



Public Utilities
Regulatory Authority
Equity in development

ANNUAL REPORT & FINANCIAL STATEMENT



2016





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ANNUAL REPORT AND FINANCIAL STATEMENT **(2016)**

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ACRONYMS

ACE	– African Coast to Europe
C&MA	– Construction and Maintenance Agreement
CIRT	– Computer Incident Response Team
CFL	– Compact Fluorescent Lamp
DWR	– Director of Water Resources
ECOWAS	– Economic Community of West Africa States
ECOWAN	– ECOWAS Regional backbone Wide Area Network
GAMCEL	– Gambia Cellular Company
GAMTEL	– Gambia Telecommunications Company
GEG	– Global Electric Group
GMA	– Gambia Maritime Agency
GOTG	– Government of The Gambia
GPPA	– Gambia Public Procurement Authority
GRA	– Gambia Revenue Authority
GRTS	– Gambia Radio and Television Services
GSM	– Global System for Mobile Communications IEC International Electro-technical Committee
FM	– Frequency Modulation
ICT	– Information Communication Technologies
IDA	– International Development Association
IDB	– Islamic Development Bank
IP	– Internet Protocol
IPP	– Independent Power Producers
ISP	– Internet Service Providers
IT	– Information Technology
ITU	– International Telecommunications Union
IXP	– Internet Exchange Point
kV	– Kilo-Volts
kWh	– Kilowatt Hour
MOE	– Department of State for Energy
MOFEA	– Department of State for Finance & Economic Affairs
MOICI	– Ministry of Information And Communications Infrastructure
NARUC	– National Association of Regulatory Utility Commissioners
NAWEC	– National Water and Electricity Company
POI	– Point of Interconnection
PURA	– Public Utilities Regulatory Authority
RE	– Renewable Energy
SIXP	– Serrekunda Internet Exchange Point
VHF	– Very high frequency
VOIP	– Voice Over Internet Protocol
WARCIP	– West African Regional Communication Infrastructure Project
WIWAX	– Worldwide Interoperability for microwave access

INTRODUCTION

The Annual Report for 2016 is produced in line with PURA's obligation under the PURA Act 2001 to report on its activities annually for the preceding year. Therefore, this Report catalogues the achievements of the Authority as well as documents several challenges it faced during the execution of its mandate in the year 2016.

Who We Are & What We Do

The Public Utilities Regulatory Authority (PURA) is The Gambia's independent multi-sector regulator established by the Government under PURA Act 2001, to regulate the following sectors:

- Broadcasting
- Electricity
- Telecommunications
- Transportation
- Water & Sewage
- Postal

However, PURA currently regulates the following four sectors.

- Telecommunication
- Energy
- Water and sewage
- Electricity

The PURA Act 2001 mandates PURA to provide guidelines on rates and fees for the provision of regulated public services protect the interest of consumers and of public utilities. PURA also monitor and enforce standards of performance and promote fair competition among public utilities.

In addition, the functions and role of PURA are further defined in the *Information and Communications Act, 2009* (the IC Act) and the *Electricity Act 2005*. The IC Act 2009 sets out PURA's mandate as the authority responsible for the regulation of information and communications services, information and communications networks, associated facilities and associated services. It further assigns additional functions to PURA and as well clarifies functions granted to PURA under the PURA Act. The Electricity Act 2005 similarly assigns additional functions to PURA and clarifies functions granted to PURA under the PURA Act.

VISION

To be a knowledge-based institution that is highly relevant to the development of public utility services through the promotion of investment in infrastructure of Quality Service Delivery in The Gambia.

MISSION

To create a competitive environment for utilities that ensures that high quality services are available, affordable and accessible to consumers.

INTRODUCTION

Part I - The Corporate Governance and Human Resources Review – provides an overview of the organizational structure of PURA and identifies the regulatory capacity building activities, focusing on staff training which are relevant to the sustained and long term development of the Authority. Also it identifies the challenges that needed to be addressed in terms of governance and human resource development to facilitate the effective implementation of PURA's regulatory mandate as required under the 2001 Act.

Part II - The Market Development Review – provides a detailed update on the market trends in all the sectors we regulate.

Part III- Legal and Compliance Review – highlights the impact and status of existing and impending legislation that empowers PURA by providing it with its legal basis to discharge its regulatory mandate. This part of the review also looks at the status of compliance of the regulated utilities in terms of their obligations under the regulatory process.

Part IV - Key regulatory activities embarked on by the Authority during the course of the year. This section highlights the main activities of the ICT, Electricity and Water Departments. For the year of 2016 the department engaged with stakeholder in the form of Quality of Experience (QoE) campaign.

Cross-cutting regulatory interventions related to consumer affairs issues are also discussed in this section such as engage in its usual advocacy and educational activities. **Part V - The Financial Review** - looks at the financial status of the Authority during 2016. It highlights the incomes received against budgeted income and overall performance as regards PURA's financial operations during the year in review.

Part VI - and final part of the report provides an outlook for 2017 and beyond vis-a-vis the sectors being regulated.

CHAIRMAN'S STATEMENT

The Gambia has experienced a decade of high growth in the Information and Communications Technologies, driven by mobile phone technology. The main goal is to build on this success and continue to improve the operating environment and backbone infrastructure. The Authority in partnership with stakeholders will continue to facilitate the growth and access to high-speed broadband.

Key strategic objectives of the Authority are the promotion of broadband, promotion and management of competition in the sector, as well as promotion of universality of services and that of emerging ICTs, which has taken on-board the goals of the national development agenda.



Momodou O.S Badjie

The attainment of a teledensity of 139% in The Gambia, over a period of less than fifteen years since the liberalization of the sector and the establishment of the Authority, is a result of the forward-looking policies implemented by the Government of The Gambia) and the value of appropriate regulatory interventions. This remarkable sector development has been achieved despite challenges of the difficult terrain and lack of requisite facilities such as road infrastructure and supply of grid electricity in rural areas. The telecommunications sector as part of the universal service obligations outlined in the Quality of Service guidelines continued to make inroads in providing communications services to communities beyond urban and “economically viable” areas. For some inhabitants of these areas, having access to a mobile network signal to communicate conveniently is milestone towards bridging the digital divide.

As already indicated, the ICT sector is not without challenges. Communications development cannot occur in isolation from other sectors of the economy. Slow economic development means some communication products are beyond the reach of some members of society. Security of the national network remains critical, as is the case in other parts of the world due to cybercrime. It is, therefore, imperative that the Authority ensure that communications regulation adapts to these developments. The Authority in partnership with the Ministry of information and communications infrastructure is at an advance stage of finalizing the establishment of a cyber-security center for the country.

The situation in the energy sector has been more challenging. PURA carried out its mandate by ensuring periodic inspections to all NAWEC facilities. This allows first hand assessment of the state of operations and appraise the state of project implementation. Major achievements were made by NAWEC in implementing the rural electrification projects and key regional towns began to have electricity for the first time. Overall electricity service delivery was affected by significant number of generators going offline in 2016 as well a NAWEC suffering from major breakdowns.

This would continue to affect electricity supply and load shedding might intensify. PURA's position remains the same, the long-term solution to the electricity sector in The Gambia is to institute much needed reforms such as unbundling NAWEC, streamlining operations and encouraging private sector participation. PURA would continue to engage government as both policy makers and the sole shareholder to follow best practices and usher in much needed reforms.

The Board is always grateful to the Government for its support and especially that of the Ministry of Finance and Economic Affairs, Ministry of Petroleum and Energy, and Ministry of Information and Communication Infrastructure. The Board is equally grateful for the support it receives from the management and staff of the Authority.

DIRECTOR GENERAL'S OUTLOOK



On behalf of the Board, Management and entire staff of the Gambia Public Utilities Regulatory Authority (PURA), I would like to present to you the Annual Report for the year ending 2016 and thank you for your continuous support!

This past year has seen particularly important achievements in all sectors where different regulations were put in place, licenses issued, and a state of the art quality of service monitoring equipment procured and installed.

PURA continues to strive to put in place other important instruments that shall assist the authority in advancing its strategic goals. We believe that this shall significantly benefit service providers and consumers in particular as well as

augment sector contribution to the development of the country at large.

The Authority worked with the Ministry of Information and Communication Infrastructure on the issues concerning migration from analogue to digital terrestrial television. Some of the activities in this regard, included the development of a television broadcasting license and code of conduct and other digital television regulations.

The financial sector for instance, adopted and expanded mobile technology to offer Mobile-banking solutions to clients. Mobile money platform offered by the two mobile operators continued to facilitate money transfer, payment of utility bills and purchases. A major achievement of the Authority this year was to raise the issue of Health and Safety (HSE) at work. PURA organized a HSE training with experts from the Ministry of Health for sewage truck drivers. This was well received and Personal Protective Equipment were distributed to participants.

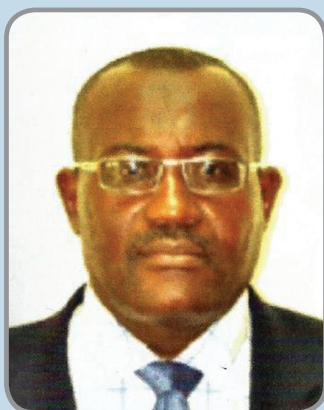
Furthermore, consumer protection was enhanced through the complaints handling system. A number of complaints were received and attended to. Educational programs were propagated through the media to provide consumers with necessary information and consultative forums were held to consult the public on important regulatory issues. Additionally, the Authority embarked on a programs of capacity building.

We are ready to continue partnerships with all our stakeholders to enhance regulation as we protect the utility users/consumers and service providers while laying groundwork for future developments.

Let me congratulate and thank all the Board Members and the entire staff of PURA for their continued vigilance in delivering high quality service and protecting consumers in the regulated sectors. Without your support, co-operation and dedication to work, all these accomplishments would not have been possible. Keep up the good work and let us continue to strive harder to give the public the best service it deserves.

BOARD OF DIRECTORS

MR. MOMODOU O.S BADJIE
Chairman



EBRIMA CHAM
Member



SAINABOU WADDA - CISSE
Member



ABDOULIE JALLOW
Ex-Officio Member



ANSUMANA SANNEH
Director General

HEADS OF DEPARTMENT

ANSUMANA SANNEH
Director General



NICHOLAS JATTA
Director of Information &
Communication Technology



SOLO SIMA
Director of Consumer Affairs



M.L. SOMPO CEESAY
Director of Energy &
Water Regulation



PAUL MENDY
Director of Finance &
Administration



BURAMA JAMMEH
Director of Economic
Regulation



KELEPHA SAMBA
Director of Human Resources
& Corporate Affairs / Board
Secretary

PART I: CORPORATE GOVERNANCE & HUMAN RESOURCES REVIEW

PURA has a governing Board of Directors appointed by the President of the Republic of The Gambia from the recommendation of the Ministry of Finance and Economic Affairs. The Board currently comprises a Chairperson and three other members, including an Ex-Officio member, and the Director General. The Director of Human Resources and Corporate Affairs is the Secretary to the Board.

During the year under review PURA started the implementation of the Strategic Plan 2016 – 2018 which focused on improving systems and processes, institutional and staff capacity development, sector leadership, advocacy and assistance to government in the review and formulation of key aspects of sector strategy and policies that will have a major impact on the Gambian economy in the future. The strategic plan implementation can be reviewed at the end of this report within the Annex section.

This year also saw the Authority have a high attrition rate with two key members of the management staff leaving the Authority.

PURA also focused on Capacity Building which remain a high priority for the Authority. During 2016 PURA staffs attended a wide range of international and national training programmes, which included management development training as well as sessions covering the specific industry sectors that PURA regulates. The Authority also sponsored two junior staffs to gain degree level qualification at the University of The Gambia.

DEPARTMENT	ORGANISATION	TRAINING	LOCATION
Directorate of Consumer Affairs	Directorate of Consumer Affairs Bank of Sierra Leone	Sub-Regional Workshop on Mobile Services	Sierra Leone
	ITU	Rapporteur Group Meetings	Switzerland
		Study Tour	Ghana
	ITU	Study Group 17 Regional Group for Africa	Sudan
	ITU	Focus Group Digital Financial Services	Tanzania
	ECOWAS	National correspondents for indicators	Togo
Directorate of Economic Regulation	ITU	Study Group 3	Switzerland
	ARTP	ARTP	Senegal
	ITU	Rapporteur Group Meetings	Switzerland
	PURC	Energy Pricing	United States
	YALI	Fellowship for Young African Leaders	United States
	NARUC	Cost-Reflective training Module for ECOWAS members	Ghana

Directorate of Energy & Water	NARUC	Cost-Reflective training Module for ECOWAS members	Ghana
	IRENA-ECREE	Energy Planning Capacity Building Programme	Senegal
		Sustainable Development and Environmental Management	Singapore
	AFRICAN FORUM FOR UTILITY REGULATORS	Regulation for emerging electricity markets in Africa	South Africa
	ERERA	Sub-Regional Workshop on Mobile Services	Ghana
	ECREEE	Workshop on Renewable Energy Development	Cape Verde
Directorate of Finance & Administration		Procurement and anti-corruption	Austria
	WATRA	AD HOC Committee Meeting	Nigeria
	WATRA	Workshop on the Establishment of FREE roaming in West Africa	Senegal
Directorate of ICT	ITU	Study Group 13	Ghana
	WARCIP	TIA Spring Policy Summit	United States
	ARTP	ARTP	Senegal
	ITU	Conformity & Interoperability for the region of Africa	Tunisia
	ITU	Study Group 12	Switzerland
	ITU	Study Group 13 Meeting	Senegal
	ITU	Study Group 11 Meeting	Switzerland
	ITU	Group 9 meeting	Switzerland
	USTTI	Satellite Regulation & Spectrum Management	United States
	ITU	Study Group 2	Switzerland
Directorate of Human Resources & Corporate Affairs	WATRA	13th Annual General Meeting	Cape Verde
	ITU	Focus Group on Digital Financial Services	Tanzania
	ITU	Global ICT Capacity Building Opportunities in the Digital Era	Kenya
Directorate of Legal, Licensing & Enforcement	YALI	Fellowship for Young African Leaders	United States
	ERERA	Sub-Regional Workshop on Mobile Services	Ghana
	ECREEE	Workshop on Renewable Energy Development	Macaronesia
	WATRA	Workshop on the Establishment of FREE roaming in West Africa	Senegal

In 2015 PURA underwent an organization structure and strategy plan review to improve its systems and processes, institutional and staff capacity development, sector leadership, advocacy and assistance to government in the review and formulation of key aspects of sector strategy and policies in order to have major impact on the Gambian economy and society in future.

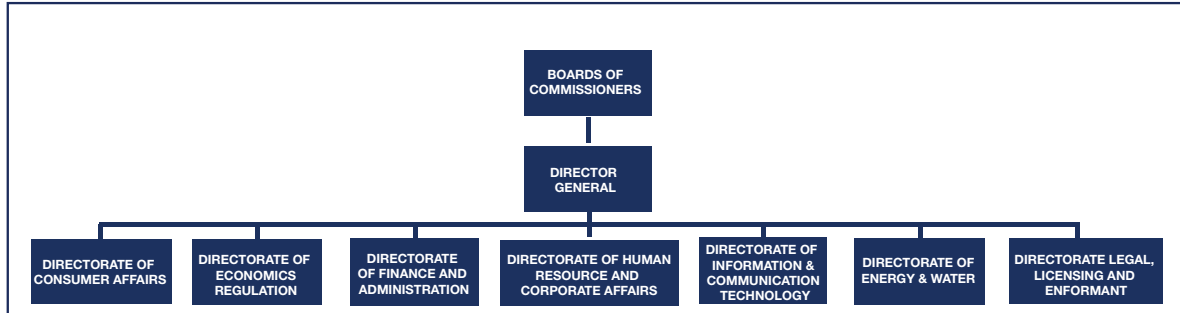


Figure 1: 2016 PURA's Current Organisational Chart

Director General - Responsible for the day-to-day management of PURA, with the objective of improving the efficiency in which public utility services are provided and increasing the percentage of Gambia residents having access to regulated services. He advises the Board on the appropriate framework for regulation of public utilities in the country in accordance with relevant legislations.

Consumer Affairs Directorate - Handles consumer complaints of utility services and reviews these with the relevant service providers. It monitors the level of consumer satisfaction with services provided by utilities. It evaluates the performance of the utilities against the respective quality of service standards and assists the management in publishing information relating to PURA's functions and activities.

Economic Regulation Directorate - Advises Director General on rates and tariffs; performs economic and financial analyses; conducts research and develops special studies and forecasts. It monitors investment programs that the Authority regulates.

Human Resource & Corporate Affairs Directorate - Oversees the staff welfare and motivation. It handles recruitment, safety, employee relations, benefits, compliances and training & development. It also responsible for the internal and external communications of the Authority and advises management on the public perception of PURA.

Information Communication & Technology Directorate - Gives technical advice to the Director General on issues relevant to regulation of the telecommunications sectors.

Energy and Water Directorate - Gives technical advice to the Director General on issues relevant to regulation of the energy, water and sewage sectors.

Finance and Administration Directorate - coordinates administrative activities, including procurement and manages the budget of the institution as well as drawing of the monthly management accounts and giving the necessary financial advice. The Directorate is also responsible for issuing invoices for regulatory fees and follow-up on payments.

Legal, Licensing and Enforcement Directorate - Advises Director General and management on all legal matters affecting the Authority. Draft all legal instruments such as licenses, contracts and regulations of the Authority.

PART II: THE MARKET DEVELOPMENT REVIEW

MACROECONOMIC PERFORMANCE

The country's flagship National Development Plan (PAGE) expired in 2015 but was extended for a subsequent term of one year into 2016 to allow for the creation of a New National Development Plan for The Gambia. The country's economic situation over the last few years has been plagued by numerous external shocks. However, amidst these turbulences, the country was able to rebound to some extent in 2016 with GDP growth estimated at 5.5%, reflective of earlier outlooks for longer term growth.

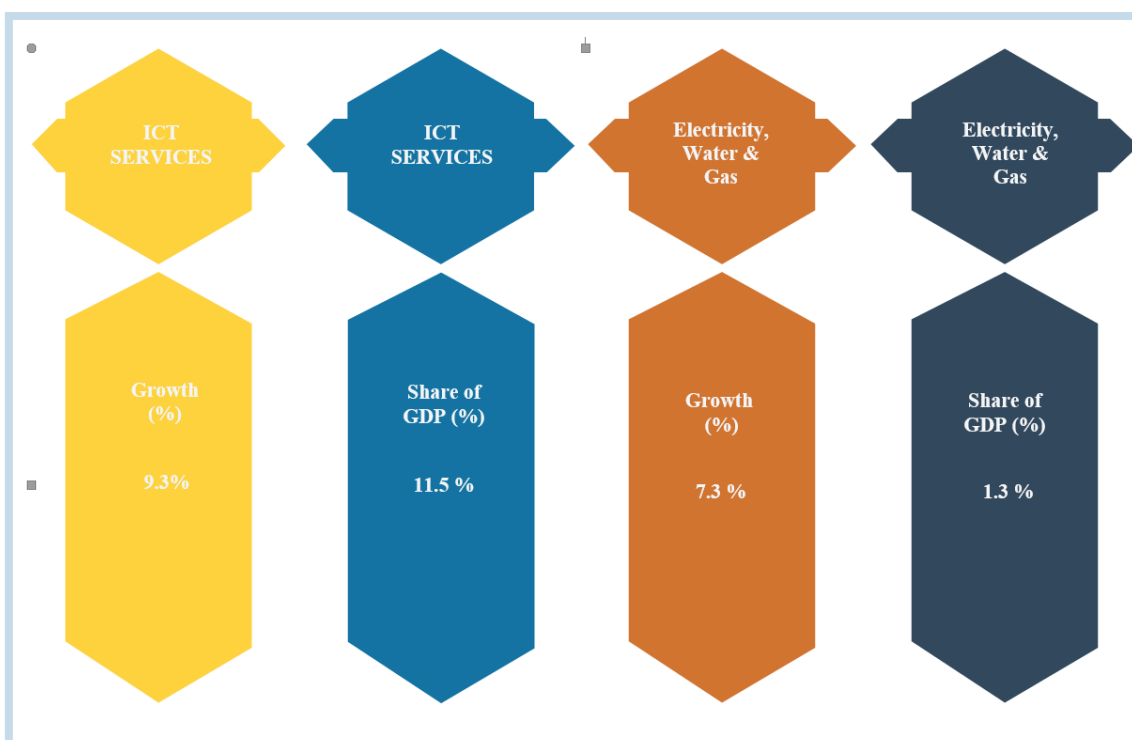


Figure 2: Contribution and Growth of Regulated Sectors to GDP

The regulated sectors under PURA's purview continue to be key contributors to Growth and could further be a crucial spur in the Gambian economy. The contribution of the ICT sector alone to GDP stands at 11.5% with a yearly growth rate of 9.3%.

Robust Improvements in Energy service delivery, reliability and affordability are needed for the electricity sub-sector to play a transformational role in the Economic destiny of The Gambia. To this end, the Authority has continually advocated for the reform and unbundling of NAWEC into separate business units to allow for focus and efficiency in the provision of these key services.

THE ICT MARKET

The telecommunication sector continues to manifest its role as the demand for it increases every year. GAMTEL as a national operator still serves as an internet service provider and the sole fixed line operator, GAMCEL, AFRICEL, COMIUM, and QCELL are still the mobile network operators. QCELL still plays a double role as both a mobile operator and an ISP thus sharing the ISP market with UNIQUE SOLUTIONS, NETPAGE, I-NET WORLD, INSIST NET, and LANIX.

