Regulations that were approved by the Regulatory Board in October 2012. The regulations intend to restrict electrical installations works to authorized and competent practitioners in possession of the appropriate electrical installation permits issued by the Regulator.

Electricity Safety Regulations: These regulations aim to ensure the safety of electrical works by setting out minimum requirements for the protection of persons and properties from risks associated with the operations of electrical systems and apparatus. They are designed to be used to address common safety issues specific to the electricity industry.

Moreover, Guidelines promoting energy efficiency conservation were also developed and uploaded to the website for public information. The Electricity Quality of Service Regulations and the Rwanda Grid Code are under elaboration and are expected to be implemented in the next fiscal year.

Furthermore, RURA has embarked on the development of the following secondary legislations: Riview of REFIT for standardized Power Purchase Agreement (PPA) Light-handed off-grid regulatory Framework and the Universal Access Fund for Electricity (UAFE).

4.1.3.2 GAS, PETROLEUM AND RENEWABLE ENERGY SUB-SECTORS

Under the revised law establishing RURA, the Regulatory Authority is entrusted with the regulation of the downstream petroleum infrastructure, i.e., oil storage depots, petrol service stations and the importation, transmission, distribution, trade of Liquefied Petroleum Gas (LPG) as well as construction and operation of LPG storage and filling plants.

The Authority developed, in collaboration with relevant stakeholders, the **Aboveground Petroleum Storage Facilities Regulations in 2012** and compliance to the regulations is anticipated to kick-start any time soon.

Following the approval of **Liquefied Petroleum Gas Regulations in 2012**, the licensing framework started in later June 2013 and is mainly targeting LPG big dealers that will shortly be followed by LPG retailers.

In order to address the general concern of petrol filling stations being constructed in a sub-standard and unsafe manner, The Regulator, in collaboration with concerned stakeholders, issued Guidelines for the construction of petrol filling stations in 2011.

After the adoption of the Rwanda Standard (RS) on "Installations, modification and

decommissioning of underground storage tanks, pumps/dispensers, pipe-work at service stations and consumer installation" (RS 744-1:2012), the Regulator embarked on the development of **Draft Regulations on Construction and Operation of Petrol Service Stations** to be validated in a stakeholder meeting scheduled in the near future.

In collaboration with relevant stakeholders such as the Rwanda Standards Board (former RBS), Rwanda Biomedical Center (RBC), King Faisal Hospital (KFH), Centre Hospitalier Universitaire de Kigali (CHUK), Rwanda Oxygen Company and KALISIMBI Company, the RURA initiated **Medical Gases Draft Regulations** by identifying and harmonizing applicable standards that are used throughout the country.

Draft Regulations for on grid Solar PV and Draft Technical Guidelines on Solar Water Heaters were also developed and are awaiting inputs from stakeholders before their validation by stakeholders and eventual approval by the Regulatory Board.

4.1.4 DEVELOPMENTS RELATING TO CONSUMER ISSUES

In energy sector, complaints rank third position following ICT and transport whereby in April, the number of complaints increased at a high level.

TABLE 23: COMPLAINTS REGISTERED FROM THE ENERGY SECTOR

Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Total
1	2	2	0	7	3	0	27	26	58	22	2	150

The above table shows that from February to May 2013, complaints increased and this was due to a shortage and meter rental related problems.

In fact, since the National Dialogue held in December 2012 where the population raised the issue of monthly meter charges for the electricity service, EWSA stopped billing for the meter and complaints increased soon after EWSA resumed invoicing the monthly meter charges.

In March 2013 many complaints came from Huye District where EWSA was requesting its customers to first buy a stolen cable before reconnecting them.

4.1.5 PERFORMED REGULATORY ACTIVITIES

4.1.5.1 ELECTRICITY SUB-SECTOR

The Regulator continued to monitor the performance of the power sector in terms of quality of services rendered to customers and compliance to set standards. In this framework, three (3) site visits were carried out to selected centers in all provinces to inspect the quality of electricity supply and services rendered to electricity customers. These inspections also covered 9 off-grid systems that are supplying electricity to consumers in remote areas.

In a bid to monitor the infrastructure development and evaluate the progress of ongoing projects, sites visits were carried out on a quarterly basis to ten (10) Hydropower projects (Nyabarongo, Giciye I, Mukungwa II, Rukarara II, Gashashi, Nyirabuhombohombo, Janja, Nyabahanga, Nshili, Musarara). Site inspections were also undertaken to eight (8) Hydropower plants (HPP); Rukarara I, Keya, Rugezi, Cyimbili, Murunda, Gihira and Gisenyi, Ntaruka to assess the status of facilities used by the operators in the provision of electricity services.

The findings and recommendations drawn from various inspections and site visits were communicated to the concerned operators for consideration and appropriate actions were taken where deemed necessary.

