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1 Mission, Vision and Values

Botswana Communications Regulatory Authority (BOCRA) was established through the Communications Regulatory Authority Act, 2012 (CRA Act) on the 1st of April 2013 to regulate the communications sector in Botswana, comprising telecommunications, Internet and Information and Communications Technologies (ICTs), radio communications, broadcasting, postal services and related matters. The CRA Act replaced the Broadcasting Act [Cap 72:04], the Telecommunications Act [Cap 72:03], and caused the amendment of the Postal Services Act to create a converged or an integrated regulatory authority for the communications industry.



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MISSION

To regulate the Communications sector for the promotion of competition, innovation, consumer protection and universal access

VISION

A connected and Digitally Driven Society.

VALUES

EXCELLENCE

We will strive to be the world-class leader in the provision of regulatory services through committed teams and impeccable customer service.

PROACTIVENESS

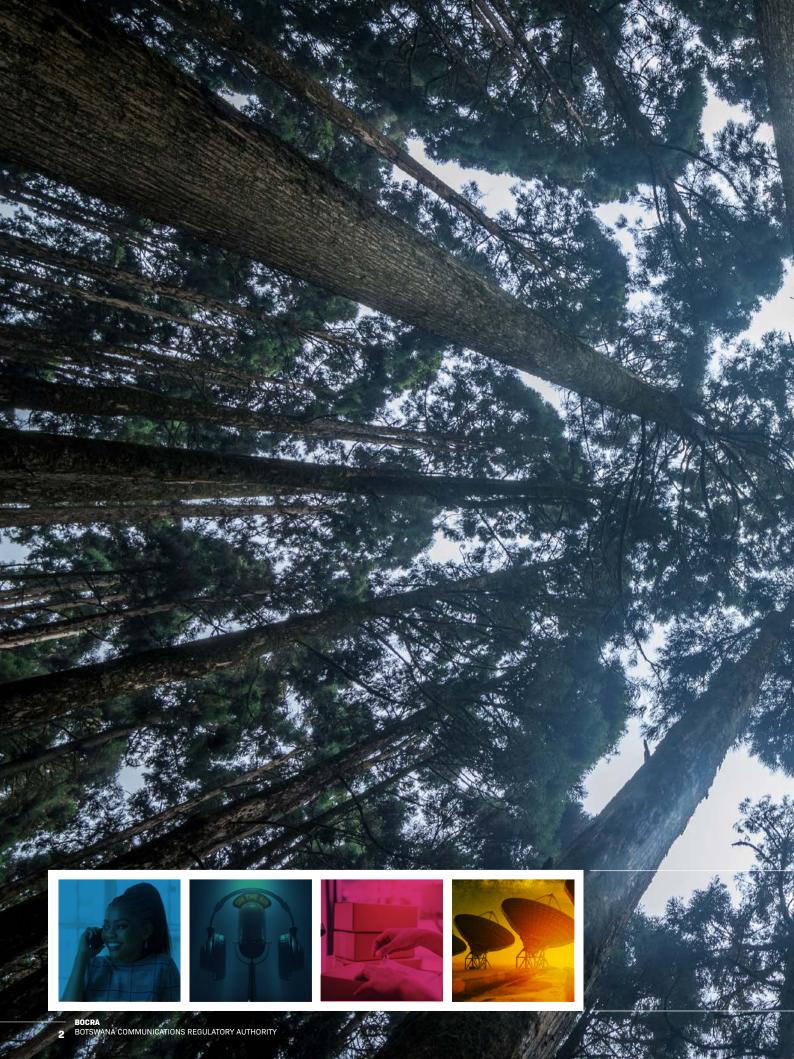
We will be forward-looking in the delivery of our mandate, to keep up with evolving industry trends.

INTEGRITY

In the execution of our mandate we will demonstrate openness, honesty and accountability in all our decisions.

PEOPLE

We believe that our people are key to driving our success through their commitment and excellence. We shall therefore harness and develop individual skills and strengths to work as one.









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These service disruptions called for re-planning and restrategising to ensure we still delivered on our strategic objectives of broadband infrastructure development, investment in services and applications, innovation, and universal service provision.

Significant shifts in consumption patterns of ICT services early in the financial year - from offices to home environments - challenged us as we provided an enabling environment that helped organisations mitigate disruptions to commerce and social services. In response to this shift, the Board approved additional radio frequency spectrum and capacity to enable operators to swiftly provision and upgrade residential packages to accommodate commercial and office workloads.

As commercial and social activities turned to communications services for continuity, the Authority engaged operators to ensure that they provided services at affordable prices. Great strides were made in Mobile Broadband pricing through an up to 55% price reduction, which resulted in increased Mobile Broadband subscriptions during the year under review. Equally, Fixed Broadband prices were also reduced, driving a 269% increase in the uptake of Fixed Broadband services.

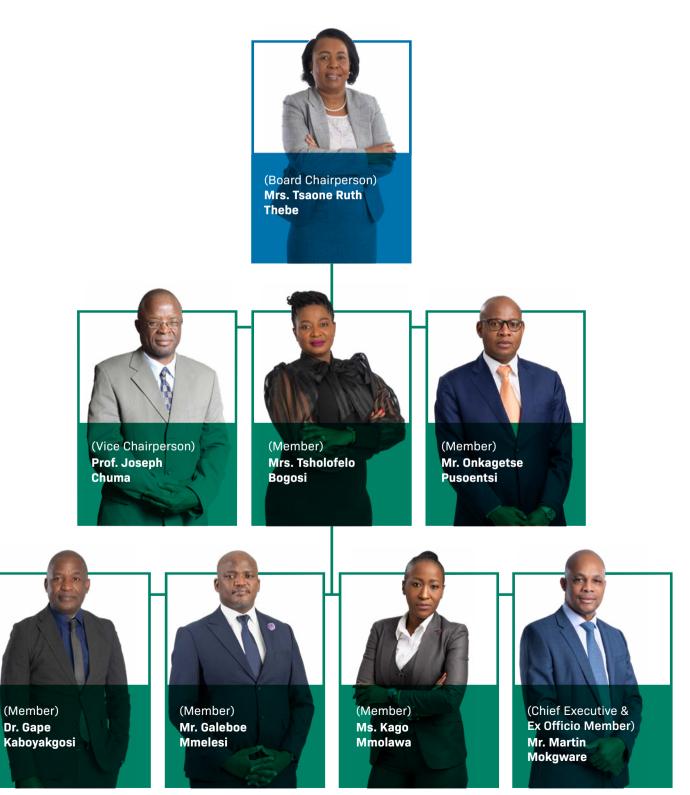
Increased usage of ICT services challenged the Authority to ready the environment for potential increased cyber threats. In line with its consumer protection mandate, BOCRA established Communicationthe Computer Incidence Response Team (COMM-CIRT) to monitor cybersecurity incidents and inform communication service providers of imminent cyber threats and improving Botswana's cyber security index. The Authority played a crucial role in finalising the National Cybersecurity Strategy approved by Cabinet in October 2020

through the Presidential Cabinet Directive CAB30(B)/2020. In addition. the Authority carried out cybersecurity training for COMM-CIRT constituents and cvbersecurity consumer awareness through activities such as the Cybersmart Campaign Challenge, which focused on the youth.

Overall, this period of upheaval meant that the Communications Sector was challenged with sustaining all the other sectors of the economy. Due to responsive and effective decisionmaking and dedication from our staff and our commercial partners, we believe that this challenge was, to a large extent, met. BOCRA managed to achieve 92% of its annual plan strategic objectives. The biggest obstacles remained growing Fixed Broadband penetration and reaching a healthy competitive subscription television sector market.

Looking ahead to the next reporting period, BOCRA will continue its relentless pursuit of increased internet coverage and usage, particularly in the education sector. The Authority will be facilitating upgrades to mobile network infrastructure and the provision of Internet and ICT equipment to the Kweneng, Southern and Northwest Districts. At the same time, emphasis will remain on the improvement of last-mile access as it is evident that the so-called 'new normal' of working predominately online and from home will be the norm henceforth. The ensuing period will also mark the mid-term review of the 2019-2024 Strategic Plan to align it with prevailing circumstances.

increase in the uptake of Fixed Broadband services Up to price reduction in Mobile Broadband prices





Board of Directors Qualifications

TSAONE RUTH THEBE (CHAIRPERSON)	 MSc in Environmental Planning, 1990 (University of Nottingham, UK) BA Environmental Science, 1982 (University of Botswana) Diploma in Education 1982 (University of Botswana)
JOSEPH MONAMATI CHUMA (PHD) (VICE CHAIRPERSON)	 PhD in Electronic Engineering Systems (University of Essex, UK) MSc. in Telecommunications and Information Systems Engineering (University of Essex, UK) MBA (University of Botswana) BEng. in Electrical and Electronic Engineering (University of Nottingham, UK)
TSHOLOFELO BOGOSI (BOARD MEMBER)	 Chartered Institute of Management Accountants (CIMA) Certified Internal Auditor (CA) Postgraduate Certificate in Enterprise Risk Management (Botswana) Bachelor of Accounting (Commerce) (University of Witwatersrand, RSA)
ONKAGETSE PUSOENTSI (BOARD MEMBER)	Bachelor of Laws Degree (University of Botswana)
GAPE KABOYAKGOSI (BOARD MEMBER)	 PhD in Public Policy (Australia National University) MPA (Syracuse University, USA) BA (University of Botswana)
GALEBOE MMELESI (BOARD MEMBER)	BSc (University of Botswana)
KAGO MMOLAWA (BOARD MEMBER)	 Master's Degree in Public Administration - Human Resources (University of Botswana) Postgraduate Diploma in Management (Henley Business School) BA Social Sciences (University of Botswana)
MARTIN MOKGWARE (CHIEF EXECUTIVE)	 MA Transport Economics (University of Leeds, UK) Postgraduate Diploma Telecommunications Regulation (University of Westminster, UK) BA Economics (University of Botswana)



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The most significant growth was realised in the Fixed Broadband Internet market

Traditionally tending to exhibit slow movement. this upward market recorded a substantial increase of 269% to reach 8.35% penetration in 2021, compared to 2.26% recorded in 2020. The expansion of Fibre to the Home (FTTH) infrastructure, and the increase in demand for this offering, led to improved Fixed Broadband penetration. The Mobile Broadband Internet market grew by 11.6%. Similar growth was also recorded in the mobile money market, where mobile money accounts grew by 16.5%.

The growth recorded in the Internet market was realised predominately because of movement restrictions that compelled people to stay and work from their homes to curb the spread of COVID-19. The "New Normal" as we have come to call it. put Botswana's Communications Sector readiness to the test, rapidly accelerating the country's transition to a digital economy. The period under review also challenged the resilience of the Communications sector in providing alternative ways of ensuring continuity of the various facets of the economy, not least the Health Sector.

The sudden increase in demand for Internet bandwidth at home during the day to facilitate office work contrasted sharply with existing Internet provisioning practices that allocated more bandwidth to offices and businesses during the day. This change caused congestion of networks resulting in poor internet service delivery. BOCRA provided additional temporary radio frequency spectrum to operators to alleviate network congestion, gradually improving the situation.

The Postal Sector experienced mixed results, but overall recorded a 27% increase in letters and parcel items movement compared to the preceding year. Movement restrictions forced people to send letters and parcels via The most significant growth recorded was in the movement of domestic parcel items, which registered 49%

Letters and Parcels Up by

the postal network. Domestic letter items recorded a substantial increase of 28% compared to the previous period, while international letter mail items increased by 15% during the same period. The most significant growth recorded was in the movement of domestic parcel items, which registered 49%, while international parcel items increased by 19%.

Notwithstanding the negative impact that COVID-19 resulted on the economy, mobile operators implemented price reductions for various pre-paid and postpaid data packages with some drops as low as 55%. Some of these reductions were implemented as increases in volumes of data bundles at no additional cost.

Worthy of note was the migration of Machine to Machine (M2M) service from personal and mobile numbering range to a dedicated ten-digits numbering block to accommodate the high demand for M2M number usage. This migration

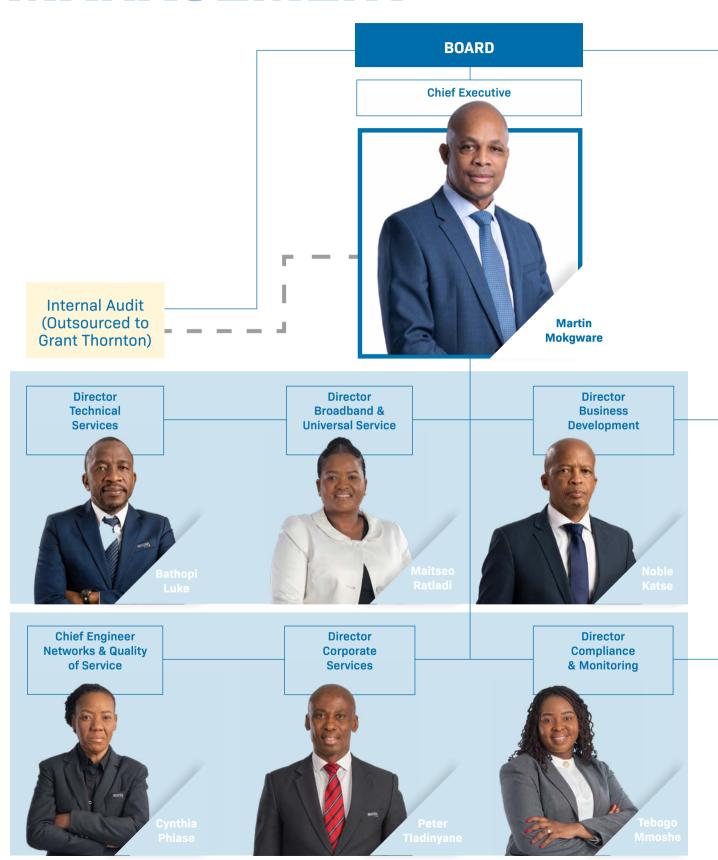
led to a decline in total active mobile numbers utilisation as some numbers were returned to the Authority for reuse. Similarly, the FTTx (Fibre To The Office/Home/Cabinet) deployments for more reliable connectivity led to the deactivation of numbers used for business and home modems.

In terms of advancing universal access and service mandate, the Universal Access. and Service Fund (UASF) facilitated the expansion of coverage of commercial FM broadcasters to the Kweneng District. This initiative saw coverage extend to 33 villages/ settlements previously considered not economically viable. The project covered the villages of Takatokwane, Malwelwe, Salajwe, and service was provided to the neighbouring villages, resulting in a 0.92 % increase in population coverage for commercial radio broadcasting, reaching 18,652 more people.

BOCRA and the Department Broadcasting Services (DBS) entered into a Memorandum of Agreement (MoA) to formalise collaboration to upskill selected media graduates and empower them with skills to develop local content. The MoA includes a threeyear mentorship and on-the-job training programme for 20 media graduates with DBS. This programme will enable participants to gain practical experience in television production to contribute to local content production.

Overall, BOCRA registered a good performance against annual organisational objectives, despite COVID-19 challenges. I attribute this performance to the dedication and commitment of staff who, under unfamiliar circumstances, managed to deliver on the annual organisational plan and achieve established targets.

MANAGEMENT



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"Section 4(1) of the **Communications** Regulatory Authority (CRA) Act (2012) grants the Minister of Transport and Communications powers to appoint the Board of seven (7) Non-**Executive Directors** for the Botswana Communications Regulatory Authority (BOCRA)

CORPORATE GOVERNANCE

Also appointed by the Minister on the Board's recommendation, the Chief Executive forms part of the Board as an ex-officio member per Section 21(5) of the Act.

In fulfilling its mandate, the Board derives guidance from the CRA Act, the Board Charter and the Shareholder Compact Agreement. These documents guide the Board's decision-making processes, ensuring good corporate governance as it formulates strategies and annual plans. They also establish the expectations of the Government from the regulator. The Act also provides the Board of the Authority with regulatory and administrative mandates, detailed under Sections 5 and 6, including the following duties:

- Promotion of universal access of communication services while establishing performance enhancement opportunities in the sector;
- Protection and promotion of consumers interests in the regulated sector;
- Effective oversight and performance monitoring of regulated sectors;
- Licence applications, permits or other authorisations for regulated sectors;
- Preparation of the Authority's strategic plan and approval of annual operating plans;
- Preparation and submission of the annual report of the Authority to the Minister; and
- Performance review of the organisation, its various committees, and the Chief Executive.

COMPOSITION OF THE BOARD

The Board of Directors comprises the following seven Non-Executive Members:

- Mrs. Tsaone Ruth Thebe (Chairperson of the Board)
- Prof. Joseph M. Chuma, (Vice Chairperson of the Board)
- Mr. Onkagetse Pusoentsi retired 31 July 2021
- Dr. Gape Kaboyakgosi
- Mr. Galeboe Mmelesi
- Mrs. Tsholofelo Bogosi
- Ms. Kago Mmolawa
- Mr. Martin Mokgware, Chief Executive of BOCRA, ex-officio Member

BOARD COMMITTEES

Section 20 of the CRA Act (2012) states that the Board may establish subcommittees to which it delegates functions under its responsibilities to the Authority. There are currently four (4) Board Committees assigned different duties and conferred with diverse powers under their respective Terms of Reference. The composition of the various Committees is presented below:

Regulatory **Committee**

Chairperson:

Prof. Joseph Chuma

Members:

Mr. Galeboe Mmelesi Mr. Onkagetse Pusoentsi

Advises the Board on regulatory issues and policies, in fulfilment of BOCRA's mandate as stated in the Act.

Board Tender Committee

Chairperson:

Mr. Galeboe Mmelesi

Members:

Prof. Joseph Chuma Mrs. Tsholofelo Bogosi

The Committee maintains the responsibility for adjudicating and approving the procurement of goods and services valued between P2 million and P5 million.

Finance & Audit Committee

Chairperson:

Mrs. Tsholofelo Bogosi

Members:

Dr. Gape Kaboyakgosi Ms. Kago Mmolawa

The Committee advises the Board on finance and audit issues and ensures that Management creates and maintains effective governance, risk and internal controls. The Committee is also responsible for managing and monitoring the Authority's IT governance.

Human Resources Committee

Chairperson:

Mr. Onkagetse Pusoentsi

Members:

Ms. Kago Mmolawa Dr. Gape Kaboyakgosi

The Committee advises the Board on Human Resourcerelated policy issues and ensures adherence to fair labour and corporate practices concerning strategic perspectives of the employer-employee relationship

Table 1: Board meeting attendances and sitting allowances April 2020 to March 2021.

BOARD MEMBERS	BOARD	REGULATORY COMMITTEE	BOARD TENDER COMMITTEE	FINANCE & AUDIT COMMITTEE	HUMAN RESOURCE COMMITTEE	TOTAL SITTING ALLOWANCES (P)
Mrs. Tsaone R. Thebe	6/7	-	-	-	-	13,500
Prof. Joseph Chuma	5/5	3/3	4/4	-	-	21,600
Mr. Onkagetse Pusoentsi	6/7	3/3	-	-	4/4	23,400
Dr. Gape Kaboyakgosi	5/5	-	-	1/4	2/3	14,400
Mr. Galeboe Mmelesi	4/5	3/3	4/4	-	-	19,800
Mrs. Tsholofelo Bogosi	7/7	-	1/4	7/7	-	27,000
Ms. Kago Mmolawa	6/7	-	-	7/7	4/4	30,600
Mr. Martin Mokgware	7/7	3/3	4/4	7/7	4/4	nil

Note:

Board Chair sitting allowance: P2.250 Member sitting allowance: P1,800

During the reporting period, the Authority continued to provide expertise and guidance to the Ministry of Transport and Communications towards finalising the Communications Regulatory Authority (CRA) Regulations and facilitating and fast-tracking promulgation by the Minister.

The CRA Regulations complement the CRA Act (2012) and will assist in further interpretation and implementation.

According to Section 6(2) (j) of the CRA Act, the Authority developed a Penalty Framework designed to provide guiding principles for a transparent process of imposing any civil penalties on the licensed operators. The Framework is one of the initiatives by the Authority to ensure compliance with the legislation, licence conditions, regulatory directives and industry guidelines within the Communications Sector.

The Board Charter and the Board Committees' Terms of Reference were reviewed during the current reporting period to align with international best corporate governance practices and organisational structures.

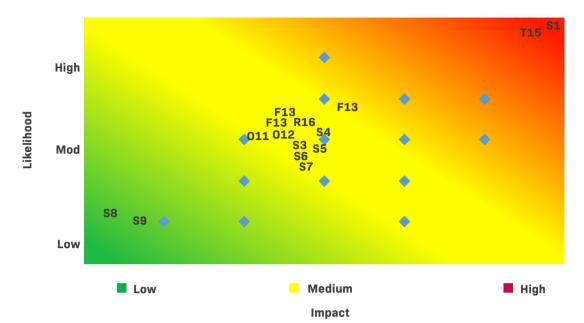
The Authority outsources its internal audit function to an independent consulting and advisory firm. The appointment was approved by the Board, with a functional reporting line to the Finance and Audit Committee and reporting administratively to the Chief Executive.

The function prepares a risk-based audit plan, provides assurance on the effectiveness of the internal controls, risk management and governance processes. Quarterly reports are issued to the Finance and Audit Committee including audit plan coverage and status of implementation of prior audit recommendations.

Risk Management

The Authority has enterprise risk management processes in place. During the period a risk assessment workshop was conducted to identify significant and emerging risks that may hinder the Authority from achieving its strategic objectives. The register was updated accordingly with a total of 17 risks, profiled and rated as High (3), Moderate (11) and Low (3) across the categories Strategic, Operational, Financial, Reputational and Legal & Compliance. The risks are illustrated in the Risk Heat Map on page 17.

Overall, the heat map shows that BOCRA is generally a low to medium risk organisation.



Risk Heat Map

Data Labels in the Risk Heat Map

Risk Numbers - Alphabet denotes categories of risks as described below; numbers denote the serial number of respective risks as per the risk register for 2020-21.

DATA LABELS	DESCRIPTION	NO. OF RISKS
S1 - S9	Strategic Risks	9
L10	Legal & Compliance Risks	1
011- 012	Operational Risks	2
F13- F14	Financial Risks	2
T15	Technological Risks	1
R16- R17	Reputational	2

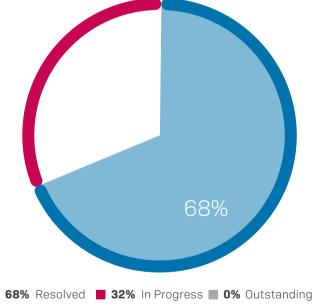
Risk Based Internal Auditing

Internal Audit contributes towards the Authority's risk management process by providing reasonable assurance that the risks identified are being effectively managed. The function has adopted a risk based auditing approach. This is evidenced by development of the internal audit plan for the year 2020/2021 based on the outcome of the risk assessment conducted. Furthermore, risk assignments are conducted at an internal audit engagement level.