INDUSTRY AT A GLANCE

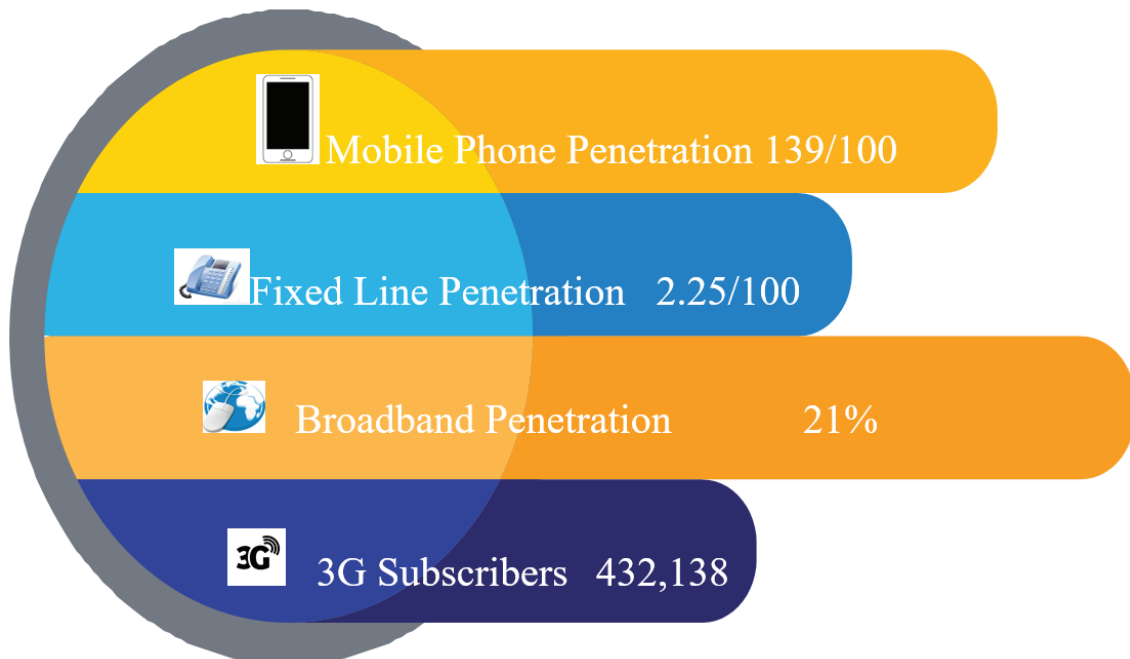


Figure 3: Industry at a Glance

INVESTMENTS

Continuous sector growth shall be anchored on robust investments towards the development of ICT in the country. QCELL and AFRICELL continue to lead the way in terms of total investments over the year. This has also been manifested in the growth of their subscribers over the same period.

QCELL particularly has made huge strides in expanding its network and offering services that would appeal to the Gambian customers. It's QPOWER and QODOO platform that operates on its network provides significant ease to the consumer for financial transactions and electricity vending. Its partnership with UNIDO in integrating Renewable Energy through hybrid technology posits it at the frontier of ICT and Renewable Energy which PURA continuously advocates for.

Investments this year increased by 7% totaling to a sum of D339 million. The growth in investment this year was lead by QCELL with a 577% increment in its investment. ARICELL and COMIUM which were the leading operators in terms of investments in 2015 both had a fall in its investments by 45% and 92% respectively. GAMCEL the state owned operator also increased its investment by 52%.

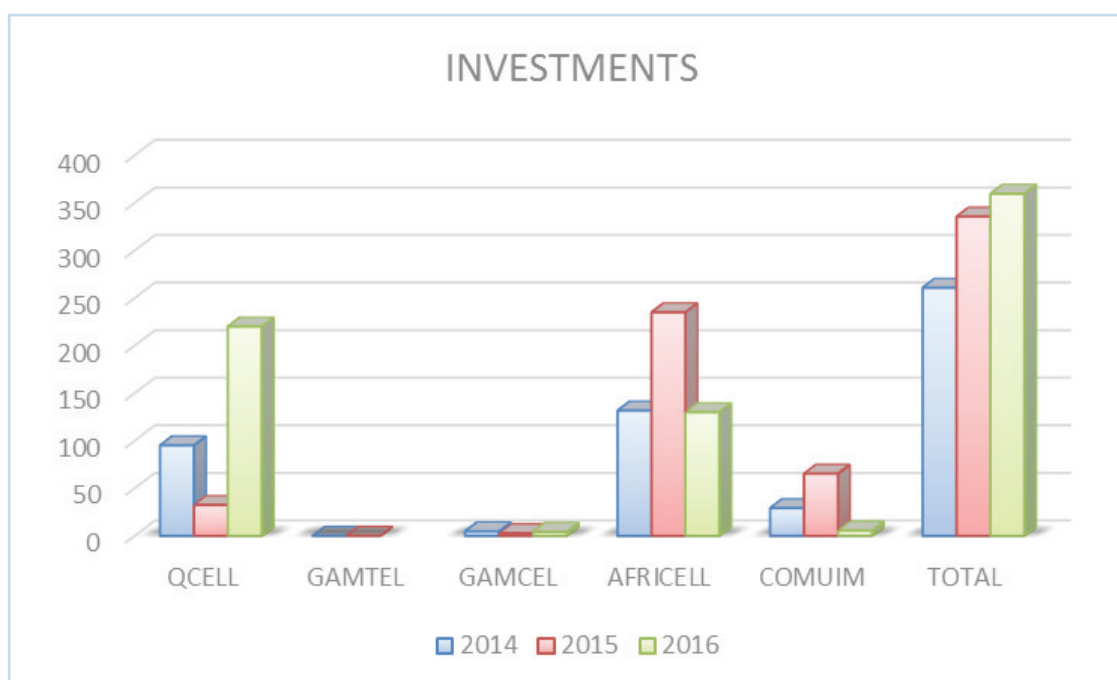


Figure 4: Investment in the Telecom Sector

EMPLOYMENT

Employment in the telecom sector totaled to 2,286 in 2016. A slight increase of 4% was witnessed by the sector. GAMTEL, GAMCEL, and COMIUM had a steady employment rate. QCELL and AFRICELL both increased their employment rate by 27%.

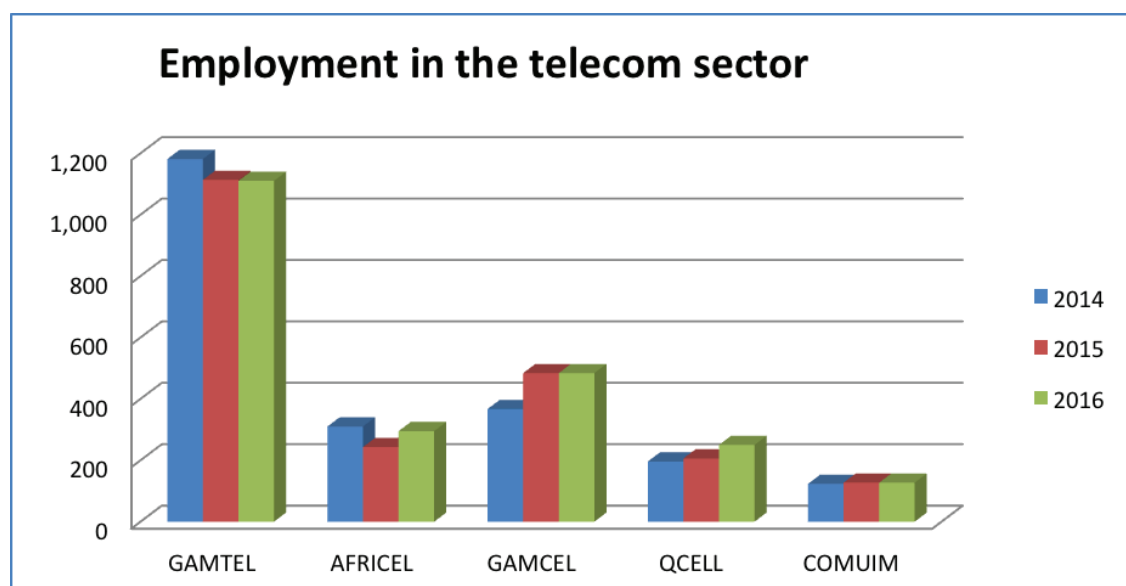


Figure 4: Investment in the Telecom Sector

SUBSCRIBERS

The subscriber base of the telecommunication sector continues to present impressive growth outlook in terms of increasing subscriber levels. A 7% increment was encountered in 2016, with a subscription rate of 2,896,456. This steady but declining growth witnessed since 2014 shows a market approaching saturation. This places an onus on operators to find new means of enticing customers mainly in the provision of adequate and reliable internet services.

YEARS							
Operator	2010	2011	2012	2013	2014	2015	2016
GAMCEL	365,385	433,440	584,407	425,929	494,978	374,227	506,315
AFRICELL	730,919	803,312	880,167	1,144,051	1,308,704	1,452,711	1,454,156
COMIUM	350,000	350,000	335,646	348,723	386,488	437,307	434,899
QCELL	32,045	47,540	100,716	256,266	358,610	451,427	503,601

Table 2: Number of subscribers from 2010 to 2016

AFRICELL continues to have the largest share of subscribers in the market with 1,454,156 subscribers followed by GAMCEL with 503,800 subscribers. QCELL had 503,601 and COMIUM with 434,899. Their respective market shares are shown below:

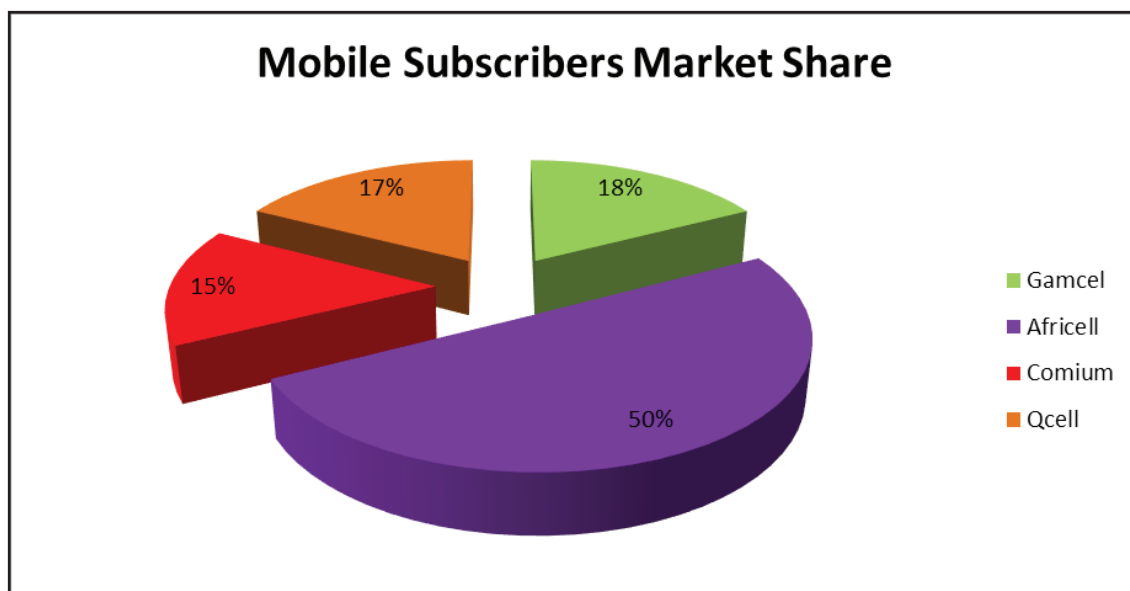


Figure 6: Mobile Subscribers Market Share

PURA's market assessment study conducted with the ITU in 2015 recognized the dominance of AFRICELL in the Mobile Voice market and has made recommendations for enhanced regulatory scrutiny so as to avoid any possible anti-competitive market behaviours from AFRICELL.

MOBILE INTERNET SUBSCRIBERS

The usage of mobile internet continues to showcase very impressive growth. Its subscription has tremendously increased by 64% in 2016 i.e. 704,818 to 1,159,340. The proliferation of Gambian social media users has contributed significantly to this growth particularly in a relatively young population. The availability and affordability of low cost smartphones have also been pivotal in this growth. The Authority deems the introduction of reliable and affordable data services as key in unleashing economic potential within the country. To this end, necessary engagements will be made with policymakers and the Industry on reducing the cost of access to further enable unbridled growth in the ICT market.

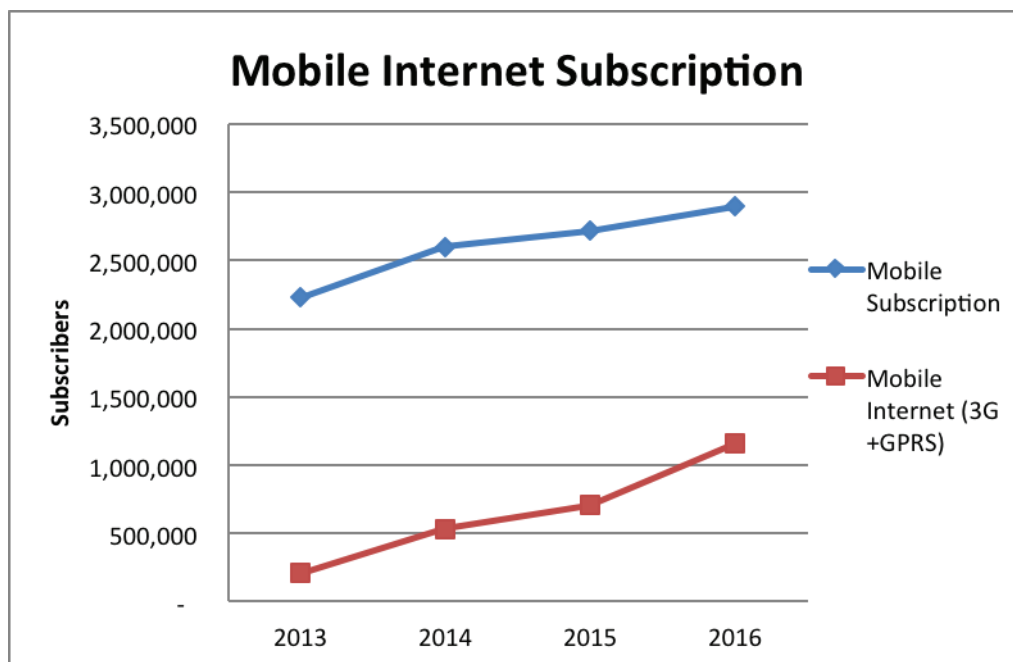


Figure 7: Mobile Internet Subscription

PENETRATION

Mobile Penetration in The Gambia continues to be on a steady increase. Mobile Penetration in the Gambia continues to be well above the African Average (74.6%).

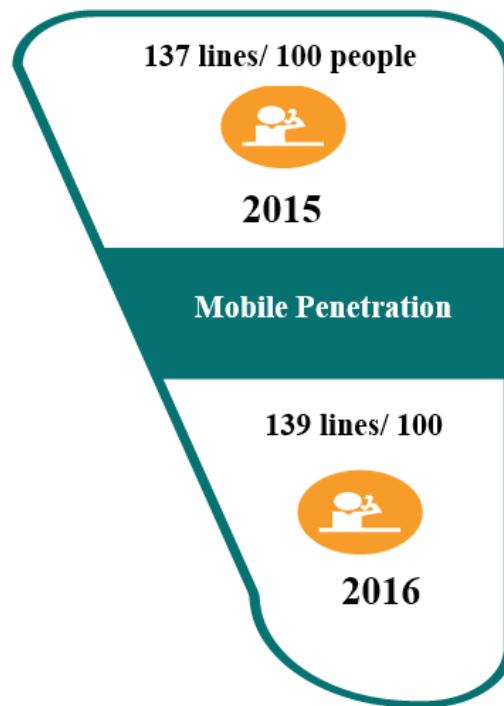


Figure 8: Mobile Penetration

This further highlights the need to continue championing the use of mobile phones as a preeminent tool for service delivery across various sectors owing to its near ubiquity across the country.

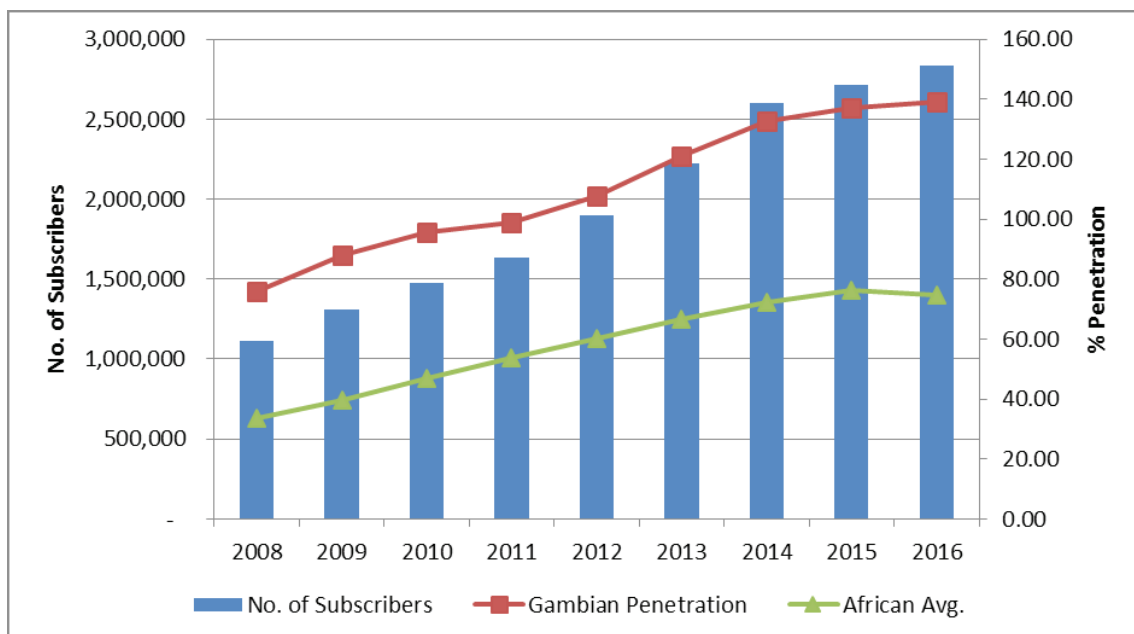


Figure 9: Mobile Penetration from 2008 to 2016

CALL TRAFFIC

Total traffic increased to 1.67 billion minutes representing a slight 1.2% increase over the corresponding period in 2015. Continuing from previous trends, domestic traffic accounts for 91% of total minutes. International traffic decreased by 10% compared to 2015.

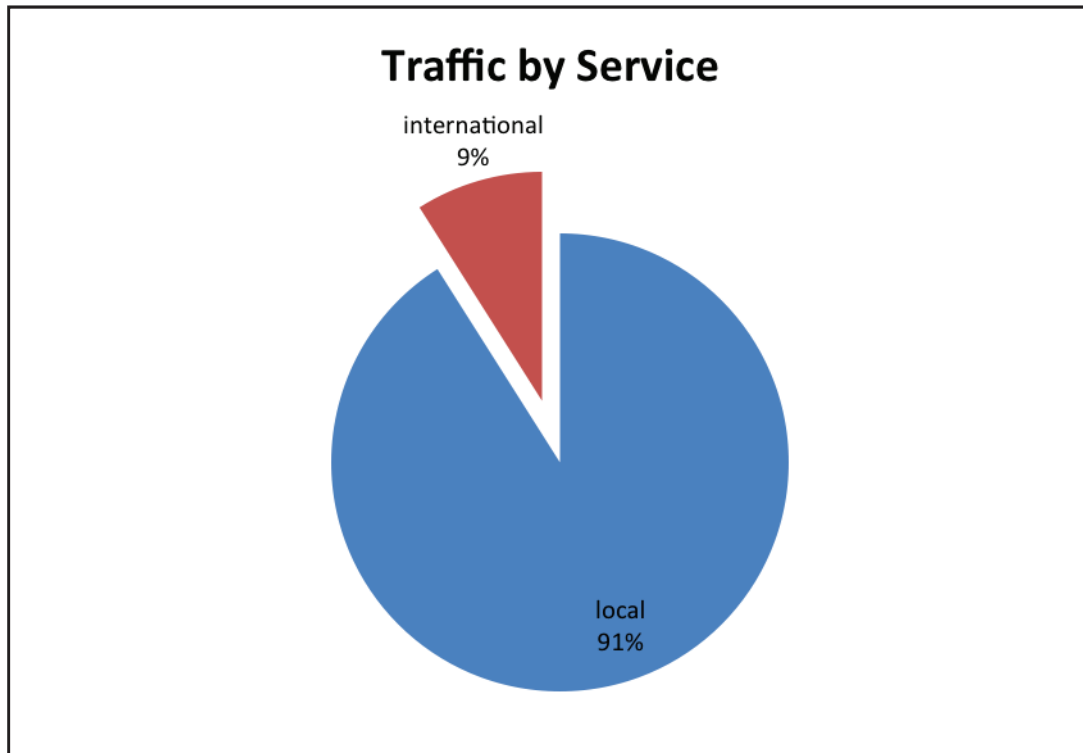


Figure 10: Voice Traffic by Service

Positive signs showing the emergence of a more robust competitive market point towards the increase in off-net traffic (Cross-network) by 19% i.e. from 183 million last year to 217 million this year. This further validates PURA's intervention in this market previously in the realm of Interconnection tariffs.

TARIFFS

Sector Tariffs as with previous years has remained constant. The last significant change in domestic tariffs was in 2013. GAMTEL continues to offer a relatively competitive fixed line rate but the dominance of mobile has hindered the uptake of the fixed line service. Average sector tariffs for local mobile, both On-Net and Off-net stand at just over D3.00/min. Owing to the discrepancies at the International Gateway level, outbound tariffs are still segregated by Zones rather than individual country destination.