On regular basis, RURA monitors the electricity network performance (power plants production, network peak values, consumption statistics, lake levels, blackouts, accidents, losses) whereby quarterly reports are produced.

In addition, a report of the performance of the electricity sub-sector from 2009-2012 was produced. The report outlines the major achievements and challenges faced in the sub-sector for the last four years. The Authority intends to produce such reports on a yearly basis as the Regulator is expected to be the point of reference with regard to comprehensive information on the Electricity Supply Industry (ESI) in the country.

In addition to that, a due diligence was carried out to assess the technical and financial capabilities of the license applicants in power generation, consequently and the following licenses were issued:

- A provisional generation license to Ngali Energy to operate RUKARARA I HPP;
- A provisional generation license to Ngali Energy to develop three Micro Hydro sites namely Base I, Base II and Ngororero Hydropower projects;
- A provisional generation license to Rwanda Mountain Tea (RMT) to develop the GICIYE II hydro project (4MW);
- Provisional generation licenses of 6 IPPs were extended while the Electricity Licensing Regulations were under finalization to provide a legal basis for RURA to issue full licenses. These are ENNY (Mazimeru), SOGEMR (Musarara), Rwanda Mountain Tea (Giciye I), STADTWERKE MAINZ AG (Jali Solar Plant), REPRO (Murunda) and REFAD (Rukarara V and Mushishiro).

The Authority has also continued to play an important role in the review of standards pertaining to the electricity sub-sector.

GAS, PETROLEUM AND RENEWABLE ENERGY SUB-SECTORS

With regard to the regulation of Gas, Petroleum and Renewal Energy, the Regulator has mainly been of monitoring the development of methane gas projects industry by providing technical guidance i.e., harmonization of Management Prescriptions (MPs), for the development of Lake Kivu Gas Resources, carrying out technical site visits and collaborating with the policymaker and other Government entities to provide technical advice regarding Lake Kivu Methane Gas exploitation. The reporting system for methane gas operations was developed for the purpose of following up methane gas activities follow-up.

One site inspection was conducted to existing oil depots while new projects of oil storage facilities are being closely followed up. Site inspections to petrol filling stations and LPG facilities were as well undertaken Countrywide.

Two site inspections on Solar PV operations were conducted on the existing on-grid solar PV plant (Kigali Solar Project owned by Stardwerke Mainz AG currently producing 0.25 MW) and a number of off-grid solar PV systems installed in different health centres, administrative offices, schools and households in the rural areas.

Two site visits were also conducted to institutional and domestic biogas plant operations with a view to assessing their construction and maintenance status in relation to issued guidelines. Likewise, one site visit was conducted to geothermal exploration prospects.

4.1.6 MARKET PERFORMANCE AND STATISTICS

4.1.6.1 TARIFF STRUCTURE

ELECTRICITY END-USER TARIFF

The financial performance of EWSA has in recent years been negatively impacted as the electricity tariffs have not been revised since 2006. Tariffs have been eroded through the effects of inflation and depreciation of the Rwandan Franc against foreign currencies. Reliance on emergency thermal power, high fuel prices and increasing network maintenance costs (due to sharp increases in metal prices) over recent years have also placed heavy financial burdens on EWSA. The electricity tariffs were considered below cost of service and therefore needed to be reviewed. In that regard, EWSA submitted a request to increase the electricity tariff and the Regulator approved new end-user tariff with a 20% increase effective 1st July 2012 as shown in the table below.

TABLE 24: REVIEWED ELECTRICITY END USER TARIFFS FROM JULY 2012

Customer categories	Tariff (Rwf-VAT inclusive)
Domestic	158
Industrial	23h00-7h00	113
	7h00-17h00	149
	17h00-23h00	198

Besides, given the number of complaints received regarding the monthly meter charges and further to the recommendations of the 10th National Dialogue which suggested among other things the review of the current electricity monthly meter charges, the Authority in consultation with EWSA discussed possible options of adjusting the said charges according to customers' purchasing power. The outcome of the discussions and consultations is soon to be tabled for the Regulatory Board approval and eventually communicated the general public.

REVIEW OF THE CURRENT RENEWABLE ENERGY FEED-IN-TARIFFS (REFIT)

The currently applied REFITs were approved by the Regulatory Board on 9th February 2012 and were set to be applicable for three years for the purchase of electrical energy by EWSA from small sized hydropower plants up to 10MW.

The current Rwanda Renewable Energy Feed-in-Tariffs in USD per kWh per plant installed capacity is as follows:

TABLE 25: CURRENT REFIT IN USD PER HYDRO POWER PLANT INSTALLED CAPACITY

No	Tariffs(US cents/kWh)	Plant installed capacity
1	16.6	50 kw
2	16.1	100 kw
3	15.2	150 kw
4	14.3	200 kw
5	13.5	250 kw
6	12.9	500 kw
7	12.3	750 kw
8	11.8	1 MW
9	9.5	2 MW
10	8.7	3 MW
11	7.9	4 MW
12	7.2	5 MW
13	7.1	6 MW
14	7.0	7 MW
15	6.9	8 MW
16	6.8	9 MW
17	6.7	10 MW

But, further to the request from some potential developer and development partners, the Regulator commissioned a study to review the current Renewable Energy Feed-in-Tariffs (REFIT) for hydro and other renewable sources of energy. The study is currently being conducted by the Economic Consulting Associates (ECA) under the International Finance Corporation (IFC) funding and is to be validated during the next fiscal year.