During the period, the function achieved 100% coverage of the approved audit plan, being 12 assignments covering high to medium risk areas across the organisation.

Implementation of Recommendations

Internal audit also conducts follow up audits and tracking of implementation of prior audit recommendations as a means of ensuring that internal control weaknesses are being addressed effectively to mitigate against the identified risks. As at 31 March 2021, 68% of the recommendations had been resolved, 32% were still in progress while none were outstanding.



■ 68% Resolved ■ 32% In Progress ■ 0% Outstanding

Recommendations Implementation Status for Year Ended 31 March 2021

Outlook

For the coming year, internal audit focus will be on continuous monitoring of the control environment, strengthening Standard Operating Procedures, awareness on internal control and fraud risks as well as improving use of data analytics.

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"During the reporting period, the Authority continued to provide expertise and guidance to the Ministry of Transport and Communications towards finalising the Communications Regulatory Authority (CRA) Regulations and facilitating and fast-tracking promulgation by the Minister.

ORGANISATIONAL PERFORMANCE

The end of the 2020/21 Financial Year marked the conclusion of year two (2) of the 2019 – 2024 BOCRA Strategic Plan.

Despite the period being largely affected by the COVID-19 pandemic, the Authority worked hard towards achieving objectives contained in its Strategic Plan.

The Authority continued to place emphasis on initiatives geared towards broadband infrastructure development, investment in services and applications, innovation, and inclusivity in terms of universal service provision. BOCRA also ensured availability of the requisite resources in the form of numbers and radio frequency spectrum whilst ensuring effective and efficient usage of the allocated

resources. In order to ensure that the resources provided were put to good use, the Authority closely monitored prices and accordingly caused their adjustment to make them affordable and enable uptake and usage.

BOCRA monitored performance towards attainment of its strategic objectives through Twenty-four (24) Key Performance Indicators (KPIs). The Authority performed well and achieved most of its targets ending up with a 92% achievement rate for the year. Table 1 shows the strategy performance dashboard.

Authority's Targets Achieved

The Authority performed well and achieved most of its targets, ending with a 92% achievement rate for the year.



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Table 2: Strategy Performance Dashboard

Perspectives	No	Strategic Objective	KPI (Measure)	Target 2020/21	Actual 2020/21	Performance Indicator
		To improve Consumer Protection	% compliance to regulatory framework and QoS	100%	99%	
	C1		% compliance to regulatory framework (tariff structure)	100%	100%	
			Cyber Security Index (ITU)	0.5	0.53	
			Mobile Broadband Price Index (\$)	\$10.14 (P107.73)	\$6.49 (P69.00)	
CUSTOMER PERSPECTIVE		Ensure Access and	Fixed Broadband Price Index (\$)	\$21.17 (P224.91)	\$22.05 (P244.00)	
	C3	Affordability of Broadband Services	% of Mobile Broadband subscriptions	84.4%	111%	
			Fixed Broadband Penetration	31.88%	8.35%	
			Mobile Broadband Coverage	73%	88%	
			% population coverage (TV)	40%	75%	
			% population coverage (radio)	70%	70%	
	IP1	To improve service	Customer satisfaction index	-	4.7	
	ILT	delivery	% adherence to service standards	-	93%	
		Enhance competitive markets	HHI (Mobile voice)	3830	3774	
	IP2		HHI (Broadcasting-Subscription TV)	9500	10000	
			HHI (Mobile Broadband Internet)	4166	4158	
INTERNAL		Efficient Management of Resources (non- financial)	Spectrum Efficiency (3G)	14	23	
PROCESS PERSPECTIVE	IP3		Spectrum Efficiency (4G)	20	19	
	15.4	Foster research and	# of studies conducted	6	13	
	IP4	innovation	# of new regulatory instruments	4	5	
	IP5	Enhance Strategic Partnership	# of strategic partnerships (leverage)	7	9	
FINANCIAL		Prudent management of financial resources	% adherence to the budget	+/-10%	15%	
PERSPECTIVE	P2		% collection of long outstanding regulatory fees	50%	75%	
PEOPLE	P2	Create and promote a high- performance culture	% staff exceeding performance threshold	≥10%	43%	
PERSPECTIVE	PZ		% staff below performance threshold	≤3%	0%	

Performance Indicator Key

Target achieved (95%-100%)
Target partially achieved (94%-80%)
Target not achieved (>80%)
No data

GOVERNANCE

Organisational Performance (Continued)

Overall performance analysis

Cybersecurity index

The Authority completed initiatives aimed at improving the country's cybersecurity index. These included finalising the National Cybersecurity Strategy, completing the Communications sector Computer Incident Response Team (COMM-CIRT), facilitating cybersecurity training for the constituents, and public awareness activities such as the Cybersmart campaign.

Broadband pricing

Great strides were achieved in Mobile Broadband pricing, Mobile Broadband subscriptions, communications coverage, and spectrum efficiency, all of which constitute a competitive environment. The Mobile Broadband Price Index was reduced from \$8.06 achieved in the previous reporting period to \$6.49 during the reporting period, realising a 19% decline against a targeted 12% decline. This reduction relates to a 2GB data package from a network provider with the largest market share. This shift represents a significant price reduction. The target was based on a 500MB package, implying that consumers now enjoy more data capacity for a reduced price.

Fixed Broadband prices also saw a reduction during the reporting period due to constantly evolving technology. For example, this period saw the phasing out of the 512Kbps speed for Fixed Broadband. Therefore, the Fixed Broadband Price index was calculated using the 4Mbps speed, which translated to \$5.26 being the cheapest package from the Operator with the largest market share.

Broadband population coverage

A significant increase in Mobile Broadband coverage was realised as Operators expanded their 3G and 4G networks across the country. Terrestrial Television (TV) coverage and commercial radio broadcasting coverage also showed an upward trend. The FM Expansion project funded through the Universal Access and Service Fund (UASF) continued to grow the commercial radio broadcasting market.

The utilisation of the radio frequency spectrum improved during the year as Operators rolled out their services to areas deemed economically unviable, with the assistance of the UASF subsidies. The infrastructure subsidies meant that the operators could increase the population coverage that has access to services while still maintaining the same spectrum resource, increasing the efficiency of spectrum use.

The Authority also saw an improvement in debt collection during the year. Collection efforts for long-outstanding fees were intensified with one-on-one meetings held with Service Providers to determine payment plans for outstanding debts.

Fixed Broadband

269%

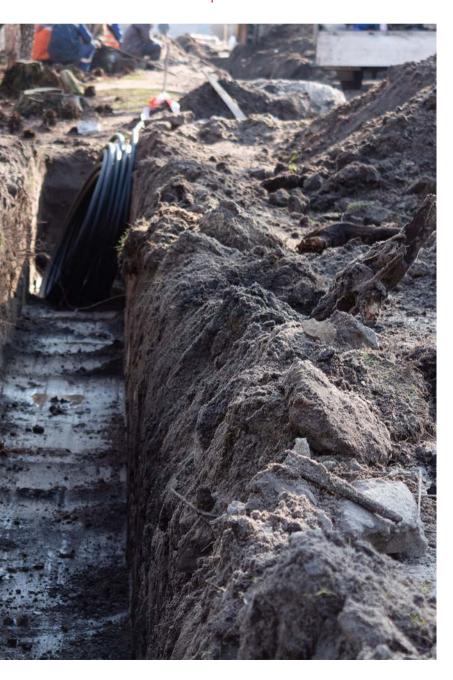
increase was realised in the penetration of Fixed Broadband from 2.26% in the previous year to 8.35%.



The decommissioning of Star Times and Kwese TV means MultiChoice Botswana has a

100 MARKET SHARE

It should be noted that the growth of broadband has encouraged the use of Over-The-Top services (OTTs) to access subscription TV content.



Market competitiveness

New service providers were licensed to enhance competition in the market, and the radio frequency spectrum issued for the rollout of new services. Operators also improved their marketing initiatives, with those who previously had a lower market share introducing better service packages.

Fixed Broadband penetration performed below the set target for the year. An 8.35% penetration was achieved for the year against a target of 31.88%. Although Fixed Broadband uptake target was not achieved, a 269% increase was realised as the penetration increased from 2.26% in the previous year to 8.35%. The expansion of Fibre to the Home (FTTH) infrastructure and the increase in FTTH demand led to improved Fixed Broadband penetration.

Competition in the Broadcasting Subscription TV market also did not fare well during the year. The decommissioning of Star Times and Kwese TV means MultiChoice Botswana has a 100% market share. Despite this monopoly scenario, it should be noted that the growth of broadband has encouraged the use of Over-The-Top services (OTTs) to access subscription TV content. Over and above the international content providers such as Netflix, Apple TV, and others, BOCRA has authorised some local service providers such as BoFiNet and Cene Media to provide video on demand, providing indirect competition to Multichoice services.

Staff performance

BOCRA realised an increase in staff performance for the year under review as more staff members performed within established thresholds, with none below thresholds relative to the previous year. Furthermore, stakeholder confidence in the Authority's service delivery increased from 87% to 90% in the prior year, a testimony of an increasingly high-performance culture.

The following sections of the report, beginning with Market Review, provide a detailed breakdown of the BOCRA's strategic and operational objectives performance during the 2020/2021 Financial Year.





REVIEWS

"Growth in subscriptions, from 3,226,389 subscriptions in March 2017 to 3,876,773 in March 2021.

Subscriptions
Up by



MARKET REVIEW

ICT MARKET PERFORMANCE REVIEW

Telecommunications market structure

There are three main service providers in the Botswana telecommunications market offering various services, including fixed and mobile telephony, Internet and data services, value-added and international services. The three operators are Botswana Telecommunications Corporation Limited (BTC), Mascom Wireless (Pty) Ltd (Mascom) and Orange Botswana (Pty) Ltd (Orange). In addition to these, there is Botswana Fibre Networks (BoFiNet), which provides wholesale Internet. Other licensees include several Internet Service Providers (ISPs) that offer value-added services and Internet on a smaller scale.

Mobile telephony market segment

Mobile telephony subscriptions continued to grow remarkably due to the convenience brought by mobile platforms. Mobile networks have become a necessity of everyday communication, efficient business operations and service delivery enhancements across all sectors of the economy. The trend for mobile telephony growth over the preceding five years is illustrated in Figure 1.



Figure 1: Mobile telephony subscriptions for five years.

Source: BOCRA

The preceding five-year period demonstrated steady growth in subscriptions, showing an approximate 20% increase from 3,226,389 subscriptions in March 2017 to 3,876,773 in March 2021. From the previous year ending March 2020, there was an increase of about 2.6% in subscriptions. The mobile telephony market continues to experience intense competition where consumers enjoy different packages offered by the three operators and the option of using more than one operator. Operators also indicate increased demand for social media packages, subsequently cultivating more engagement with mobile platforms.

Mobile teledensity stood at 191% during the period under review compared with 186% registered the previous year. For the four years preceding 2021, there have not been significant changes in this metric.

As in previous years, Mascom Wireless continued to lead the mobile telephony market share as measured by active mobile subscriptions. Figures 2 and 3 give a pictorial representation of the market shares of the three operators for the periods ending March 2020 and March 2021. As at March 2021, Mascom market share stood at 45% of all mobile subscribers, followed by Orange at 38% and BTC at 17%. Mascom's market share decreased by one percentage point from 46% in the previous year. Orange market share increased by three percentage points from 35%, and BTC market share dropped by two percentage points from 19%. As mentioned previously, the increase in competitive forces such as prices, new services, promotions and commensurate consumer demand have played a significant role in the above market share changes, as customers spread usage among the three mobile operators.

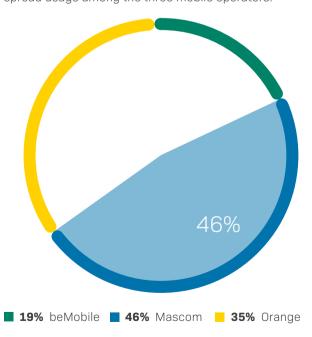


Figure 2: Mobile telephony market share 2020.

Source: BOCRA

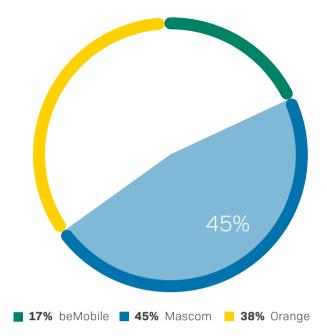


Figure 3: Mobile telephony market share 2021.

Source: BOCRA

Market share of prepaid and post-paid mobile telephony

By March 2021, the share between prepaid and postpaid mobile telephony subscriptions stood at 97% and 3%, respectively, as demonstrated in Figure 4. There have not been any changes from the previous year. Although the usage charges for post-paid services are generally cheaper than those for prepaid services, consumers prefer prepaid services for the convenience of tracking their usage while avoiding contractual obligations. The use of multiple networks allows consumers to enjoy a variety of offerings from the operators.

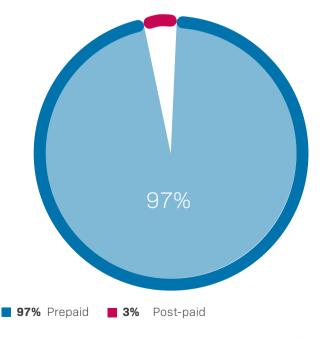


Figure 4: Market share of prepaid and post-paid mobile.

Source: BOCRA

ICT Market Performance Review (Continued)

Fixed market segment

Fixed telephony subscriptions offered exclusively by BTC stood at 139,930 compared to 140,722 recorded the year before, representing a marginal decline of 0.6%. Teledensity for fixed telephony remained at 7%, consistent with the previous year. Market trends indicate that the demand for fixed telephony is unlikely to grow as consumers favour

mobile technology for various reasons, including cost, flexibility, mobility and the diversity of value-added services. The trend for the fixed telephony subscriptions over the five years from March 2017 to March 2021 is illustrated in Figure 5, showing a relatively stable subscriber base as the number of fixed lines plateaued around 140,000.



Figure 5: Total Fixed Telephony subscriptions 2017 to 2021.

Source: BOCRA



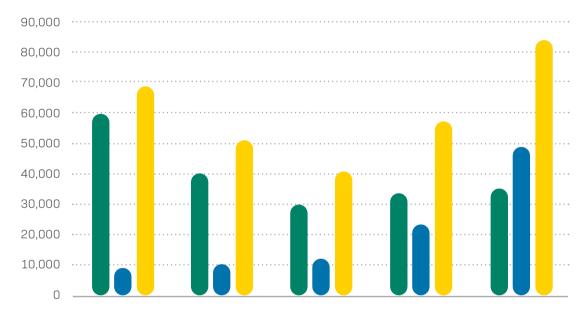
INTERNET UPTAKE

Fixed Broadband Internet

Access to Fixed Broadband has proven to be essential for reliable, high speed and high-capacity internet. In this regard, market trends indicate that Fixed Broadband access and usage will increase over time: firstly, as a complimentary service to mobile wireless internet and secondly as a solution for bandwidth-intensive applications and services. BTC offers, among others, a Fixed Broadband product named ADSL at retail and wholesale level with a market share of 42% of the total Fixed Broadband. Mascom and Orange

offer a combined fixed wireless broadband at 58% of the total Fixed Broadband market in the year reviewed. Internet service providers offer ADSL as resellers of the BTC service. Most ISPs provide fixed wireless internet because they use free spectrum in the Industrial, Scientific and Medical (ISM) bands for last-mile access.

Figure 6 represents the number of Fixed Broadband subscriptions to ADSL and fixed wireless and the total Fixed Broadband subscriptions.



	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21
ADSL Subscriptions	59,590	40,164	29532	33618	35197
FIXED Wireless Subscriptions	8,997	10,350	10943	23352	48713
Total Broadband Subscriptions	68,587	50,514	40,475	56,970	83,910

Figure 6: Fixed Broadband subscriptions.

Source: BOCRA

Fixed Broadband - ADSL

BTC offers, among others, a Fixed Broadband product named ADSL at retail and wholesale level with a market share of 42% of the total Fixed Broadband.



REVIEWS

ICT Market Performance Review (Continued)

An increase in ADSL uptake was recorded from 33,618 in the previous year to 35,197 this year. However, ADSL decreased in the preceding five years, reaching its lowest point in March 2019 with 29 532 subscriptions. The decline can be primarily attributed to a database clean-up exercise by BTC validating its subscription records. ADSL then experienced steady growth to reach 35 197 subscriptions in March 2021. Conversely, fixed wireless subscriptions grew substantially from 56,970 registered in March 2020 to 83,910 in March 2021. This increase was primarily due to the growth in new products and services introduced by mobile operators compared to the previous years.

Mobile Broadband market

A significant portion of the population has access to and use Mobile Broadband as operators continue to expand Mobile Broadband services. Operators also continue to develop consumer-driven packages, including own-brand and alternative brand smartphones, which contribute to increased access and usage. Figure 7 represents the number of Mobile Broadband subscriptions over the preceding five years.



Figure 7: Number of Mobile Broadband subscribers.

Source: BOCRA

ADSL then experienced steady growth to reach 35,197 subscriptions in March 2021

ADSL uptake up to

35,197

During the period under review, Mobile Broadband penetration increased from 2,037,359 in March 2020 to 2,273,363 in March 2021, representing an 11.6% increase. Mobile Broadband penetration is expected to continue higher growth than Fixed Broadband due to its convenience – ease of access to e-commerce, social media networking, knowledge resources and entertainment.

"All three mobile operators are players in the Mobile Money market, together with Botswana Post, which began offering the service in 2018.



MOBILE MONEY SERVICES

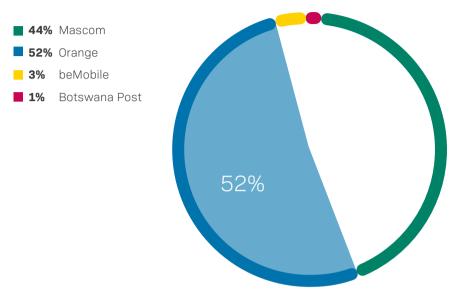


Figure 8: Mobile money market share 2020.

Source: BOCRA

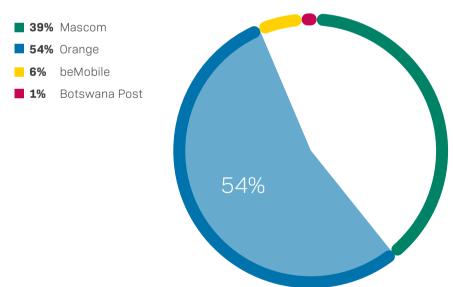


Figure 9: Mobile money market share 2021.

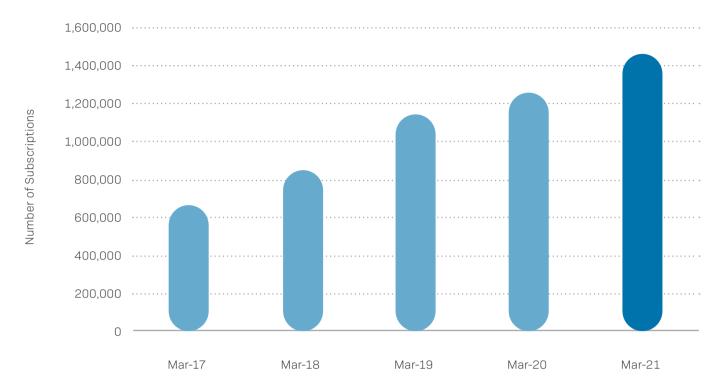
Source: BOCRA

As illustrated in Figure 9, in terms of mobile money subscriptions, Orange leads at 54% of the market share, followed by Mascom at 39%, then BTC at 6% and Botswana Post at 1%. Orange and BTC market share increased from March 2020 to March 2021 while Mascom market share decreased.

Mobile money is now interoperable with traditional bank accounts, bringing much-needed convenience for users. Cross-border transactions are also possible, making mobile money an even more attractive and widely accepted option for payment processes.

REVIEWS

Mobile Money Services (Continued)



 $\label{thm:prop:subscriptions} \textbf{Figure 10: Total mobile money subscriptions for five years.}$

Source: BOCRA

Figure 10 illustrates the number of mobile money accounts active during the preceding five years, showing a significant increase from 118% in March 2017 to March 2021. Notwithstanding this substantial increase, year on year growth was steady. In the year under review, subscriptions

increased by 16.5% from March 2020 to March 2021. Growth in the mobile money market is attributable to the wide acceptance of the service, driven by convenience-related to bill payments, service subscriptions, and money transfers, to mention a few. (MB) or Gigabyte (GB) for ease of appreciation.

A significant increase in mobile money accounts active during the preceding five years from March 2017 to March 2021.

118%

"BOCRA continues to enhance competition in the communications sector by ensuring that services are accessible at affordable prices and appropriate quality throughout the country.

PRICE REDUCTIONS FOR DATA BUNDLES

During the year under review, BOCRA engaged mobile operators to discuss opportunities for reducing costs for data bundles. The outcome of this engagement was substantial, with up to 55% reductions in pricing for data bundles

The Mobile Broadband price index fell from \$8.06 achieved in the previous reporting period to \$6.49 during the reporting period, realising a 19% reduction against a targeted 12% decline on a 2GB data package of a network provider with the largest market share. The Fixed Broadband prices also saw a reduction. The Fixed Broadband Price index calculated using the 4Mbps speed translated to \$5.26 - the cheapest package by the Operator with the largest market share.

Some of the reductions came as substantial increases in volumes of data bundles at unchanged prices by Mascom Wireless and Orange Botswana. The price reductions were for various postpaid and prepaid packages of varying validities, including one day, two days, one week, two weeks and one month. Prices for BTC data bundles remained unchanged.

Tables 3-9 show the various data bundles and the improved prices and volume offerings. The effective price reductions are expressed per Megabyte (MB) or Gigabyte (GB) for ease of appreciation.