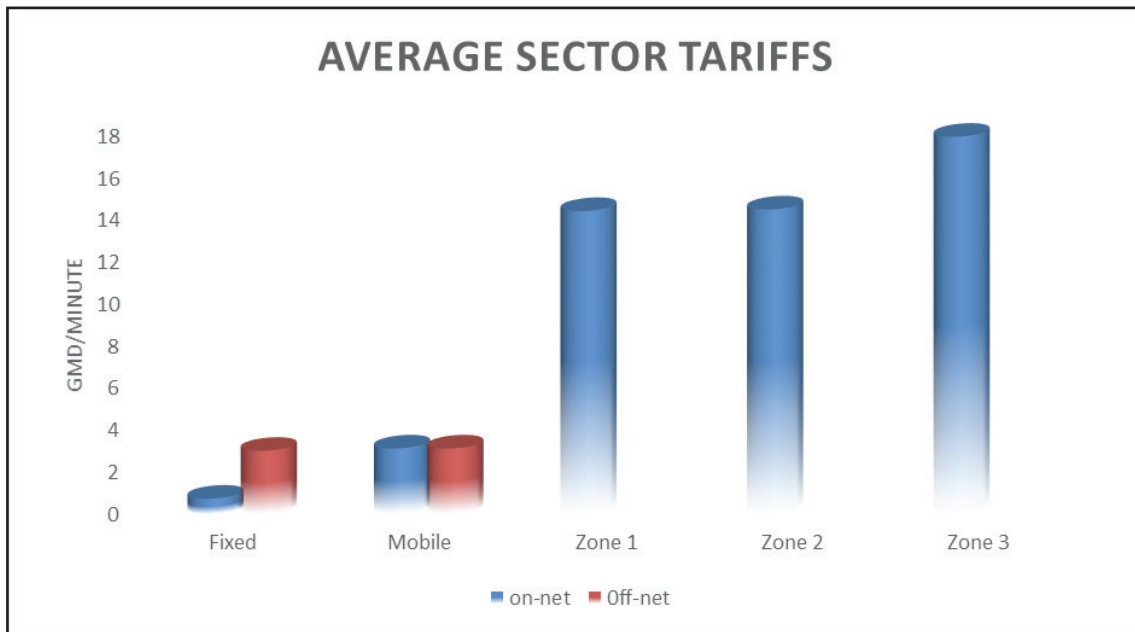


Figure 11: Average Sector Tariff

The relatively low Voice rates have also led to considerably low ARPU's (Average Revenue per User) across the industry with an average of around D275/quarter.

INTERNATIONAL TRAFFIC

The use of VOIP continues to be the preferred choice for the subscribers when it comes to international calls due to a myriad of factors, mainly cost. Over the years, the International Voice Market has been plagued by serious governance issues particularly in the realm of managing the International Gateway. These have led to Destination Gambia being priced out of most markets internationally. During the year, Incoming Termination Rates to Gambia stood at \$0.53. This makes it rather difficult, particularly for diaspora Gambians to call home at reasonable rates. These exorbitant rates have also led to the evolution and consolidation of grey markets where SIM-boxes thrive. These SIM-boxed calls manifest in a local subscriber seeing a local number when the call comes in internationally.

The Authority continues to advocate for the development of a Liberalized market that shall operate according to strict regulatory protocol with an added oversight function for the verification of traffic coming in and out of the country. Such a move would guarantee immense socio-economic benefits to the country and could possibly be a game-changer in reducing the costs of communication in The Gambia.

The competing alternatives such as Whatsapp, Viber etc would continue to pose a significant competitive threat in the International Telephony market. This has already been witnessed in The Gambia where reductions in International Traffic Volumes (Incoming & Outgoing) have been the order of the day.

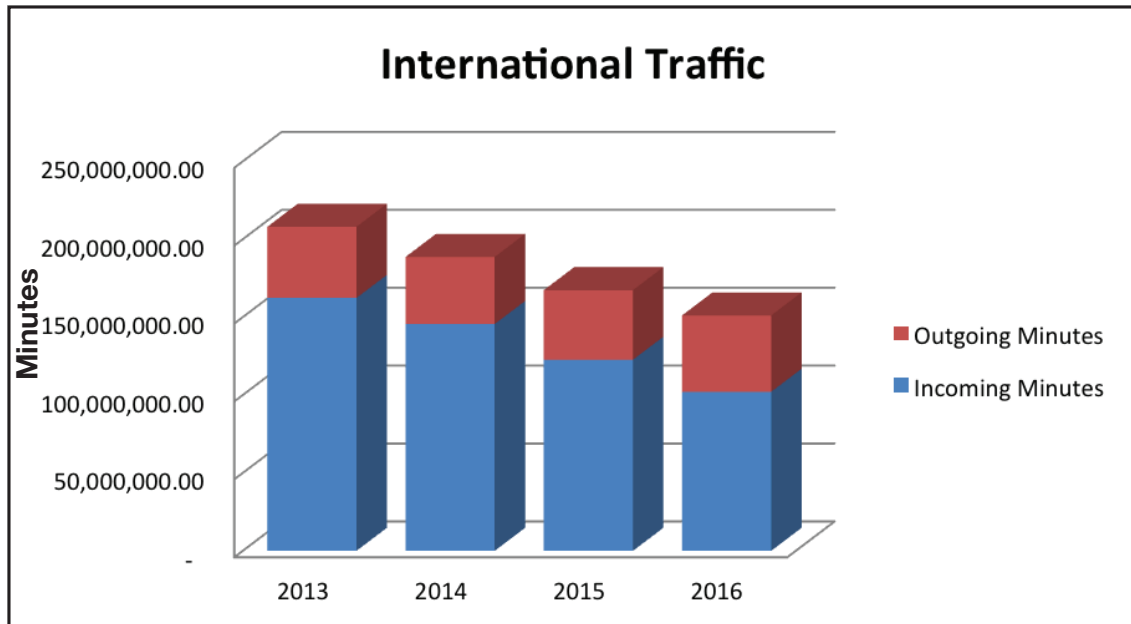


Figure 12: International Traffic

FIXED BROADBAND INTERNET

The Fixed Broadband Internet Market (Corporate and Residential) still faces challenges in its growth. In the past year, this market has grown by 10% with a total of 3,641 subscribers. The launch of the ACE Cable has brought about significant reductions in the cost of a 1 Mbps residential connection by about 53% from highs of D5,500/month in 2012. Nonetheless, the cost of these reduced rates which range from D2,200 to D2,530 still remain prohibitive to the average Gambian.

To this end, The Authority in trying to spur the development of a more competitive market has granted a Category II ISP license to Insist Net in 2016. Furthermore, the Authority shall explore the possibility of price caps at the Internet Backbone Level to ensure that new and licensed ISPs are able to procure bandwidth at competitive rates.

QCELL has the largest share of subscribers in the ISP market with 1,210 subscribers, followed by GAMTEL which has increased its subscribers by 39% i.e. from 782 subscribers in 2015 to 1,086 subscribers in 2016. NETPAGE with the third largest subscriber base had declined its subscriber base by 17%, followed by UNIQUE SOLUTIONS, INSIST NET and LANIX.

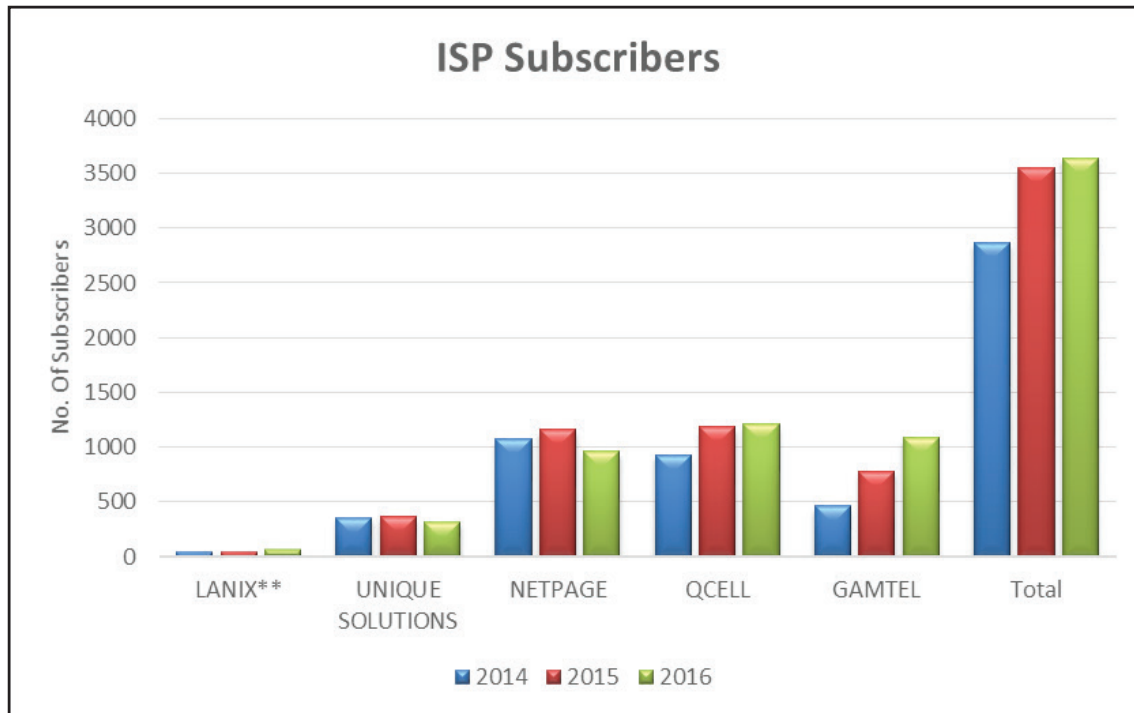


Figure 13: ISP Subscribers

THE ELECTRICITY, WATER AND SEWERAGE MARKETS

Most third world countries battle with the provision of affordable and reliable electricity services. The inability to match the ever increasing demand with the nearly constant supply remains an insurmountable challenge to overcome. This is because most utilities are state owned enterprises that are not well managed as a result lack the necessary capital to expand the networks especially in remote areas. In such communities the only source of lighting is battery powered off-grid solutions or candles. The few well to do individuals in these communities have solar roof top systems which are shared by the communities for services such as charging mobile phones.

In the towns and cities where the grid is rolled out, the consumers have to battle with constant outages due to load shedding. Institutions and Business have to resort to self-generation if they are to operate effectively and as a result the cost of running business becomes high rendering the products uncompetitive. A World Bank study on the state of electrification in the Sub-Saharan Africa indicates that more than two thirds of the households don't have access to electricity supply and where it exist the service is erratic coupled with high tariffs beyond the means of the average citizen.

In order to address this disparity, greater emphasis should be directed towards addressing the supply side constraints. One way of overcoming this bottlenecks is to attract foreign investment by opening the sector to privatization and competition. This will usher in the necessary skill set and management expertise which is a prerequisite for attracting the necessary funding. The renewable potentials should also be maximally exploited for wider outreach to under serve areas.

In The Gambia, the situation is not any different. The utility is state owned devoid of investment capital to meet the demand of the ever increasing customer base. The existing generating plants are in some cases too old requiring constant maintenance. The mode of generation is predominating fossil fuels the price of which keeps on fluctuating in the world market exerting constant pressure on the end-user tariffs.

The table below shows the increasing trends of the electricity tariffs over the years to date and a close look at the trend further attest to the fact that it is high time renewable sources are exploited.

Customer Class	KWH Consumption	PURA's Determined Rates for 2010	Ministry's Determined Rates for 2010	PURA's Determined Rates for 2011	New Consumption Band (KWH)	PURA's Determined Rates for 2011	PURA's Determined Rates for 2015
Domestic Credit Meters	0-40	2.02					
	1-92	2.24	0-300	9.10	0-300		10.14
	41-600	6.5	6.2	7.20	301-600	9.10	10.49
	601-1000	7	6.65	7.75	601-1000	9.70	10.77
	Above 1000	8	7.60	8.40	Above 1000	10.40	11.54
Cash Power	Flat rate	6.5	6.20	7.20		9.10	10.14
Commercial		8	7.20	8.60		9.70	10.90
Hotel/Industries		8.50	7.65	8.95		10.40	11.65
Agriculture		8.00	7.20	8.00		9.10	10.14
Area Councils		8.00	7.20	8.70		9.70	10.90
Central Government		8.00	7.20	8.70		9.70	10.90

Table 4: Evolution of Tariffs for electricity services from 2010 – 2016

ELECTRICITY GENERATION

During the year under review, the company has not made any significant addition to the generation capacity of the company. The following tables show the generation plant across the length and breadth of the country.

Location/	Unit	Make	Installed Year	Installed Capacity (MW)	Available Capacity (MW)
Kotu	KPS - G1	Mirrless	1981	3	2.5
Kotu	KPS - G2	Mirrless	1981	3	2.5
Kotu	KPS - G3	Mirrless	1997	3.4	2.5
Kotu	KPS - G4	Deutz	2001	6.4	5.5
Kotu	KPS - G6	MAN B&W	1990	6.4	5.5
Kotu	KPS - G7	Deutz	2001	6.4	5.5
Kotu	KPS - G8	Deutz	2001	6.4	5.5
Kotu	KPS - G9	Deutz	2009	6.4	5.5
Kotu	Total			41.4	35

Table 5: List of engines at Kotu Power Station

LIST of ENGINES of AT BRIKAMA POWER STATION OWNED BY NAWEC

Location/Unit	Make	Installed Year	Installed Capacity (MW)	Available Capacity (MW)
BRK - (NAWEC)	Wartsila	2011	9	8.3
Total			9	8.3
Total for NAWEC			50.4	43.3

Table 6: List of engines of at Brikama Power station owned by NAWEC

BRIKAMA POWER STATION II

Location/Unit	Make	Installed Year	Installed Capacity (MW)	Available Capacity (MW)
BRK - G1	Deutz	2006	6.4	5.5
BRK - G2	Deutz	2006	6.4	5.5
BRK - G3	Deutz	2007	6.4	5.5
BRK - G4	Deutz	2007	6.4	5.5
BRK - G5	Deutz	2013	6.4	5.5
BRK - G6	Deutz	2013	6.4	5.5
Total			38	22

Table 7: List of engines of at Brikama Power station owned by the IPP

PROVINCES

Location/Unit	Installed Year	Installed Capacity (KW)	No. of Engines (KW)	Available Capacity (KW)
Essau	2006	460	2 x 200 + 1 x 60	400
Farafenni	2006	1400	2 x 600 + 1 x 200	1360
Mansa Konko	2006	1000	2 x 400 + 1 x 600	940
Kerewan	2006	220	1 x 100 + 2 x 60	180
Kaur	2006	180	3 x 60	120
Bansang	2006	600	3 x 200	540
Basse Mobile Unit		450	1 Containerized	410
Basse Santo Su	2006	1400	2 x 600 + 1 x 200	1360
Total		5710		5310

Table 8: List of Power station in the Provinces owned by NAWEC

TRANSMISSION AND DISTRIBUTION

Electricity is transmitted for distribution via five radial 11-kV feeders and three 33 kV feeders that form a ring in the GBA. The 33 kV feeders supply medium voltage substations where the voltages are transformed to 11 kV for further distribution. The rehabilitation of the transmission lines under the Venezuela project continue to pay dividends as line extension are on the increase without any major issues with the voltage. By end of 2016, NAWEC had a total electricity customer base of 169,432 in 990 coded zones grouped in seven categories as shown in the tables below.

NUMBER OF CUSTOMERS

CATEGORY	2011	2012	2013	2014	2015	2016
Domestic	24,767	19,585	25,840	16575	15381	14732
Commercial (NGO'S, Schools, etc)	5,118	4408	6,093	4003	3842	3697
Major consumers (Industries, Banks, S/markets etc)	463	451	450	502	509	512
Agriculture	5	14	27	18	17	24
Local Government Authorities	1,214	194	250	229	212	213
Central Government		1059	1,123	1079	1085	1099
Prepayment Customers	67,763	85,071	99,532	110,652	126,388	149162
Provincial Services(aggregated)				11540		
TOTAL	98,116	110782	133,315	145141	146435	169432

Table 9: Number of customers per customer category (2010 – 20015)

ITEMS	2011	2012	2013	2014	2015	2016
Customer population	98,116	110782	133315	145,141	146,435	169432
Sales MWH -Credit	80,947	84728	68234	71789	88157	20277
Sales MWH-Prepayment	87,042	102490	120954	146,577	138,079	149162
Rev. collection Credit (millions)	628.463	802.804	761.24	723.309	836.648	832.4001
Prepayment sales(millions)	647.586	893.681	1,073.79	1,254.76	1400.113	1,614.55
System Losses Power House Consumption	31.20%	23.8	24.9	24		
Power Demand MW	132	147	152	160	166	173
Energy Demand MWh	621,680	647,330	685805	735309	794345	862419
Customer growth p/a %	23	13	20	8.87	1	15.7
Energy Demand Growth rate	4.3	11	3	5	8	9
Power Demand Growth rate	5	4	6	7.2	3,7	4
Revenue growth rate	12	33	8	7.79	13	9.4

Table 10: Status of the electricity market.

The company is making great efforts in extending the network to the under served areas as shown in the table above. The company registered a 16% increase in its customer numbers as oppose to a near Zero increase in the previous year. During the same period last year while the company could only manage a 1% increase in the customer base, they were however able to generate a 13% increase in revenue as oppose to the 2016 when they had a 16% increase in customers but could only generate a 10% increase in revenue.

A probable explanation could be the company's inability to add any significant generation capacity over the period. Serious efforts should be geared towards matching the customer expansion with the additional generation capacity to address the imbalance.

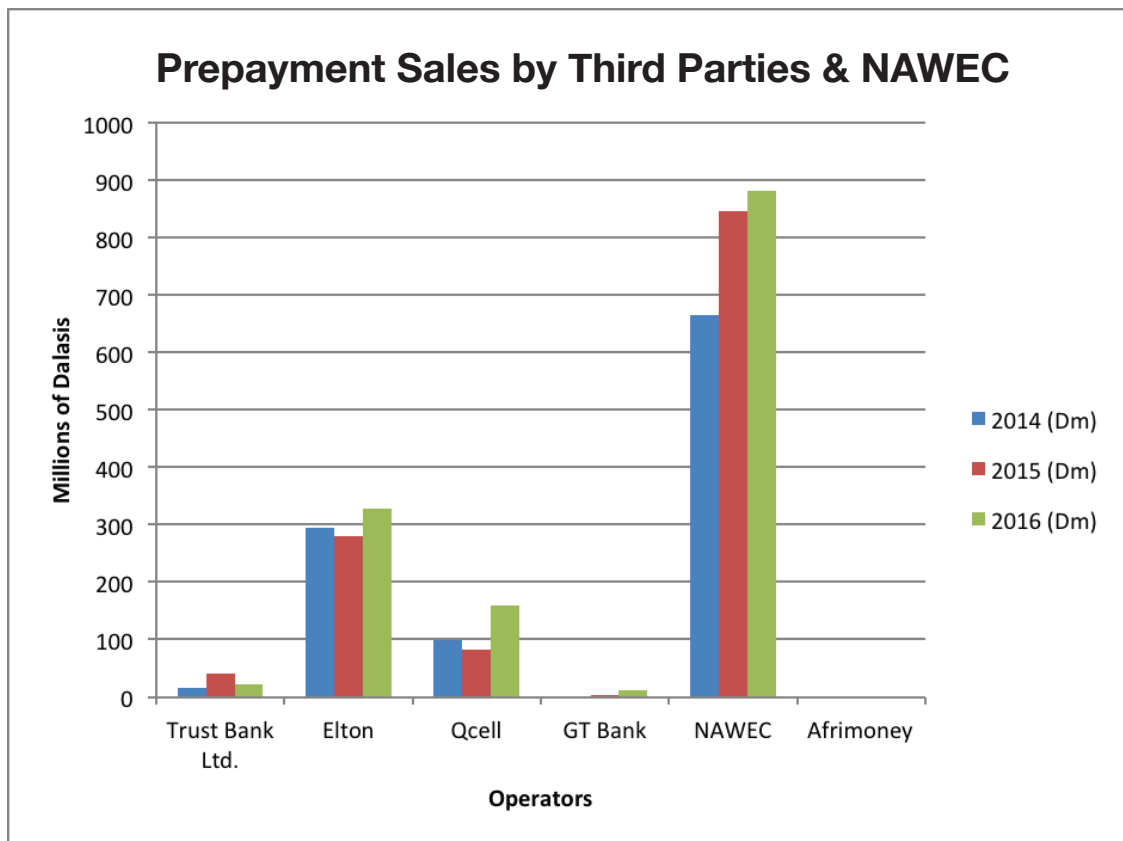
THIRD PARTY SERVICES

The sale of prepayment tokens across various platforms is paying dividends as shown in the table below. The policy has two main advantages. Firstly, the company makes significant cost reduction in man hours and also operational expenses at the commercial branches. Secondly, the customers have multiple platforms to access the service especially during odd hours and public holidays when most of the branches may be closed. The platform accounts for 32% of all prepayment sales which is an improvement over the previous year sales of 29 %. Overall the sales on the platform grew by 28% over the previous figures.

Among the five participating institutions Elton and QCell are the leading players with sales of D327.3m and D159.98m respectively. Other players like Trust Bank have seen sale figures dropped by 48% whereas GT Bank registered the highest growth in sales of 168%. AFRIMONEY which is the newest entrant made sales of D0.63m which is expected to grow based on their large subscriber numbers in the telecoms market.

INSTITUTION	2014 (Dm)	2015 (Dm)	2016 (Dm)	%change
Trust Bank Ltd.	15.343	40.803	21.28	-47.9
Elton	295.,311	280.275	327.3	16.77
Qcell	97.875	83.139	159.98	92.4
GT Bank		3.918	10.5	168
Afrimoney			0.63	
Total	408.529	408.135	519.69	218.4

Table 11: Third Party Services: sales Figures



Water Service Provision

Access to safe drinking water is considered a basic human right by the United Nations. Goal no 6 of the newly adopted Sustainable Development Goal has a target “Ensure access to water and Sanitation for all” by 2030. Governments all over the world have set themselves timelines and action points to realize this objective. However there are real challenges that need to be overcome if this noble objective is to be realized especially in developing countries. This challenges include poor and ageing infrastructure, resulting from lack of investment in the sector. Other problems include lack of proper chlorination facilities and contamination at source.

In The Gambia since most of our water is obtained from underground sources, the risk of source contamination is reduced except in areas where the iron and heavy metals content are high. The major challenge is that chlorination facilities in some centers are nonfunctional thereby increasing the risk to the users. The ageing water transmission pipes in the GBA couple with the severe soil erosion poses serious challenges for the utility.