4.1.7 SECTOR SPECIFIC CHALLENGES

- **Unbalance between power demand and supply:** Despite the fact that Rwanda's access rate to electricity has improved, the demand is growing extremely faster than production due to the general country development, leaving the network with no or small reserve margin that eventually results in system instability and hence necessitating the procurement of expensive thermal generation.

- **Reliabilitiy and stability of the grid:** The system grid stability and reliability remain unsatisfactory as there is still a significant number of outages and technical incidents to the grid. In addition, a significant number of power outages caused by aged or damaged equipments (underground cables, old wood poles, protection equipments, etc) is a major hindrance to the provision of adequate supply of electricity to consumers. Furthermore, the operations of newly constructed power plants such as Rukarara I, Rugezi, Keya, Cyimbili, Nkora as a remedy to the power shortfall, have continued to be inefficient as they repeatedly experienced technical problems.

- **Delay in projects implementation:** this is mainly due to lack of sufficient and timely funding and inadequate technical expertise. It has proven difficult for projects to achieve financial closure in the planned period and that has contributed to delaying the commissioning of different plants. Some local project developers also lack the necessary technical, financial and business development skills that often result in project implementation delays.

- **Insignificant private sector participation:** This is mainly due to financing constraints. There is a limited access to financing largely due to the global financial crisis and perceived technological risks. In addition, domestic financing is either inadequate or unavailable due to relatively small financial markets. Most of the existing IPPs rely on grants and on external funding from donors to be able to implement their projects.

- **Low electrification access rates:** Electricity is still not accessible to the majority of the population because of cost implications of grid extension and the inability of most households to afford the costs of connection and other related costs.

- **Legal and regulatory frameworks in the petroleum and gas sub-sectors:** delays in the enactment of both downstream petroleum and gas laws in these sub-sectors continue to hinder the drafting of corresponding secondary legislations.

4.2 WATER AND SANITATION SECTOR

4.2.1 PROFILE OF THE SECTOR

Rwanda has made good progress in extending water supply and sanitation services during the past few years under clear political commitment to three complementary sets of targets: the Economic Development and Poverty Reduction Strategy (EDPRS II), Millennium Development Goals and the Vision 2020. To accelerate the move towards the national targets of 100% access to water supply and sanitation services, the Government has adopted a 7 year programme to achieve, by 2017, 100% access to improved water supply and sanitation facilities and has set ambitious targets in the EDPRS II to achieve this goal. The Strategic Plan of the sector has also set targets corresponding to EDPRS II goals based on annual indicators and is committed to achieving these targets by 2017/18.

The current trend as provided by the National Institute of Statistics through the third Integrated Household Living Conditions Survey (EICV 3) and the Demographic and Health Survey (August, 2012) showed that the national access to improved drinking water has reached 74.2% with specific access rates of 86.4% and 72.1% for urban and rural areas respectively. Access to sanitation has also shown a good progress compared to last year.

In the urban areas, improvements in terms of water service coverage were recorded with slight increase in water production, network expansion and customers' connections. The number of customers increased by 9.2% coupled with the rate of production that increased to 20.7%.

In contrast, the non-revenue water has increased significantly this year to 42% and this indicates a poor performance compared to previous years 2010 (31.1%) to 2011 (40%).

The sector still faces challenges relating to un-sustainability of rural water supply infrastructures whereby high and persistent rehabilitation costs are still required as a result of poor operation and maintenance of infrastructures. The situation is to be improved with significant involvement of professional private operators through delegated management. Also of concern is that the percentage of schemes under private management is still below and the involvement of professional operators is still a challenge. EWSA recorded only 28.4% of rural water systems that are under PPP contracts as by December 2012, this proves a reduction of 2.1% compared to last year.

In regard to sanitation, the sub-sector recorded progress in terms of number of licensed operators, especially in solid waste collection and transportation where four (4) operators as well as nineteen (19) cleaning services providers were licensed. Solid collection and transportation witnessed great improvements, most specifically in Kigali

where the service is provided up to the cell level.

However, waste disposal facilities remain a crucial challenge although some initiatives with regard to planning and construction of improved waste disposal facilities / landfills are noticed. Out of 27 districts (excluding 3 districts of the City of Kigali), only 2 districts have constructed dumping sites, 11 districts are in the process of construction and other 14 have not commissioned any waste disposal facility.