REVIEWS

Price Reductions for Data Bundles (Continued)

Botswana Telecommunications Corporation Limited (BTCL)

VALIDITY	BUNDLES	CURRENT PRICES AS AT YEAR 2020	PRICE PER Mb OR Gb (BWP)
	20Mb	2.00	0.10/Mb
	100Mb	5.00	0.05/Mb
1 Day	500Mb	10.00	0.02/Mb
	1Gb	20.00	20.00/Gb
	250Mb	15.00	0.06/Mb
1 Week	500Mb	30.00	0.06/Mb
	1Gb	60.00	60.00/Gb
	1Gb	65.00	65.00/Gb
2 Weeks	2Gb	75.00	37.50/Gb
	3Gb	85.00	28.33/Gb
	1Gb	75.00	75.00/Gb
	3Gb	90.00	30.00/Gb
1 Month	5Gb	110.00	22.00/Gb
•	10Gb	220.00	22.00/Gb
	15Gb	300.00	20.00/Gb

Table 3: Turn-up data bundles.



9 7 - 1 4 0

Mascom Wireless

VALIDITY	BUNDLES	2019 OLD PRICES	NOTES	NEW PRICE AT JUNE 2020	CURRENT PRICE PER Mb OR Gb (PULA)
	20 Mb	2.00	Discontinued	N/A	N/A
	25 Mb		New Package	2.00	0.08/Mb
	60 Mb	5.00	Discontinued	N/A	N/A
1 Day	100 Mb		New Package	5.00	0.05/Mb
	140 Mb	10.00	Discontinued	N/A	N/A
	500 Mb		New Package	10.00	0.02/Mb
	1 Gb	18.00	Not Changed	18.00	18.00/Gb
2 Davis	300 Mb	20.00	Discontinued	N/A	N/A
2 Days	1 Gb		New Package	20.00	20.00/Gb
	600 Mb	35.00	Discontinued	N/A	N/A
1 Week	1 Gb	45.00	Reduced By 13%	39.00	39.00/Gb
	2 Gb	65.00	Reduced By 31%	45.00	22.50/Gb
2 Weeks	1 Gb	55.00	Reduced By 11%	49.00	49.00/Gb
2 WEEKS	3 Gb	_	New Package	85.00	28.33/Gb
	2 Gb	95.00	Reduced By 27%	69.00	34.50/Gb
	4Gb	145.00	Reduced By 32%	99.00	24.75/Gb
1 Month	8 Gb	275.00	Reduced By 46%	149.00	18.63/Gb
	16 Gb	475.00	Reduced By 41%	279.00	17.44/Gb
	32 Gb	675.00	Reduced By 22%	525.00	16.41/Gb

Table 4: Mymix prepaid packages.

The Mobile Broadband price index fell from \$8.06 achieved in the previous reporting period to

^{\$}6.49

realising a reduction of

against a targeted 12% decline on a 2GB data package of a network provider with the largest market share.

The Fixed Broadband Price index calculated using the 4Mbps speed reduced to

^{\$}5.26

Some of the reductions came as substantial increases in volumes of data bundles at unchanged prices by Mascom Wireless and Orange Botswana.

REVIEWS

Price reductions for data bundles (continued)

Mascom Wireless (continued)

VALIDITY	BUNDLES	2019 OLD PRICES	NOTES	NEW PRICE AT JUNE 2020	CURRENT PRICE PER MB OR GB (PULA)
	20 Mb	2.00	Discontinued	N/A	N/A
	25 Mb	_	New Package	2.00	0.08/Mb
	60 Mb	5.00	Discontinued	N/A	N/A
1 Day	100 Mb	_	New Package	5.00	0.05/Mb
	140 Mb	10.00	Discontinued	N/A	N/A
	500 Mb	_	New Package	10.00	0.02/Mb
	1 Gb	18.00	Not Changed	18.00	18.00/Gb
O Dovo	300 Mb	20.00	Discontinued	N/A	N/A
2 Days	1 Gb		New Package	20.00	20.00/Gb
	600 Mb	35.00	Discontinued	N/A	N/A
1 Week	1 Gb	45.00	Reduced By 13%	39.00	39.00/Gb
	2 Gb	65.00	Reduced By 31%	45.00	22.50/Gb
2 Weeks	1 Gb	55.00	Reduced By 11%	49.00	49.00/Gb
2 WEEKS	3 Gb		New Package	85.00	28.33/Gb
	2 Gb	95.00	Reduced By 27%	69.00	34.50/Gb
	4Gb	145.00	Reduced By 32%	99.00	24.75/Gb
1 Month	8 Gb	275.00	Reduced By 46%	149.00	18.63/Gb
]	16 Gb	475.00	Reduced By 41%	279.00	17.44/Gb
	32 Gb	675.00	Reduced By 22%	525.00	16.41/Gb

Table 5: Mymeg post-paid bundles.



Orange Botswana

VALIDITY	DATA BUNDLES	2019 OLD PRICE (BWP)	NEW PRICE (BWP) AS AT 01 JULY 2020	NOTES	CURRENT PRICES PER MB OR GB (BWP)
	12 Mb	2.00	_	Discontinued	N/A
	25 Mb	_	2.00	New Package	0.08/Mb
	40 Mb	5.00	_	Discontinued	N/A
1 Day	100 Mb	_	5.00	New Package	0.05/Mb
	120 Mb	10.00		Discontinued	N/A
	500 Mb	_	10.00	New Package	0.02/Mb
	1 Gb	_	18.00	New Package	18.00/Gb
0.0	300 Mb	20.00	_	Discontinued	N/A
2 Days	1 Gb		20.00	New Package	20.00/Gb
	650 Mb	40.00	_	Discontinued	N/A
1 Week	1 Gb	60.00	35.00	Reduced By 42%	35.00/Gb
	2.5 Gb	_	50.00	New Package	20.00/Gb
_	1.5 Gb	80.00	60.00	Reduced By 25%	40.00/Gb
2 Weeks	4 Gb	_	80.00	New Package	20.00/Gb
	2 Gb	120.00	69.00	Reduced By 43%	34.50/Gb
	3 Gb	_	89.00	New Package	29.67/Gb
	4 Gb	220.00	99.00	Reduced By 55%	24.75/Gb
d Bannah	6 Gb	_	119.00	New Package	19.83/Gb
1 Month	10 Gb	500.00	_	Discontinued	N/A
	12 Gb	_	219.00	New Package	18.25/Gb
	18 Gb		299.00	New Package	16.61/Gb
	32 Gb		499.00	New Package	15.59/Gb

Table 6: All My Internet Package.

REVIEWS

Price reductions for data bundles (continued

VALIDITY	VOLUME	2019 OLD PRICE (BWP)	NEW PRICE (BWP) as at 01 July 2020	Notes	Current Prices Per Gb (BWP)
	5Gb	199.00	_	Discontinued	N/A
	10Gb	349.00	_	Discontinued	N/A
	12.5Gb	_	199.00	New Package	15.92/Gb
00 DAVO	20Gb	599.00	_	Discontinued	N/A
30 DAYS	30Gb		349.00	New Package	11.63/Gb
	50Gb	1249.00	_	Discontinued	N/A
	70Gb	_	599.00	New Package	8.56/Gb
	175Gb		1249.00	New Package	7.14/Gb

Table 7: Prepaid Konnecta.

VALIDITY	OFFER	VOLUME	2019 OLD PRICE (BWP)	NEW PRICE (BWP) as at 01 July 2020	Notes	Current Prices Per Gb (BWP)
	N 41N 11N 41 1N 4	2Gb	99.00		Discontinued	N/A
	MINIMUM	5Gb	_	99.00	New Package	19.80/Gb
	BASIC	5Gb 12.5Gb	169.00		Discontinued New Package	N/A 13.52/Gb
30 DAYS	CLASSIC	10Gb	299.00		Discontinued	N/A
		30Gb	_	299.00	New Package	9.97/Gb
	DDECTIOE	20Gb	529.00		Discontinued	N/A
	PRESTIGE	70Gb	_	529.00	New Package	7.56/Gb
		50Gb	1149.00		Discontinued	N/A
	PREMIUM	175Gb	_	1099.00	New Package	6.28/Gb

Table 8: Hybrid Konnecta.

REVIEWS

Price reductions for data bundles (continued)

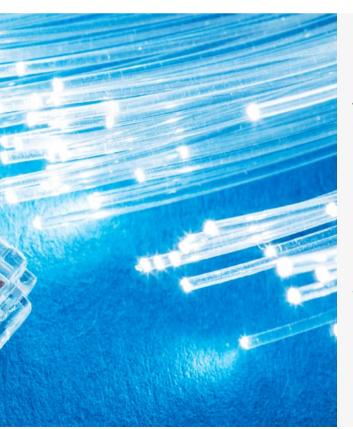
Orange Botswana

OLD SPEED (MBPS)	NEW SPEED (MBPS) AS AT 01 JULY 2020	OLD FUP	NEW FUP	OLD Calls (Min)	NEW CALLS AS AT 01 JULY 2020 (MIN)	CUG
1	N/A	256K	N/A	100	N/A	
N/A	2	N/A	1Mbps		100	
4	N/A	256K	N/A	150	N/A	
N/A	6	N/A	3Mbps		150	
10	N/A	512K	N/A	250	N/A	
N/A	10	N/A	5Mbps		250	
2	Ν/Δ	512K	Ν/Δ			Unlimited calls to
***************************************						Konnecta
			·			box
N/A	6	N/A	3Mbps			
10	N/A	1Mbps	N/A		N/A	
N/A	10	N/A	5Mbps			
20	N/A	1Mbps	N/A			
N/A	20	N/A	8Mbps			
	\$PEED (MBPS) 1 N/A 4 N/A 10 N/A 2 N/A 4 N/A 10 N/A 20 N/A 20	SPEED (MBPS)	OLD SPEED (MBPS) SPEED (MBPS) SPEED (MBPS) AS AT 01 JULY 2020 1 N/A 256K N/A 2 N/A 4 N/A 256K N/A 6 N/A 10 N/A 512K N/A 10 N/A 2 N/A 512K N/A 2 N/A 4 N/A 512K N/A 6 N/A 10 N/A 1Mbps N/A 10 N/A 10 N/A 1Mbps N/A 10 N/A	OLD SPEED (MBPS) SPEED (MBPS) OLD FUP NEW FUP 1 N/A 256K N/A N/A 2 N/A 1Mbps 4 N/A 256K N/A N/A 6 N/A 3Mbps 10 N/A 512K N/A N/A 10 N/A 5Mbps 2 N/A 512K N/A N/A 2 N/A 1Mbps 4 N/A 512K N/A N/A 512K N/A N/A 1Mbps N/A N/A 1Mbps N/A N/A 1Mbps N/A N/A 1Mbps N/A	OLD SPEED (MBPS) AS AT 01 (MBPS) OLD FUP NEW FUP CALLS (MIN) 1 N/A 256K N/A 100 N/A 2 N/A 1Mbps	OLD SPEED (MBPS) AS AT 01 JULY 2020 OLD FUP NEW CALLS AS AT 01 JULY 2020 (MIN) NEW CALLS AS AT 01 JULY 2020 (MIN) 1 N/A 256K N/A 100 N/A N/A 2 N/A 1Mbps _ 100 4 N/A 256K N/A 150 N/A N/A 6 N/A 3Mbps _ 150 10 N/A 512K N/A 250 N/A N/A 10 N/A 5Mbps _ 250 2 N/A 512K N/A N/A N/A N/A N/A 10 N/A 1Mbps N/A N/A N/A N/A 10 N/A 1Mbps N/A N/A N/A N/A 10 N/A 1Mbps N/A N/A N/A 10 N/A 1Mbps N/A N/A N/A N/A 10 N/A 1Mbps N/A N/A N/A

Table 9: Post-paid Konnecta.



DATA	2019 OLD RENTAL (PULA)	NEW RENTAL (PULA) AS AT 01 JULY 2020			PULA) AS AT 01 JULY 2020		PRICES (BWP)
VOLUME (Gb)	12 MONTHS	24 MONTHS	12 M	24 M	NOTES	12 MONTHS	24 MONTHS
20	479.00	399.00	_	_	Discontinued	N/A	N/A
50	_		399.00	359.00	New Package	7.98/Gb	7.18/Gb
35	849.00	699.00	_	_	Discontinued	N/A	N/A
100		<u>_</u>	699.00	599.00	New Package	6.99/Gb	5.99/Gb
60	1,349.00	1,099.00	_	_	Discontinued	N/A	N/A
200			1,099.00	899.00	New Package	5.50/Gb	4.50/Gb
20	479.00	399.00	_	_	Discontinued	N/A	N/A
50		<u>_</u> _	399.00	359.00	New Package	7.98/Gb	7.18/Gb
35	849.00	699.00	_	_	Discontinued	N/A	N/A
100		<u>_</u>	699.00	599.00	New Package	6.99/Gb	5.99/Gb
60	1,349.00	1,099.00	_	_	Discontinued	N/A	N/A
200	_	_	1,099.00	899.00	New Package	5.50/Gb	4.50/Gb
100	1,849.00	1,399.00	_	_	Discontinued	N/A	N/A
300	_	_	1,399.00	1,199.00	New Package	4.66/Gb	4.00/Gb



The Fixed Broadband Price index calculated using the 4Mbps speed reduced to

\$**5.26**

Some of the reductions came as substantial increases in volumes of data bundles at unchanged prices by Mascom Wireless and Orange Botswana. "In a bid to ensure that communications equipment distributed in Botswana comply with established technical standards, BOCRA continued to approve new equipment entering the market, following the requirements of the Act and in line with the Type Approval Guidelines.

687

Electronic Communications Devices Approved.

TECHNICAL SERVICES

TYPE APPROVAL

BOCRA recommended cessation of the renewal of Type Approval Certificates for equipment already approved and in circulation. In line with this recommendation, all types of approved equipment can be used until it reaches the end of life without renewal, except in cases where substantial modifications have been made against device specifications.

A total of 687 electronic communication equipment devices were typeapproved during the year 2020/2021. This equipment included three locally produced devices. BOCRA does not physically test the equipment as it has no laboratory but relies on the test reports from recognised laboratories to assess compliance.

Figure 11 presents comparative statistics for the type-approved communication devices per quarter.

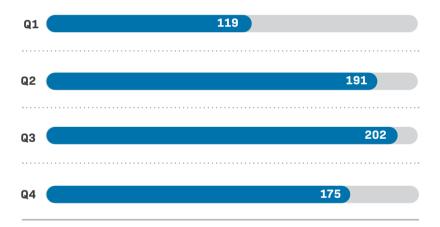


Fig 11: Number of type-approved devices - 2020/21.

Approvals were reduced in the first quarter of the financial year following the first COVID-19 National lockdown. However, from Q2 onward, the number of models type-approved increased slowly as economic activities opened up. The increase became significant as the global population adjusted to new working arrangements and relied more on communications devices. The slight drop in the number of type-approved devices in Q4 matched the trend experienced at the beginning of the year when further movement restrictions were put in place.

1 3 - 2 2

Type-Approval (SIM-enabled) Verification **Guidelines**

BOCRA approved and published the Type-Approval Verification Guidelines for SIM-enabled devices. These quidelines are intended to ensure compliance of SIM-enabled devices with standardised type-approval requirements. They define a process through which devices connecting to public networks are checked for compliance, and actions are taken when they are non-compliant. SIM-enabled devices include, but are not limited to, cell phones, dongles, smart meters, and pay-point machines. These Guidelines include a framework system for operationalisation of this process for development in the next financial year.

Type-Approval Inspections

BOCRA is empowered by the CRA Act (2012) to review compliance to type-approval requirements in the communications sector. The Act necessitates the typeapproval of communications equipment to ensure safety for consumers and compatibility with local networks. According to Sections 84 and 85 of the Act, the Authority, in conjunction with the Botswana Police Service and Competition and Consumer Authority (CCA), conducted type-approval inspections in four (4) regions to ensure compliance with provisions of the Act - see Figure 12.



Fig 12: Planned Type-Approval inspection areas - 2020/2021.

Table 10 provides a detailed summary of inspections conducted during the year, as well as the corresponding observations.

DATE	INSPECTION AREAS	# OF STORES INSPECTED	# OF STORES CHARGED	# OF ENTITIES FULLY PAID UP	# OF CONFISCATED GADGETS
23-29 Sep 20	Molepolole	19	6	5	178
23-27 Nov 20	Masunga	9	2	2	9
27-28 Nov 20	Sebina	2	1	1	10
27-28 Nov 20	Tutume	7	0	0	0
30 Nov to 4 Dec 20	Letlhakane	19	4	4	45
5 Dec 20	Rakops	2	2	2	138
1-5 Feb 21	Kang	9	4	3	34
2-4 Feb 21	Hukuntsi	6	0	0	0
8-12 Feb 21	Tsabong	11	4	4	142
11 Feb 21	Bokspits	1	0	0	0
11 Feb 21	Middlepits	1	0	0	0
7-14 Mar 21	Gumare	9	3	3	7
11 Mar 21	Etsha 6	1	0	0	0
15-20 Mar 21	Shakawe	14	0	0	0
12 Mar 21	Seronga	1	0	0	0
TOTAL	15	111	26	24	563

Table 10: Type-Approval inspection statistics.

All non-compliant entities were charged admission of guilt penalties for failure to comply with type-approval requirements by the Botswana Police Service. Fines ranged from P1,000.00 to P2,000.00, depending on the circumstances of the case.

REVIEWS

Technical Services (continued)

One of the key findings of the inspections was that retailers were unfamiliar with the type-approval regulations in place. These circumstances limited their ability to exercise their rights and ensure their safety when purchasing communications devices. As a result of these findings, BOCRA will enhance consumer education targeted at retailers.

Numbering management

Special Number Category - during the year 2020/21, BOCRA allocated four special categories of numbers per operator, as summarised in Table 11, and per guarter as depicted in Figure 13.

MOBILE NETWORK OPERATOR	EMERGENCY #S	TOLL-FREE #S	USSD CODE	SHORT CODE
Mascom Wireless	0	0	4	2
Orange Botswana	0	0	6	6
BTCL	1	23	1	10
TOTAL	1	23	11	18

Table 11: Special Number types assigned MNOs for 2020/2021.

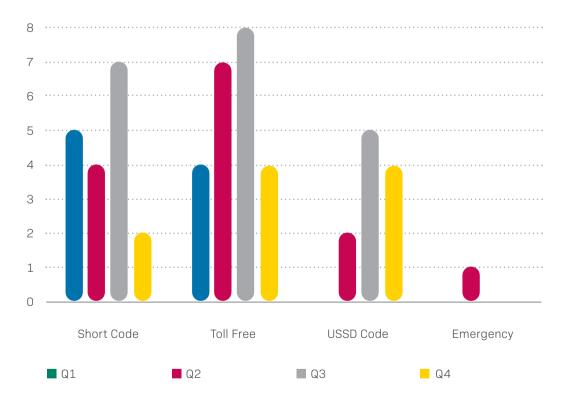


Fig 13: Special number categories allocated during the year 2020/21.

MACHINE-TO-MACHINE NUMBER MIGRATION

Machine-to-Machine (M2M) is a service that provides for direct data communication between devices using a wired or wireless network. For example, Automatic Teller Machines, Points of Sale, Fleet Management Systems.

M2M service operation was initially allowed in the personal and mobile numbering range. Due to the high demand for the M2M number usage, BOCRA directed the Mobile Network Operators (MNOs) to migrate M2M service from the eight digits mobile number range to a dedicated ten-digit numbering block. To facilitate the migration of the numbers to the new ranges, in line with the numbering plan, BOCRA allocated appropriate new numbering ranges to the MNOs.

Figure 14 summarises the M2M numbers allocated to the MNOs, with the blue columns representing the total M2M resources allocated to each MNO to enable the migration process. Other colour columns are the numbers the respective MNOs had to migrate from the mobile numbering block. Some of these numbers have since been returned to the Authority for reuse at the end of March 2021.

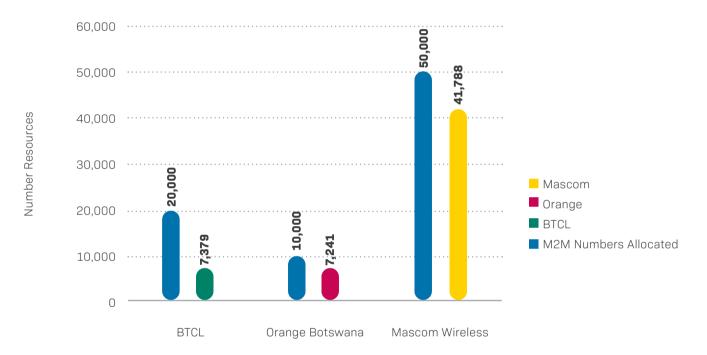


Fig 14: Numbers migrated and allocated for facilitation of migration by the MNOs during 2020/21.

Number Allocation/Assigned

Seven Million Two Hundred Thousand (7,200,000) mobile numbers have been allocated to date. The respective MNO number allocations are shown in Table 12.

MOBILE NETWORK OPERATOR	Numbers Allocated	Allocated in 2020/21	Total Numbers holding
Mascom Wireless	3,000,000	0	3,000,000
Orange Botswana	2,800,000	400,000	3,200,000
BTCL	1,400,000	0	1,400,000
TOTAL	7,200,000	400,000	7,600,000

Table 12: A total mobile numbers allocated as at end of 2020/21.

Technical Services (continued)

Number utilisation

The complete utilisation data from the MNOs are presented in Figure 15, illustrating the total number utilisation versus the total number allocated on the mobile numbering range thus far by quarter for all the MNOs.

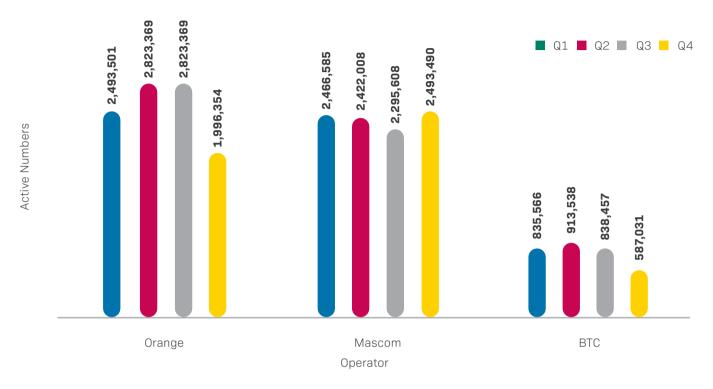


Fig 15: Mobile number utilised by the MNOs for 2020/21.

As discussed above, the decline in the utilisation of the total mobile numbers can be partly attributed to the migration of M2M numbers from level 7 to level 8 M2M numbering blocks. The rises in utilisation from Q1 to Q2 can be attributed to mobile applications for home use, including increased usage due to working from home practices. The decline experienced towards the end of the year, from Q3 to Q4, may be associated with the expanded use of the FTTx (Fibre To The Office/Home/Cabinet) with deployments increasing to improve connectivity. The uptake of the FTTx services led to the deactivation of numbers used for business and home modems. Furthermore, FTTx connectivity provides better bandwidth when compared to radio communication, which is often degraded by environmental conditions such as temperature and humidity. This shift contributed to the decline in SIM cards for internet connections for favourable data bandwidth associated with home connections following the need to work from home during COVID-related movement restrictions.