The table below shows all the NAWEC water extraction points across the length and breadth of the country.

Well fields	No. of Boreholes	Status
Salagi & Jambur	15	Operating
Wellingara & Sukuta	11	Operating
Fajara	6	Operating
Brikama	17	Operating
TTC	1	Operating
NASA	1	Operating
Yundum	1	Operating
Kanifing	1	Operating
Kerr Serigne	1	Operating

Table 12: List of various well fields and the number of boreholes in each well field.

Well fields	No. of Boreholes	Status
Essau	2	Operating
Kerewan	1	Operating
Mansakonko	2	Operating
Farafenni	3	Operating
Kaur	2	Operating
Janjangbureh	1	Operating
Bansang	1	Operating
Basse	3	Operating
Albreda	1	Operating

Table 13: list of provincial boreholes and their operating status

Sewerage Plant	Status
Banjul	Operating
Kotu	Operating

Table 14: Sewage facilities in the GBA

WATER QUANTITY SOLD AND REVENUE

The quantity of water produced, sold and revenue generated during the period of 2010 to 2016 is shown in the table below.

YEAR	PRODUCTION m3	SALES m3	LOSSES %	REVENUE Dalasi
2010	27,781,445	22,605,584	19	152,240,000
2011	28,309,264	18,501,049	35	126,473,463
2012	29,930,553	20,563,417	32	225,864,000
2013	29,772,311	20,611,310	31	244,168,000
2014	35,395,881	25,944,355	27	350,062,841
2015	37,375,261	30,971,741	20	576,511,592
2016	40,226,849	24,137,070	40	349,582,255

Table 15: Amount of water produced, sold and revenue generated.

The company was on a steady path of reducing its water losses as far back as 2011 when the losses were at a record 35%. In the subsequent years losses were reduced to 32%, 31% and 27% in 2012, 2013 and 2014 respectively. In 2015 the figure went down to an impressive 20% which receive commendation from the Authority. However the impressive record could not be sustained as losses skyrocketed to a new high of 40%. This development is unsustainable and NAWEC needs to seriously look into the root causes of this downward spiral with a view to addressing it as soon as possible.

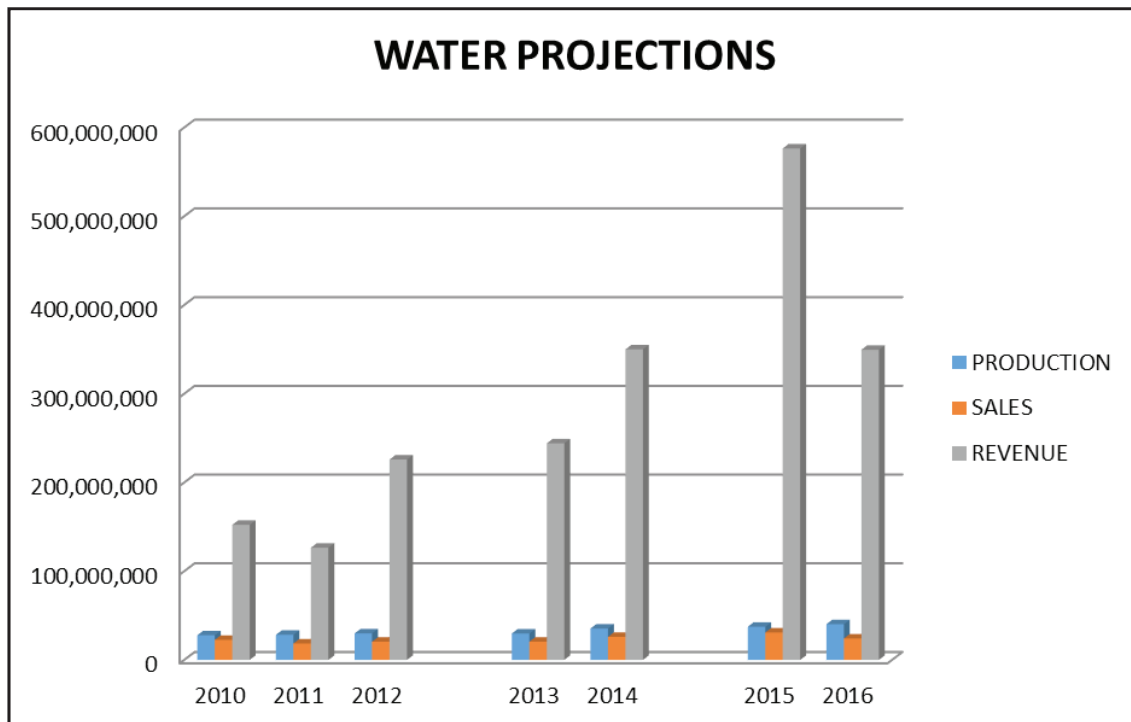


Figure 15: Water Projections

A closer look at the figures in the above graph will also show that revenue from the water sector dropped by almost 40% which is the same as production losses. When this is contrasted against the 65% increase in revenue in 2015, it bears the question what went wrong? The Authority in its routine inspection of NAWEC facilities will endeavor to find out the issues and forward recommendations to the utility.

PART III- LEGAL AND COMPLIANCE REVIEW

The Year 2016 has been eventful and challenging for the Directorate of Legal, Licensing and Enforcement. The year under review witnessed tremendous activities in our traditional regulated sectors and the emergent new sectors that were added to the regulated sectors.

The Department of Legal, Licensing and Enforcement undertook activities in the following sectors:

1. Licensing of Broadcasting Radio stations
2. Resolution of inter operator disputes
3. Petroleum Products Regulation Legislation development
4. Girls in ICT

LICENSING OF BROADCASTING RADIO STATIONS

The Honourable Minister of Information and Communications Infrastructure, following recommendations from PURA granted three (3) additional Commercial radio stations to Deggo FM, Sahel Business FM and Sky FM through processes as established in the PURA Act 2001 and Information and Communications Act 2009. These licenses were issued in order to support and ensure pluralism and further access to information for citizens of the Gambia.

RESOLUTION OF INTER OPERATOR DISPUTES BETWEEN AFRICELL AND BANGZ ENTERTAINMENT

The Authority assigned a PREMIUM **RATE SERVICE** short code to Rising Stars (Bangz Entertainment) following the successful negotiations and agreements of commercial terms with 3 operators namely; GAMCEL, COMIUM & QCELL and the Authority authorized the activation of the number by the respective operators. Bangz Entertainment did not reach commercial terms with AFRICELL.

Bangz Entertainment wrote to the Authority requesting that AFRICELL refund credits to subscribers who had texted the 1800 short code as well as close the 1800 short code on their network as they have not reached a commercial agreement because AFRICELL wanted an 80/20 split of SMS revenues emanating from voting on the program. In line with its dispute resolution guidelines, the Authority invited AFRICELL to a meeting in order to discuss the issues raised by the complainant.

The Authority also conducted an independent investigation to ascertain the veracity and accuracy of the complaint. The Authority requested AFRICELL to block the 1800 number immediately and asked them to send text messages to the affected subscribers detailing that a refund was processed following them sending messages to the 1800 short code and further apologize to the affected subscribers.

PETROLEUM PRODUCTS REGULATION

In December 2016, the National Assembly of The Gambia enacted the Petroleum Products Act for administration of the downstream petroleum activities. In the Act, PURA was given the mandate to regulate the downstream petroleum activities.

GIRLS IN ICT

International Girls in ICT day is an initiative backed by International Telecommunications Union (ITU) member states in the ITU plenipotentiary resolution 70 (Guadalajara 2010) to create a global environment that empower and encourages girls and young ladies to consider careers in the growing field of Information Communication Technologies (ICTs).

PURA as the telecommunications regulatory body sponsored all the events for Girls in ICT 2016 as part of its regulatory support role. The Ministry of Information and Communication Infrastructure (MOICI) established a taskforce consisting of PURA, the Ministry of Youths and Sports and other Stakeholders.

The 2016 GICT was a two-Day event aimed at empowering encouraging young girls to pursue careers in the ICT field. There was a workshop on the 28th of April 2016, celebrating Girls in ICT Day for 30 young girls from different senior secondary schools. Leading women in the ICT sector in The Gambia were invited to the workshop to talk to the girls and young women. They had the opportunity to have discussions with professional in the ICT field who made presentations on the various career opportunities in the ICT field and the need for more female engineers.

A web design competition was also organized for 9 female participants. The winners of the web-design competition went home with prizes and internships. There was also be a Job Fair on the 29th of April 2016 as part of the celebrations, whereby top ICT institutions in The Gambia were present and they interacted with the students and potential employees.



Figure 16: opening ceremony of the Girls In ICT 2016



Figure 17: Group picture of the delegates



Figure 18: an encounter with one of the operators at the MDI grounds at the job fair



Figure 19: Group discussions with PURA staff job fair

PART IV - KEY REGULATORY ACTIVITIES

INFORMATION AND COMMUNICATIONS TECHNOLOGY

The ICT world is increasingly becoming broadband. Twenty years ago, only one per cent of the global population had a mobile cellular subscription, and 11 per cent had a fixed telephone subscription. Today, mobile cellular penetration is approaching saturation with more than seven billion subscriptions worldwide. Globally, 3.48 billion people were using the Internet by end 2016. Mobile broadband is the most dynamic market segment; globally, mobile broadband penetration reached 49.4% by end 2016. Fixed broadband access is expected to have reached more than 884 million fixed broadband subscriptions by end 2016. The number of Internet users is growing reaching more than 47% of the world population.

Broadband provides access bitrates in downstream and upstream which support all available types of services offered through Internet access with good quality. A decade ago, broadband access was mainly offering hundreds of kbps, today it provides access within Mbps or tens of Mbps (i.e., speeds), enabling, for example the provision of HD video as well as ultra-HD videos, etc.

Fixed broadband access technologies can be provided either by copper (twisted-pairs) by reusing local-loops for fixed telephony, cable access (by reusing coaxial cable networks, primarily developed for TV distribution, for IP-based access via ADSL, VDSL, or generally xDSL, where DSL stands for Digital Subscriber Line). During the year under review, GAMTEL has deployed ADSL services to customers throughout the country using copper connected to the Next Generation Switches funded by the Islamic Development Bank under the ECOWAN project.

Mobile broadband access is provided currently with 3G (e.g., UMTS/HSPA) and 4G mobile technologies (e.g., LTE/LTE-Advanced). In 2016, LTE services which enhance the quality of Internet use were offered in 165 countries worldwide amongst which The Gambia is.

MOBILE CELLULAR SERVICES

The communications sector continued with its overall growth with the number of subscribers for mobile services recording the greatest increase. The number of communications towers increased and thus broadened the geographic area receiving services and the number of people having access to mobile services.

At the end of December 2016, the number of Cells deployed by each operator on each mobile network is shown below.

CELLS DEPLOYED COUNTRYWIDE (31/12/2016)

Item	AFRICELL 2G	COMIUM 2G	GAMCEL 2G	QCELL 2G
Cell Sites	466	265	314	448

Item	AFRICELL 3G	GAMCEL 3G	QCELL 3G
Cell Sites	613	146	563

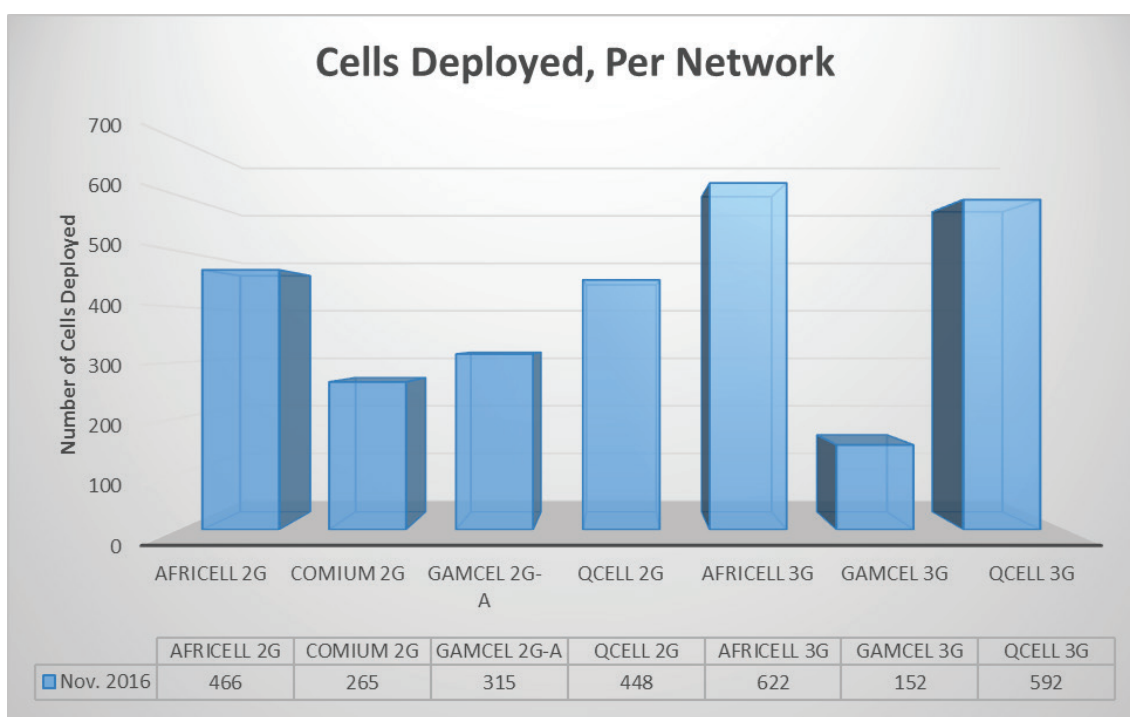


Figure 20: Cells Deployed per Network

MOBILE NETWORK COVERAGE

The desired impact of the Quality of service is the improvement of services by mobile operators, and this includes the addition of new and/or improved Cell Sites to better serve the consumers, and increase geographic coverage.

The number of connections for both fixed and mobile services per every 100 inhabitants, normally referred to as teledensity. Teledensity provides an objective and fair reflection about the development of a communications sector.

The geographic area coverage which has access to communications service has also increased given the development of new base transceiver stations (BTSs) in new areas by both network operators.



Figure 21: BTS cell site with antennas

From our annual countrywide treks, it is estimated that the land coverage is now just over 96% of the country. The areas which have services of mobile network services are reflected on the coverage maps of the four network operators and the consolidated coverage map depicted in the following Figures.

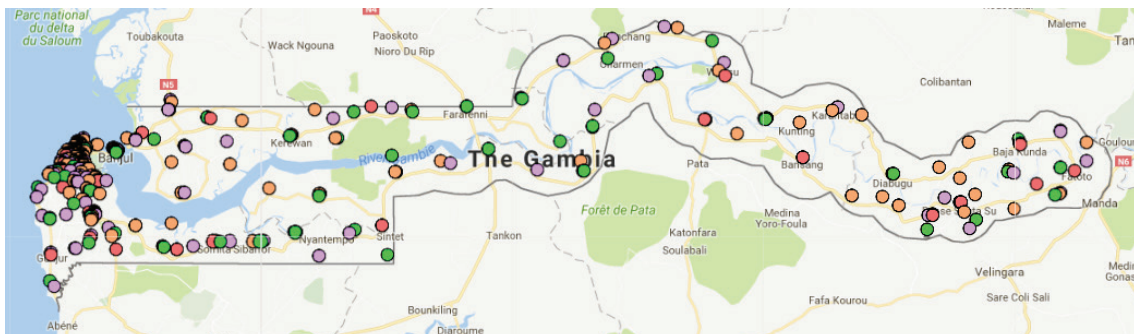


Figure 22: Countrywide 2G Coverage - All Operators

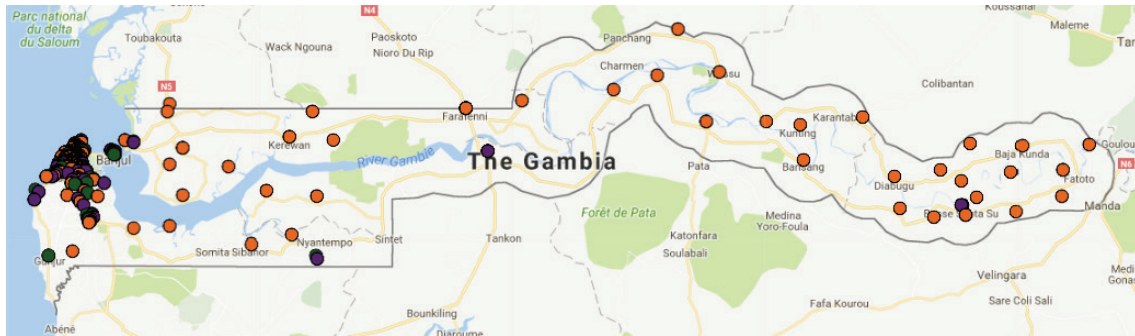


Figure 23: Countrywide 3G Coverage - All Operators

QUALITY OF SERVICE

We live in a globally connected world, where all functions and aspects of the real life are being transferred to communication networks and services. In this digital world, citizens throughout the world rely on ICTs to conduct their everyday socio-economic activities which call upon quality of services. Telecommunication networks are interconnected on national, regional and global basis, and telecommunication services are global. Therefore, the quality of telecommunication services applied in one network or one country influences the end-to-end quality of that service, so the quality cannot be considered only at national or regional level, but therefore also needs to be considered globally. Today, citizens throughout the world rely on ICTs to conduct their everyday socio-economic activities which call upon quality of services. Ensuring QoS in this environment is therefore becoming critical. A harmonized and common approach to regulating QoS would enable greater quality prospects.

Quality of service and quality of experience measuring is becoming more and more complex as quality can be impacted by many factors at the network level and along the value chain such as with the device, the hardware, the infrastructure, the service and the apps. In addition differences may arise between perceived and assessed QoS.

QUALITY OF SERVICE MONITORING NETWORK

The Authority by virtue of Section 83 of The Information Communications Act 2009, is mandated to ensure that all licensed Telecommunications Service Providers offer an acceptable quality of service.

Being cognizant of the aforementioned provision, The Authority strives to balance the interests of all stakeholders, particularly consumers and regulated utilities as Quality of Service Standards is vital to the sanctity and vibrancy of the ICT sector.

In light of the foregoing, PURA with the support of the World Bank through the West African Regional Communications Infrastructure Project (WARCIP) project acquired a state of the art QOS monitoring tool to monitor and measure both the Voice and Data platforms of the Mobile Network operators.

To complement this platform, QOS Guidelines have been developed by PURA to protect and enhance the rights of consumers in obtaining an acceptable level of Quality. The guidelines have been benchmarked with global best practice in order to ensure that consumers are given a satisfactory level of service and to further help them make informed decisions when deciding on their service providers.



Figure 25: Honorable Minister of Finance and PURA DG

The Quality of service Monitoring platform procured by the Authority was officially launched by Abdou Colley, the Honourable Minister of Finance and Economic Affairs on 16th October 2016 as can be seen in Figure 20.

Other key dignitaries included officials from OP, MOICI, MOTRE, GCCPC, GCCI, ECOWAN, WARCIP, CPAC, operators,

consumer groups, media and the private sector.

QUALITY OF SERVICE BENCHMARKING

The QoS Monitoring Network generates reports and benchmark them against the set targets stipulated in the QoS Guidelines. Generated reports are published for the consumption of the general public. This will ensure that consumers get up to date and accurate information about the performance of various Mobile Communication Service providers' networks. This will help them make informed choices when deciding on their choice of Service Provider.

Call Success Rate (CSR)

This parameter measures the number of calls that are completed / connected on a network satisfactorily compared to the total number of call attempts made by callers. The target set for this parameter is 95% of the calls expected to be completed.

Handover Success Rate (HSR)

Call handover occurs when a mobile handset moves out of one cell to the next and is handed over automatically from the base station of the first cell, to that of the next with no discernible disruption of the call. This rate represents the efficiency for mobility between cells (this can be affected by bad radio quality or signal strength). This rate should be higher than 95%.

The figure below shows a selected comparative key performance indicators such as call success rate, handover success rate, and call drop rate for GAMCELL, AFRICELL, COMIUM and QCELL for their 2G and 3G networks.

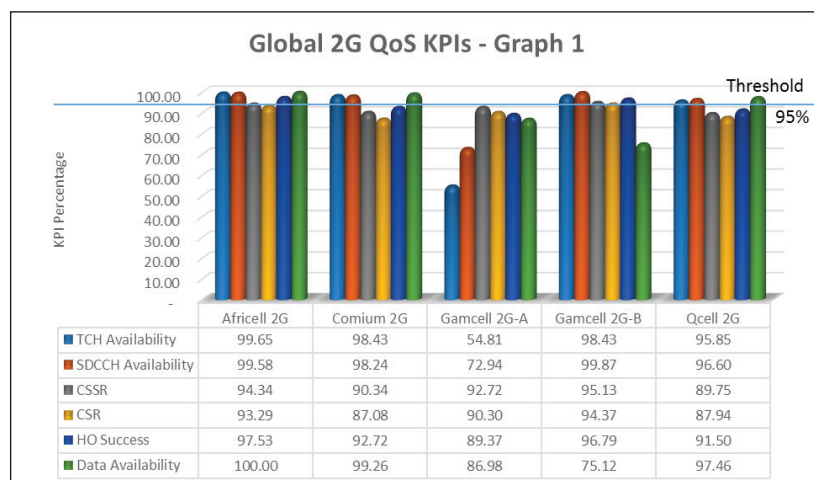


Figure 27: Global 2G Comparative Performances

REGIONAL QUALITY OF SERVICE PERFORMANCE

During the month of December 2016, the quality of service monitoring network was able to determine the quality of service delivered in each region throughout the country. Furthermore it can determine the quality of service delivered in each location that a BTS is installed on a 24/7 basis. A quality of service delivered in randomly selected districts is shown below.