4.2.2 SECTOR COMPONENTS

4.2.2.1 WATER SUB-SECTOR

Like in most developing countries, the water sector in Rwanda is subdivided into urban and rural water systems. Urban water operations and management are under the monopoly of the Energy, Water and Sanitation Authority (EWSA) while rural water supply service is provided under various management types. The service provision in rural areas is either through private operators with management contracts in the form of Public-Private-Partnerships (PPPs) and other types of management such as water committees (Regies), schools, health centers, Tea/coffee factories, sectors, etc. that operate without contracts.

In the framework of improving the operation and management and address challenges relating to infrastructure sustainability, water systems that are still under districts and sectors' management are to be delegated to professional operators through Public-Private-Partnerships.

Currently, there are 890 recorded rural water systems of which only 253 are under private management through PPP contracts consisting of companies, cooperatives, associations and individual operators.

4.2.2.2 SANITATION SUB-SECTOR

Service provision in sanitation is mainly in the private hands and consists of solid waste collection and transportation, installation and management of decentralized wastewater treatment systems as well as cleaning services. There are various operators within the sub-sector but most specifically in cleaning and solid waste collection and transportation. During the period under review, there were very few operators in decentralized wastewater. However, infrastructure developments such as landfills, decentralized wastewater treatment systems, etc remain the monopoly of the Government. Quite few initiatives for decentralized wastewater treatment systems recorded for housing developers.

The mandate of the Regulator in sanitation regulation is to ensure availability, affordability and quality of service in the sub-sector.In this context, as shown in table 27 various types of licenses are issued to operators in solid waste collection and transportation and cleaning services and the Regulator regularly monitors the quality of service provision.

4.2.3 LEGAL AND REGULATORY FRAMEWORK

The legal and regulatory framework for the water and sanitation sector is still evolving and the sector law (water supply and sanitation law) is still to be developed and enacted. The water supply and sanitation policy is the governing policy within the sector. The regulation of the sector stems from the law N^{0} 39/2001 of 13/09/2001 and amended law N° 09/2013 of 01/03/2013 establishing the RURA as well as various other laws such as the Organic Law No 04/2005 determining the modalities of protection, safeguard and promotion of the environment in Rwanda and the Law No 62/2008 putting in place the use, conservation, protection and management of water resources.

In a bid to strengthen the legal and regulatory framework, RURA has developed a number of regulations and guidelines to provide a legal basis for the sector consisting of the following:

- Regulations on Minimum Required Service Level for water service provision,
- Water Services Licensing Regulations;
- Regulations on Decentralized wastewater treatment systems,
- Regulations on cleaning services;
- Regulations on solid waste collection and transportation;
- Guidelines for the management of waste disposal sites/Landfills;
- Guidelines on liquid waste treatment;

Other draft regulations and guidelines such as regulations on waste recycling are in pipeline, pending internal review before stakeholders' consultations.

4.2.4 ACHIEVEMENTS OF THE SECTOR

4.2.4.1 WATER SUB-SECTOR

The water supply sector has registered achievements during this reporting period; new investments were recorded for the construction of water schemes and rehabilitation of the damaged ones. Other achievements entailed network extensions and number of new connections.

Specific achievement recorded by the Urban Water Systems operator (EWSA) is the number of new connected customers that increased by 9.2% from 2012 (104,419) to June 2013 (114,962)[1]. The majority of water consumers (representing 56%) are still recorded in Kigali. The Household category occupies the majority of connected customers (representing 99.4%) while industries represent 0.6% as shown in the graph below.

[1]EWSA report, July 2013.

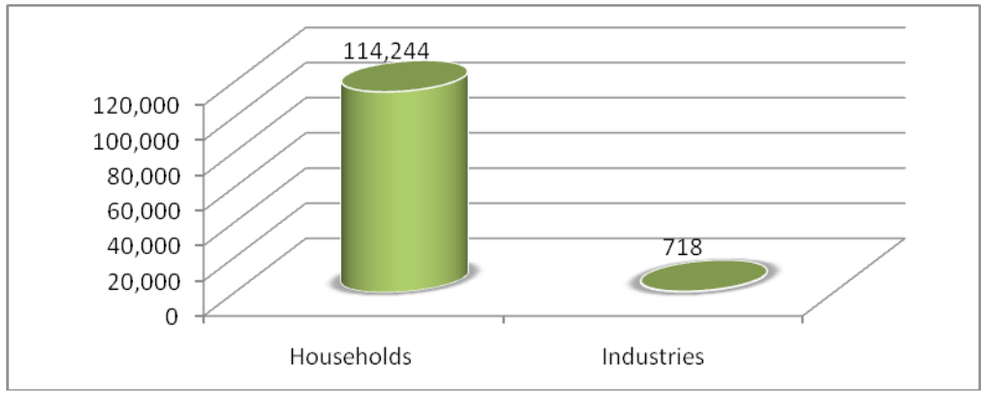


FIGURE 18: NUMBER OF EWSA WATER SERVICE SUBSCRIBERS AS OF JUNE 2013

The water production also registered a considerable increase. The total water production increased during the period under review since the production for only six months is 19,362,220 m^3 (Jan-June, 2013). Considering the trend of production, there is a sharp increase in production from the year 2010 as shown below:

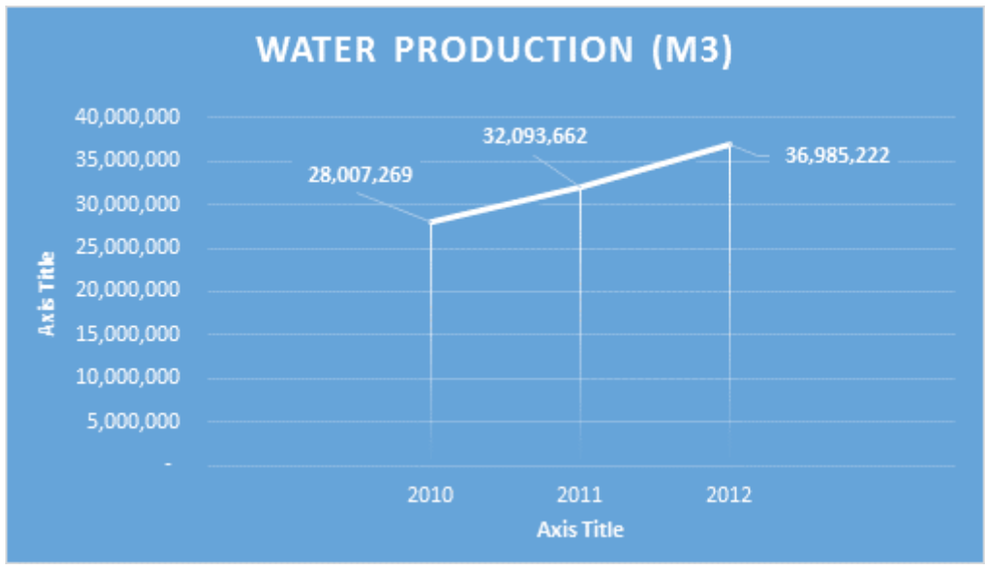


FIGURE 19: EVOLUTION OF WATER PRODUCTION AND SUPPLY FOR THE PERIOD 2009-2012

In contrast, the non-revenue water as reported by EWSA has slightly increased to 42%[2] from 40%. This therefore calls for considerable efforts to be deployed in order to achieve the targeted 24% as set in the Water Supply and Sanitation Policy.

Tariff for water supply in urban areas, connection fees as well as meter charges remained unchanged in the course of 2012-2013.

[2] EWSA report, July 2013.

In rural areas, achievements were recorded in terms of investments made to increase the coverage through construction of new schemes, rehabilitation and extension of existing ones. In regard to the management of water systems, a reduction of 1.7% in PPP contracts was recorded from 30.1% to 28.4%[3]. This also calls for a special attention in order to achieve the target set in the water and sanitation policy. The envisaged trend to improve the situation is to cluster a number of water systems and cater for the economy of scale. These arrangements are anticipated to provide opportunity for operators to make a reasonable profit out of the business and attract professional operators within the sector.

4.2.4.2 SANITATION SUB-SECTOR

The sanitation sub-sector also registered commendable achievements mostly in regard to planning and construction of waste disposal facilities in various districts. Achievements in the City of Kigali are related to the introduction of the policy of "one operator per sector" for solid waste collection and transportation from households. This arrangement has significantly contributed to improving the service provision at household level and the cleanness of the city as a whole. The service provision in the City of Kigali is currently provided by 11 operators that are hired at the sector level.

Sanitation Service Providers are generally dependent on tariff to finance the development of their infrastructures. This is however not sufficient since the current tariff does not cover full costs for providing sanitation services.

Moreover, Sanitation Service Providers do not readily access financial institutions as a result of companies' ownership structure. In that regard, RURA, made a study on the sanitation market and license fees that would encourage investors to invest in the sanitation sector.

4.2.5 PERFORMED REGULATORY ACTIVITIES

4.2.5.1 WATER SUB-SECTOR

Audits and Inspections are key tools used by RURA to monitor improvements in terms of infrastructures, operation and management, quality of service as well as implementation of recommendations previously provided to service providers. In the framework of monitoring the quality of service provided by EWSA, audits and inspections were conducted to 18 water treatment facilities to evaluate the implementation of previous recommendations. Improvements were noticed in terms of water quality, laboratories' new equipments, installation of water meters, reduction for water used for backwashing, extension of Nyabwishongwezi and Mpanga treatment plants, rehabilitation of Kadahokwa Water Treatment Plant, etc. Also recorded were extensions of water networks and new reservoirs constructed.