Only Netway (Pty) Ltd was allocated two thousand (2000) VoIP numbers in 7912 4000 to 7912 5999 of the numbering block for 2020/21.

The total utilisation for all the MONs is summarised in Figure 16.

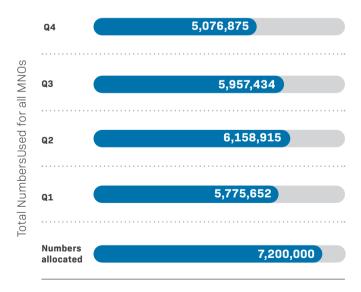


Fig 16: Total allocated versus utilisation for all MNOs by quarter.

ELECTROMAGNETIC FIELD (EMF) MONITORING AND MEASUREMENTS

BOCRA continued to carry out Electromagnetic Field (EMF) measurements across the country. The purpose of the measurements was to ensure that consumers were protected against possible harmful radiation emitted from cellular base stations.

As the country gets closer to the launch of Fifth Generation services (5G) and considering perceptions surrounding the use of 5G and COVID, BOCRA should continue to carry out measurement exercises to ensure compliance with EMF level regulations and inspire consumer confidence.

The EMF monitoring and measurements were carried out on cellular network base stations at Jwaneng, Palapye, Ghanzi, Maun, and Kasane per the 2020/21 Monitoring Plan. Thirty base stations were measured using the NARDA tool referencing the ICNIRP minimum radiation levels measurement methodology. Accordingly, at least six measurements were carried out per base station from a range of directions at the base station. Figure 17 shows ICNIRP reference levels.

Of note are the solid lines that show the limit for the level of Electric and Magnetic field exposure limit for the general public. During each monitoring exercise, every measurement is compared to these limits at every frequency and calculations are performed to show how measurements taken compare with reference levels. Measurement exercises showed that base stations were compliant with established limits for harmful emissions as prescribed by the International Commission on Non-Ionising Radiation Protection (ICNIRP). Figure 18 illustrates exposure at the measured sites.

All 190 measurement portions from the 30 base stations complied to the ICNIRP guidelines with the majority falling in the range of ten thousandths below the set limits, indicating that the base stations radiation levels were compliant with the adopted standards for Electromagnetic Radiation.

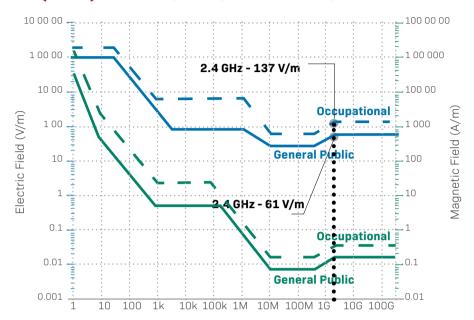


Fig. 17 – ICNIRP reference levels. Source ICNIRP.

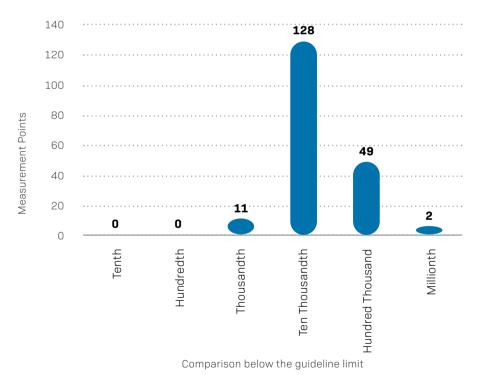
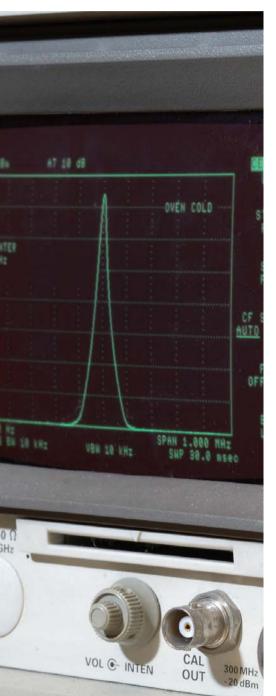


Fig 18: Non-ionising radiation exposure for the 190 points measured.

Technical Services (continued)

SPECTRUM MANAGEMENT (MIGRATION)

BOCRA is responsible for resolving Radio Frequency interferences resulting from increased spectrum assignment to operators among its duties.



One of the service providers was migrated to a different part of the 2600 MHz band to promote efficient use of spectrum and allow for rechannelisation of this band to accommodate Frequency Division Duplex (FDD) and Time Division Duplex (TDD) technologies in the band.

Interference challenges were experienced during the migration process where some base stations were left active by the previous users. The interfering base stations were identified and switched off.

A similar challenge was experienced in Palapye and Mahalapye, where a previous operator had left some base stations active, interfering with the operator assigned the spectrum. The matter was resolved by decommissioning equipment owned by the previous user.

Radio frequency spectrum monitoring system

BOCRA uses radio frequency spectrum monitoring equipment to ensure compliance of radio frequency spectrum licensees with technical parameters and conditions. BOCRA purchased spectrum monitoring vehicles, which are used to monitor spectrum usage and ensure that spectrum is used appropriately and efficiently. During the year, BOCRA successfully installed and commissioned the vehicle with monitoring equipment to be used primarily to augment fixed monitoring sites. The mobile monitoring equipment is convenient for tracking sources of interference. The equipment can measure higher frequencies up to 8 GHz, while fixed sites can only measure up to 3 GHz.

Spectrum monitoring and measurement

BOCRA developed a Spectrum Monitoring Plan that guides the monitoring process of spectrum usage, particularly spectrum that is considered high demand. During 2020 and 2021, BOCRA undertook an initiative to monitor the high demand spectrum usage in the Gaborone area. The monitoring exercise concentrated on measuring spectra assigned to the MNOs to establish if the spectrum is used efficiently and according to licence conditions. The results obtained from the monitoring exercise showed that the spectrum was being used according to licence conditions.

Table 13 summarises measurements of the three MNOs usage of the High Demand Spectrum and their compliance to conditions of the licence using the mobile monitoring vehicle.

BAND	2620 - 2640 (MHZ)	2640 - 2660 (MHZ)	2300 - 2340 (MHZ)
Average Signal level (dBm)	-77		-70.6
Used BW (MHz)		17.9	37.4
Prescribed Max Power (dB)	54	54	54
Max Tx Power (dB)	43	44	49

Table 13: Usage of high demand IMT spectrum by operators

97-140

Spectrum allocation

The demand for broadband connectivity has increased as people embrace online services to do business. The current networks, particularly mobile networks, continue to experience congestion as demand increases. To remedy this situation. BOCRA embarked on a process to license additional Fixed Wireless Access spectrum to off-load traffic and ease congestion.

To facilitate licensing, BOCRA conducted a Demand Assessment in the 2300MHz band to determine the appropriate method for the spectrum release. The assessment results showed that there was generally more demand than the available spectrum in this band. Therefore, a competitive bidding process was established for licensing of this spectrum.

After completing the competitive process, Orange Botswana was awarded the 20 MHz spectrum in the IMT2300 band for a National rollout; this included an obligation to cover 53 towns/villages.

IMT Spectrum Roadmap

Spectrum release roadmaps are necessary for planning purposes for ICT regulators and regulated entities. BOCRA developed an IMT radio frequency spectrum release roadmap spanning three (3) years ending in 2024. The radio frequency spectrum roadmap is intended to guide BOCRA on when to release the IMT spectrum and allowing operators to plan for future trends in technology. Implementation of the roadmap is ongoing, with some IMT bands soon to be released.

Optimisation of the broadcasting plan (GE 84)

In 1984, the International Telecommunication Union (ITU) convened a Regional Administrative Radio Conference in Geneva to establish an Agreement incorporating a FM sound broadcasting plan in the band 87.5 - 108 MHz. Aligned with Articles 7 and 54 of the International Telecommunications Convention, this conference coordinated FM sound broadcast frequencies for countries. According to this plan. Botswana has coordinated 49 sites, each with six FM broadcast channels

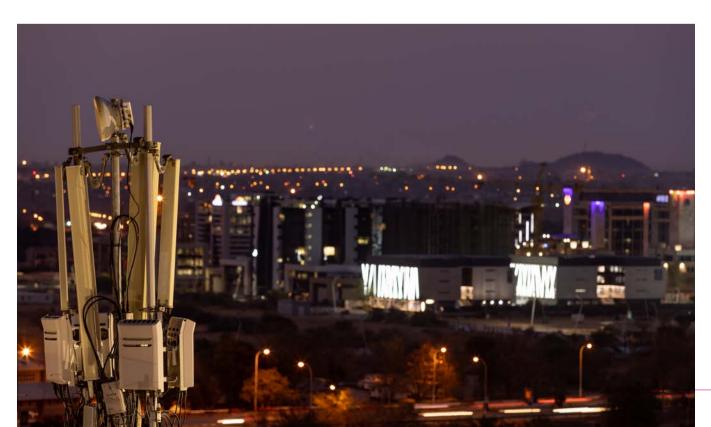
Like other southern African countries, Botswana continues to experience constraints expanding FM broadcasting due to the limited frequencies assigned in the GE 84 plan. These limitations make it difficult to license new regional or national FM broadcasters.

The ITU-R, in conjunction with the African Telecommunications Union (ATU) has initiated a process to optimise the GE84 plan for Africa. The primary purpose of the process is to enhance and identify new frequencies for analogue FM sound broadcasting. In a bid to achieve the above, Botswana submitted her proposals or iterations to ITU-R. The iterations are the country's intended modifications to the plan to acquire more frequencies after considering demands from neighbouring administrations. The process will be completed in December 2021.

Botswana Orbital Satellite Slot (BSS)

BOCRA aspires to obtain a permanent orbital satellite slot with minimum harmful interference for broadcasting services to enhance the possibilities of Botswana launching a satellite in the future. The World Radiocommunication Conference 2019 (WRC-19) established through ITU-R Resolution 559 that 31 African countries, including Botswana, have unusable, harmful interference in their satellite orbital slots allocation.

Botswana initiated satellite frequency coordination to identify a suitable satellite orbital slot. However, 13 countries raised objections indicating that the identified orbital slots will adversely affect their satellite slots and networks. Botswana continues the search for an amicable solution for all the countries involved.



"The need for the licensing framework emanated from the 2018 National Broadcasting Conference, where various stakeholders called for the licensing of campus radios.

BROADGASTING REGULATION

Kweneng FM expansion

Through the UASF, BOCRA undertook a project to expand coverage of commercial FM broadcasters in 33 areas in the Kweneng District considered not economically viable by installing an integrated transmitter system that broadcasts over 40 km. The project covered the villages of Takatokwane, Malwelwe and Salajwe and the neighbouring villages. The expansion of the FM broadcast service project aimed to promote connectivity and accessibility to communications services, particularly in underserved and unserved communities. The installation of a shared transmitter yielded a 0.92% increase in population coverage (18,652 people).

Termination of Maru Tv on DStv Platform

BOCRA received notification from Multichoice and Maru TV announcing termination of the latter from the former's Dstv platform. The Authority engaged Maru TV to establish the way forward regarding its plans to resume service as it still holds a broadcasting licence. Maru TV informed the Authority of its intention to use online platforms to broadcast content and engage various other television stations to carry its content, including Btv.

Campus Radio Licensing Framework

In pursuit of its mandate to facilitate market entry into the communications sector, BOCRA published a Discussion Paper on Campus Radio Licensing Framework and subsequently consulted stakeholders on the framework. The need for the licensing framework emanated from the 2018 National Broadcasting Conference forum, where various stakeholders called for the licensing of campus radios. Campus Radio stations are seen as training platforms for telecommunications/broadcasting engineering and media students to apply academic skills in a realistic environment, readying them for the market.

The draft campus Radio Licensing Framework will be finalised and implemented during the next reporting period.

Monitoring of broadcasting services

In line with its consumer protection mandate, BOCRA monitored broadcasting service parameters such as service availability, local content and advertising performance through the Broadcasting Monitoring System. Through the system, BOCRA received reports and alerts on service downtime. Broadcasters were engaged on the Broadcasting Monitoring System, its capabilities and the parameters monitored. The system was also used to validate the data received through the compliance reports submitted by broadcasters quarterly.

During the period of extreme social distancing, the system revealed that all broadcast services were available throughout, with no downtime and that broadcasters aired more local content, benefitting the local creative sector through royalties.

Further, during this reporting period, the system supplier modifications to the system, including Carambola software, mainly enabling the Authority to analyse data received from the broadcasters.



Fig 19: An operator of the Broadcasting Monitoring System.Source: BOCRA

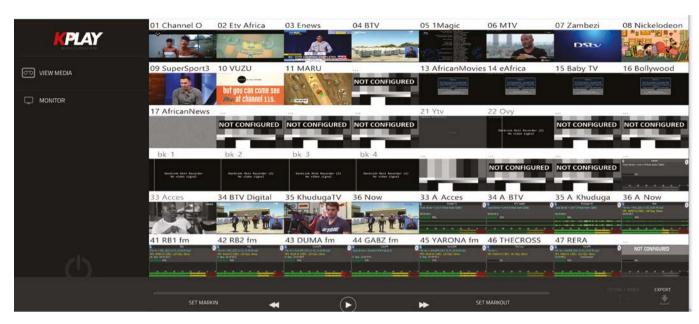


Fig 20: Kplay indicating the FM radio stations & television channels being monitored.

Broadcasting monitoring through Probe

The Authority also monitored the service availability rate of Broadcasters in Hukuntsi using a second-generation digital FM Radio Modulation Analyser, generically referred to as Probe. The tool allowed for easy and reliable monitoring of FM broadcasters through internet protocol.

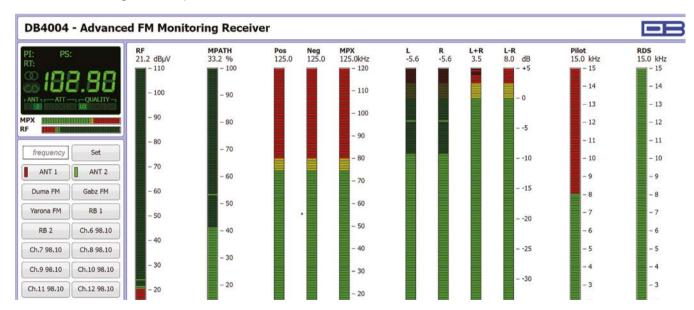


Fig 21: Indicating monitoring FM Broadcasters using the Remote Probe

Broadcasting Regulation (continued)

Local content quota compliance

BOCRA monitors broadcasters for compliance with local content quota requirements in line with the Licence Conditions. Local Content Quota for radio broadcasting is calculated as the total percentage of local music aired over a particular station's overall portion of music. Radio Stations are obliged to achieve a minimum of 40% local content under their licensing conditions.

Single Channel television service local content quota is calculated as a percentage of locally produced programmes over the overall programme, excluding news aired by a particular station. Television stations are obliged to attain a minimum of 20% local content.

STATION	APR - JUN 2020	JUL - SEP 2020	OCT - NOV 2020	JAN - MAR 2021	ANNUAL PERFORMANCE
DUMA FM	63.00%	68.00%	54.00%	63.00%	62.00%
GABZ FM	45.93%	42.95%	43.00%	41.00%	43.22%
YARONA FM	48.64%	50.00%	50.00%	50.00%	49.66%
ACCESS TV	0	83%	93%	93%	89.67%
Ytv	9.80%	16.10%	28.00%	28.00%	20.48%
KHUDUGA TV	0	95.00%	98.00%	98.00%	97.00%
MARU TV	0.00%	95%	94.50%	94.50%	71.00%
RADIO TARGET	40.00%	40.00%	40.00%	40.00%	40.00%
TV TARGET	20.00%	20.00%	20.00%	20.00%	20.00%

Table 14: Local content quota achieved by Broadcasters during this reporting period.

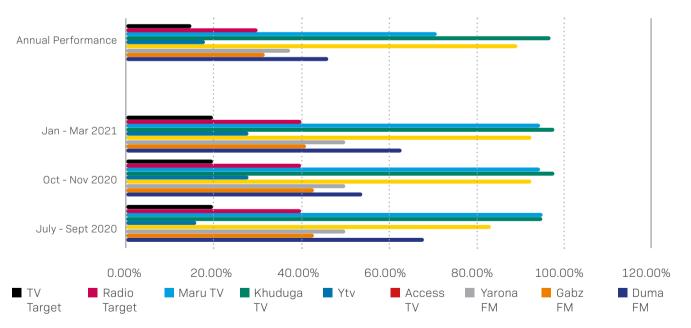


Fig 22: Local content Performance for 2020/2021

Commercial Radio Broadcasters achieved the minimum local content quota of 40%. Gabz FM performance declined towards the end of the reporting period with 41% local content. Duma FM and Yarona FM exceeded the 40% local content guota throughout the reporting period. Television stations surpassed the set threshold of 20% local content. Ytv performed well for the later quarters of the financial year exceeding the 20% local content quota for Television. The station indicated that most of their local content programming was produced in-house.

Service Availability Rate

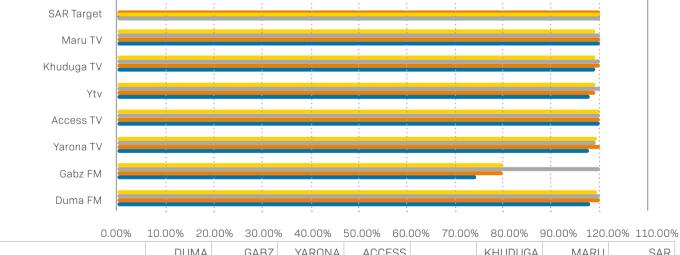
BOCRA monitored operations of the licensed Broadcasters for compliance based on the Service Availability Rate (SAR). SAR is defined as the percentage of time that the broadcasting service is available for access by consumers. Broadcasters are obliged to achieve a minimum 99% SAR.

SAR for the period under review is shown in Table 15.

3 - 1 2

STATIONS	APR - JUN 2020 (%)	JUL - SEPT 2020	OCT - DEC 2020	JAN - MAR 2021	AVERAGE	SHORTFALL
Duma FM	98.00%	99.90%	99.90%	99.50%	99.33%	0.57%
Gabz FM	74.42%	80.00%	99.90%	80.00%	83.58%	16.32%
Yarona FM	97.90%	99.90%	99.20%	99.48%	99.12%	0.78%
Access TV	100.00%	100.00%	99.00%	100.00%	99.75%	0.15%
Ytv	98.00%	99.00%	100.00%	99.00%	99.00%	0.90%
Khuduga TV	99.16%	99.99%	99.98%	99.16%	99.57%	0.33%
Maru TV	100.00%	90.00%	92.00%	99.00%	95.25%	4.65%
SAR Target	99.90%	99.90%	99.90%	99.90%	99.90%	0.00%

Table 15: Service Availability Rate (SAR) for April 2020 to March 2021.



	DUMA	GABZ	YARONA	ACCESS		KHUDUGA	MARU	SAR
	FM	FM	FM	TV	Ytv	TV	TV	TARGET
JAN-MAR 2021	99.50%	80.00%	99.48%	100.00%	99.00%	99.16%	99.00%	99.90%
■ OCT-DEC 2020	99.90%	99.90%	99.20%	99.90%	100.00%	99.98%	92.00%	99.90%
JULY-SEP 2020	99.90%	80.00%	99.90%	100.00%	99.00%	99.99%	90.00%	99.90%
APRIL-JUNE 2020	98.00%	74.42%	97.90%	100.00%	98.00%	99.16%	100.00%	99.90%

Fig 23: Service Availability Rate (SAR) performance 2020 to 2021.

RFVIFWS

Broadcasting Regulation (continued)

SAR for the Broadcasters improved during the reporting year. Notwithstanding, Gabz FM was challenged to attain the SAR of 99.90% due to technical problems with its Lobatse transmission site. The station reported that it experienced interference at the site and was investigating the relocation of transmission infrastructure. Duma FM and Yarona FM performed relatively well.

Television stations attained the established threshold of 99.0% SAR during the reporting period. While Maru tv SAR declined following the termination of service from the Multichoice platform, the remaining television stations performed well.

FM Network Expansion

Commercial radio broadcasters registered a slight increase in FM network coverage during the period under review compared to the last reporting period following the installation of transmitters at Takatokwane, Malwelwe and Salajwe villages. Table 16 presents commercial radio broadcaster FM network coverage and expected percentage coverage per their rollout plans for their licensing period.

FM RADIO STATIONS	JULY - SEPT 2019	OCT - NOV 2019	JAN - MAR 2020	JAN - MAR 2021	% EXPECTED COVERAGE
Duma FM	77.00%	77.00%	77.86%	78.78%	76%
Gabz FM	65.60%	65.00%	65.20%	66.12%	78%
Yarona FM	61.00%	61.20%	62.06%	62.98%	78%

Table 16: Broadcaster network coverage rollout obligations.

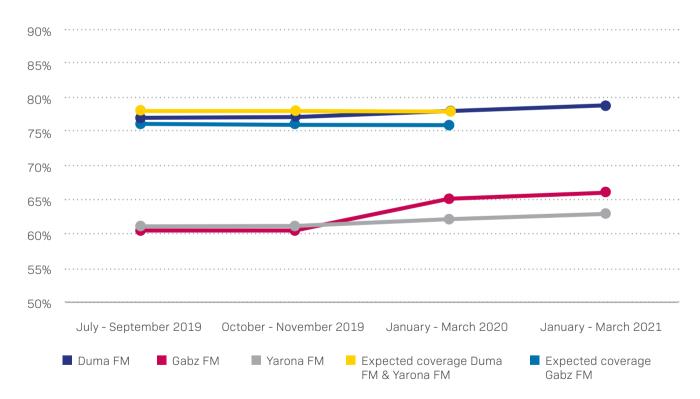


Fig 24: Percentage population FM coverage.