Region	Call Success Rate				Handover Success Rate			
	GAMCELL	AFRICELL	COMIUM	QCELL	GAMCELL	AFRICELL	COMIUM	QCELL
Banjul	95.85	96.63	82.53	93.44	98.99	98.62	94.2	90.12
Kanifing	96.96	95.85	91.85	95.48	99.28	96.61	94.4	95.91
Foni Brefet	90.22	90.66	79.12	91.1	91.11	93.5	89.19	94.04
Fulladu West	93.17	93.69	88.55	88.41	96.16	97.24	95.89	97.28
Janjangbureh	95.62	95.87	90.22	94.98	95.52	98.17	95.23	98.21
Jarra East	93.63	93.96	90.17	90.45	92.91	96.96	96.59	96.29
Kiang Central	92.55	95	90.64	82.12	90.48	97.2	94.9	90.44
Kombo South	66.68	93.83	86.9	72.62	95.97	95.26	89.37	82.75
Upper Badibou	94.81	87.96	93.44	94.62	95.24	98.31	98.7	98.17
Lower Niumi	93.22	88.19	80.52	82.57	87.26	93.61	90.16	92.48
Niamina East	97.16	88.25	91.33	94.73	95.38	97.56	98.03	95.06

Table 16: Quality of service in randomly selected districts

NETWORK OUTAGES

During the month of December 2016, the quality of service monitoring network was able to determine the number of 2G and 3G Base Station Transceivers that were out of service of each of the operators as can be seen in the graph below.

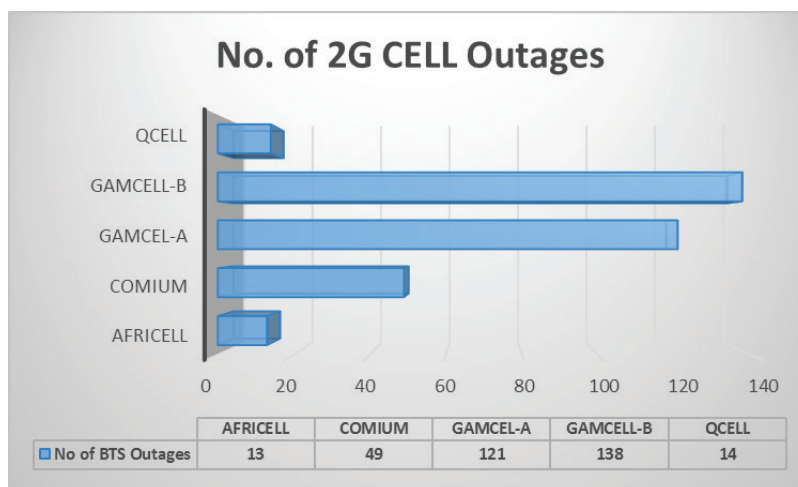


Figure 28: 2G Operator Cell Outages

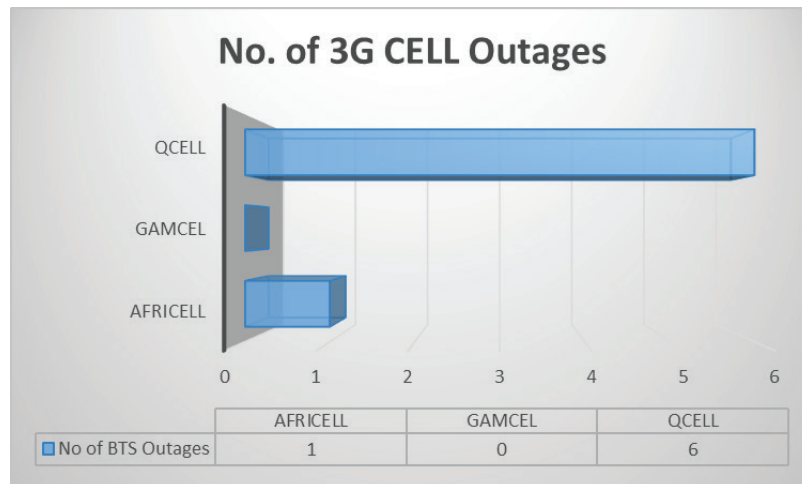


Figure 29: 3G Operator Cell Outages

The outage of Cells may be due to technical issues, planned maintenance, mains, generator or solar power outages, etc.

MANAGEMENT OF SCARCE RESOURCES

This chapter presents the status of the use of scarce resources namely spectrum, numbering and domain names. Radio frequency spectrum is a scarce national resource managed by the Authority on behalf of the Government of The Gambia.

This resource is essential to the provision of wireless communication such as broadcasting, cellular, radar, and space communication, among others. Numbering resources refer to numbers, is structured in a standard format to provide unique communications identifiers to a user network interface, services or end users. A domain name is a unique name used as an Internet address to identify the location of a particular website in the World Wide Web.

NUMBER RESOURCES

During the year under review, the Authority following consultations with the operators had achieved its objective of harmonizing the 111 customer care short code. It should be noted that operators were issued different short codes for access to their customer care centers.

After the validation of the guidelines on short code numbers, the Authority has seen an increase of applications for these codes to be used for different designated services. The purpose of these Guidelines is to ensure that numbering resources are efficiently and continuously managed. This will enable the Authority to also create equal access, transparency, fair competition and ensure an acceptable level of customer protection. Short Codes which have become popular for providing Value Added Services are numbers that are shorter than the ITU-T E.164 format which for The Gambia is currently 7 digits long.

The table below indicates the Short Codes on the 1xxx numbering range that are to be assigned by the Authority.

Item No	Service Name	Service Code	Digit Length	Number Range
1	Toll free services	1xxx	4	1000 -1699
2	Shared Rate Services	1xxx	4	1700 - 1799
3	Premium Rate Services	1xxx	4	1800 - 1899
4	Reserved & to be determined	1xxx	4	1900 - 1999

Table 17: Short Codes on the 1xxx numbering range

In the event of an emergency, the Authority will review the application in consultation with the operators and assign an appropriate short code.

SIGNAL POINT CODES

The Signaling Point Codes (SPC) is used in the International Telecommunications Union (ITU) Signaling System No.7 (SS7) to identify the exchanges between which speech path connections are to be established. The SPC code of a Signaling Point in a SS7 Network is an unambiguous identification code for an exchange (Signaling Point) in a network to enable establishment of speech path connections.

As the national telecommunication networks in The Gambia consist of several operator networks, it is the responsibility of the Regulatory Body, PURA to allocate and administer the national SPC codes to enable interworking between the networks in the country.

CURRENT ASSIGNMENTS

The latest signaling point code allocation are shown in the table below

Mobile Country code	Mobile Network Code	Service Provider	Type of service	Remarks
607	1	GAMCEL	Cellular mobile service	
607	2	AFRICELL	Cellular mobile service	
607	3	COMIUM	Cellular mobile service	
607	4	QCELL	Cellular mobile service	
607	5	GAMTEL-ECOWAN	Fixed wireless broadband	Government e-services
607	6	NETPAGE	Fixed wireless broadband	

Table 18: Current ISPC and National SPCs assignment

SPECTRUM MANAGEMENT

The International Telecommunication Union (ITU), in its International Radio Regulations, divides the world into three ITU regions for the purposes of managing the global radio-communication spectrum. Each region has its own set of frequency allocation, which is the main reason for defining the regions.

- **Region 1** comprises of Europe, Africa, the Middle East west of the Persian Gulf including Iraq, the former Soviet Union and Mongolia.
- **Region 2** covers the Americas (both North and South), Greenland and some of the eastern Pacific Islands.
- **Region 3** contains most of non-former-Soviet-Union, Asia, east of and including Iran, and most of Oceania.

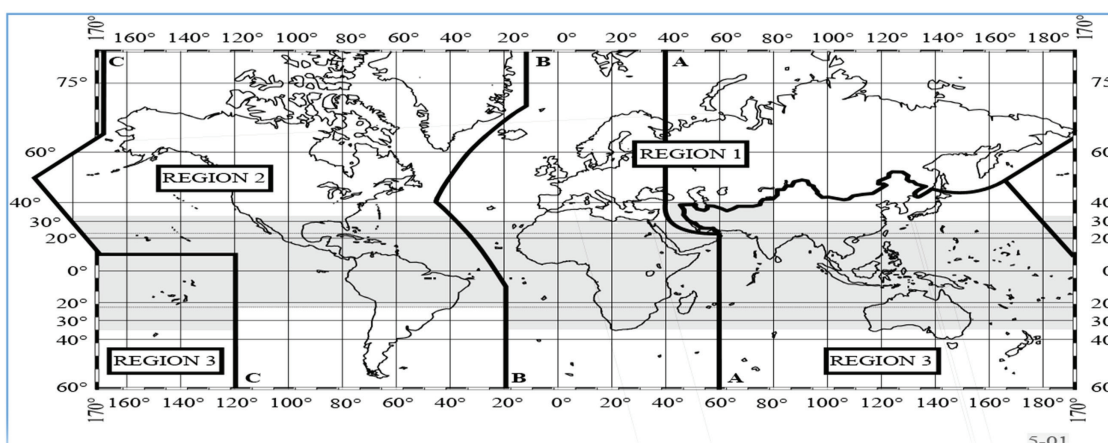


Figure 30: This figure above shows the three ITU Regions worldwide as far as spectrum usage is concern.

With the proliferation of new technologies and the growing demand for ICT services, the demand on spectrum has increased rapidly. The greatest demand has in the past come from television and radio communications and with the new focus on mobile telephone services, broadband and the delivery of data in high speeds, there is a growing demand for spectrum to facilitate these services. Today, there are approximately over 105 active licensed / authorized users of spectrum in The Gambia

REGULATORY RESOURCES AND TECHNOLOGIES

The Authority is mandated to regulate resources required for communication services such as the radio frequency spectrum and numbering. The radio frequency spectrum is the range of frequencies used for wireless applications such as broadcast television / radio, wireless computer networks, Bluetooth, global positioning system (GPS), mobile telephony, cordless telephones / microphones, remote controls, walkie talkies and many general and specialised applications used in everyday life.

PRIVATE LAND MOBILE SERVICES

During the year under review, the Authority issued authorization to stakeholders to operate private mobile portable devices in both very high frequency (VHF) and high frequencies (HF) bands. The stakeholders are mainly security companies, amateur radio and aviation services who set up these networks to aid their operations.

AMATEUR RADIO

Amateur radio (also called 'ham radio') is the use of designated radio frequency spectrum for the purposes of private recreation, non-commercial exchange of messages, wireless experimentation, self-training, and emergency communication. The term "amateur" is used to specify persons interested in radio technique solely with a personal aim and without direct monetary or other similar reward.

The amateur radio service (amateur service and amateur satellite service) is established by the International Telecommunication Union (ITU) through the International Telecommunication Regulations. National governments regulate technical and operational characteristics of transmissions and issue individual stations licenses with an identifying Call Sign. Radio amateurs use a variety of voice, text, image, and data communications modes and have access to frequency allocations throughout the radio frequency spectrum to enable communication across cities, regions, countries and the world at large.

Amateur radio is officially represented and coordinated by the International Amateur Radio Union (IARU), which is organized in three regions similar to that of the ITU and has as its members who join the national amateur radio societies existing in most countries. The following table shows the amateur radio Call Signs assigned in 2016.

Item No	Call Sign	Month Assigned
1	C5FUD	February
2	C5GCJ	March
3	C5NX	June
4	C50VB	October
5	C5YK	December

Table 19: Amateur Radio Call Sign Assignments

VERY SMALL AMATEUR TERMINALS (VSATs)

During the period under review, two entities shown in the Table below were authorized to operate VSATs in The Gambia, namely the Chinese Embassy and Huawei respectively

Nr	Month Assigned	Applicant	VSAT Type
1	Nov-16	Chinese Embassy	Class 'B' VSAT
2	Sep-16	Huawei	Class 'B' VSAT

Table 20: Authorized to operate VSATs



Figure 29: a VSAT receiver .

TYPE APPROVAL

In accordance with Part IX of the Information and Communications Act 2009, the Authority has within its remit the responsibility of type approving and accepting all telecommunications equipment intended to work within the public telecommunications networks in the country. PURA is also responsible for type approving or accepting radio communication equipment intended for use in The Gambia. In this regard, the Authority developed Type Approval Guidelines which can be downloaded from the PURA website (www.pura.gm)

It is thus important for manufacturers, importers and vendors to familiarize themselves with PURA's Type Approval Certification and Application process. It explains the process in place to monitor and control radio interference from radio transmitters and other electronic products as well as checking compatibility of all Telecommunications / Radio communications equipment.

The Authority type-approves or grant certificates of conformity to devices that meet a minimum set of regulatory, technical and safety requirements for devices in line with the Type Approval Guidelines. These devices may be used for both licensed and unlicensed bands. These devices were all low power units that are not expected to cause harmful interference, hence they are termed, Short Range Devices (SRD). In the year 2016, one hundred and eighty seven (187) certificates for type approved equipment were issued compared to ninety two (92) in 2015.

The Authority continues to review its type approval Guidelines in order to improve efficiency and to enhance the protection of consumers in terms of the purchase of telecommunications, radio-communications and electrical equipment and their accessories countrywide.

NETWORK INSTALLATION INSPECTIONS AND CERTIFICATION

The Authority ensures that the broadcasting standards are upheld by all players in the ICT Industry largely through inspection and certification exercise. In this regard, the Authority conducts a countrywide monitoring and inspections of all FM, TV and Telecom operators to verify compliance with their license obligations. It is an opportunity to meet with the broadcasters, see samples installations and sensitize the industry players on the current broadcasting standards and industry trends.

During the year under review, the Authority conducted an inspection tour to a sample commercial and community radio stations. The objective of the inspection tour is to get a first-hand information on the technical condition of both the studio and transmitter equipment, identify challenges and then discuss with the local staff on the way forward. During these inspection tours we ascertain that important documents such as Business Registration Certificates, Licenses, TIN certificates and GRA payment receipts are available. At the end of the tour a comprehensive report was prepared detailing specific challenges for each radio station. A set of recommendations for addressing the challenges identified were sent to all FM operators for implementation within a specified time line.

BROADCASTING SERVICES

The Authority continued re-planning and optimizing the FM broadcasting frequency plan during the year under review. This was achieved through the collaboration with the ITU and bi-lateral co-ordination with neighboring countries as outlined in the Geneva Agreement GE84 to which The Gambia is a signatory.

PURA is happy to report that 125 FM broadcast sound radio frequencies were registered with the ITU Master Frequency International Register as of December 2016. This means that these frequencies are recorded in the MFIR and that The Gambia has priority over its neighbour to utilize these particular frequencies provided that, the technical parameters at the time of submission are respected. The registration process puts the Gambia up to date in its bid to respect its ITU obligation of registering frequencies in the event of cross border interferences in the future.

The Authority assigned 31 FM broadcasting frequencies up to date and licensed 26 FM broadcast Radio Stations in various locations throughout the country as can be seen on the table below.

COMMERCIAL FM RADIO STATIONS

During the period under review, a number of licenses were issued and most of them are for the use of radio frequency spectrum. The Table below gives a summary of the Licenses issued to the FM broadcasting sector as of December 2016.

NO.	Name	Frequency	Location
1	RFI	89.0 MHz	Abuko
2	Senn FM	90.5 MHz	West Field
3	West Coast 2	92.1 MHz	Kotu
4	City Limit	93.6 MHz	Kairaba Avenue
5	Star FM	96.6 MHz	Churchills Town / Serekunda / Brikama Highway
6	Taranga FM	97.5 MHz	Sinchu Alhagie
7	GRTS FM	98.6 MHz	Mile 7
8	GRTS FM	102.6 MHz	GRTS Mile 7
9	GRTS	106.7 MHz	Abuko
10	Capital FM	100.4 MHz	Kairaba Avenue
11	Unique FM	100.7 MHz	Bakau New Town
12	Unique FM	101.7 MHz	Basse
13	Radio 1 FM	102.1 MHz	Fajara Booster Station
14	Kora FM	103.9 MHz	KaniFing south
15	Hot FM	104.3 MHz	Bakau New Town
16	Hill Top FM	104.7 MHz	Sukuta
17	Paradise FM	105.7 MHz	Pipe Line near BSTS
18	Paradise FM	105.8 MHz	Basse
19	Paradise FM	105.5 MHz	Farafeni
20	Vibes FM	106.1 MHz	Manjai
21	AL FaLAH FM	107.2 MHz	MDI Road kanifing
22	Afri Radio	106.7 MHz	Kairaba Avenue
23	Sahel Group FM	88.5 MHz	MDI Road,Kanifing
24	Choice FM	103.6 MHz	Sanchaba Sullay Jobe
25	SKY FM	96.9 MHz	Old Yundum
25	Deggo FM	100.1MHz	Kairaba Avenue
27	QRadio	103.3	Bijilo
28	West Coast Radio 1	95.3MHz	Kotu

Table 20: Summary of the Licenses issued to the FM broadcasting sector

COMMUNITY FM RADIO STATIONS

NO.	Name	Frequency	Location
1	Soma Community FM	88.8 MHz	Soma – LRR
2	Bwiam Community FM	91.9 MHz	Bwiam – WCR
3	Kerewan Community FM	100.5 MHz	Kerewan – NRR
4	Bansang Community FM	107.2 MHz	Bansang – CRR
5	Brikamaba Community FM	96.8 MHz	Brikamaba – CRR
6	Brikama Community FM	98.0 MHz	Brikama – WCR
7	Farafeni Community FM	99.9 MHz	Farafeni – NRR
8	Kairanying Community FM	107.9 MHz	Kuloro

Table 21: Community FM Radio Station

ICT SUPPORT FUNCTIONS

In addition to the expansion of PURA's technology-centric systems, the ICT Department supported the initiation, launching and maintenance of a few projects that the Authority launched in 2017. Key among these is the QoS Monitoring System, review, testing and monitoring of ISP networks and services.

ICT TRAINING

The IT Unit conducted various in-house trainings for staff, after a needs-analysis was conducted to determine pertinent areas needing improvement. These trainings were designed and delivered in-house by the IT UNIT, to all PURA Staff.

Areas of training included:

1. Understanding the Authority's ICT Systems and proper use of ICT Tools
2. Intermediate to Advanced Microsoft Office (Word 2013, Excel and PowerPoint),
3. Professional Report Writing: Content, structure, design and presentation,
4. File Management, Maintenance and Security

Essential training was conducted in areas such as:

5. Online Safety and Internet Security
6. Proper Use of the Internet, Net Etiquette
7. Viruses and Malware

ICT POLICY AND SECURITY

The ICT Department also led the ratification of a comprehensive IT Acceptable Use Policy, with guidelines on all aspects of the Authority's IT Systems. These included data storage, security and protection, wireless access, and password policies, just to name a few.

Awareness training was conducted to apprise staff of the proliferation of ransomware threats and other prevalent malware and IT Security tools.

ELECTRICITY AND WATER

NAWEC Electricity Facilities

During the course of the year, PURA conducted site visits and inspections to Kotu and Brikama Power plants as part of its mandate. It gave us an opportunity to get first hand assessment of the power plants and also maintenance works. At Kotu PURA was able to assess the new Kotu 11MW project whose foundation was being completed. Unfortunately, NAWEC suffered a major breakdown on the new Brikama engine and this also reduced net available capacity.



Figure 30: Ongoing works for the 11MW at Kotu visited during routine inspection

Generally, the functionality of the generation facilities has been very good during the site visits. The number of hours of operation has increase in the provinces but the unprecedented power load shedding still remains a challenge in the GBA. Facility upkeep has generally improved with relative security and safety concerns still to address, particularly in the provinces.

NAWEC Water Facilities

The water treatment plants were as always very well kept. These are perhaps the best part of NAWEC's assets. Particular mention has to be made of Gunjur and Sukuta water treatment plants. Sukuta, which is older, was found to be highly maintained despite expansion works. The additional well fields and new treatment facilities would greatly enhance water supply in the GBA area where demand for water is increasing rapidly due to urbanization.



Figure 33: New aerators and additional pumps at the Sukuta treatment plant

In Banjul we found two of the ground tanks were being repaired. These tanks were undergoing maintenance after more than 25 years in operation. Erosion had affected its structural integrity.

PURA had its concerns with the poor quality of some of the expansion works. In particular, the overhead tanks in Brufut and Kerr Serign. Poor quality steel used in construction means that the tanks are already affected with serious corrosion and this will affect its designed life. In fact some of the tanks are also not operated as desired. PURA will continue to call for greater transparency in NAWEC's procurement process to ensure that only highly qualified contractors are selected to build such critical infrastructure.

AGUA Sewerage System

Agua Gambia, a licensed concession holder of the NAWEC Kotu sewage pond has made significant investments in the civil works and network around the Kotu waste water treatment pond. A new Office complex was built within the facility to house their offices. New toilets and resting facilities were made for drivers. In addition, a new offloading point was inaugurated which would allow multiple trucks to discharge at a certain point with minimal spillage. During the course of the year as well, one of the



Figure 34: Discharging at the Kotu pond in 2015 and with the new facilities in 2016.

settling ponds was completely drenched and emptied and maintenance works done. During the rainy season and the later part of 2016, the facility was operating on a zero discharge basis as the effluent was almost insignificant.

Numerous upgrades were ongoing in the sewerage system which will improve resilience of AGUA Gambia's Operations. The facility's functionality was greatly improved by the construction of a pretreatment system to replace the old bar screens and also upgrading pump stations. However, AGUA was yet to install the ABIS system as contained in its business plan. Furthermore, quality of effluent needs to be tested before final discharge into water bodies.