[3] EWSA, MIS 2012.

With regard to rural water supply sites, inspections were paid to 35 rural water systems located in 26 districts across the country to assess infrastructure status, operation & management as well as the level of implementation of the Government policy of delegating the management to private operators. Site visits and Inspections revealed a poor management of systems that are not managed by private operators whereby there is very limited ownership by beneficiaries soon after developers hand infrastructures over to districts.

Other regulatory activities during the reporting period consisted of strengthening the legal and regulatory framework. In this regard, regulations on minimum required service level for water service provision highlighting the minimum level of service that operators must guarantee to customers were developed and approved by the Regulatory Board.

4.2.5.2 SANITATION SUB-SECTOR

Sanitation activities recorded in 2012-13 fiscal year were mainly focussed on strengthening the legal and on regulatory framework along with enforcement of regulatory tools and awareness campaigns to various consumer groups. The regulations for solid waste collection and transportation were developed and approved by the Regulatory Board. These regulations govern the service provision in solid waste collection and transportation from residential premises.

In the framework of enforcing regulations in place, various Companies / Cooperatives that are operating in waste collection and transportation as well as cleaning services were licensed as indicated in the table below.

TABLE 26: LICENSED CLEANING SERVICE PROVIDERS AS OF JUNE 2013

No	Licensee	Activity	License Number
	Cleaning Services		
1	DUSABANE	Cleaning services	002/CSP/RURA/2013
2	FIRST CLEANING COMPANY	Cleaning services	003/CSP/RURA/2013
3	NEW LIFE COOPERATIVE	Cleaning services	004/CSP/RURA/2013
4	ESCOM UNLIMITED	Cleaning services	005/CSP/RURA/2013
5	CALL ME LTD	Cleaning services	006/CSP/RURA/2013
6	TRUSTCO RWANDA LTD	Cleaning services	007/CSP/RURA/2013
7	ASK RWANDA (A.R) LTD	Cleaning services	008/CSP/RURA/2013
8	DAMU GENERAL SERVICES	Cleaning services	009/CSP/RURA/2013
9	GREEN SPACE LTD	Cleaning services	010/CSP/RURA/2013
10	SHINE RWANDA LTD	Cleaning services	011/CSP/RURA/2013
11	ENVIRO CLEANERS INTERNATIONAL	Cleaning services	012/CSP/RURA/2013
12	SINAIUS CLEANING SERVICES LTD	Cleaning services	013/CSP/RURA/2013
13	KG HARVEST CO LTD	Cleaning services	014/CSP/RURA/2013
14	THE EQUINOX CO. LTD	Cleaning services	016/CSP/RURA/2013
15	GENERAL BUSINESS ENTERPRISE LTD	Cleaning services	017/CSP/RURA/2013
16	GROUP ENVIRONMENT SERVICES LTD	Cleaning services	018/CSP/RURA/2013
17	COVEGAPROH	Cleaning services	019/CSP/RURA/2013
18	WOMEN TOGETHER DEVELOPMENT COMPANY (WODEC) LTD	Cleaning services	020/CSP/RURA/2013
19	TOP CLEANERS LTD	Cleaning services	021/CSP/RURA/2013
Solid Waste Collection and Transportation			
1	Action des Agriculteurs Unis pour l'Hygiène, la Propreté et la Protection de l'Environnement (AGRUNI) Ltd	Solid Waste Collection and transportation	007/San/RURA/2011 RENEWED
2	REAL CLEANING SERVICES Ltd	Solid Waste Collection and transportation	001/SAN/RURA/2013
3	UBUMWE CLEANING SERVICES	Solid Waste Collection and transportation	020/San/RURA/2011 RENEWED
4	COOPERATIVE ISUKU KINYINYA	Solid Waste Collection and transportation	013/San/RURA/2011 RENEWED

In the same perspective, two workshops were organized for both operators and local authorities in City of Kigali aiming at improving awareness of stakeholders on issues such as how to improve the service delivery, report and prepare the Business Plan.

Audits and site inspections were also conducted to various sanitation operators to assess the quality of service. It was actually noticed that, in Kigali, the quality of service has improved only six months after the implementation of the "one operator per sector" policy.

In the same vein, 27 district dumping sites across the country were visited to assess the status of waste management and especially waste disposal in rural districts. It was noted that, although most districts do not have proper waste management, all districts have

now planned to construct on putting up improved wastes management facilities as part of their performance targets (imihigo).

With regard to licensing, 25 licenses were granted to Operators in cleaning services (22) and solid waste collection and transportation operators (3) during the period under review.

Concerning awareness, two TV and radio live shows were organized in order to share information on regulatory issues and get feedback from consumers. The campaigns focused on provisions of regulations on solid waste collection and transportation, the new policy for waste collection of "one operator per sector", tariffs applied as well as the quality of service provided by operators. Few articles on the same topic were published in local Newspapers such as (Imvaho Nshya and New times).