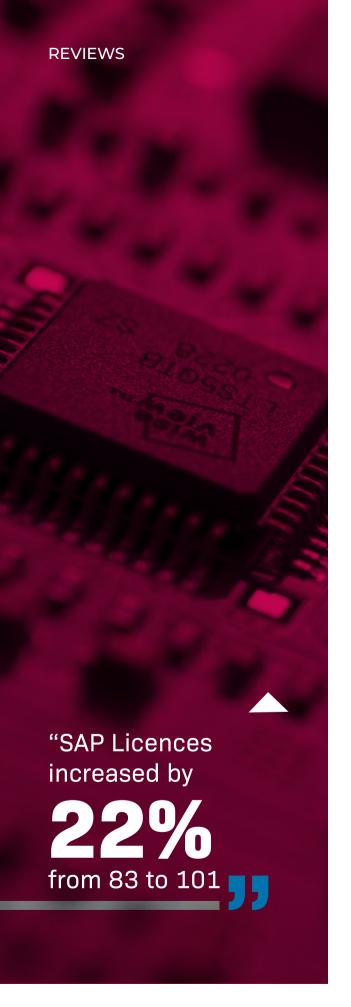
Transmitter locations of the three FM radio stations are as shown in Table 17.

DUMA FM	GABZ FM	YARONA FM
Lobatse	Gaborone	Lobatse
Palapye	Lobatse	Mahalapye
Serowe	Mahalapye	Palapye
Maun	Palapye	Phikwe
Mahalapye	Phikwe	Orapa
Francistown	Serowe	Gaborone
Gaborone	Francistown	Francistown
Orapa	Maun	Maun
Jwaneng	Orapa	Serowe
Kanye	Kasane	Hukuntsi
Ramatlabama	Tsabong	Sojwe
Kasane	Gantsi	Malwelwe
Gantsi	Hukuntsi	Salajwe
Serule	Sojwe	Takatokwane
Sefhare	Malwelwe	
Bobonong	Salajwe	
Molepolole	Takatokwane	
Letlhakeng		
Tutume		
Hukuntsi		
Sojwe		
Malwelwe		
Salajwe		
Takatokwane		

Table 17: Transmitter locations of the three FM radio stations.

Television stations attained the established threshold of 99.0%





IGT LIGENSING

SAP and NFP licences increased by 22% from 83 to 101 and 17% from 41 to 48. Tower management licences remained unchanged and stood at four (4) as at March 2021.

BOCRA also issued three (3) Private Telecommunication Network (PTN) licences to Elephant Back Safaris, Absa Botswana and Debswana Diamond Company. Additional spectrum licences were issued to Microtek, Botswana Telecommunications Corporation, Orange Botswana and Debswana Diamond Company.

Figure 25 compares the number of licences issued during 2020/21 with 2019/20.

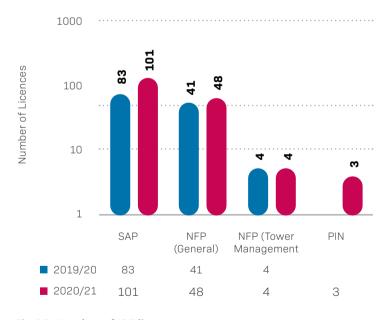


Fig 25: Number of ICT licences.

Allocation of additional spectrum

The prevalence of COVID-19 increased the number of people working from their homes, resulting in MNOs requiring more radio frequency spectrum to meet the demand for broadband services in residential areas. BOCRA responded by assigning additional radio frequency spectrum to Mascom, Orange, BTCL, and BoFiNet to address the high demand. The additional spectrum was assigned temporarily at no charge for an initial period of six months, beginning April 2020. However, the Authority subsequently allowed the operators to use the spectrum until the end of the State of Public Emergency (SoPE) period (September 2021).

During the period under review, the Authority issued one Content Service Provider (CSP) – Free to Air Satellite Commercial Television licence to On Air News (Pty) Ltd, increasing the number of licensees to three. Two further online authorisations for Internet Protocol Television (IPTV) were issued to Demlink (Pty) Ltd and First Entrepreneur (Pty) Ltd, increasing the number of authorised entities from six to eight. Other broadcasting categories remain unchanged. During this reporting period, the Authority renewed the television broadcasting licence for eBotswana, which has also changed its name to Ytv.

Radio licences

BOCRA issued 324 new radio licences compared to 333 issued during the previous year, as depicted by Figure 26.

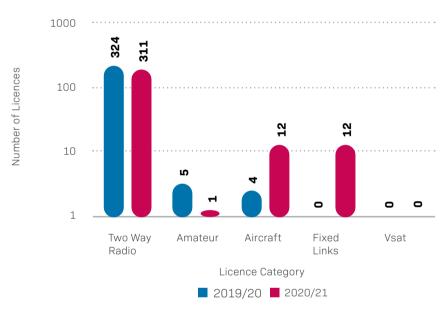


Fig 26: The number of radio communication licences issued during the 2020/21 financial year.

At the end of March 2021, the total number of active licences was 1024, while eight were terminated, as shown in Table 18.

LICENCE TYPE	ACTIVE	TERMINATED
Land Mobile	935	8
Aircraft	49	
Amateur	5	
Fixed links	7	
Alarm	18	
Satellite	10	

Table 18: Radio licences statistics as at March 2021.





POSTAL REGULATION

LICENSING OF POSTAL OPERATORS

The Authority licensed three Commercial Postal operators, namely, Bonesa Distribution (Pty) Ltd, Dulys (Pty) Ltd and Courier Afrique (Pty) Ltd. However, Enlink Freight Services (Pty) Ltd and Skynet Botswana (Pty) Ltd closed operations in Botswana and surrendered their licences, bringing the number of licensed Commercial Postal operators to 29.

Out of 29 licensed Commercial Postal operators, 16 offer domestic and international express and parcel services. Three provide international express and parcel services only, while ten companies only offer domestic express and parcel services. Table 18 presents the market segmentation of the Commercial Postal operators by service offering.

COURIER, EXPRESS AND PARCELS SERVICES	INTERNATIONAL COURIER, EXPRESS AND PARCELS SERVICES ONLY	DOMESTIC COURIER, EXPRESS AND PARCELS SERVICES ONLY
Aramex Botswana (Pty) Ltd	Tri-Optimum Logistics (Pty) Ltd	First Connections Couriers (Pty) Ltd
Botswana Postal Services	Logistixware Botswana (Pty) Ltd	NorthGuys Messaging & Couriers (Pty) Ltd
Courier Solutions (Pty) Ltd	S Couriers (Pty) Ltd	Montel View (Pty) Ltd T/A Drop It
DHL International Botswana (Pty) Ltd		Bonesa Distribution (Pty) Ltd
FedEx Express Botswana (Pty) Ltd		Pelican Moving Company (Pty) Ltd
KTU Express		Avante Couriers & Logistics
Ram Transport Botswana (Pty) Ltd		Dulys (Pty) Ltd
Courier Africa (Pty) Ltd		Acardia Couriers (Pty) Ltd
Sprint Couriers (Pty) Ltd		Cowen Deliveries (Pty) Ltd
TMS Logistics (Pty) Ltd		Wesosmart (Pty) Ltd
Zebra Hub of Excellence (Pty) Ltd		
A2B Logistics (Pty) Ltd		
Delight Express (Pty) Ltd		
The Silver Reserve (Pty) Ltd		
Triton Express (Pty) Ltd		
Pinnacle Express (Pty) Ltd		



Commercial Postal Operators' market share

Figure 27 illustrates the market share of commercial (courier) postal operators measured by the number of items carried by each operator during the period ending March 2021. As in the previous financial year, Sprint Couriers (Pty) Ltd continued to lead in market share, accounting for 65.58% of the market, followed by Botswana Postal Services Limited at 17.14%. DHL International Botswana (Pty) Ltd is third, accounting for 4.48%, and Ram Transport Botswana (Pty) Ltd holds fourth place with 3.43%. The aggregated operators labelled as Others collectively account for 2.80% of the market. These are operators that individually have less than 1.00% of the market share.

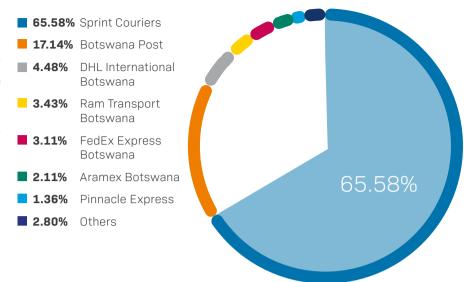


Fig 27: Commercial Postal Operator market share for the period ending March 2021.

Source: BOCRA



Total mail volume for the Postal Sector

Analysis of mail volumes recorded between April 2020 and March 2021 shows an increase of 27% in the movement of letters and parcel items. This increase in mail volumes, especially domestic mail volumes, is attributed to the COVID-19 situation. During this period, movements were restricted across the region, encouraging people to send letters and parcels via the postal network. During the period ending March 2021, the postal market recorded 23,358,417 mail items, compared to 16,958,585 mail items registered during the preceding period.

Letter mail movement was higher than parcel mail – as shown in Figure 28. Domestic letter mail items constituted 88.5% of the total mail volume (20,662,423 items), while international

letter mail items accounted for 4.7% (1,094,638 items). Domestic parcel mail items accounted for 5.9% (1,366,852 items), while international parcel mail constituted 1.0% (234,504 mail items) of postal mail volume.

Domestic letter items recorded a substantial increase of 5,853,557 mail items (28%) from a total of 14,808,866 recorded for the year ending March 2020. In contrast, international letter mail items registered a moderate decline of 160,472 mail items (15%) from a total of 1,255,110 recorded the previous year. The movement of parcels experienced remarkable growth of 662,958 domestic parcel items (49%) and 43,789 international parcel items (19%).

Postal Regulation (continued)



Fig 28: Total mail volumes for the period ending March 2021.

Impact of COVID-19 pandemic on the Postal Sector

As depicted in Figure 27, Mail volume trends show that the COVID-19 pandemic had a negative impact on the Postal Sector. The figure illustrates a considerable decline in the movement of mail items for all mail categories between June 2020 and September 2020. The mail volumes declined from a minimum of 64.7% up to a maximum of 99.9% in mail items per operator. Postal operators attributed this decline to the impact of the national lockdown - 2nd April to the 22nd May 2020 and the Greater Gaborone region lockdown that followed from 30th July to 13th August 2020.

Postal operators indicated that businesses categorised as non-essential service providers during these lockdowns were forced to close operations, leaving postal operators to deliver mainly items regarded as essential goods. Hence, the decline in the number of items carried during those periods.

Furthermore, operators that offer international courier services indicated that COVID-19 movement restrictions led airlines to suspend operations, which resulted in the decline in the movement of international mail. Moreover, operators stated that the cancellation of flights between South Africa and Botswana resulted in goods from other countries being

transported by road between these two countries, causing delays in the delivery of goods. These delays were caused by drivers needing to wait for their COVID-19 test results at border crossing points before entering Botswana. Operators indicated that these delays discouraged customers from ordering goods internationally.

International letter mail items were the most affected mail category during the quarter ending September 2020. This category recorded a decline of 949,978 items (99.2%) for Incoming Cross Border letters from 957,746 items registered for the quarter ending June 2020 at 7,768 items. Outgoing Cross Border recorded a decline of 99% (297,068 items from 297,364 items) reported for the quarter ending June 2020 to 296 items for the quarter ending September 2020.

Notwithstanding, the sector recorded an increase in mail volumes for all mail categories during the quarter ending December 2020, save for domestic letter mail items which registered a decline of 295 044 (13.8%) in domestic letter items from a total of 2 133 808 items recorded during the quarter ending September 2020. Incoming Cross Border letter items registered the highest volume growth, increasing

by 65,711 (845.9%) letter items from 7,768 recorded for the quarter ending September 2020 to 73,479 letter items registered by December 2020. Outgoing Cross Border letter items and Domestic Parcels items also identified a considerable increase in volumes having recorded an increase of 72 (24.3%) letter items and 38,677 (20.1%) parcels items, respectively.

During the quarter ending March 2021, the sector recorded a significant increase in Outgoing Cross Border Parcels of 3,470

(40.4%) items from a total of 8,586 parcel items registered for the quarter ending December 2020. Domestic Letter items and Domestic Parcel items also recorded a marginal increase of 42,221 (2.3%) and 19,939 (8.6%) items, respectively. However, Incoming Cross Border Letter items registered a decline of 17,834 (24.3%) from 73,479 items recorded during the quarter ending December 2020. Incoming Cross Border Parcels items registered a drop of 13,833 (41.8%) items from 33,127 items registered for the quarter ending December 2020.



Figure 29. Movement of mail volumes between April 2020 and March 2021.

Approval of Botswana postal services Limited tariffs

During the period under review, Botswana Postal Services Limited submitted a proposal to BOCRA to review tariffs following Section 90 of the CRA Act (2012) as read with Section 68 (3) of the same Act. The former mandates service providers to file their proposed tariffs with the Authority for approval. At the same time, the latter requires a Public Postal Operator to provide Universal Postal Services on a cost based-plus tariff. In this regard, a Public Postal Operator's pricing structure shall reflect the underlying costs of providing the services with a reasonable mark-up on the charges. BotswanaPost proposed to adjust its tariffs to ensure that its operations remained sustainable in the face of increasing input costs due to inflationary pressures.

The Authority approved the proposed price increases by BotswanaPost, which covered various services ranging from Postal Box rental to postage. The price increase for Postal Box rental, Postal Box Locks & Key replacements and New Bags ranged from 4% to 7%. Price increase for Postage Stamps for Standard, Large and Oversize letters ranged between 10% and 40%. Other services included Registered letters destined for the Rest of Africa, Europe and Rest of the World Zones, adjusted by between 60% and 100%. The approved tariffs were implemented with effect from the 1st of October 2020.



During the reporting period, the CIRT subscribed and collaborated with various reputable Cybersecurity companies worldwide that provide services such as threat feeds, incidents alerts and attacks.

Incident threats detected during the year include Botswana compromised websites, malware propagation, HTTP flood attack, Cisco installation vulnerability, open port mapper, SSL vulnerable servers, Botnet infection, vulnerable exchange websites, malicious code, and phishing.

COMM-CIRT engaged its constituents through the publication of security-related awareness bulletins such as news alerts. It disseminated this information through e-mails to subscribers and sent e-newsletter to all members for emerging cyber security threats and vulnerabilities. These notices included recommendations on how they could safeguard against such attacks.

Impact of COVID-19 pandemic on **COMM-CIRT constituents**

Cybercriminals took advantage of the COVID-19 pandemic by spreading misinformation using email phishing attacks, social engineering, fraud websites, fraudulent sale of counterfeit goods, and malicious applications of corona effect updates. As organisations implemented "Work From Home" conditions and policy to address COVID-19 movement restrictions, employees are no longer surrounded by cyber secure working environments. They have become highly valuable and vulnerable targets for cybercriminals. COMM-CIRT advised

constituents to avoid websites without an SSL certificate and only visit websites with https addresses as security protocols. Employees were encouraged to store their confidential data in secure cloud-based applications and connecting to company network infrastructure using virtual private networks. COMM-CIRT encouraged its constituents to use strong, complex passwords that are hard to decode and two-factor authentication to keep their accounts hard to access by hackers.

Country Code Top Level Domain (ccTLD)

The Authority manages and administers Botswana's country code Top Level Domain (.bw ccTLD) Registry. The registry maximises the utilisation of domain names and IP addresses to meet consumer demands and promote and maintain competition in the communication market following the Internet Corporation for Assigned Names and Numbers (ICANN) Policies and Procedures.

The .bw domain names have shown significant growth, with registered domains at 10,409 compared to 7,847 recorded in the previous financial year. Eight hundred and eighteen more domains were registered during this reporting period, bringing 2,562 new registrations for 2020/21.

While 1,072 domains were deleted during the same period, this process saw a fall of 378 less deletions than the previous year (1,450). This continued decline in domain deletions is a positive trend towards the Authority's desired zero deletions.

The Authority introduced and released three more zones in the .bw namespace - me.bw, agric.bw and shop.bw. The main objective of introducing these new domain names was to assist with the digital transformation through co-promotion of the agricultural sector and e-commerce.

BOCRA registered eleven additional registrars during the period under review, compared to four during the previous year, totalling 76. Nine (9) of these new Registrars were local companies.

ccTLD cyber threats

The registry continued to receive malicious attacks from unknown actors who use the Botswana namespace as a platform to launch cyber-attacks. The Authority constantly monitored attacks and informed the owners of websites and hosting companies, allowing them to take action. The most common attacks recorded were web shell and phishing attacks. The ccTLD unit recorded 15 phishing takedowns during the year under review, which were all resolved.

Information Technology

BOCRA upgraded its core Server and Networking Information Technology (IT) infrastructure to replace obsolete equipment with more secure, up-to-date equipment during the reporting period. The new infrastructure was designed to be robust and scalable. In the future, it enabled BOCRA to have improved Disaster Recovery and Business Continuity capabilities and handling different IT requirements.

Accreditation of secure electronic signature providers

The Authority accredited LAWtrust, a South African Foreign Electronic Signature service provider under the Electronic Communications and Transaction Act (ECTA). The company provides secure electronic signatures under the ECTA provisions.

Certification of Electronic Records systems

BOCRA received one application for the certification of the electronic records system under the Electronic Records (Evidence) Act, which was referred to the Auditors for assessment. The other two applications received were referred back to the Applicants for additional information.

new registrations

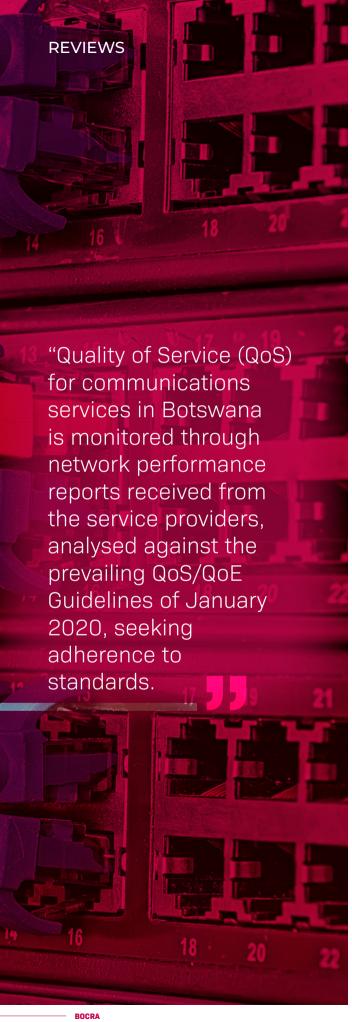
for 2020/21

818

more domains were registered during the reporting period

10,409

.bw domain names registrations for 2020/21



NETWORK QUALITY OF SERVICE

The Authority monitored a list of Key Performance Indicators (KPIs) over the year:

- **Drop Call Rate (DCR)** target 2% maximum: refers to the percentage of calls cut before the speaking parties finished their conversation. The DCR applies to data drop rate and voice drop rate.
- Call Set-up Success Rate (CSSR) target 98% minimum: refers to the percentage of successful calls established by the customer.
- Congestion Rate (CR) target 2% maximum: refers to the percentage of failure to access a traffic channel during a call set-up.
- Network Availability (NA) target 99% minimum: refers to the availability of network equipment and software used to set up a call.
- Handover Success Rate (HSR) target 95% minimum: refers to the percentage of the ongoing calls transferred from one channel to another.
- SMS Delivery Success Rate (SMS DSR) target 99% minimum: refers to the percentage of sent messages received by the intended recipient(s).

During the reporting period, the Authority introduced KPI monitoring. Data KPI monitoring was introduced using a staged approach. In this report, only Data Drop Call and Data Call Setup Success Rate are presented. Future reports will cover other KPIs such as Data Throughput.

NETWORK PERFORMANCE

The Authority conducted an audit of QoS services during the year, providing an independent position on the performance of the mobile data networks. Umlaut conducted the audit, an international network benchmarking services company. The results of the QoS audit report are also discussed in this report.

Network drop call rate

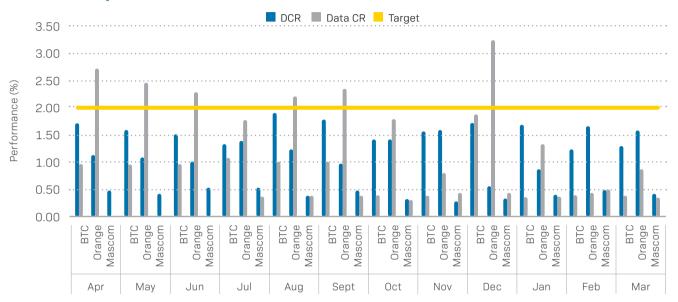


Fig 30: Drop Call Rates.

All operators were able to maintain good performance for voice DCR over the year. Mascom and BTC were within target for data DCR. Orange started the year with unsatisfactory performance but was within target by September. Orange underperformed again in December where data usage was higher than average. From mid-2019 until mid-2020, Orange carried out a significant network improvement project, hence falling within target in September 2021. The performance of the major network operators is summarised in Figure 30.

Congestion rate

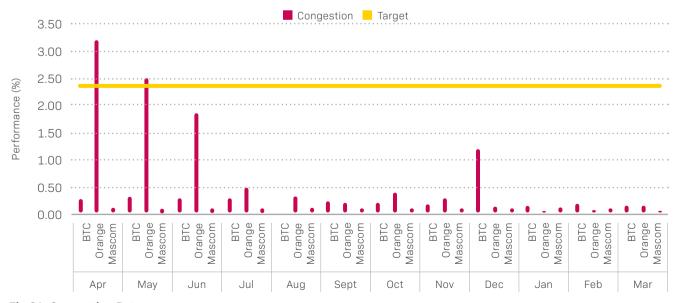


Fig 31: Congestion Rate.

BTC and Mascom were within the target of 2% for congestion for the whole year, while Orange failed to reach their target during April and May. The Authority has observed significant improvements to address increased traffic and working patterns across networks.

REVIEWS

Network Quality of Service (continued)

Congestion was primarily caused by the growing demand for data services, requiring increased broadband infrastructure investment. Land authorities' slow turnaround times in responding to requests for land for new base station construction and theft of backup power batteries have all contributed to congestion.

Operators continue to invest in network improvements. Operators have grown 4G broadband coverage to accommodate the increasing demand for data services. BOCRA also plans to release more spectrum to support the growth of bandwidthintensive services.

Network availability and SMS success rate

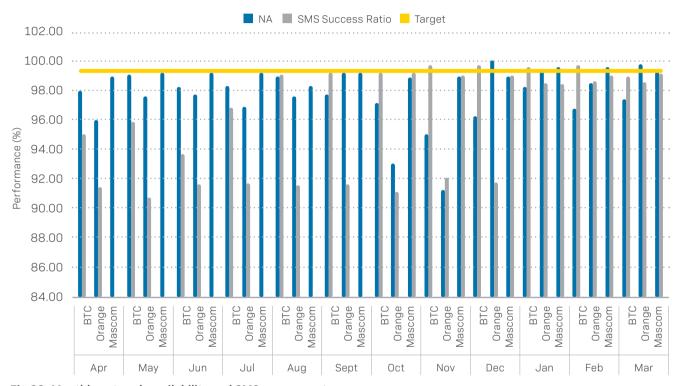


Fig 32: Monthly network availability and SMS success rate.