Water Balance 2012 - 2016

Indicator	2012	2013	2014	2015	2016
Total Residential Usage, Cu m/day	40,183	40,183	57,452	62,028	57,207
Residential usage growth, %	0%	0%	43%	8%	-8%
Domestic water billed, Cu M/Year	14,666,789	14,666,789	20,969,985	22,640,355	20,880,403.00
Domestic usage growth, %	0%	0%	43%	8%	-8%
Commercial, Cu M/Year	523,016	523,016	630,857	568,593	573,354.00
Commercial usage growth, %	0%	0%	21%	-10%	1%
Hotel/Club/Industries Cu M/Year	1,085,614	1,085,614	1,618,479	1015084	1,152,470.00
Hotel/Club/Industries Cu M/Year	0%	0%	49%	-37%	14%
Agriculture Cu M/Year	86,675	86,675	377,628	330826	283,649.00
Agriculture usage growth, %	0%	0%	336%	-12%	-14%
Area Councils Cu M/Year	735,553	735,553	589095	259902	357819
Area Council usage growth, %	0%	0%	-20%	-56%	38%
Central Government Cu M/Year	3,615,704	3,615,704	1,758,312	548729	148,191
C. Govt. usage growth, %	0%	0%	-51%	-69%	-73%
Total water Billed, Cu M/Year	17,855,895	19,185,748	21,975,461	24,348,404.63	22,243,416.14
Average water Billed, Cu M/month	1,487,991.25	1,598,812.33	1,831,288.42	2,029,033.72	1,853,618.01
Total Daily Usage, Cu M/Day	48,920	52,564	60,207	66,708	60,941
Total Average production, Cu / month	2,301,621	2,295,203	2,949,657	3,082,022	2,011,447
Average Daily Production Cu M/ day	76,721	76,507	98,322	102,734	67,048
Avg. Avail. for distribution Cu M/ mth	1,818,579	1,911,473	1,986,621	2,076,232	1,853,618.00
Average Daily Distribution - Cu M/ day	60,619	63,716	66,221	69,208	61,787
% Production Losses Cu M/day	21%	17%	33%	33%	8%
Water production losses, Cu M/day	16,101	12,791	32,101	33,526	5,261

% Unaccounted For Water	19%	18%	9%	4%	1%
Unaccounted For Water, Cu M/day	11,699	11,152	6,014	2,500	846
% Non-Revenue Water	36%	31%	39%	35%	9%
Non-Revenue Water, Cu M/Month	27,800	23,943	38,115	36,026	6,107
Non-Revenue Water, Cu M/Year	10,147,161	8,739,222	13,912,033	13,149,530	2,229,189
Total Average Day Demand, Cu / day	48,920	52,564	60,207	66,708	60,941
Daily Peaking Factor	1.5	1.5	1.5	1.5	1.5
Total Peak Day Demand, Cu M/day	73,380	78,846	90,310	100,062	91,411
Plant Capacity, Cu M/Day	89,908	92,301	162,000	162,000	162,000
Plant Capacity, Cu M/Year	32,816,420	33,689,865	59,130,000	59,130,000	

Table 23: Water Balance table 2012 - 2016

The PURA/DWR Water Quality Monitoring Program

The Authority has committed partnership with the Department of Water Resources in a MoU to monitor the quality of water delivered by NAWEC to customers throughout the country. In that regard, the Abuko Water Laboratory conducts quarterly water quality tests for physico-chemical, microbiological and chemical parameters against the World Health Organization (WHO) drinking water standards. The gist for carrying out these tests is to make sure that customers are provided with a palatable but also safe drinking water. This is geared towards promoting public health and other socioeconomic dimensions in which water is a driving force.

Due to the good quality of groundwater in The Gambia, particular attention is usually given to indicators relating to microbial contamination and disinfection (Chemical) which are more related to operations and contamination arising from the surface environment. However, few chemicals such as iron that occur naturally in the ground are also closely monitored. The programme has also recently included testing for few heavy metals which in large quantities are toxic and could have diverse health effects for consumers.

Water Quality Results

This year, there were 340 samples tested for physico-chemical and chemical parameters against the World Health Organization (WHO) drinking water standards. Analysis of the reports indicates an overall improvement over the period since 2009.

The indicators tested were 6 physico-chemical, 2 microbiological, 7 chemical and 2 heavy metals. The samples were distributed across the regions; 32 in GBA, 15 in WCR, 17 in NBR, 9 in CRR, 7 in LRR and 5 in URR.

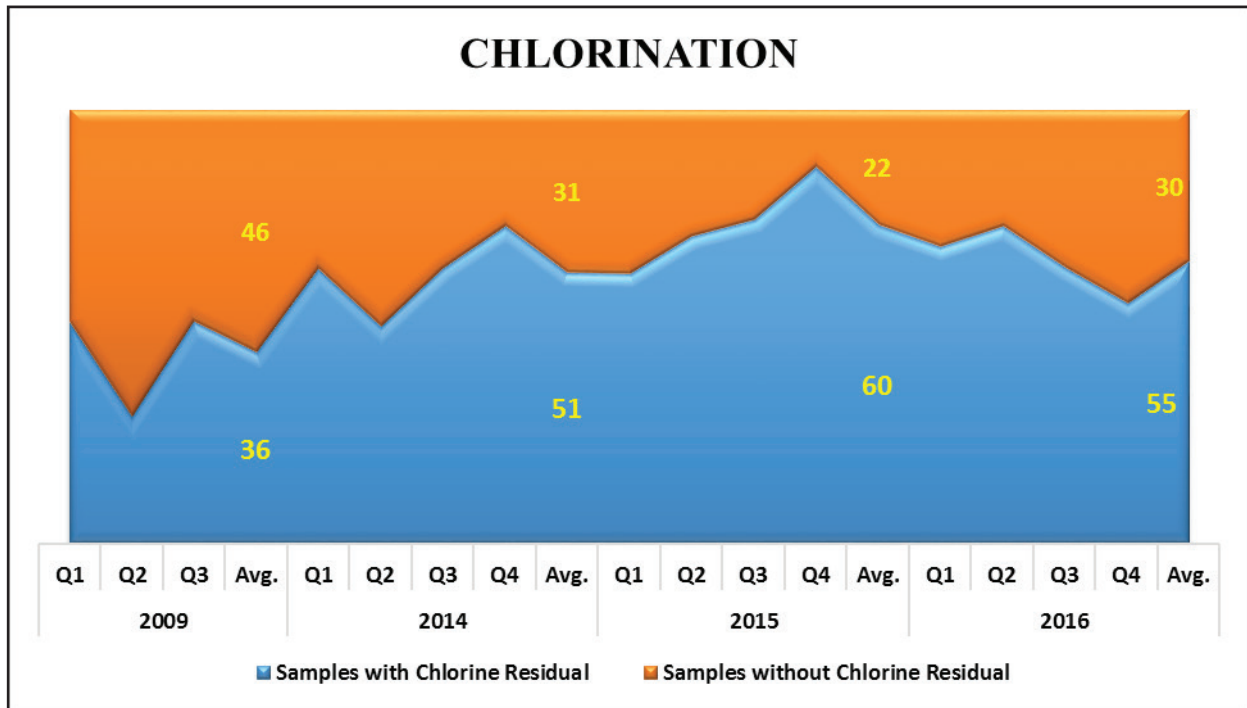


Figure 30 Availability of Residual Chlorine

WHO standards indicate that there should be 0.3mg/l of residual chlorine throughout the supply system, from point of treatment to the end user level. Chlorination is one of the most suitable treatment methods for keeping water safe for consumption. There has been progressive improvements done towards achieving this standards. In 2009, the average compliance rate was only 44% which has improved to 65% in 2016.

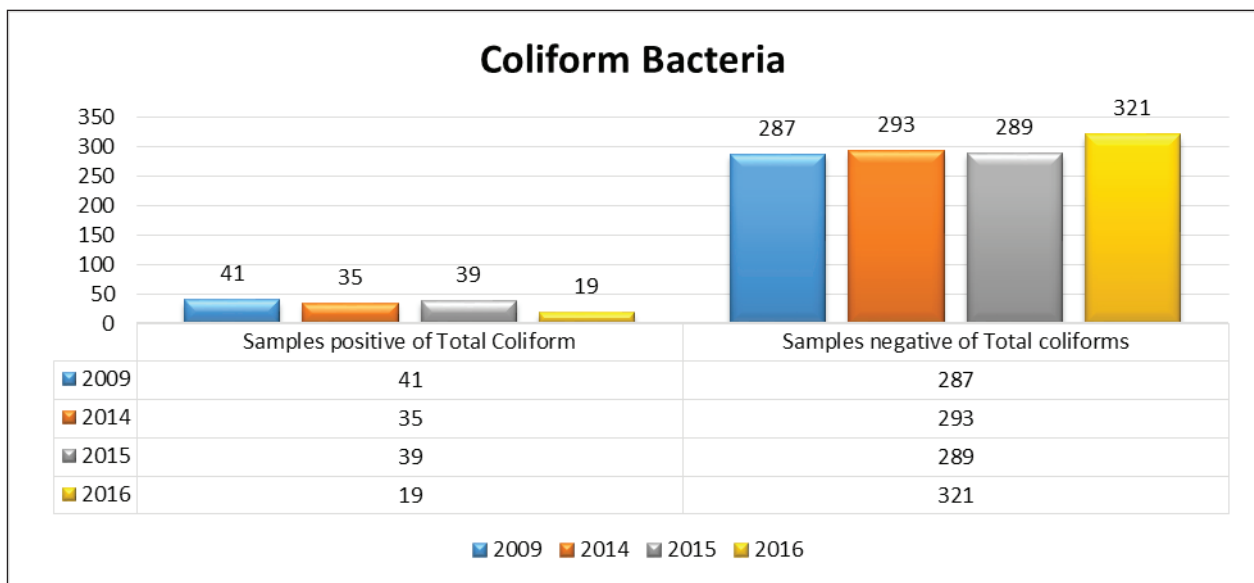


Figure 31: Presence of Coliform Bacteria

There has been steadily decreasing trend in the proportion of samples positive of Coliform bacteria since 2009. The presence of Coliforms in water is an indication of contamination particularly from faeces, which poses considerable risk of water related diseases to consumers. As indicated above, the proportion of positive samples has slightly reduced from 13% in 2009 to 6% in 2016. In order to meet the WHO standard of 0% of coliform bacteria, particular attention towards adequate chlorination, environmental sanitation, security and routine maintenance of the infrastructure should be reinforced, particularly in the provinces where 85% of the positive samples were registered.

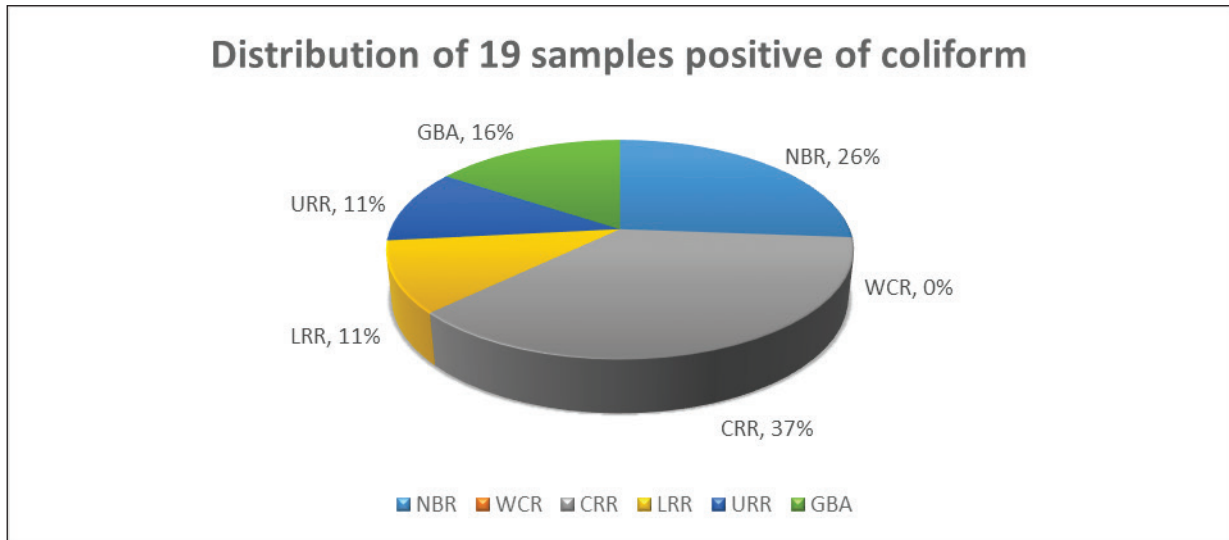


Figure 32 Distribution of Coliform Bacteria by Settlement

A distribution of the positive samples by settlement has indicated that 85% of the positive sample are from the provinces and Central River Region constitute the highest proportion. More efforts need to be undertaken to improve water services in Bansang in terms of environmental sanitation and good facility upkeep.

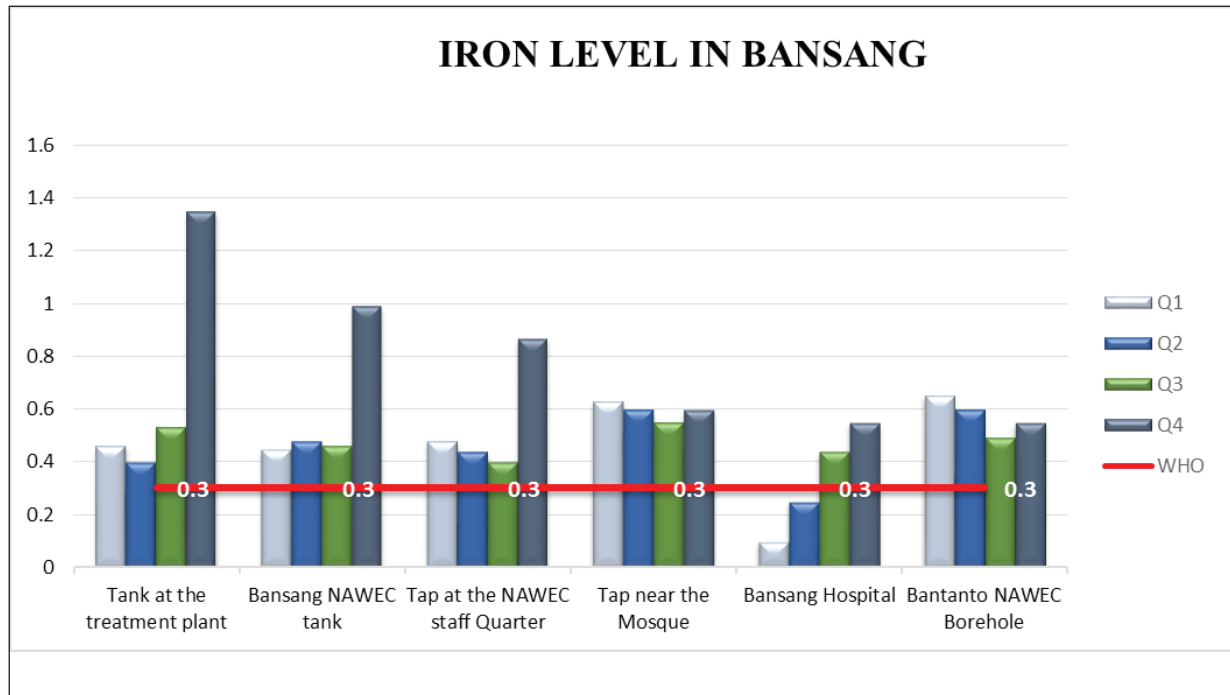


Figure 33: Iron Levels in Bansang

Iron which naturally occurred in the ground in parts of the country has still been a persistent contaminant at Bansang. Test values still remain two to three folds higher than WHO recommended value of 0.3mg/l. The chart above showed that all the tested points in the Bansang network has higher values. Iron at regulated values has nutritional importance but at high values can stain laundry and sanitary wares. Health effects on humans are only obvious at extremely high values.

HEALTH, SAFETY AND ENVIRONMENT

Illegal Dumping of sewage

The Authority and the National Environment Agency (NEA) as stakeholders in the sewage sector have noted with great concern that there has been a rise in illegal dumping of raw sewage which is hazardous to the general public. The two institutions have collaboratively worked on investigating cases of this nature at Tambana and Nema Kunku. A joint press release was published in the print media passing across pertinent information on enforcement and regulation of the sewage sector.



Figure 34 *Illegal Dumping at Tanbana*

HEALTH AND SAFETY WORKSHOP FOR SEPTIC TRUCK DRIVERS

The health and safety workshop was organized as a step towards contributing to sewage workers' health and safety thus enhancing productivity, well-being and standard practices in the sewage sector.

The workshop primary participants were the sewerage workers and septic truck drivers. Several stakeholder institutions were also invited; The Ministry of Petroleum and Energy, Brikama Area Council, Banjul City Council, Kanifing Municipality, NAWEC and AGUA Gambia Limited. Presentations made by PURA, MOHSW, AGUA, NEA and the Department of Labour were followed by a short video on current sewage disposal practices.

The training will go a long way to enhance knowledge and practice on health and safety for all participants. Misconceptions about stakeholder roles in regulating the sewage sector were cleared which is vital for cooperation and involvement in the sector. Furthermore participants were empowered with sets of safety kits as a milestone to improve their health and safety practices.

PURA in collaboration with partners will work towards developing written standards on health and safety for the sewage sector.



Figure 35: Participant from the first ever Health and Safety training workshop



Figure 36: Director of Consumer Affairs handing over PPE to a participant

DIRECTORATE OF CONSUMER AFFAIRS

WHO ARE WE AND WHAT WE DO

Directorate of Consumer Affairs (DCA) is an arm within the Public Utility Regulatory Authority (PURA) mandated by the PURA Act 2001 to preserve and protect the interest of consumer of all regulated services. DCA in discharging this function ensures that unfair business practices and unconscionable acts are not prevalent in everyday consumer business transactions. To underpin these functions, DCA engages in a range of activities to educate, provide adequate information to consumers and advice consumers in a professional and courteous manner.

DISPUTE RESOLUTION

Directorate of Consumer Affairs sets out a clear process to help consumers deal with grievances. The Directorate acts as a mediator between Service providers and Consumers. This role provides as an alternative method of resolving complaints.

DCA helps guide consumers and operators in reaching an amicable solution, to disputes. Because, we believe that communication is often the best way to prevent disputes and DCA shares with Service providers complaints received, for any review period for this very purpose. It is expected that through information sharing, the service providers are able to analyze complaint trends and identify areas that need improvement, and act upon them before they become problematic.

CONSUMER EDUCATION AND AWARENESS

The Consumer affairs directorate has remained committed, during the period under review to consumer protection through effective education and awareness campaigns. Staying true to our mission of consumer protection, the directorate sets out several education and awareness programmes with the intent of empowering, engaging, educating and informing consumers.



Consumers taking part in Bantaba



Consumer Expressing Concern

One such campaign is our weekly radio programmes where consumers are given the opportunity to phone in and discuss their concerns regarding services offered to them by service providers. This platform is also utilized to sensitize consumers about our other services like the 148 toll-free telephone facilities where consumers can call to complain and seek redress. In the same vein we also sponsor other stakeholders like the Fire service and Consumer Advocacy groups to also conduct programs on their own sensitizing their specific consumers as to their rights and obligations. This action we hope will create a consumer aware populace that will be comfortable to insist on getting their fair due from any operator.

Based on the forgoing, during the period under Review the Authority through DCA continued to sponsor a radio talk show for a consumer advocacy group called Foundation of The Gambia Incorporation (FGI), for a weekly talk show on Al Falah Radio station. And we also have a similar arrangement with the Gambia Fire and Rescue services for a similar weekly talk show on West Coast Radio. Both programmes are meant purely to compliment the efforts of the Authority through DCA by augmenting the education and information ethos of the Authority.



Water purification demonstration for Consumers



Consumer demonstrate how he hang's his phone to get a signal



Educating consumers on energy efficiency

2016 COMPLAINT DATA ANALYSIS

Directorate of Consumer Affairs operates a call center with a toll free number **(148)** for consumers of all regulated entities. The call center agents receive and process consumer's complaints and enquiries. Complaints received are logged into DCA's database. Using an internal process known as the 360 Degree complaint resolution mechanism, whereby, a complaint received is relayed to the respondent and then responses are equally relayed back to the complainant, so that we could have a complete picture of both sides. This particular method acts as a form of arbitration and or mediation whereby the process eliminates possible misconceptions on the part of the consumer and or misunderstandings between the two thereby ironing out the need for further action from either party. For the period under review, complaints received are analyzed below:

Service Provider	Complaints	Trend From 2015
NAWEC	127	↓ 14%
AFRICELL	111	↑ 8%
COMIUM	67	↓ 59%
QCELL	54	↑ 32%
GAMCEL	32	↓ 70%

Table 24: Comparison of Complaints for all Regulated entities 2015/2016

COMPARISON OF COMPLAINTS FOR ALL REGULATED ENTITIES 2015/2016

The Directorate of Consumer Affairs recorded 502 complaints in the year 2016. Each complaint reported is recorded in a database of the appropriate service provider. Overall the number of complaints received has reduced significantly compared to 2015.

As can be seen from Table 24, NAWEC recorded the highest number of complaints. However, compared to last year, the rate of complaint has reduced by 14%. COMIUM and GAMCEL both as can be seen from Table 24, NAWEC recorded the highest number of complaints. However, compared to last year, the rate of complaint has reduced by 14%. COMIUM and GAMCEL both recorded 59% and 70% respectively. This is a significant reduction of complaints received for both Operators. On the other hand, QCELL and AFRICELL both recorded a substantial increase of 32% and 18% complaints respectively.

MONTHLY COMPLAINTS VOLUME

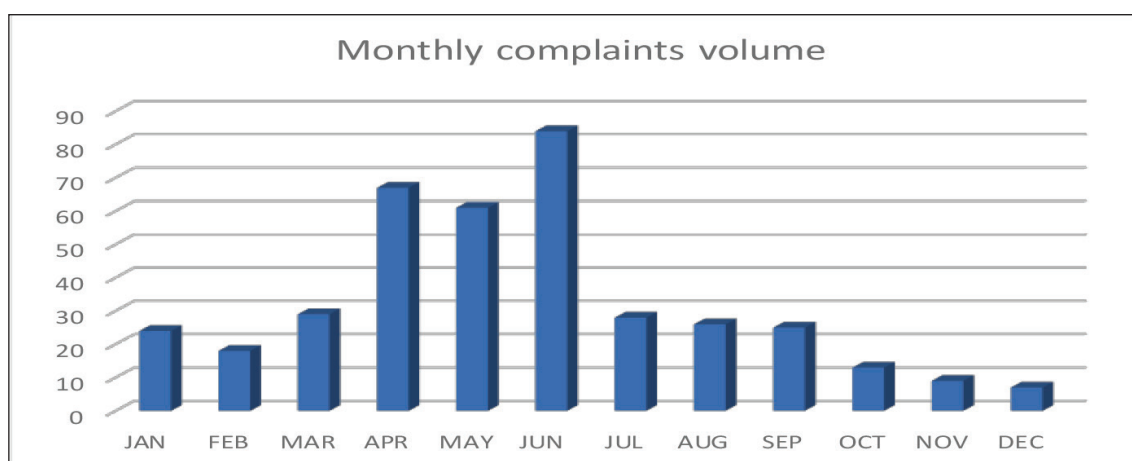


Figure 37: Monthly Complaints volume

From the graph above, it is illustrated that DCA received the highest number complaints in the month of June; this is attributed to the fact that most issues related to network failures occur during the rainy season both for the telecom and electricity and water services. Whilst, December logged the lowest number of complaints, this low rate of complaints could understandably be attributed to the fact that the majority of Gambians fled out of the country during the political impasse of December 2016.