In the same spirit, a consumer forum was organized.

4.2.6 DEVELOPMENTS RELATING TO CONSUMER ISSUES

In the context of protecting consumer interests, the monitoring exericse recorded 578 complaints of which 99.5% were related to sanitation service provision as shown below.

TABLE 27: NUMBER OF REGISTERED COMPLAINTS IN SANITATION SECTOR FOR THE YEAR 2012/2013

Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Total
0	2	0	1	37	60	90	153	137	98	0	0	578

4.2.7 SECTOR SPECIFIC CHALLENGES

Sector challenges recorded so far are similar to last year's and mainly consist of the following:

- Absence of water supply and sanitation law;
- Inadequate management of water supply systems that contribute to high infrastructure rehabilitation costs in rural areas.
- Very limited private sector investments in the sector;
- Inadequate water quality control in rural areas.

CONCLUSIONS & WAY FORWARD

5. CONCLUSIONS AND WAY FORWARD

Conclusion

During the 2012 - 2013 fiscal year, RURA recorded a very good overall performance in terms of the action plan implementation. As extensively discussed in this report, a good number of programs aiming at ensuring consumer rights protection, consumer education and empowerment, regional and international partnerships as well as building high quality delivering team were undertaken. RURA also pursued its mission of monitoring the market performance and ensuring that each regulated sector has proper and enabling legal and regulatory frameworks.

In the ICT sector, RURA licensed two new service providers during the period under review, namely Rwanda Towers Limited and Liquid Telecom. In addition, this year recorded growth in both mobile and Internet penetration rate, to reach 60.9% from 44.4 % in mobile penetration and 12.2% from 7% in Internet penetration. The interconnection rate decreased from 32.08 to 28.73 Rwf per minute and further retail prices from Licensed Telecom companies were extremely reduced as result of increased competition during the year under review. On the side of broadcasting, RURA is in the process of reviewing the licensing of TV broadcasting due to Migration from Analogue to Digital ongoing process.

In the transport sector, the Rwanda's public transport policy and strategy of road transportation was adopted by the Cabinet on 10th of October 2012. RURA licensed 11 new transport companies/cooperatives and a recorded 11% increase was mainly due to RURA's remarkable sensitisation to form cooperatives.

Furthermore, the period under review recorded 17% access rate in Electricity. The total number of electricity subscribers was 374,056 and out of the total subscribers, 39% are based in Kigali while 61% are in other provinces. In addition, the national trend in water sector showed that the access to improved drinking water has reached 74.2% with specific access of 86.4% and 72.1% for urban and rural areas respectively. Access to sanitation has also shown a good progress compared to last year.

Although there was a remarkable progress in all sectors regulated by RURA during the last fiscal year, RURA is still facing challenges relating to lack of monitoring equipments and tools to collect data on content quality, software tools and necessary hardware equipments for Internet content quality monitoring, lack of some sector laws, and low level of investment in some sectors. The Authority is and reamains committed to the development of the regulated sectors by actively contributing to finding sustainable solutions to those challenges.

Way Forward

The Authority looks forward to implementing a number of other programs which concur with its strategic mission of being a catalyst of development of the country. The following are the few of many programs which are anticipated to be implemented in the next fiscal year:

ICT SECTOR

The Authority is committed to supporting the Digital Broadcasting Migration process, Installation and Commissioning of a new Mobile Networks QoS Measurement Platform to ensure that Mobile Networks are well monitored and operators fully comply to the new regulations and standard parameters. A cost-benefit analysis of number portability will also be conducted before the number portability can be introduced in the country. Furthermore, RURA will closely follow up activities of implementing, testing and operationalizing the KPI system.

TRANSPORT SECTOR

In the Transport sector, RURA is committed to re-organizing urban passenger transport system, building the capacity of grouped individual taxi cab and motorcycle operators under companies or cooperatives for a better service level, acquiring appropriate equipment for inspecting and monitoring adherence to public transport regulations by operators, organizing trainings of drivers on service delivery and customer care, introducing the use of electronic ticketing system in intercity public transport, grouping all waterways transport operators into unions according to their location, etc.

ENEGY, WATER AND SANITATION SECTOR

RURA will put in place means to review the existing regulations in water and sanitation subsectors to reflect the current prevailing market conditions and shall establish mechanisms of enforcement of the same. A study on consumer satisfaction in sanitation service provision (starting with hotels) will be conducted and a Tariff Study for Rural Water Systems will be conducted too. Mechanisms for complaints handling and dispute resolution will be reinforced in all sectors and missing second legislations to operationalize the Electricity Law will be adopted and implemented.