Meeting targets for network availability and SMS delivery success rates presented challenges for all three operators during the reporting period. Prolonged power supply interruptions drove low network availability during the year. Battery theft also contributed to lower network availability in some rural areas, where they provide backup power.

The SMS delivery success rate was not meeting the 99% target for the whole year. Operators explained a low SMS delivery success rate due to a significant number of disconnected or dormant recipients. By year-end, a decision was reached to exclude bulk SMS from the computation of SMS KPI. However, subscribers are occasionally disconnected in most rural villages and settlements, resulting in low SMS delivery KPI.

"Prolonged power supply interruptions

drove low network availability during the year. Battery theft also contributed to lower network availability in some rural areas, where they provide backup power.

Call setup success rates

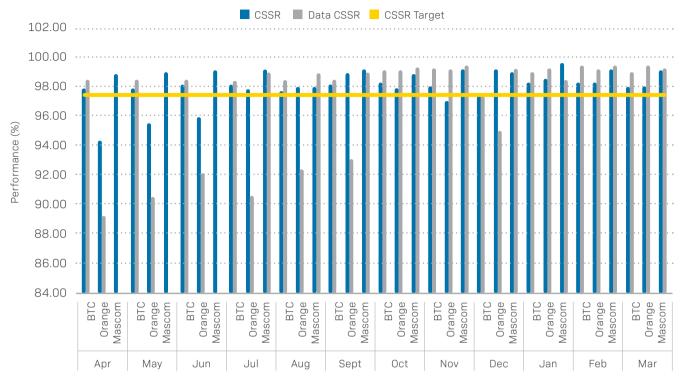


Fig 33: Monthly call setup success rate.

Orange recorded low performance between April and September while it was implementing the network upgrading project. BTC and Mascom performed within the target range for voice and data Call Setup Success rates for most of the year.

Handover Success Rate



Fig 34: Monthly Handover Success Rate

All operators performed above target Handover Success Rate year-round.

Network Quality of Service (continued)

SUMMARY

The results above were computed using the average monthly performance of each site. Segregated national performance of individual sites indicated challenges in some areas, which operators continued to address with BOCRA oversight to ensure that prolonged periods did not persist.

Unsatisfactory QoS continued to be a cause of concern for the Authority. As a result, BOCRA engaged various stakeholders, including the Ministries of Transport and Communications and the Ministry of Land Management, Water and Sanitation Services, to solve delays in land allocation for the construction of base stations. Increasing demand for data services exacerbated by the advent of COVID, which resulted in increased Internet usage, will continue to put pressure on networks with implications for QoS.

BOCRA, through the UASF, continued to facilitate the faster rollout of 4G networks in remote and rural areas to help accommodate the increasing demand for high bandwidth data services. BOCRA also created the Department of Networks and Quality of Services to enhance the monitoring of QoS.

QoS audit results

In February 2021, BOCRA engaged Umlaut to conduct an independent QoS audit of all three mobile networks in Botswana. The methodology involved drive tests in selected areas around the country which were carried out from 14 February to 12 March 2021, and crowdsourcing data collected between week 39 of 2020 and week 9 of 2021. Both test methods provided performance for voice and data services and an indication of network signal performance. Figures 37 and 38 indicate the drive test routes and the crowdsourcing data collection points.

"BOCRA, through the UASF, continued to facilitate the faster rollout of

networks in remote and rural areas

to help accommodate the increasing demand for high bandwidth data services.

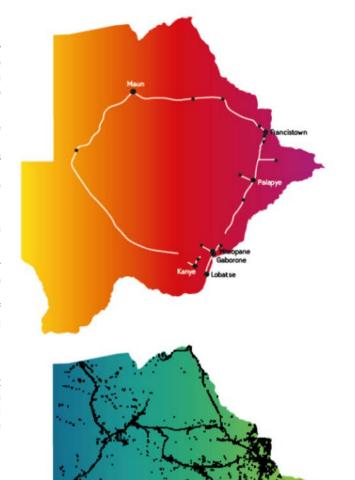


Fig 35 & 36: Drive test routes and the crowd sourcing data collection points.

87.0 %

Umlaut developed a benchmarking framework that allocated a maximum possible score of 1,000 points to each service, distributed as follows:

- 200 for crowdsourcing
- 480 for Data
- 320 for Voice

	MAX SCORE	ORANGE	втс	MASCOM
VOICE	320	99	23	40
Voice Overall Drive test	320	31%	7%	12%
DATA	480	147	137	77
Data Overall Drive test	480	31%	28%	16%
Crowdsourcing Quality	200	144	132	120
Broadband Coverage	100	85%	73%	88%
Download Speed	60	70%	53%	46%
Latency	40	42%	68%	10%
TOTAL	1000	390	292	237

Table 20: Network performance per operator.

Orange was the market leader with 390 points, BTC with 292, and Mascom last with 237 points. None of the operators scored more than 500 points (50%) of the maximum possible score, indicating low performance by all the operators. The operators were found to have opportunities to improve their scores in short to medium term. Low performance was attributed to poor network coverage along the main roads, no voice over LTE in Botswana or wideband codec and low LTE deployment in rural areas.

Base station rollout

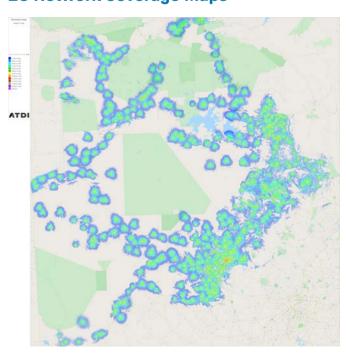
Following the increased demand for data services due to COVID-19 movement restrictions, operators improved their network, resulting in new sites nationwide. Table 20 depicts the deployment of sites for each operator per technology as at March 2021. The table indicates that more 4G base stations were deployed than the previous year to address the increase in data usage. The number of base stations for 2G reached 2,268 compared to 2,252 recorded during the last year. 3G increased from 1,591 to 1,648, and 4G rose from 1,340 to 1,359. Figures 36, 37 and 38 indicates the network coverage for the three operators per technology.

2,2682G base stations in 2021 from 2,252 in 2020

TECHNOLOGY	OPERATOR	NO OF BASE STATIONS
	втс	627
2G	Orange	660
	Mascom	981
	втс	175
3G	Orange	646
	Mascom	827
	втс	429
4G	Orange	398
	Mascom	532

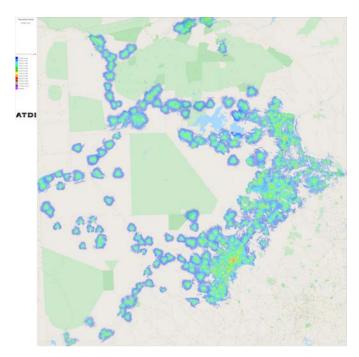
Table 21: Number of base stations per technology.

2G Network Coverage Maps

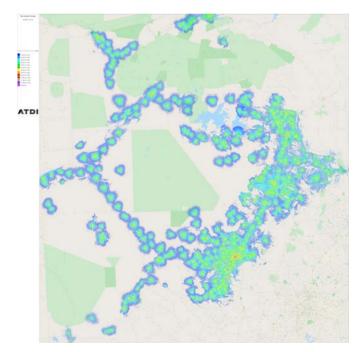


REVIEWS

Network Quality of Service (continued)



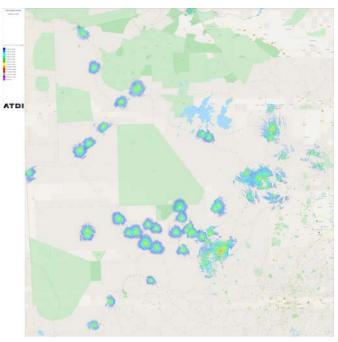
Orange 2G



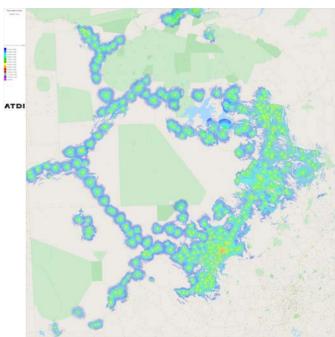
Mascom 2G

Fig 36: Network Coverage Maps 2G

3G Network Coverage Maps

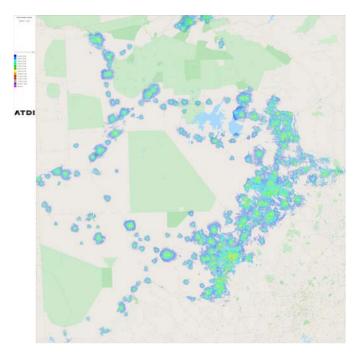


BTC 3G



Orange 3G

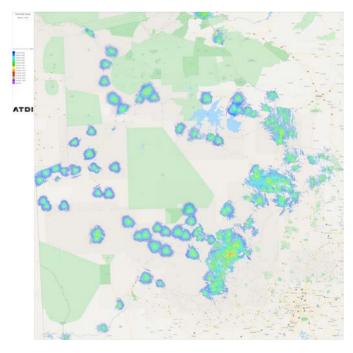
1,648 3G base stations in 2021 from 1,590 in 2020



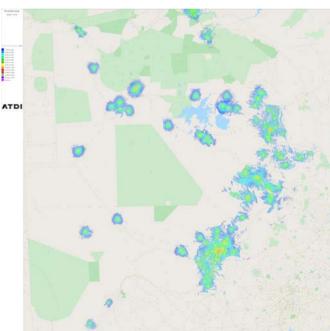
Mascom 3G

Fig 37: Network Coverage Maps 3G

4G Network Coverage Maps



BTC 4G



Orange 4G

Mascom 4G

Fig 38: Network Coverage Maps 4G

1,359 4G base stations in 2021 from 1,340 in 2020

REVIEWS

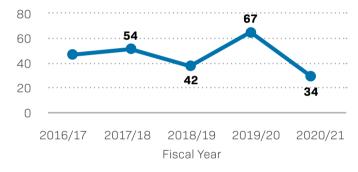
"In line with the CRA Act (2012) provisions, BOCRA is mandated to ensure that, as far as is possible, safe, reliable, efficient, and affordable services are provided in the regulated sectors throughout Botswana.

GOMPLIANGE AND MONITORING

To this end, the Authority's regulatory processes are continuously evolving, with new consumer protection initiatives to monitor the performance of regulated sectors. During the year under review, the Authority engaged in complaints resolution and investigations; continuously tracked and monitored licensees' compliance and carried out appropriate enforcement action against non-compliant licensees.

Complaints resolution

One of the Authority's consumer protection mandates is to resolve complaints and disputes from consumers and licensed operators. In line with its complaints handling procedures, BOCRA is responsible for facilitating the investigation of escalated consumer complaints against service providers, where sufficient and appropriate substantiated evidence exists. BOCRA encourages complainants to exhaust complaints handling processes at their respective service providers before escalating them to the Authority. BOCRA received and addressed 34 cases during the period under review, with a 91.2% resolution rate achieved. Only three (3) complaints remained outstanding at the end of March 2021. The Authority registered 49.3% fewer cases in comparison to the previous reporting period. The reduction in the number of issues escalated was attributable to improved consumer knowledge of the BOCRA complaints handling procedures.



Number of Complaints received

Fig 39: Five year trend analysis of registered complaints.

Complaints Received During the Fiscal Year

As with preceding years, most complaints escalated to the Authority were attributable to Billing, Internet, and Mobile Money Services. Mobile money and Internet-related complaints accounted for 26.5% and 20.54% of cases registered, respectively. Billing complaints registered with the Authority only accounted for 11.8% of all escalated cases. A significant decline compared to the 2019/20 financial year, where 22.5% of reported cases were related to billing.

Detailed analysis of the type of complaints registered with the Authority and the frequency thereof is captured in Figure 40.

Improved customer knowledge

The reduction in the number of issues escalated was attributable to improved consumer knowledge of the BOCRA complaints handling procedures.



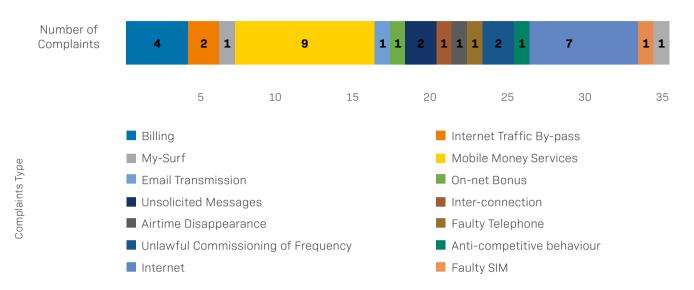


Fig 40: Types of complaints registered with BOCRA.

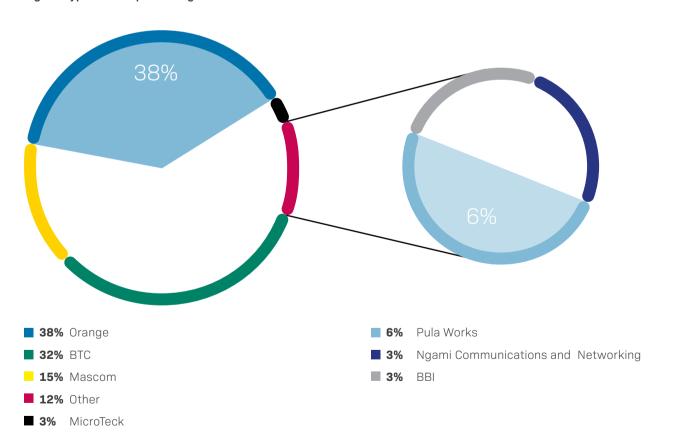


Fig 41: Cases registered per operator.

Figure 41 illustrates the distribution of escalated complaints amongst some of the regulated entities and retail outlets.

Compliance and Monitoring (continued)

Orange had the highest number of complaints escalated to BOCRA, with 13 complaints reported against the operator. 69% of the complaints lodged against Orange were on issues related to mobile money, with customers mostly complaining about transaction failures. Compared to the preceding year, this was a significant increase of 25% from the 44% previously recorded, with the operator engaged to ensure that all issues were adequately resolved.

BTCL had the second-highest number of complaints escalated to the Authority, with ten complaints registered. As with the previous year, most of the cases reported were internet related with customers complaining of slow to no internet.

Mascom had the lowest number of cases against it, with only five complaints escalated to the Authority - a significant improvement, suggesting that the operator has enhanced how it handles consumer complaints.

The Authority facilitated operational meetings with all Operators around their complaints handling processes. This process was intended to ensure that systems and procedures were in place to protect the interests of consumers. Furthermore, BOCRA launched a complaint form in April 2020, so complainants could lodge unresolved complaints directly against service providers. This complaint form reinforced the need for consumers/complainants to ensure that they routed and exhausted all complaints processes before escalating issues to BOCRA. Fundamentally, the Authority believes this directly impacted the number of complaints registered as complainants were continuously advised to escalate matters to BOCRA only if they had exhausted all complaints channels with their respective operators.

Compliance audits

BOCRA reviewed 14 licensees for compliance with regulatory requirements across all sectors, including Broadcasting, Postal, and Information Communication Technology (ICT). The critical audit areas interrogated during the compliance reviews included the following:

- Consumer Protection
- Payment of Fees
- Performance Reporting
- Products & Packages
- Tarrifs
- Roll Out Obligations

The level of compliance of engaged licensees was relatively low, with an average rate of 55% registered across all sectors. In comparison with the preceding financial year, however, the compliance rate had increased by 19%. Although there

was a notable improvement in compliance by engaged licensees, it was observed that recently reviewed licensees were generally unfamiliar with licence conditions. BOCRA will increase outreach targeted at licensees to enhance conformity by licensees and ensure full compliance.

As with the previous reporting periods, the Authority continued to review and monitor the compliance of BOCRA-registered security companies with terms of their registration including payment of registration fees. From a selection of nine security companies identified for review, the Authority recovered P836,156.40 constituting 88% recovery of outstanding licence fees.

With the implementation of the Penalty Framework in the upcoming financial year, it is expected that there will be a significant improvement in the level of compliance across all regulated sectors.

Enforcement

Under the CRA Act (2012), the Authority is vested with enforcement powers such as imposing civil penalties or other conditions on a licence. These powers include suspension or revocation in the event of contravention or failure to comply with any lawful direction or requirement of the Authority.

The Authority undertook enforcement activities for non-payment of licence fees and non-operational licensees during the period under review.

Business Continuity Plans and Disaster Recovery

BOCRA BCM

BOCRA is committed to maintaining a comprehensive Business Continuity Management (BCM) programme to ensure business resilience under extraordinary conditions. The Authority facilitated the review of its BCM Policy which primarily sets out the intentions and direction of the organisation concerning its BCM and disaster recovery practices during the period under review. The Authority continually reviews BCM & Disaster Recovery (DR) systems and processes.

Sector BCM

Following the development and approval of the sector BCM and DR Guidelines, the Authority continued to monitor regulated entities' compliance. The Guidelines provide direction for all licensees for BCM and DR process development and implementation, ensuring service availability and recovery of business processes in the event of a disaster. Fiftyone licensees were engaged to commence guideline implementation during the period under review with tracking and monitoring, revealing 34.8% compliance.

"The need for the licensing framework emanated from the 2018 National Broadcasting Conference forum, where various stakeholders called for the licensing of campus radios.

LOGAL, REGIONAL AND INTERNATIONAL PARTIGPATION

LOCAL PARTICIPATION

Commemoration of Girls in ICT Day 2020

BOCRA joined the local ICT industry and the international community in commemorating the Girls in ICT Day 2020. Held under the theme, Inspiring the Next Generation, the 2020 event was hosted online by the ITU and featured panellists from all continents and time zones sharing experiences and challenges that girls and women faced in accessing information, especially during COVID-19.

The Girls in ICT Day is an initiative that seeks to expose the girl-child to career opportunities in the ICT field. As a leading UN agency in telecommunication and ICTs, the ITU commemorates the event annually to encourage stakeholders to reduce and balance the digital gender gap at all levels.



Local Participation (continued)

World Telecommunications and Information Society Day 2020

Following the announcement the postponement of the annual World Telecommunication and Information Society Day (WTISD) 2020 by the Ministry of Transport and Communications, BOCRA published a media release to address the theme of the event: "Access a Better World." The media release sought to remind the local ICT stakeholders of the commemoration and its theme that presented a unique opportunity for the ITU membership to commemorate ICTs' contribution to the advancement of the Information Society.





World Radio Day 2021

World Radio Day (WRD) is commemorated annually on the 13th of February. The day was proclaimed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) to raise awareness about the importance of radio among the public at large.

World Radio Day 2021 (WRD'21) was commemorated under the theme New World, New Radio with the following sub-themes: Evolution, Innovation Broadcasters Connection. joined the Ministry of Transport and Communications, UNESCO and BOCRA to virtually commemorate WRD 21. Stakeholders leveraged the event to sensitise members of the public about the importance of the radio in informing, educating and entertaining people. Various speakers took part in the virtual event to speak about the importance of the radio for information dissemination and the challenges faced by conventional radio brought about by ICTs.

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REGIONAL PARTICIPATION

CRASA Annual General Meeting

BOCRA took part in the 9th Annual General Meeting (AGM) of the Communications Regulators' Association of Southern Africa (CRASA), which was convened in August 2020 via video conference and officially hosted by the Republic of Zambia.

The AGM addressed several agenda items, including reports from statutory committees and related committee operational plans for the 2020/21 period; CRASA Financial Planning and performance; CRASA Annual Report; and the Election of the Executive Committee.

In line with CRASA's mandate of regional harmonisation, the AGM specifically discussed issues of regional interest, including, but not limited to, the following:

- Revision of SADC Radio Frequency Spectrum Allocation Plan (RFSAP);
- Revision of the Short-Range Devices Framework;
- Development of SADC Radio Frequency Spectrum Policy Model;
- Retail Broadband Prices in SADC;
- Development of the SADC Guidelines on Mutual Recognition on Type Approval of Electronic Communications Equipment; and
- Monitoring and Evaluation (M&E) Report on Implementation of Postal Regulatory Guidelines.

The AGM is the highest decision-making body of CRASA, which seeks to review the affairs of the Association and progress on implementation of policy direction from SADC Ministers of ICT. As the Treasurer of CRASA, BOCRA presented the Financial Report and represented Botswana's interest, such as the SADC Roaming Agreement.



REVIEWS

Regional Participation (continued)

World Radiocommunication Conference 2023 (WRC-23)

Botswana attended the first SADC WRC-23 preparatory meeting whose objective was to review the outcome of WRC-19, set the structure for WRC-23 and review the terms of reference for chapter coordinators and agenda item rapporteurs.



Botswana has assumed the Chair of Chapters dealing with satellite issues and vice-chair to chapters dealing with general matters. The second SADC WRC-23 preparatory meeting, convened in March 2021, focused on considering the following input documents:

- The RF Spectrum Stocktaking and studies related to WRC-23;
- Proposals from industry players from the SADC region and beyond;
- The outcomes of the 85th Radio Regulations Board (RRB) meeting concerning SADC Member States Resolution 559 submissions;
- Proposals and outcomes of the various ITU Study groups and working parties; and
- Development of the SADC Preliminary Common Positions on WRC-23 agenda Items and preparation of the SADC input contributions to the first ATU Working Group workshop.

The ATU WRC-23 preparatory meeting adopted the recommendations made by the sub-regions, and Botswana was co-opted into the ATU WRC-23 structures as vice-chair of Chapters dealing with Satellite Regulatory matters.

The World Radiocommunication Conference (WRC) is a conference organised every four years by the ITU to review and, where necessary, revise the Radio regulations. Conference proceedings include a series of preparatory meetings that formulate key documents and positions for agreement before the event.

The WRC-23 will, among other things, discuss specific Agenda items with a view to the increasing availability of frequencies for new broadband services. This issue will be considered in Agenda items under Chapter 1, focusing on Land Mobile and Fixed services with emphases on International Mobile Telecommunications (IMT). The Conference will view other items that may impact frequencies used for radio astronomy, Earth remote sensing and satellite communications.