2016 COMPARATIVE ANALYSIS OF QOS COMPLAINTS

The 148 unit of the DCA collect and tabulate complaints relating to Quality of Service. Complaints received are logged in four different categories as follows: **Availability, Accessibility, Retainability and mobility**. During the period under review, using the afore-mentioned parameters COMIUM logged the highest Network Availability failure, GAMCELL recorded the lowest rate. This result suggests that network availability failure is a common issue for all the operators.

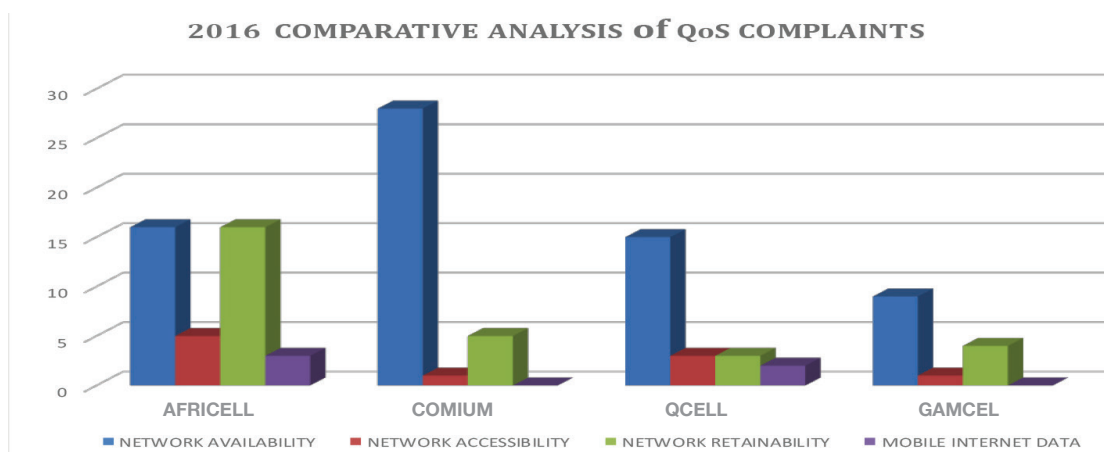


Figure 38: 2016 COMPARATIVE ANALYSIS of QoS COMPLAINTS

2016 COMPLAINTS – BY INDUSTRY

During the period under review and in order to put things into perspective, we looked at the most common complaints filed for each service provider. Five service providers generated all the complaints filed in 2016. These service providers are namely: GAMCEL, AFRICELL, COMIUM, QCELL and NAWEC.

GAMCEL's most common complaints

During the period under review, 44% of complaints received for GAMCEL were related to megabyte deduction. The increase in complaints with megabytes deduction is multi-faceted, but is in part linked to the surge in the use of smart phones. The Prevalence of the use of smart phones, and the fact that, data is becoming the “new-Voice” in that with megabytes you can now make and receive voice calls and much more. This invariably will continue to increase the demand for data. Consequently, there will be more issues to deal with in terms of data usage. Credit deduction accounts for 37%, Tariff and can't send credit proved to be amongst the most common complaints, for GAMCEL for the period under review.

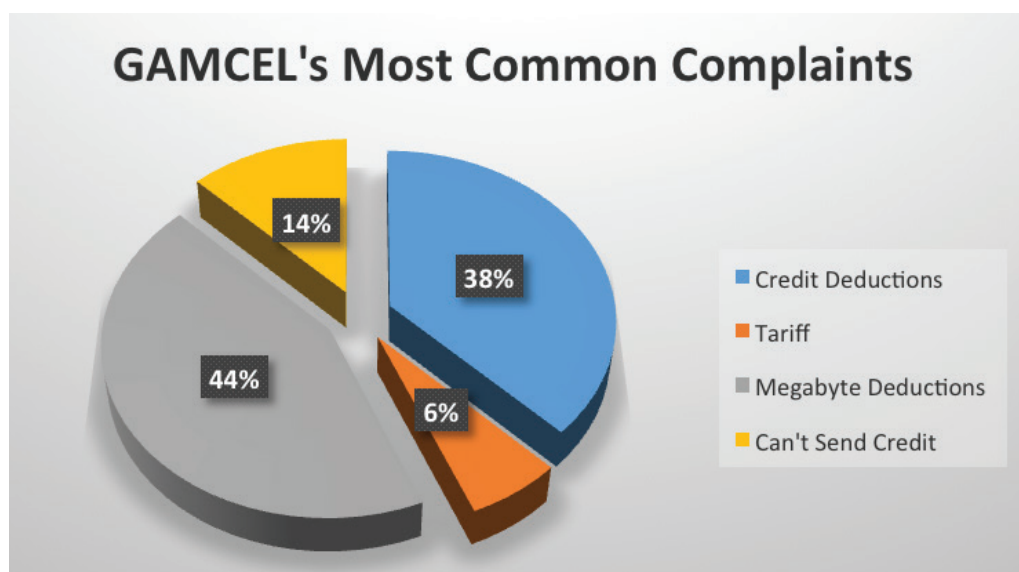


Figure 39: GAMCEL's Most Common Complaints

AFRICELL's most common complaints

During the period under review AFRICELL, based on similar reasons as posited before, also registers Megabyte deduction as its most common complaint accounting for 36% of complaints filed for AFRICELL followed by credit deduction which accounts for 25% of complaints. Other complaints include credit deduction, fun ring service, 125 Kolareh and SIM card Registration. Issues were also were registered.

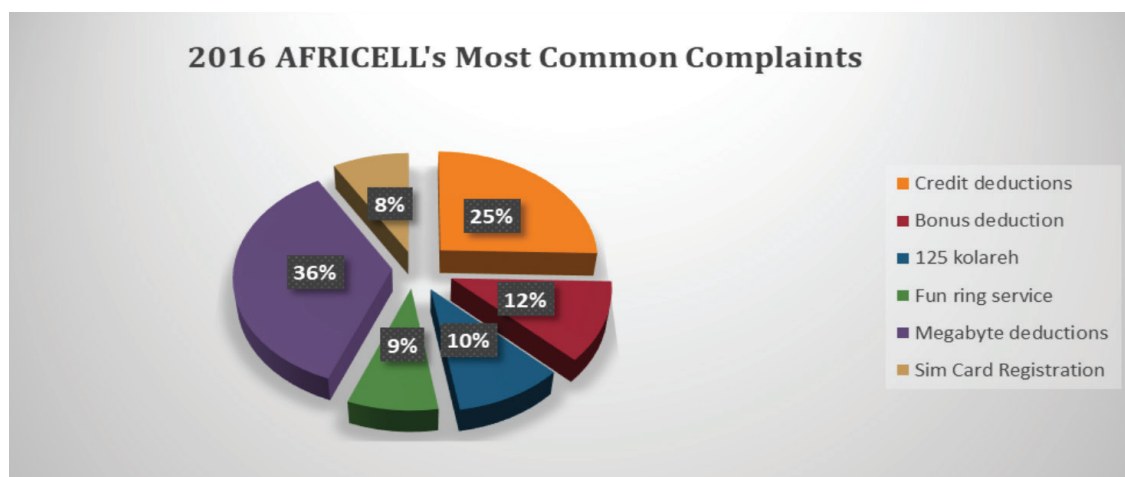


Figure 40: AFRICELL'S most common complaints

COMIUM'S most common complaints

During the period under review Bonanza, as the main and longest running promotion for COMIUM, again, topped the most frequent complaint filed by COMIUM's consumers. Credit deduction accounts for 17% of the complaints. Amongst the complaints filed are no network if lights go off and SIM card Registration related issues.

QCELL's most common Complaints

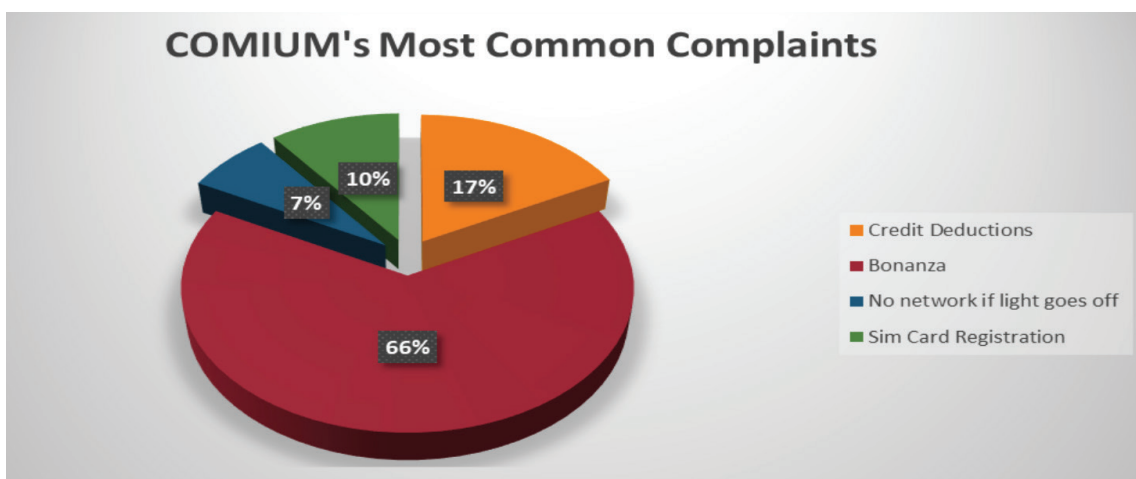


Figure 41: COMIUM's Most Common Complaints

Given the prevalence of mobile data usage by all consumers Megabyte deduction is also the most common complaint filed by QCELL's consumers. It is evident that megabyte deduction is a common issue across all service providers offering 3G data services. Credit deduction is the second most common complaint accounting for 26% of complaints received for the period. Bonus deduction and SIM card registration are among the most common complaints filed.

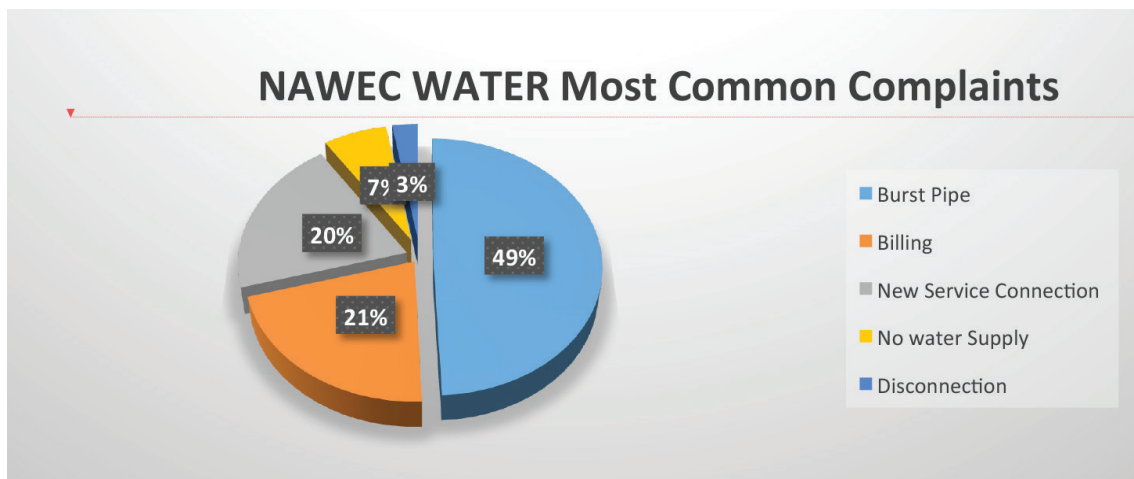


Figure 42: QCell's Most Common Complaints

NAWEC Water Services

For the purposes of reporting we have separated the complaints to Water and Electricity. During the period under review, burst pipes continue to be the single largest source of complaint registered for NAWEC water service, representing 49% of all water complaints received.

This raised concerns for the Authority as the problem keeps recurring and increasing year on year. Billing and new service connection are the next highest complaint received. Whilst surprisingly based on complaints received “no water supply” falls way short of what actually gives in reality.

NAWEC Electricity Services

Faulty Cash power represents the highest complaint received for the period under review. Consumers continue to express their concerns about the “sparkling poles” which poses a question of both quality and safety. Amongst the most common complaint filed are “no Light”, “low voltage”, Disconnections and billing represented the least amount of complaints, this is due to the fact that NAWEC’s migration of all consumer classes to a pre-paid platform has started paying dividend even in terms of complaints.

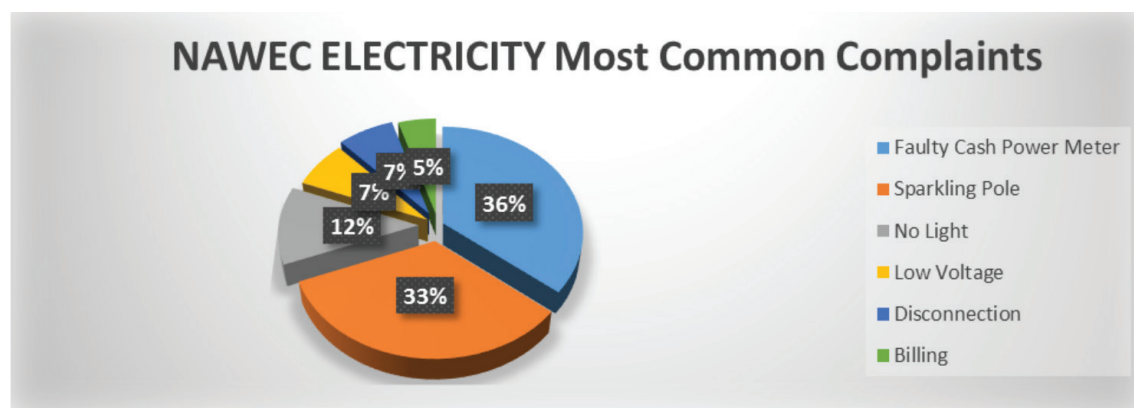


Figure 47: Most Common electricity Complaint

Bantaba out Reach 2016

The key to a successful consumer affair management is its education initiatives. In 2016, DCA conducted its second country wide consumer – regulator education program called the “Bantaba Outreach” from the 14th - 23rd March 2016. Bantaba is a forum organized for rural communities to have in-depth knowledge of consumers’ complaints and comments about the services offered by the regulated service providers. The information collected is analyzed and shared with stakeholders and service providers to provide redress.



The Team on en route



Arrival of the team and welcome from the community

The program was designed to visit about 19 villages chosen with the help of National Assembly members. This year the Bantaba took a different twist, DCA was accompanied by representatives from QCELL, AFRICELL, GAMCEL and NAWEC to equally get first-hand information on quality of services for their respective companies. The team composed of 15 members which was headed by, DCA with representation from the Electricity, Legal Licensing and Enforcement and ICT Departments who were there to explain and demonstrate to consumer how to improve their water quality and save energy respectively, access services and other matters.

PURA has successfully conducted meetings in all the following villages below during which diverse groups of consumers in all the village catchment areas attended: Keneba, Sibito, Si-Kunda, Kaiaf, Dongoroba, Dankunku, Jareng, Kudang, Pacharr, Gambisara, Bakadagi, Yoro Bawol, Diabugubatapa, Niani Kayai, Niani Sukuta, Illiassa, Salikene, Darsilami and Aljamdu.

The topics discussed in the forums include and not limited to:

- Poor and/or no network coverage
- Limited access to electricity and clean potable water
- Quality of service related issues(including call-drop, call-clarity, call set-up and call interference)
- Limited access to Customer care outlets resulting to difficulties in registration of SIM cards

The outreach for the year ended successfully, with the expected results in that the operators that accompanied us on the tour came up with their own action plans regarding access to networks in some of the hard to hit areas. As much as some of the areas affected are sparsely populated and are usually deemed by operators as nonprofit areas, nonetheless the Authority worked with them during the period under review for them to invest in these areas as part of their universal access obligation annual role out plan.



Balaranx: Using local talent to sensitize consumer

PART V: OUTLOOK FOR 2017

WAY FORWARD

BROADCASTING

In any direct public engagement and the provision and enhancement of the process of education, information dissemination, the creation of openness and transparency, the role of television and radio services cannot be understated.

Globally, these roles for broadcasting services are facilitated by broadcasting technologies with analogue technologies being replaced by digital broadcasting technology. The dawn of digital technologies has accelerated increased convergence of the traditionally separate businesses of broadcasting, telecommunications and the Internet in one platform.

There is a global process of migration which is to ensure that all broadcasting services that are delivered through analogue network/technologies are fully replicated on the digital broadcasting network/technologies with the aim of switching off the analogue broadcasting services at a specific point in time and this has impacts on existing policies and legal framework for broadcasting services.

The Gambia did not have any specific television broadcasting regulatory instruments in place that guides the provision of broadcasting services. Television Broadcasting represents an important tool for mass communication and it reaches the greater part of the population with ease. Having understood the importance of broadcasting as a crucial development tool, it is prudent to develop regulatory frameworks to guide the process. In this regard, PURA is working closely with Ministry of Information and Communication Infrastructure to develop such regulatory instruments in anticipation of the liberalization of the television broadcasting sector.

QUALITY OF SERVICE

As outlined in Section 83 of the Information and Communications Act 2009, the Authority in fulfilling its mandate on Quality of Service (QoS) for voice and data services is carrying out measurements aimed at testing the compliance of Cellular Mobile Operators to their obligations in ensuring quality services are offered to the end users

The Authority shall be producing monthly reports which has been published on various media outlets in accordance with the Authority's mandate, pursuant to Section 83 (d) of the IC Act and Section 10 of the Quality of Service Guidelines for Mobile Network Operators in The Gambia

PART VI: THE FINANCIAL REVIEW

PURA's main source of income is regulatory fees charged to regulated utilities.

The amount invoiced and collected from operators as regulatory fees is based on the annual budget of PURA, which is approved by the Board of Directors. The amount collectible as regulatory fees is pegged at a maximum of 1.5% of the operators' turnover, which is one of the lowest rates charged by regulatory authorities in Africa. The ceiling was determined to ensure that operators do not incur exorbitant regulatory charges which are passed on to consumers.

In the year 2016, 1.10% of GSM operators' turnover figure and 1.00% of Fixed line operator's turnover was invoiced unlike the previous 1.00% of turnover for the Telecoms operators and a fixed amount of **D 50,000.00** per annum for Internet Service Providers (ISPs) in the information and communications sector. For the energy sector the Authority since 2008 has decided that the regulatory fee invoice to NAWEC is fixed at **D 4,000,000.00** per annum instead of the maximum amount chargeable of 1.5% of operator's annual turnover as stated in the 2006 Regulatory Fees Regulations of PURA. These decisions were as a result of the Authority's continuous belief in **supportive regulation** in the sectors by trying to moderate the cost of regulation for the benefit of the industries as a whole and also cognizant of the peculiarity of the energy sector, in our development process.

Further to the above regulatory support to the sectors in general, the Management of the Authority over recent years has continued the series of engagements with the main defaulters GAMTEL and NAWEC, to encourage them in the settlement of their arrears as well their current invoices.

Despite these considerations and engagements, the payment of regulatory fees by GAMTEL and NAWEC has not been encouraging. Out of the amount of **D45.929million** budgeted as regulatory fees income, only **D37.178 million** was collected, as shown in Table 1 below. Undoubtedly, the noncompliance by **GAMTEL, GAMCEL and NAWEC** has continued to hamper the implementation of some of PURA's regulatory activities in all the regulated sectors.

Budgeted Vs Actual Income In Dalasis For Regulatory Fees Invoiced 2016

SOURCE OF FUNDS	BUDGET	ACTUAL PAID	AMOUNT OUTSTANDING	REMARKS
GAMTEL	9,060,380.00	6,858,054.21	2,202,325.79	
AFRICELL	17,697,394.00	17,697,394	0.00	
GAMCEL	6,740,173.00	4,251,854.89.	2,488,318.11	Paid in 2017
COMIUM	4,663,043.00	4,663,043.00	0.00	
QCELL	3,268,031.00	3,268,031.00	0.00	
I NET WORLD COMPANY	50,000.00	50,000.00	0.00	
NETPAGE	50,000.00	50,000.00	0.00	
NAWEC	4,000,000.00	0.00	4,000,000.00	
UNIQUE SOLUTIONS	50,000.00	50,000.00	0.00	
INSIST NET	50,000.00	40,000.00	10,000.00	Paid in 2017
AGUA INC	250,000.00	250,000.00	0.00	
THOMAS GLOBAL TECHNOLOGIES	50,000.00	0.00	50,000.00	
TOTAL	45,929,021.00	37,178,377.10	8,750,643.90	

Table 25: The status of regulatory fees payment is depicted

The status of regulatory fees payment is depicted in the Table above. Only three of the GSM operators and three of the ISPs have fully paid their regulatory fees invoiced for 2016 as at 31st December 2016, except **GAMTEL, GAMCEL, NAWEC and THOMAS GLOBAL TECHNOLOGIES**, as illustrated above.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016



PUBLIC UTILITY REGULATORY AUTHORITY - (PURA)

**FINANCIAL STATEMENTS & REPORTS
FOR THE YEAR ENDED 31st DECEMBER 2016**

AUGUSTUS PROM

AUDIT.TAX.ADVISORY.