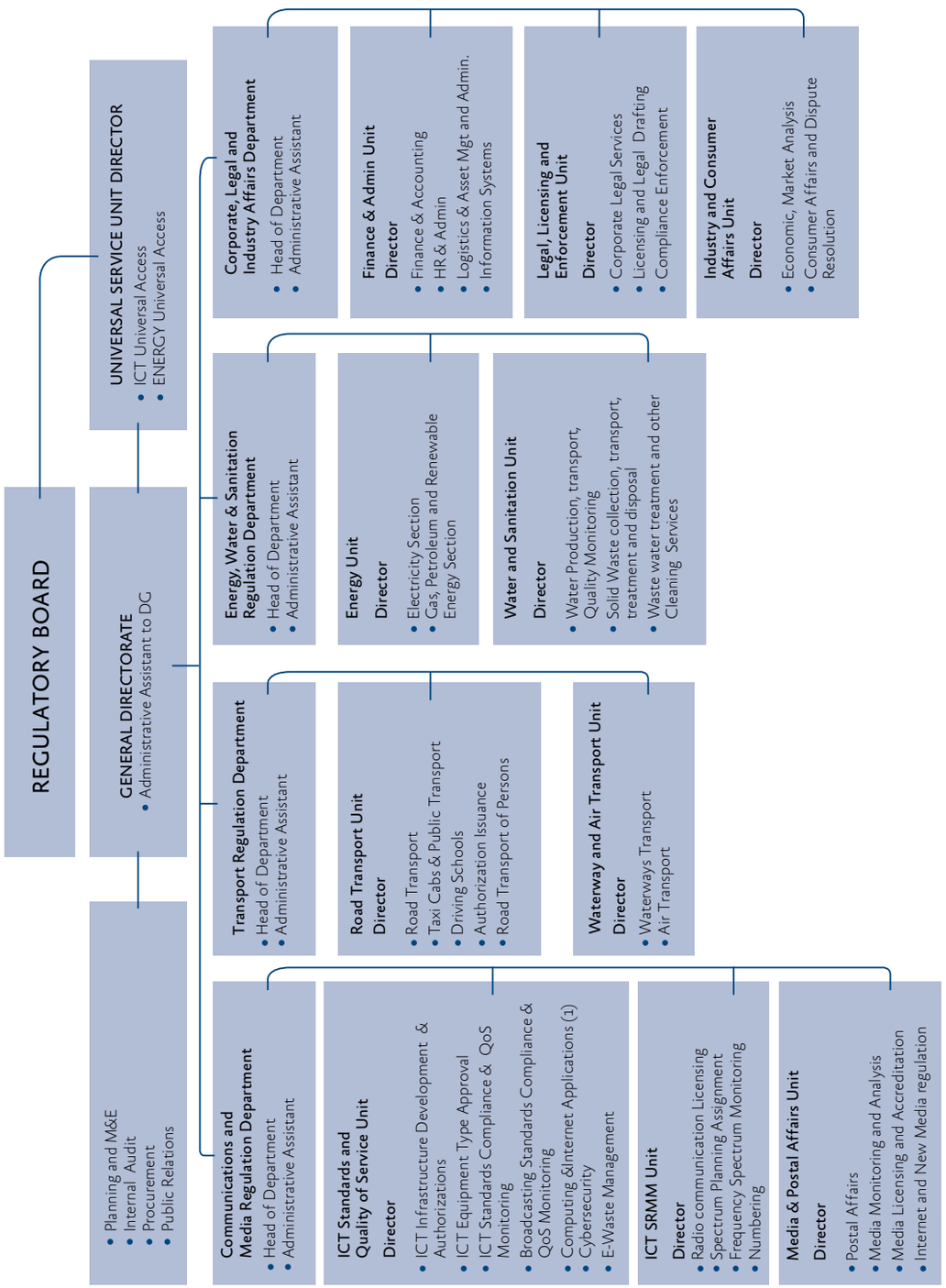
UNIVERSAL ACCESS

The Universal Access will remain the catalyst for the government initiatives to meet the Millennium Development Goals and EDPRS II targets. Using Universal Access Fund, RURA shall support the Ministry of Education to connect Higher Learning Institutions to UbuntuNet Alliances. The Ubuntunet is the Eastern and Southern Africa's Research and Education Networking organization aiming at supporting the data communications needs of the research and education community region. The purpose of this support will be to promote quality education in the country and ICT penetration to rural and underserved areas and spreading Internet connectivity to school's neighborhood communities.

Furthermore, RURA shall continue its endeavor of connecting schools in rural and underserved areas on broadband Internet Services. It shall support the VIZIYO Project: a program aimed at providing ICT tools (3G/LTE) in rural and remote areas of the country and providing affordable access to low cost devices in order to further increase ICT penetration in the country.

RURA will be involved in promotion of equal opportunity access and usage of ICT support to people with Disability as a tool for social integration. RURA will also provide financial support to war veteran causalities in a move to make ICT services, tools and applications more accessible and affordable.

ANNEX 1: RURA ORGANISATIONAL STRUCTURE



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