INTERNATIONAL PARTICIPATION

Internet Corporation for Assigned Names and Numbers (ICANN)

ICANN is a multi-stakeholder entity where Governments participate alongside the domain names industry, the technical community, business, non-commercial users, and civil society. ICANN's mission is to coordinate policy development related to unique Internet identifiers through a multistakeholder open and transparent policy development process. ICANN holds three global annual meetings to discuss various Internet policy issues through their Community Forum, Policy Forum and Annual General Meetings.

BOCRA is the ccTLD manager of the country code top-level domain ccTLD or (.bw) domain name. The Authority is focused on the Country Code Names Supporting Organisation (ccNSO), a body within the ICANN structure created for and by country code top-level domain name (ccTLD) managers and the Government Advisory Committee (GAC). GAC advise on public policy aspects of specific

issues where ICANN has responsibility. GAC advice has special status under the ICANN ByLaws since the advice must be taken into account by the ICANN Board; where the Board proposes actions inconsistent with GAC advice, it must give reasons for doing so and attempt to reach a mutually acceptable solution.

During the period under review, the Authority attended the ICANN 68 Virtual Policy Forum and the ICANN 69 Annual General Meeting, where the following issues were discussed:

- Subsequent Rounds of New Generic Top-Level Domain Names (gTLDs);
- Domain Names abuse mitigation; and
- WHOIS Database accessibility and data protection.



REVIEWS

International Participation (continued)

COMM-CIRT cooperation with other bodies

The COMM-CIRT continued to establish and maintain International and Regional Cooperation with professional organisations dealing with cybersecurity.



During the period under review, the COMM-CIRT joined AfricaCERT as a full member and joined the USA Cybersecurity & Infrastructure Security Agency (CISA) threat and vulnerability intelligence exchange system. In addition, it established relationships with Team CyMr.u and Shadowserver, which are cybersecurity threats intelligence centres COMM-CIRT began the application process for Forum of Incident Response and Security Teams (FIRST) membership. FIRST is the premier international organisation and recognised leader in incident response, bringing together a range of computer security incident response teams from government, commercial, and educational organisations from around the world. FIRST assists in fostering cooperation and coordination in incident prevention, stimulates rapid reaction to cyber incidents and promoting information sharing among member states.

COMM-CIRT provided training to the communication sector constituents during the period under review with the assistance of Team CyMr.u and the European Union Cyber4Dev. Cyber4Dev continued with capacity building assistance for the COMM-CIRT and provided the Advanced CIRT Training to the CIRT Team Members and the Basic CIRT training to the ICT stakeholders. In addition, the CIRT team attended numerous online courses and conferences, including the First Annual General Meeting Conference, AfricaCERT, Cyberdrills, Africa internet Summit, ITU-T Study Group 17 (SG17) Security and ICANN Meetings, among others.

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World Telecommunication Standardisation Assembly (WTSA)

The World Telecommunication Standardisation Assembly (WTSA) that defines general policy and sets out a work program for the ITU Telecommunication Standardisation Sector (ITU-T) could not be held in November 2020 as planned but was postponed until February 2022.

Botswana continued to prepare for this event to ensure its objectives were met. Nationally, the preparations were concluded through consultative processes that identified eight resolutions, as referenced in Table 22. From the eight resolutions, Botswana identified Resolution 58 for modification, which was proposed and presented to SADC and ATU, respectively, for further consideration by the assembly.

Botswana proposed that ITU design a toolkit to assist in setting up Computer Incidence Response Teams (CIRT) for developing countries to assist in combating cyber threats. It further proposed that ITU should allow the use of other open-source toolkits other than the ones from ITU, which are expensive. Furthermore, the proposal requests that ITU consider using eligible local companies within the Member States or regionally, which could be reasonably priced to facilitate capacity building, not just leave it to the big international companies. This proposal was put forward based on the experiences learnt during the setting of the Botswana CIRT.

RESOLUTION	MANDATE
Resolution 58	Encouraging the creation of national computer incident response teams, particularly for developing countries
Resolution 61	Countering and combating misappropriation and misuse of international telecommunication numbering resources
Resolution 72	Measurement and assessment concerns related to human exposure to electromagnetic fields
Resolution 88	International Mobile Roaming
Resolution 93	Interconnection of 4G, IMT-2020 networks and beyond
Resolution 95	Initiatives to raise awareness on best practices and policies related to service
Resolution 96	Combating counterfeit telecommunication/information and communication technology devices
Resolution 98	Enhancing the standardisation of Internet of Things (IoT) technologies and Smart Cities and communities for global development

Table 22: WTSA-16 Resolution Identified.

"COMM-CIRT

provided training to the communication sector constituents during the period under review with the assistance of Team CyMr.u and the European Union Cyber4Dev



STAKEHOLDER ENGAGEMENT

Development of the National Cybersecurity Strategy

During this reporting period, BOCRA, as a member of the National Cybersecurity Committee, developed a Communication Plan for the National Cyber Security Strategy. Subsequently, elements of the National Cyber Security Strategy Communication Plan were infused into the BOCRA consumer education and awareness activities to educate consumers about the importance of so-called cyberhygiene.

Botswana is a partner in the European Union (EU) sponsored Cyber Resilience for Development (Cyber4Dev), whose objective is to offer capacity building and enhance cyber resilience and cyber security to benefit all citizens, public agencies, and private enterprises. Cyber resilience is essential for economic development, stable societies, and security. Cyber Resilience and Awareness is a consumer protection function shared between the Botswana Communications Computer Incident Response Team (COMM-CIRT) and BOCRA.

Engagement meetings with broadcasters

BOCRA held one-on-one engagement meetings with commercial broadcasters to raise its concerns around compliance to licence conditions. The main issues of discussion covered adherence of broadcasters to Local Content Quotas, Network Rollout Obligations, and the payment schedule for financial regulatory obligations. BOCRA also used the platform to remind the broadcasters of the impending expiry dates of their respective licences and the need to observe the clause that calls for submitting renewal applications no less than two years and no later than one year to the licence expiry date. More importantly, broadcasters were made aware of the importance of ensuring that they were in good standing in terms of their respective licence obligations.

The broadcasters lamented the adverse effects brought upon the sector by the COVID-19 pandemic. Notwithstanding, they individually made undertakings to make good of their outstanding financial debts and submitted payment plans of how they would clear the arrears.

Kweneng District Council

BOCRA met with Kweneng District leadership to consult them on the UASF mobile network upgrades, schools Internet connectivity project, FM broadcasting transmission network expansion and the tribal administration offices internet connectivity.

BOCRA explained that during the 2021/22 financial year, it would embark on the project in the district as part of its commitment under the UASF to facilitate the rollout of communication services to unserved and underserved areas.

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The Authority applied to the district leadership to support the project by facilitating the provision of land for construction of new transmission sites together with requisite Environmental Impact Assessments Reports, where required. The leadership was also asked to identify two schools to benefit from the construction of a model computer laboratory and a select number of tribal administration offices to be connected to the internet through ICT devices.

South East District Council

In a bid to regularly engage with stakeholders of the communications sector to update them on regulatory issues affecting the industry, BOCRA addressed a full South East District Council meeting in July 2020. The address sought to orientate the newly elected local government legislators from the 2019 general elections on the mandate of BOCRA and relevant communications regulations. It covered the mandate of BOCRA, including Licensing, Spectrum Management, Consumer Protection, Broadcasting Regulation, Postal Regulation and the Internet. The address also dedicated time to briefing legislators on the role of the Universal Access and Service Fund (UASF) in facilitating the rollout of communications services to the unserved and underserved communities.

The Full Council meeting also addressed specific consumer issues, including mobile money concerns, internet speed, hidden identity calls, and calls for licensing of community broadcasting, among others.

The Councillors appreciated the engagement and encouraged BOCRA to make it a regular practice to address District Councils on ICT developments. The process empowers councillors with the knowledge to respond to questions raised by their electorates.

"A Full Council meeting

addressed specific consumer issues, including mobile money concerns, internet speed, hidden identity calls, and calls for licensing of community broadcasting, among others.

Southern District Council administrative leadership

In August 2020, BOCRA, led by the Chief Executive, held a consultation meeting with the Southern District Council administrative leadership. The objective of the meeting was to appraise the leadership on the imminent UASF projects planned for the district. BOCRA informed the meeting of its plan to commence the Schools Computerisation and Internet Connectivity for the region to solicit buy-in and support for the project. The meeting was also informed of the impending ICT needs assessment that was due to follow.

In response, the Council administrative leadership invited BOCRA to return and address Full Council Meeting. BOCRA returned in September 2020 to address the Council. The address served the Consumer education function of sharing the mandate of BOCRA and the UASF and availing the leadership the opportunity to raise questions, concerns and feedback concerning the communications sector. Moreover, the address specifically informed the honourable Councillors of the UASF's Schools Computerisation and Connectivity project slated for the Southern District. By informing the Council about the project, BOCRA shared its experiences of the inaugural project that covered Ghanzi, Kgalagadi and Mabutsane areas. These communications emphasised the importance of support from local government political leadership for the success of the project.

The Councillors welcomed the news about the project and pledged their support for its success.

Media workshop on cybersecurity

In November 2020, BOCRA, in collaboration with the EU delegation to Botswana, the Ministry of Transport and Communications, BOCRA CIRT Team, UNICEF Office in Botswana, and the Competition and Consumer Authority hosted a media workshop focusing on training media practitioners to enhance their reporting on cybersecurity issues. BOCRA identified media as a critical stakeholder in driving public information and sort to address the media's apparent shortcomings in reporting highly technical ICT issues. The two-day training workshop was attended by 45 media practitioners and addressed by 14 speakers from a wide range of professional and technical angles. It addressed various issues, including cybersecurity policy, legal and regulatory matters, technical applications, network and data security, cybercrime, consumer Protection, fake news and online misinformation, protection of children online, and Internet usage perspectives.

REVIEWS "BOCRA sponsored the eBotho Digital Literacy Initiative with P100 000.00 for the campaign to air through advertisements and radio talk shows to enhance responsible use of ICTs and digital platforms.

CONSUMER EDUCATION

Management of social media pages, brand and information

BOCRA engaged e-Enhancement Services to provide skills for better and structured management of the BOCRA digital media platforms. The objective of this training was to share skills and experience to improve the existing efforts around the use and management of BOCRA social media platforms. The training was part of BOCRA's efforts to leverage its media platforms to increase its online presence, particularly during the COVID-19 period that requires non-physical interaction. Five officers benefitted from the training.

COVID-19 Infodemic

Following the outbreak of COVID-19 and the influx of social media information about the virus, BOCRA issued a public notice through print media and social media platforms warning the public about the dangers of publishing inaccurate, unsubstantiated, and fabricated online content through social media platforms during the period of COVID19. To augment these efforts, BOCRA took part in some panel discussions hosted by the local broadcasters to buttress the importance of avoiding engagement in COVID-19 infodemic or trivialising important information about COVID-19 by spreading false information and news about the disease.





eBOTHO digital literacy campaign

In March 2020, BOCRA partnered with InFuture Foundation in an eBotho Digital Literacy campaign that aimed to provide Batswana with awareness and self-monitored so-called cyberhygiene grounded in the principle of Botho. BOCRA sponsored the eBotho Digital Literacy Initiative with P100,000.00 for the campaign to air through advertisements and radio talk shows to enhance responsible use of ICTs and digital platforms. The campaign featured thematic messages addressing different issues such as social media literacy, online scams and abuse.

As part of the campaign, BOCRA and the inFuture Foundation co-sponsored the youth-oriented Cybersmart BW Challenge to address safety in cyberspace, covering challenges relating to consumer protection, cyberhygiene, privacy and security when online. The Cybersmart BW challenge launch was streamed online for maximum reach to online users. Additional commentary was presented on selected broadcasters, such as commercial radio broadcasters that have a youth listenership.

Publication of Retail Internet Prices

In keeping with the consumer protection mandate, BOCRA published Retail Internet Prices in the local print media to avail consumers with information that would allow them to compare prices and make informed choices to derive good value for their money.

The publications compared Internet service packages from 25 service providers in terms of bandwidth, price, and duration of contracts. It also made available to consumers contact details of service providers to facilitate their interaction with individual providers.



GORPORATE SOGIAL INVESTMENT

Podulogong and Ithuteng Primary School projects

BOCRA sponsored the renovation of a block of two classrooms at Pudulogong Rehabilitation and Development (PUREDET) with P108,462. The project was officially commissioned in November 2020. PUREDET is a charitable non-profit organisation located in Mochudi in Kgatleng District. The organisation trains Visually Impaired People to be self-sustaining by offering them basic handcraft skills, vocational training and job opportunities.

BOCRA sponsorship entailed the replacement of asbestos roofing with corrugated iron, retiling of the floors and repainting. In addition, BOCRA offered to sponsor engaging visual artworks for the walls to stimulate creativity among the learners.

In addition, BOCRA undertook a project to paint a block of classrooms for the Special Education Unit at Ithuteng Primary School in Gaborone. The project included decorating walls with creative art, making the environment more engaging for learners with special needs.



Contribution to COVID-19 Relief Fund

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BOCRA contributed P1 Million to the National COVID-19 Relief Fund to help mitigate the impact of Coronavirus on the economy. Furthermore, individual members of BOCRA staff contributed P37.544.00 towards the Fund.

BOCRA also approved the allocation of additional radio frequency spectrum, at no charge to communication services providers and ISPs, to facilitate communication during the COVID-19 period. This radio frequency spectrum was temporarily allocated for six months, later extending to cover the entire State of the Emergency.



Support for Schools Against COVID-19

In line with national efforts to contain the spread of the COVID-19 virus. BOCRA donated 5,000 branded face masks, sanitisers and paper towels valued at P168,672 to a series of primary schools in Gaborone. These included Tshwaragano Primary School in Naledi, Bosele Primary School in Broadhurst, Ledumang Primary School in Ledumana, Thebe Primary School in

White City, Tsogang Primary School in Tawana and Diphetogo Primary School in Gaborone West.

Branded masks, sanitisers. dispensers were also donated to schools in the Kweneng Region. Beneficiaries included Motswakhumo Secondary School in Lentsweletau. Kopong Junior Secondary, Mahetwe Primary School and Letsholo Primary Schools in Kopong. The donations benefitted the entire school community comprising students, teachers, and support staff.

Through this donation from BOCRA recognised the challenges teachers faced with helping children to follow COVID-19 protocols.

School Prizing Ceremonies

Moeng College Prize Giving Ceremony

BOCRA Chairperson officiated at the Moeng College Prize Giving Ceremony, where the college recognised and rewarded best performing students across the Form 4 and Form 5 streams. BOCRA sponsored various prize categories to the tune of P50,000.00. The prizes included five tablets awarded to the best-performing male and female students from the Form 5 stream and the best forming male and female students from the Form 4 stream. The last tablet was allocated to the thirdbest performing Form 4 student.

BOCRA accepted the invitation to officiate at the ceremony as a follow-up to its ICT sponsorship. It had undertaken to revamp and modernise the College's ICT infrastructure, including Local Area Network and computers.

The project was valued at P1,149,362.

BOCRA senior and executive staff members also officiated at Prize Giving Ceremonies at Sir Seretse Khama Memorial Junior Secondary School in Gaborone and Mahetlwe Community Junior Secondary School in Mahetlwe village, Kweneng District.

BOCRA took part in the Prize Giving ceremonies to reach out and support institutions of learning in recognising and awarding outstanding performance and encouraging learners to take an interest and pursue careers in the field of Science, Technology, Engineering and Maths - widely referred to as STEM.

Support for Struizendam Primary School

In keeping with its promise to support the school and students of Struizendam Primary School under the Adopt A School initiative of the Ministry of Education, BOCRA purchased and donated consumables. These contributions included BOCRA t-shirts and sun hats, school stationery (pens, rulers,

erasers, pencils, colouring pencils, and mathematical sets) and sanitary towels. BOCRA also procured school shoes and socks for the entire student community to assist less fortunate learners in protecting their dignity and focusing on learning.

In addition, BOCRA donated a laptop to Mr. Mosarwa as a token of appreciation to the teacher for his dedication and passion in facilitating ICTs in the school.

In total, BOCRA spent P2,538,811 towards various deserving causes under its CSI programme.

STRATEGIC PARTNERSHIPS

BOCRA/DBS MoA Signing

BOCRA and the Department of Broadcasting Services (DBS) entered into a Memorandum of Agreement (MoA) in September 2020. The signing of the MoA formalised a relationship where the two entities committed to working together to help media graduates to develop local content.

Under this MoA, BOCRA committed to identifying and employing 20 Media graduates and placing them under DBS for mentorship and on-the-job training for three years. As part of the project deliverables, the media graduates will, among others, be expected to produce local content by way of documentaries and other television and radio content.

Signing of MoA between UASF/MoBE/MLG&RD

In October, BOCRA hosted an event on behalf of the UASF where the UASF, Ministry of Basic Education and Ministry of Local Government, signed an MoA to facilitate the provision of connectivity of ICTs in the Kweneng region.

The MoA details the rules of engagement applicable between contracting parties and lists obligations required of each party to ensure the project's success. It aims to upgrade mobile networks to higher bandwidth and provide all schools in the region with Internet, ICT gadgets entirely supported by qualified teachers and IT personnel.



BOCRA Human Capital Management is driven by two (2) vital strategic objectives:

To create and promote highperformance culture: and

In pursuit of the strategic human capital objectives, the organisation's engagement level stood at 71%, above the 66% regional, 64% global and National benchmark as measured in 2019.

The year 2020/2021 was adversely affected by the COVID-19 global pandemic, and the Authority put in place measures such as flexitime policy to allow employees to work from home. This initiative assisted the organisation to continue to work towards achieving its strategic objective while keeping employees safe from infection. In addition, BOCRA provided staff with access to COVID-19 testing services in the event of contact or exposure.

BOCRA has created a conducive environment to attract and retain high-performing and engaged human resources to attain its strategic goals. An organisational culture framework was developed in December 2020 to promote a high-performing organisation. Implementation of the framework is in progress.

Talent Management and Succession Plan at BOCRA is ongoing to strengthen and build organisational capability and capacity to deliver on our mandate and strategic goals. Employee engagement initiatives are also in place to promote high-performance culture.

Training and Development & Organisational Capital

In line with its Training and Development Policy, BOCRA continued to invest in the development of its employees. Training and development are based on 70% of training done on the job, 20% through coaching and mentorship, and learning from others; and 10% classroom learning. The policy provides a robust framework for well-rounded learning and development Strategy. The Authority also encourages staff to take responsibility for their training, and this is promoted through Self Development where, upon completion, employees are refunded.

To improve employee engagement.

The quality and commitment of BOCRA employees are central to the Authority's ability to fulfil its mandate. Seven (7) employees were sponsored to pursue fulltime training in Master's degree programmes.

Eleven (11) employees were sponsored for a Diploma in Telecommunications Regulation, and One was funded for a Diploma in Archives and Records Management.

Through Coaching and Mentorship interventions and a Talent Management and Succession Planning programme, the Authority has enhanced employee career development, skills, and capabilities.

Graduate Development Program

Eight graduate trainees completed the two-year graduate development program in December 2020. The programme's objective is to develop capacity and skills in recently graduated tertiary-level young talent and create a pool of talent for BOCRA and the market. Trainees with Telecommunications Engineering, ICT, Law, and Economics backgrounds embarked on the program. The program was completed in December 2020, and all graduates have been offered permanent and pensionable jobs at BOCRA.

During the Launch of BOCRA's International Relations Committee (IRC)

BOCRA officially launched the International Relations Committee (IRC), whose main objective is to promote and encourage the participation of the Authority in international forums where topical issues on the future of our sector and emerging trends and technology are discussed. The Committee is intended to be a focal point for BOCRA, facilitating the Authority's meaningful participation and engagement in line with its role of representing Botswana in international ICT forums.

REVIEWS

Human capital Management (continued)

BOCRA Wellness Week

BOCRA hosted its Wellness Week in March 2021, focusing on the impact of COVID-19 across all sectors of the economy. In line with COVID-19 health protocols, the event that was held virtually, including a range of speakers, including those who recovered from COVID-19 infection. The event also included public health experts who addressed staff on safety precautions required to reduce the risk of infection by COVID-19.

2020/21 Staff Promotions

Sixteen employees were promoted to various positions, including 56% females and 44% males.

NAME	DEPARTMENT	PROMOTED TO	QUALIFICATION
Olerato Tiego	Broadband & Universal Service	Officer, Broadband & UASF	Bachelor of Arts (Economics)
Keotshepile Ntau	Broadcasting Regulation	Senior officer Media & Content	Bachelor of Media Studies
Thato Sebeso	Broadcasting Regulation	Senior officer Media & Content	Bachelor of Media Studies, MSc Project Management
Angela Matlapeng	Technology Department	Officer, CIRT	BSc. Computer Systems Engineering
Mafoko Lebogang	Technology Department	Officer, CIRT	Hons Degree in Network Security & Computer Forensics
Keamogetse Mmokele	Licensing & Postal Regulation	Senior officer, Licensing	Bachelor of Business Science in Economics & Marketing
Evah Kentshitswe	Technical Services Department	Deputy Director, Standards	MSc. Telecomms, BEng Telecomms
Tebogo Ketshabile	Technical Services Department	Manager, Spectrum Management	Bachelor of Engineering, Msc Telecom Management
Pule Mathebula	Technical Services Department	Manager, Monitoring & Maintenance	Bachelor of Engineering
Lesego Sekwena	Finance	Senior officer, Accounts	Bachelor of Business Accounting and Finance
Lorato Mahalelo	Strategy & Projects	Officer, Strategy & Projects	Bachelor of Arts (Economics)
Maipelo Mookodi	Business Development	Senior officer, Licensing	Bachelor of Arts (Economics), Masters of Arts (Economics)
Botsang Mojamela	Corporate Services	Manager, Admin	Master of Public Admin (HR Management), Bachelor of Information Management
Helenah Keseabetswe	Corporate Services	Senior Officer, HR	Bachelor of Arts (Economics & Public Admin)
Keamogetswe Matomela	Corporate Services	Senior Legal Counsel	Bachelor of Laws
Tebogo Kabelo	Licensing & Postal Regulation	Senior Officer, Licensing & Postal Reg	Bachelor of Business Administration (Management)

Table 23: Staff promotions.



employees were sponsored to pursue full-time training in Master's degree programmes.