REGISTERED AUDITORS

3 KAIRABA AVENUE

3rd FL. CENTENARY HOUSE

SERREKUNDA, K.M.C

THE GAMBIA

APRIL 2017

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

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PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

GENERAL INFORMATION

1. Board of Directors

Mr.Momodou O.S. Badjie	Chairman
Mr.Ebrima Cham	Member
Mrs.Sainabou Wadda Cisse	Member
Mr.Abdoulie Jallow	Ex-Officio Member – PS MOFEA
Mr.Ansumana Sanneh	Director General

2. Board Secretary

Mr. Malamin Darboe

3. Bankers

Trust Bank (G) Ltd	Eco Bank (G) Ltd
3/4 Ecowas Avenue	Kairaba Avenue
Banjul, The Gambia	KMC, The Gambia
Reliance Financial Services	Access Bank (G) Ltd
Kairaba Avenue	Kairaba Avenue
KMC, The Gambia	KMC, The Gambia
Guaranty Trust Bank (G) Ltd	
Kairaba Avenue	
KMC, The Gambia	

4. External Auditor

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Augustus Prom

Audit.Tax.Advisory.

Registered Auditors

3rd FL. Centenary Building

3Kairaba Avenue, KMC

The Gambia

5. Registered Address

94 Kairaba Avenue

KMC

The Gambia

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Board of Directors Report

For the Year Ended 31st December 2016

The Board of Directors of the Public Utilities Regulatory Authority (PURA) presents their audited financial statements for the year ended 31st December 2016.

1. State of Affairs

The state of affairs of the Public Utilities Regulatory Authority (PURA) is set out in the accompanying financial statements and notes on pages 7 to 15.

2. Principal Activities

The principal activities of the PURA are to provide guidelines on rates and fees for the provision of regulated public services, examine rates and fees chargeable and to protect the interest of consumers and of the public utilities. PURA does monitor and enforce standards of performance by public utilities and to promote fair competition amongst them.

3. Director's Responsibilities for the Financial Statements

The Companies (Gambia) Act, 2013 and the PURA Act of 2001, requires the Authority's Directors to prepare financial statements for each financial year, which gives a true and fair view of the Authority's financial position and of its profit or loss as at year end.

In preparing these financial statements, the Board of Directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Corporation will continue in business.

The Directors are also responsible for keeping proper accounting records which disclose with reasonable accuracy at any given time, the financial position of the Corporation and to enable them to ensure that they comply with Generally Accepted Accounting Principles (GAAP). They are also responsible for safeguarding the assets of the Authority and taking reasonable steps for the prevention and detection of fraud and other irregularities.

4. External Auditors

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

The Authority's external auditor, Augustus Prom-Audit. Tax. Advisory, as appointed through the National Audit Office The Gambia, have expressed their willingness to continue in office.

BY ORDER OF THE BOARD OF DIRECTORS



.....
BOARD CHAIRMAN

DATE:

Registered Address

94 Kairaba Avenue

KMC

The Gambia

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016



AUGUSTUS PROM



AUDIT. TAX. ADVISORY.

3Kairaba Avenue – P O Box 587, The Gambia - Telephone (220)4378146/ 4392376 / 4378147 – Fax (220) 4378148

E-mail: admin@augustusprom.com

www.augustus-prom.gm

**AUDITOR'S REPORT TO THE MEMBERS OF
THE PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)**

We have audited the financial statements and notes thereon of the Authority for the year ended 31st December 2016 set out on pages 7 to 15 which have been prepared under the historical cost convention.

RESPECTIVE RESPONSIBILITIES OF THE DIRECTORS& AUDITORS

The Board of Directors is responsible for the preparation of the year ended financial statements. It is our responsibility to form an independent opinion based on our audit of those financial statements and to report our opinion to you.

BASIS OF OPINION

We conducted our audit in accordance with International Standards on Auditing (ISA) as promulgated by the International Federation of Accountants (IFAC). Those standards require that we plan and perform the audit to obtain reasonable assurance on whether the financial statements are free of material misstatement. An audit includes the examination, on a test basis, of evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting policies used and significant estimates and judgements made by the Directors in the preparation of the financial statements and whether the applied accounting policies are appropriate to the Corporation's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud, irregularity or error. In forming our opinion, we also evaluated the overall adequacy of the presentation of information in the financial statements.

OPINION

In our opinion, the financial statements give a true and fair view of the financial position of the Authority as at 31st December 2016 and of its financial performance and cash-flows for the year then ended and has been prepared in accordance with Generally Accepted

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Accounting Principles adhering to the Companies (Gambia) Act, 2013 and the PURA Act of 2001.

Augustus Prom

AUGUSTUS PROM

AUDIT. TAX. ADVISORY.

REGISTERED AUDITORS



DATE: **2017**

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Balance Sheet*As at 31st December 2016*

		2016	2015
	Notes	GMD	GMD
<u>Assets</u>			
<u>Non Current Assets</u>			
Fixed Assets	2	3,794,499	5,009,055
		<u>3,794,499</u>	<u>5,009,055</u>
		=====	=====
<u>CURRENT ASSETS</u>			
Cash and Bank Balances	3	7,353,206	894,464
Trade Receivables	4	75,247,847	75,322,355
Staff Loan Receivable	5	3,729,096	4,848,423
		<u>86,330,149</u>	<u>81,065,242</u>
		=====	=====
Total Asset		90,124,648	86,074,297
		=====	=====
<u>Reserves & Liabilities</u>			
<u>Reserves</u>			
Retained Earnings	7	86,989,443	81,693,823
		<u>86,989,443</u>	<u>81,693,823</u>

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Liabilities

Trade and Other Payables	6	3,135,205	4,380,474
		<hr/>	<hr/>
		3,135,205	4,380,474
		<hr/>	<hr/>
Total Reserves & Liabilities		90,124,648	86,074,297
		<hr/> <hr/>	<hr/> <hr/>

The Financial Statements were approved by the PURA Board of Directors on

.....and signed on its behalf by;



DIRECTOR:



DIRECTOR:

The notes on page 10 – 15 form an integral part of the financial statements.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Income Statement*For the year ended 31st December 2016*

	<i>Notes</i>	2016	2015
<u>Income</u>			
Revenue	8	45,976,521	44,256,399
Other income	9	1,595,035	921,250
		<hr/>	<hr/>
Total income		47,571,556	45,177,649
		<hr/>	<hr/>
<u>Expenditure</u>			
Personnel Cost	10	13,428,898	12,608,334
General & Administrative Expenses	11	27,043,634	24,312,037
Depreciation	2	1,803,404	1,882,044
		<hr/>	<hr/>
Total Expenditure		42,275,936	38,802,415
		<hr/>	<hr/>
Surplus for the year		5,295,620	6,375,234
		<hr/> <hr/>	<hr/> <hr/>

The notes on page 10– 15 form an integral part of the financial statements.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Cash flow Statement*For the year ended 31st December 2016*

		2016	2015
	Notes	GMD	GMD
Operating Activities			
Surplus for the year		5,295,620	6,375,234
<i>Adjust for:</i>			
Depreciation	2	1,803,403	1,882,044
		<hr/>	<hr/>
		7,099,023	8,257,278
Increase in Receivable		1,193,836	(7,257,571)
Increase in Payables		(1,245,270)	415,020
		<hr/>	<hr/>
Net Cash flows from Operating Activities		7,047,589	1,414,727
		<hr/> <hr/>	<hr/> <hr/>
Investing Activities			
Acquisition of Fixed Assets		(588,847)	(4,554,695)
		<hr/>	<hr/>
Net cash outflow from investing activities		6,458,742	(3,139,968)
		<hr/> <hr/>	<hr/> <hr/>
Net Decrease in cash and cash equivalent		7,353,206	(3,139,968)

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Balance at 1st January 2016	894,464	4,034,432
	<hr/>	<hr/>
Balance as at 31st December 2016	6,458,742	894,464
	<hr/> <hr/>	<hr/> <hr/>

The notes on page 10 – 15 form an integral part of the financial statements.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Notes to the Financial Statements

1. Accounting Policies

The following accounting policies have been applied consistently in dealing with items which are considered material in the Authority's Financial Statements.

1.1 Basis of Accounting

The Financial Statements have been prepared under the historical cost convention, in accordance with the Generally Accepted Accounting Principles (GAAP), and the requirements of the Companies (Gambia) Act 2013 and the PURA Act 2001.

1.2 Property, Plant & Equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation less impairment loss and the amount of any subsequent revaluation. It is the Authority's policy to charge full year's depreciation in the year of acquisition and no charge in the year of disposal.

Depreciation is calculated and charged to the income and expenditure statement on a straight-line basis by reference to the estimated useful lives of the assets at the following rates:

Motor Vehicles	25%
Computers & Other office equipment	25%
Furniture, fixtures & Fittings	20%
Others	20%

1.3 Revenue Recognition

Revenue comprises regulatory fees, contribution by The Gambia Government, external funding and any other income accruing on accounts. Revenue grants are recognised in the financial statements on receipts. Capital grants are recognised in equity. However, they are transferred to the income statement to meet related cost.

1.4 Employee Benefits

Obligation for contribution to the Social Security & Housing Finance Corporation administered pension scheme at a rate of 15% on employee's salary are recognised as an expense in the Income and Expenditure Statement. PURA's contribution of GMD15 per month per employee to Social Security & Housing Finance Corporation as Industrial Injury Compensation is also recognised in the Income and Expenditure Statement.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

1.5 Foreign currency Translation

Transactions in foreign currencies are converted into Dalasis at the rates of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currency are converted in to Dalasis at the rates of exchange ruling at the balance sheet date. All gains and losses are transferred to the income and expenditure account.

1.6 Taxation

No tax provision is made as the Authority is exempted from tax as an Agency of The Government.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

2. <u>FIXED ASSETS</u>	<i>MOTOR VEHICLES</i>		<i>COMPUTER EQUIPMENT</i>		<i>FURNITURE & FITTINGS</i>		<i>OTHERS</i>		<i>TOTAL</i>	
	<i>GMD</i>		<i>GMD</i>		<i>GMD</i>		<i>GMD</i>		<i>GMD</i>	
<u>COST/VALUATION</u>										
<i>AT 1ST JANUARY 2016</i>	7,460,850		15,031,572		5,013,955		3,455,112		30,961,489	
<i>ADDITIONS</i>	-		457,300		60,100		71,447		588,847	
<i>AT 31/12/15</i>	<u>7,460,850</u>		<u>15,488,872</u>		<u>5,074,055</u>		<u>3,526,559</u>		<u>31,550,336</u>	
<u>DEPRECIATION</u>										
<i>AT 1ST JANUARY 2016</i>	4,505,212		14,367,925		4,820,550		2,258,747		25,952,434	
<i>CHARGE FOR THE YEAR</i>	985,212		388,214		87,626		342,351		1,803,403	
<i>AT 31/12/16</i>	<u>5,490,424</u>		<u>14,756,139</u>		<u>4,908,176</u>		<u>2,601,098</u>		<u>27,755,837</u>	
<u>NET BOOK VALUE</u>										
<i>AT 31/12/16</i>	<u>1,970,426</u>		<u>732,733</u>		<u>165,879</u>		<u>925,461</u>		<u>3,794,499</u>	
<i>AT 31/12/15</i>	<u>2,955,638</u>		<u>663,647</u>		<u>193,405</u>		<u>1,196,365</u>		<u>5,009,055</u>	

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

	2016	2015
	GMD	GMD
3. Bank & Cash		
Trust Bank Ltd.	632,638	251,179
Eco Bank Gambia Limited	2,690,480	27,432
Access bank Gambia Limited	439,548	41,498
Guaranty Trust Gambia Limited	3,558,549	542,364
Reliance financial services	21,991	21,991
Cash Imprest account	10,000	10,000
	<u>7,353,206</u>	<u>894,464</u>
4. Trade Receivables		
Gamtel Ltd	39,335,341	40,733,015
Nawec Ltd	22,378,755	21,378,755
Gamcel Ltd	2,488,318	2,175,160
G.E.G Ltd	10,660,425	10,660,425
I Link	50,000	50,000
Linux	225,000	225,000
Thomas Global Technologies	100,000	50,000
Connection solutions	-	50,000
Insist Net	10,000	-
Qcell	8.00	-
	<u>75,247,847</u>	<u>75,322,355</u>

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

5. Staff Loans & Prepayments

Staff personal loans	1,658,528	1,404,516
Staff car loans	1,712,235	3,045,851
Prepayments	358,333	389,582
Others	-	8,474
	<hr/>	<hr/>
	3,729,096	4,848,423
	<hr/>	<hr/>
	2016	2015
	GMD	GMD

6. Trade and Other Payables

WATRA Membership Contribution 2014/15	1,158,600	1,291,828
Audit fees	210,450	210,450
Provision for court judgement	1,692,302	1,692,302
Accruals – Telephone Bills	73,853	1,185,894
	<hr/>	<hr/>
	3,135,205	4,380,474
	<hr/>	<hr/>

7. Retained Earnings

Opening Balance	81,693,823	75,318,589
Surplus for the Year (<i>See Page 8</i>)	5,295,620	6,375,237
	<hr/>	<hr/>
Closing Retained Earnings Balance	86,989,443	81,693,826
	<hr/>	<hr/>

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

8.Revenue

Regulatory fees	45,929,021	44,238,899
Application fees	47,500	17,500
	<hr/>	<hr/>
	45,976,521	44,256,399
	<hr/> <hr/>	<hr/> <hr/>

9.Other Income

Sale of tender documents	6,000	10,000
Type approval fees	1,527,061	849,183
Bank interest	25,444	22,246
Staff loan interest	36,530	34,821
Others	-	5,000
	<hr/>	<hr/>
	1,595,035	921,250
	<hr/> <hr/>	<hr/> <hr/>

10.Personnel Cost

Salaries& Wages	11,787,074	11,089,532
Social Security Contributions	1,641,824	1,518,802
	<hr/>	<hr/>
	13,428,898	12,608,334
	<hr/> <hr/>	<hr/> <hr/>

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

	2016	2015
	GMD	GMD
11. General & Admin Expenses		
Admin and office expense (<i>See Note 11a</i>)	25,643,204	21,865,519
Board fees	278,000	289,500
Membership contributions	139,608	721,277
Audit fees	210,450	210,450
Travel and training expenses	772,372	1,225,291
	<hr/>	<hr/>
	27,043,634	24,312,037
	<hr/>	<hr/>

11a. Administrative & Office Expenses

Medical expenses	784,853	648,535
National travel expenses	124,549	143,025
Office Stationary	1,291,461	1,445,585
Staff travel insurance	11,745	15,879
Fuel & lubricants	3,034,210	3,524,228
Rent/facilities management services	2,712,069	2,559,844
Electricity & water	988,369	989,877
Advertisement	228,025	355,735
Subscription- Journals/magazines	144,265	72,225
Postages	5,915	9,703
Communications	7,447,018	2,988,208

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

Stakeholder relationship	1,063,586	815,944
Repairs & maintenance	532,093	791,014
Consumer outreach program	1,479,990	1,004,058
Workshops/ retreat	98,570	5,000
Staff car scheme	-	925,000
Consultancy	12,000	405,205
Conference & meetings	2,709,986	2,174,788
Vehicle insurance & licence	258,660	269,098
Legal & registration fees	15,018	72,280
Staff uniforms	46,200	40,700
Corporate social responsibilities	1,050,900	1,333,595
Regulatory support expenses	1,063,114	936,685
Sim card registration project	467,362	310,800
Bank charges	73,246	24,008
Other expenses	-	4,500
	25,643,204	21,865,519

12. Contingent Liabilities

There is a current case in which World Report, a London Based published sued PURA for the recovery of the following;

- The sum of 30,016 Euros pursuant to an advertising contract Number 00033.
- Interest on the said sum at the rate of 1.8% per month from the 9th day of August 2012 to date of payment as per said contract.
- Statutory interest at the rate of 4% from date of judgement.

PUBLIC UTILITIES REGULATORY AUTHORITY (PURA)

FINANCIAL STATEMENTS & REPORTS FOR THE YEAR ENDED 31st DECEMBER 2016

PURA declined to honour the payment and proceeded to engage an outside attorney to defend the matter in court.

Counsel for the Authority filed an appeal at the Court of Appeal against the ruling of the high court dated 7th January 2015. The panel dismissed the appeal on the 21st April 2015 and ordered the High court to continue with hearing into the case. On the 10th of November 2016, the High Court of The Gambia dismissed the case.



PUBLIC UTILITY REGULATORY AUTHORITY – (PURA)

**MANAGEMENT LETTER REPORT
FOR THE YEAR ENDED 31st DECEMBER 2016**

**AUGUSTUS PROM
AUDIT.TAX.ADVISORY
REGISTERED AUDITORS**

**3 KAIRABA AVENUE
SERREKUNDA, KMC
THE GAMBIA**

APRIL 2017

PUBLIC UTILITY REGULATORY AUTHORITY (PURA)
MANAGEMENT LETTER REPORT FOR THE YEAR ENDED 31ST DECEMBER 2016



AUGUSTUS PROM
AUDIT.TAX.ADVISORY



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IN CONFIDENCE

REF: AP/C/PURA/652/17/(1)

30th April 2017

Managing Director
Public Utility Regulatory Authority (PURA)
Kairaba Avenue
KSMD, The Gambia.

Dear Sir,

PUBLIC UTILITY REGULATORY AUTHORITY (PURA)
MANAGEMENT LETTER FOR THE YEAR ENDED 31ST DECEMBER 2016

We have completed the audit of the Public Utility Regulatory Authority (PURA) for the year ended 31st December 2016 and wish to bring to your attention the following observations and implications. The recommendations suggested are for management action aimed at improving operations, accounting and internal controls systems, level of compliance etc.

We wish to inform you that the purpose of the audit is to enable us to express our professional opinion on the accounts presented to us by the management to audit. Such an audit should not be relied upon to disclose all defalcations or other irregularities that may exist in your system but where such exist and are discovered during the course of our audit, they would be disclosed.

Please accept the Firm's profound gratitude for the cooperation of the Management Team accorded to us during the conduct of the audit exercise.

Should you require additional information on the matters raised, please do not hesitate to contact us.

Yours Sincerely,

.....
AUGUSTUS PROM
AUDIT.TAX.ADVISORY
REGISTERED AUDITORS

PUBLIC UTILITY REGULATORY AUTHORITY (PURA)
MANAGEMENT LETTER REPORT FOR THE YEAR ENDED 31ST DECEMBER 2016

TABLE OF CONTENTS

No.	Description	Pa
<i>1</i>	<i>Asset Verification Exercise</i>	
<i>2</i>	<i>Dormant Bank Account</i>	
<i>3</i>	<i>Review on Previous Year Points</i>	

PUBLIC UTILITY REGULATORY AUTHORITY (PURA)
MANAGEMENT LETTER REPORT FOR THE YEAR ENDED 31ST DECEMBER 2016

PRIORITISATION OF AUDIT FINDINGS

The objective of the management letter report is to communicate appropriately to those charged with governance and management on information gathered in the course of the audit to give added value to the client.

The management letter is used to communicate with those charged with governance focus on the following:

- Weaknesses within the internal controls system that could lead to material losses or misstatements in the financial statements;
- Efficiencies to be made, to improve the overall performance of the organization;
- Failure to comply with policies, laws, regulations and laid down procedures;
- Issues to be addressed which would enable the audit to run more smoothly.

The findings which are stated in the management letter are categorised into a system grading to enable management to better prioritise implementation of recommendations emanating from audit findings.

The observations raised during the audit are categorised into three different grades.

The grades are as follows:

Grade 1: These are findings that are particularly significant and the urgent involvement of management may be required for their resolution (High Risk);

Grade 2: These are findings that may have a significant impact on the control environment or financial systems which can have a negative impact on operations within the organisation (Medium Risk);

Grade 3: These are findings which are less significant than Grade 1 and 2 but need attention (Low Risk).

PUBLIC UTILITY REGULATORY AUTHORITY (PURA)
MANAGEMENT LETTER REPORT FOR THE YEAR ENDED 31ST DECEMBER 2016

1. FIXED ASSET VERIFICATION

GRADE 2

1.1 OBSERVATIONS

During our review on the controls with regard to fixed assets of the authority, we noted that management did not conduct a physical asset verification exercise which is in line with recommended asset control practices.

1.2 IMPLICATION

Management not conducting an asset verification exercise makes it difficult to determine if there are missing assets or damaged assets that are still captured as an asset which would overstate the assets of the authority.

1.3 RECOMMENDATION

We recommend that management should ensure an annual asset verification exercise is conducted and a report prepared and filed for review and verification.

1.4 MANAGEMENT RESPONSE

Management noted it and agreed to assign the Directorate of Human Resources and Corporate Affairs to be conducting periodic Assets Verifications and be sending reports to DG and Management independently. Furthermore in the future Management will work on recommending to the Board of Directors to work on the possibilities of having an Internal Audit personnel for the Institution; to be performing this particular function and other Internal Audit control functions, with a direct reporting line to Director General.

2. DORMANT ACCOUNT – RELIANCE FINANCIAL

GRADE 2

2.1 OBSERVATIONS

Upon our review on closing bank balances for the period, we noted that Reliance Financial has a closing balance of D21,991 which has not moved for over a period of 18 months which indicates that the account is dormant.

2.2 IMPLICATION

Management maintaining an account which is dormant leads to unnecessary monitoring and it also could lead to charges which could have been avoided if the bank account was closed.

2.3 RECOMMENDATION

We recommend that management should ensure all bank accounts that are not needed are closed and balance of funds transferred to an operating bank account of the authority.

2.4 MANAGEMENT RESPONSE

Reliance Financial Services are not part of the MICR (RTGS) operated by the Central Bank of The Gambia and Commercial Banks for effecting large sums of payments i.e. payments above D100, 000.00. PURA will recommend to the Board of Directors for the closure of the said Account at Reliance Financial Services, and probably ask for a replacement with another Bank.



**Public Utilities
Regulatory Authority**
Equity in development

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