BOCRA Loyalty Long Service Awards

BOCRA recognised long-serving staff during the period under review. Long Service Awards were presented in three categories - five, ten and 15 years of service. Twenty-five employees received awards comprising the following:

- Portraits bearing their names and number of years of service; and
- Prize money commensurate with years in service'

	First Name	Surname	Years of Service
Ms.	Tshiamo	Teleki	20
Ms.	Evah Kebarakile	Kentshitswe	20
Mr.	Martin	Mokgware	20
Mr.	Thapelo	Maruping	20
Mr.	Pule Kid	Mathebula	20
Ms.	Basebi	Mosinyi	20
Mr.	Sexton	Segobaetso	20
Ms	Merriam	Mfetane	20
Ms	Kgomotso Eva	Tabane	20
Mr.	Lesole	Joel	20
Ms.	Elizabeth Mmatsheko	Masithe	20
Mr.	Emmanuel	Thekiso	20
Mr.	Botsang	Mojamela	20
Mr.	Andrew Seboletswe	Tshiamo	15
Mr.	Jericho	Keletso	15
Mr.	Onkgolotse	Manowe	10
Mr.	Gobotswang	Karabo	5
Ms.	Keamogetse	Mmokele	5
Ms.	Salome	Gaolekwe	5
Mr.	Tebogo	Kabelo	5
Ms.	Maipelo	Mookodi	5
Ms.	Keotshepile	Jabane	5
Mr.	Thato	Sebeso	5
Mr.	Goemeone	Pheto	5
Mr.	Thapelo	Sethebethe	5

Table 24: Long Service Awards.



REVIEWS

Human capital Management (continued)

2020/21 Staff Promotions



Evah Kentshitswe Deputy Director, Standards



Pule Mathebula Manager, Monitoring & Maintenance



Botsang Mojamela Manager, Admin



Tebogo Ketshabile Manager, Spectrum Management



Keamogetse Mmokele Senior Officer, Licensing



Thato Sebeso Senior Officer Media & Content



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Lesego Sekwena Senior Officer, Accounts



Helenah Keseabetswe Senior Officer, HR



Keamogetswe Matomela Senior Legal Counsel



Tebogo Kabelo Senior Officer, Licensing & Postal Reg

Keotshepile Ntau Senior Officer Media & Content

Angela MatlapengOfficer, CIRT

Olerato Tiego Officer, Broadband & UASF

Mafoko Lebogang Officer, CIRT

Human capital Management (continued)

2020/21 Loyalty Long Service Awards

20 Years of Service



Tshiamo Teleki



Evah Kebarakile Kentshitswe



Martin Mokgware



Pule Kid Mathebula



Basebi Mosinyi



Merriam Mfetane



Kgomotso Eva Tabane



Lesole Joel



Elizabeth Mmatsheko Masithe



Botsang Mojamela

Sexton Segobaetso

Emmanuel Thekiso

15 Years of Service



Andrew Seboletswe Tshiamo



Jericho Keletso

10 Years of Service



Onkgolotse Manowe

5 Years of Service



Keamogetse Mmokele



Salome **Gaolekwe**

Maipelo Mookodi



Tebogo Kabelo

Thapelo Sethebethe



Thato Sebeso

REVIEWS

Human capital Management (continued)

Staff Complement

As at the end of March 2021, the BOCRA staff complement stood at 92, with 46 females and 46 male employees, representing a 50:50 gender distribution; an increase of eight, from 84 employees in March 2020.

STAFF COMPLEMENT	2019/2020	2020/2021
Staff in-post as at April	84	84
Staff recruited	3	10
Staff departing	3	2
Total as at March	84	92



Table 25: Staff complement comparison.

GENDER	QUALIFICATIONS		
	Masters	Degree	Other
Female	17 (18.47%)	23 (25%)	7 (7.61%)
Male	20 (21.73%)	18 (19.57%)	7 (7.61%)
Total	37 (40.20%)	41 (44.57%)	14 (15.22%)

Table 26: Staff qualification by gender.

Table 26 BOCRA has an educated and trained workforce. At least 84% of the employees have obtained an undergraduate degree and Masters qualifications, while the remaining 15% possess other qualifications.

		STAFF CATEGORY		
Gender	Executive	Middle Management	Snr/Professionals	General Staff
Female	5	9	3	29
Male	8	13	11	14
Total	13	22	14	43

Table 27: Staff categories by gender and position.

Table 27 shows that the majority of BOCRA employees are in middle management and at professional levels.







Country of incorporation and domicile Botswana

Nature of business and principal activities The Authority is a body corporate, established under the

Communications Regulatory Act, 2012 for the regulation of

communications sector in Botswana comprising telecommunications, internet and information and communications technologies, radio communications, broadcasting, postal services and related matters.

Members of the Board Mrs. Tsaone, R. Thebe (Chairperson)

Prof. Joseph Chuma (Vice Chairperson)

Mr. Onkagetse Pusoentsi (retired 31 July 2021)

Mr. Galeboe Mmelesi Dr. Gape Kaboyakgosi Mrs. Tsholofelo Bogosi Ms. Kago Mmolawa

Mr. Martin Mokgware - Chief Executive (ex-officio)

Registered office Lot 50671

Independence Avenue

Extension 5 Gaborone Botswana

Postal address Private Bag 00495

> Gaborone Botswana

Bankers First National Bank of Botswana Limited

Absa Bank Botswana Limited

Standard Chartered Bank Botswana Limited

Bank of Baroda (Botswana) Limited Stanbic Bank Botswana Limited

Auditors PricewaterhouseCoopers

Secretary Ms. Joyce W. Isa-Molwane

Chief Executive Mr. Martin Mokgware

Functional Currency Botswana Pula ('P') and is rounded to the nearest Pula

BOARD MEMBERST REPORT

The Members of the Board have pleasure in submitting their Report.

1. Review of activities

The Authority is a body corporate, established under the Communications Regulatory Authority Act, 2012 for the regulation of communications sector in Botswana comprising telecommunications, internet and information and communications technologies, radio communications, postal services and related matters.

The operating results and state of affairs of the Group and Authority are fully set out in the attached annual financial statements and do not in our opinion require any further comment. Net surplus of the Group was P27,459,020 (2020: P47,302,788) and for Authority was P21,628,234 (2020: P15,457,202).

2. Accounting policies

The accounting policies of the Group and Authority are consistent with the previous year.

3. Members interest in contracts

None of the Members or Officers of the Authority had any interest in any contract during the financial year.

4. Members

The Board Members of the Authority during the year and to the date of this report are as follows:

Mrs. Tsaone Thebe Prof. Joseph Chuma

Mr. Onkagetse Pusoentsi (retired 31 July 2021)

Mr. Galeboe Mmelesi Dr. Gape Kaboyakgosi Mrs. Tsholofelo Bogosi Ms. Kago Mmolawa

Mr. Martin Mokgware - Chief Executive (ex-officio)

5. Secretary

Ms. Joyce W. Isa-Molwane

BOARD MEMBERS? RESPONSIBILITIES AND APPROVAL

The members are required in terms of the Communications Regulatory Authority Act, 2012 to maintain adequate accounting records and are responsible for the content and integrity of the consolidated and separate annual financial statements and related financial information included in this report. It is their responsibility to ensure that the consolidated and separate annual financial statements show a true and fair view of the state of affairs of the Group and Authority as at the end of the financial year and the results of its operations and cash flows for the year then ended, in conformity with International Financial Reporting Standards. The external auditors are engaged to express an independent opinion on the financial statements.

The consolidated and separate annual financial statements are prepared in accordance with International Financial Reporting Standards and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgments and estimates.

The members acknowledge that they are ultimately responsible for the system of internal financial control established by the Group and place considerable importance on maintaining a strong control environment. To enable the members to meet these responsibilities, the board sets standards for internal control aimed at reducing the risk of error or loss in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the Group and all employees are required to maintain the highest ethical standards in ensuring the Group's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the Group is on identifying, assessing, managing and monitoring all known forms of risk across the Group. While operating risk cannot be fully eliminated, the Group endeavors to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behavior are applied and managed within predetermined procedures and constraints.

The members are of the opinion, based on the information and explanations given by management that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The members have reviewed the Group and Authority's cash flow forecast for the year to 31 March 2022 and, in the light of this review and the current financial position, they are satisfied that the Group has access to adequate resources to continue in operational existence for the foreseeable future.

The annual financial statements set out on pages 105 to 138 and the supplementary information disclosed on pages 139 and 140 which have been prepared on the going concern basis, were approved by Board Members on 25 September 2021 and were signed on its behalf by:

Chairperson

Chief Executive

Gaborone

INDEPENDENT AUDITOR'S REPORT



To the Minister of Transport and Communications

Report on the audit of the consolidated and separate financial statements

Our opinion

In our opinion, the consolidated and separate financial statements give a true and fair view of the consolidated and separate financial position of Botswana Communications Regulatory Authority (the "Authority") and its subsidiary (together the "Group") as at 31 March 2021, and its consolidated and separate financial performance and its consolidated and separate cash flows for the year then ended in accordance with International Financial Reporting Standard ("IFRS").

What we have audited

Botswana Communications Regulatory Authority's consolidated and separate financial statements set out on pages 105 to 138 which comprise:

- The consolidated and separate statements of financial position as at 31 March 2021;
- The consolidated and separate statements of comprehensive income for the year then ended;
- The consolidated and separate statements of changes in equity for the year then ended;
- · The consolidated and separate statements of cash flows for the year then ended; and
- · The notes to the financial statements, which include a summary of significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated and separate financial statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the *International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code)* issued by the International Ethics Standards Board for Accountants and other independence requirements applicable to performing audits of financial statements in Botswana. We have fulfilled our other ethical responsibilities in accordance with the IESBA Code and other ethical requirements applicable to performing audits of financial statements in Botswana.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated and separate financial statements of the current period. These matters were addressed in the context of our audit of the consolidated and separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Independent Auditor's Report (continued)



Key audit matter

How our audit addressed the key audit matter

Expected credit losses relating to trade receivables

This key audit matter relates to the consolidated and separate • financial statements

At 31 March 2021, the Group and Authority recognised trade receivables of BWP 50 million and BWP 36.9 million, • respectively, after deducting expected credit losses (ECL) of BWP 3.1 million and BWP 2.7 million, respectively.

The Group and Authority applied IFRS 9 - Financial Instruments ("IFRS 9") in determining the ECL to be recognised in respect • of trade receivables.

The Group and Authority applied the simplified approach in the measurement of ECL, which uses a lifetime expected . provision for all trade receivables. In determining the ECL on trade receivables, management applied a provision matrix which is based on historical credit loss experience, adjusted for factors that are specific to the debtor, general economic conditions and an assessment of current and forecast default experience of debtors. The ECL model also incorporates the effects of any forward-looking information.

The significant assumptions used by management in determination of ECL are disclosed in note 1.1 to the consolidated and separate financial statements.

The ECL relating to trade receivables was considered to be a matter of most significance to the current year audit due to the following:

- significant judgement and estimates applied by management in determining the ECL; and
- the effect that the ECL has on the measurement of trade receivables and the Group and Authority's credit risk management.

Disclosures with respect to the application of IFRS 9 in determining the ECL are disclosed in:

- Note 1.1, Significant judgements and sources of estimation uncertainty- Impairment of financial assets and Measurement and recognition of expected credit
- Note 6, Trade and other receivables; and
- Note 22, Risk management Credit risk.

Our audit procedures included the following:

- Obtained an understanding of management's processes and controls in relation to credit origination and credit control;
- For a sample of transactions that occurred throughout the year, we tested the operating effectiveness of the established controls and did not find any significant control deficiencies:
- We assessed management's ECL model against the requirements of IFRS 9 and found the model to be aligned with the requirements;
- We tested the mathematical accuracy of the ECL model, noting no material exceptions;
- We challenged the assumptions and judgements made by management through discussion and through comparison to market and client data and our knowledge of the operations as gained through our audit in assessing future expected loss rates. Based on our work performed, we found management's assumptions and judgements to be reasonable;
- We assessed the reasonability of the inputs used in the ECL model by comparing those inputs to prior year model inputs and current year data as relevant. We found the inputs to the ECL model to be reasonable:
- We assessed the reasonability of the macroeconomic factors used in the ECL model by performing the following procedures:
 - Assessing whether the macroeconomic factors applied in the model are consistent with our understanding of the economic environment in which the Group and Authority operate, and
 - Performing a sensitivity analysis on the inputs used by management.

and found the macroeconomic factors applied in the ECL model to be reasonable:

On a sample basis, we evaluated the accuracy of the trade receivables ageing reports utilised by management in their ECL calculations at 31 March 2021 by agreeing the inputs to relevant underlying documents. No material differences were noted.

Independent Auditor's Report (continued)



Other information

The Board members are responsible for the other information. The other information comprises the information included in the document titled "Botswana Communications Regulatory Authority Consolidated and Separate Annual Financial Statements for the year ended 31 March 2021" which we obtained prior to the date of this auditor's report and the other sections of the document titled "Botswana Communications Regulatory Authority 2021 Annual Report", which is expected to be made available to us after that date. The other information does not include the consolidated and separate financial statements and our auditor's report thereon.

Our opinion on the consolidated and separate financial statements does not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the consolidated and separate financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board members for the consolidated and separate financial statements

The Board members are responsible for the preparation of the consolidated and separate financial statements that give a true and fair view in accordance with International Financial Reporting Standards and for such internal control as the Board members determine is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, the Board members are responsible for assessing the Group's and the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board members either intend to liquidate the Group and/or the Authority or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated and separate financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated and separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated and separate financial statements, whether
 due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is
 sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting
 from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions,
 misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's or the Authority's internal control.

Independent Auditor's Report (continued)



- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board members.
- Conclude on the appropriateness of the Board members' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's and the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated and separate financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and/or the Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Board members regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

From the matters communicated with the Board members, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

In accordance with section 26 (3) of the Communications Regulatory Authority Act. 2012 we confirm that:

- We have received all the information and explanations which, to the best of our knowledge and belief, are necessary for the performance of our duties as auditors;
- In our opinion the accounts and related records of the Authority have been properly maintained;
- The Authority has complied with the financial provisions of the Communications Regulatory Act, 2012; and
- The financial statements prepared by the Authority were prepared consistent with that of the previous year.

Individual Practicing Member: Sheyan Edirisinghe

Registration number: 20030048

Swaterhouse Gopers

Gaborone

29 September 2021

CONSOLIDATED AND SEPARATE STATEMENTS OF FINANCIAL POSITION

As at 31 March 2021

		Group		Authority	
	Note	2021	2020	2021	2020
Assets		Р	Р	Р	Р
Non-Current Assets					
Investment property	3	10,100,000	10,100,000	10,100,000	10,100,000
Property, plant and equipment	4	111,275,189	119,309,581	111,261,399	119,298,896
		121,375,189	129,409,581	121,361,399	129,398,896
Current Assets					
Tax receivable		203,477	_	203,477	_
Trade and other receivables	6	55,002,420	67,943,348	40,892,643	45,979,370
Cash and cash equivalents	7	483,628,100	425,993,160	214,564,988	194,262,017
<u>'</u>		538,833,997	493,936,508	255,661,108	240,241,388
Total Assets		660,209,186	623,346,089	377,022,507	369,640,283
Equity and Liabilities					
Equity		500 500 500	F74 000 000	000 000 000	000 000 000
Accumulated surplus Universal Access and Service Fund	0	592,586,590	571,298,602	322,228,026	322,228,026
Universal Access and Service Fund	9	27,456,059 620,042,649	21,285,027 592,583,629	322,228,026	322,228,026
		020,042,043	332,363,629	322,220,020	322,220,020
Liabilities					
Non-current Liabilities					
Deferred tax liability	8	2,803,473	2,047,109	2,803,473	2,047,109
Current Liabilities					
Trade and other payables	10	37,363,064	28,221,228	24,534,949	23,585,998
Tax Payable		-	494,123	-	494,123
Universal Access and Service Fund Trust	9	-	-	27,456,059	21,285,027
		37,363,064	28,715,351	51,991,008	45,365,148
Total Equity and Liabilities		660,209,186	623,346,089	377,022,507	369,640,283

For the year ended 31 March 2021

			Group		Authority	
	Note	2021	2020	2021	2020	
		Р	Р	Р	Р	
Revenue	12	181,154,639	183,055,740	133,361,667	132,747,518	
Other income		2,150,167	3,553,396	2,146,662	3,532,102	
Operating expenses	13	(164,647,953)	(147,329,492)	(114,357,862)	(121,933,611)	
Surplus for the year before finance income	14	18,656,853	39,279,644	21,150,467	14,346,009	
Finance income	15	15,476,061	12,867,133	7,151,661	5,955,182	
Fair value adjustments	3	-	200,000	-	200,000	
Surplus for the year before tax		34,132,914	52,346,777	28,302,128	20,501,191	
Taxation	16	(6,673,894)	(5,043,989)	(6,673,894)	(5,043,989)	
Surplus for the year		27,459,020	47,302,788	21,628,234	15,457,202	
Other comprehensive income		-		-		
Total comprehensive income for the year		27,459,020	47,302,788	21,628,234	15,457,202	

CONSOLIDATED AND SEPARATE STATEMENTS OF CASH FLOWS

For the year ended 31 March 2021

		Gro	ир	Authority		
	Note	2021	2020	2021	2020	
		Р	Р	Р	Р	
Cash flows from operating activities						
Cash generated from operations	18	55,438,224	47,789,475	41,819,811	37,299,251	
Tax paid		(6,615,129)	(2,335,467)	(6,615,129)	(2,335,467)	
Net cash generated from operating activities		48,823,095	45,454,008	35,204,682	34,963,784	
Cash flows from investing activities						
Finance income	15	15,476,061	12,867,133	7,151,661	5,955,182	
Purchase of property, plant and equipment	4	(6,971,890)	(24,507,014)	(6,903,844)	(24,494,914)	
Sale of property, plant and equipment		307,674	169,384	307,674	128,588	
Net cash generated from/(used in) investing			·		·	
activities		8,811,845	(11,470,497)	555,491	(18,411,144)	
Cash flows from financing activities						
Amount paid to Universal Access and Service						
Fund Trust		-	-	(15,457,202)	(5,065,019)	
Net cash used in financing activities		-	-	(15,457,202)	(5,065,019)	
Total cash and cash equivalents movement for						
the year		57,634,940	33,983,511	20,302,971	11,487,621	
Cash and cash equivalents at beginning of the						
year		425,993,160	392,009,649	194,262,017	182,774,396	
Total cash and cash equivalents at end of						
year	7	483,628,100	425,993,160	214,564,988	194,262,017	

For the year ended 31 March 2021

	Authority		
	Accumulated	Total	
	Surplus	Equity	
	P	P	
Balance at 01 April 2019	322,228,026	322,228,026	
Surplus for the year	15,457,202	15,457,202	
Other comprehensive income for the year	-	-	
Total comprehensive income for the year	15,457,202	15,457,202	
Excess of income over expenditure allocated to the Universal Access and Service Fund			
Trust	(15,457,202)	(15,457,202)	
Total transactions with owners	(15,457,202)	(15,457,202)	
Balance as at 31 March 2020			
	322,228,026	322,228,026	
Balance at 01 April 2020	322,228,026	322,228,026	
Surplus for the year	21,628,234	21,628,234	
Other comprehensive income for the year	-	-	
Total comprehensive income for the year	21,628,234	24,014,428	
Excess of income over expenditure allocated to the Universal Access and Service Fund			
Trust	(21,628,234)	(21,628,234)	
Total transactions with owners	(21,628,234)	(21,628,234)	
Balance as at 31 March 2021			
	322,228,026	322,228,026	

CONSOLIDATED AND SEPARATE STATEMENTS OF CHANGES IN EQUITY

For the year ended 31 March 2021

		Gro	ир			
	Surplus allocated towards					
	Universal					
	Access and	Total	Accumulated	Total		
	Service Fund	Reserves	Surplus	Equity		
	Р	Р	Р	P		
Balance as at 01 April 2019	10,892,844	10,892,844	534,387,997	545,280,841		
Surplus for the year	-	-	47,302,788	47,302,788		
Other comprehensive income for the year	-	-	-	-		
Total comprehensive income for the year	-	-	47,302,788	47,302,788		
Excess of income over expenditure paid to the						
Universal Access and Service Fund Trust	(5,065,019)	(5,065,019)	5,065,019	-		
Transferred from accumulated surplus	15,457,202	15,457,202	(15,457,202)	-		
Total transactions with owners	10,392,183	10,392,183	(10,392,183)	-		
Balance as at 31 March 2020	21,285,027	21,285,027	571,298,602	592,583,629		
Note(s)	9					
Balance at 01 April 2020	21,285,027	21,285,027	571,298,602	592,583,629		
Surplus for the year	-	-	27,459,020	27,459,020		
Other comprehensive income for the year	-	-	-	-		
Total comprehensive income for the year	-	-	27,459,020	27,459,020		
Excess of income over expenditure paid to the						
Universal Access and Service Fund Trust	(15,457,202)	(15,457,202)	15,457,202	-		
Transfer from accumulated surplus	21,628,234	21,628,234	(21,628,234)	-		
Total transactions with owners	6,171,032	6,171,032	(6,171,032)	-		
Balance as at 31 March 2021	27,456,059	27,456,059	592,586,590	620,042,649		
Note(s)	9					

General information

The Authority is a body corporate, established under the Communications Regulatory Authority Act, 2012. The address of the Authority's register red office is at Lot 50671, Independence Avenue, Extension 5, Gaborone, Botswana. The main activities of the Authority is to regulate the communications sector in Botswana comprising telecommunications, internet and information and communications technologies, radio communications, broadcasting, postal services and related matters.

The Consolidated and Separate Annual Financial Statements set out on pages 105 to 138 have been approved by the Board on 25 September 2021.

1. Presentation of Annual Financial Statements

The Group and Authority annual financial statements have been prepared in accordance with International Financial Reporting Standards. The annual financial statements have been prepared on the historical cost basis, except for the measurement of investment properties and certain financial instruments at fair value, and incorporate the principal accounting policies set out below. These policies have been consistently applied to all the years presented, unless otherwise stated. They are presented in Botswana Pula.

1.1 Significant judgements and sources of estimation uncertainty

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts represented in the annual financial statements and related disclosures. Use of available information and the application of judgement are inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements. Significant judgements include:

Consolidation of Universal Access and Service Fund Trust

In terms of the section 29 of the Communications Regulatory Authority Act, 2012 the Authority established and registered the Universal Access and Service Fund Trust on 4 April 2014.

The Trust is established with the aim of implementation of universal access and service provision and for the administration of the Universal Access Service Fund (the "Fund") of the Authority.

The following factors were considered for consolidating the Trust in terms of IFRS 10:

- The Board of Trustees of the Trust are appointed by the Board of the Authority, in consultation with the Minister;
- The Authority issues general or specific policy directions, directives and guidelines relating to the management of the Fund;
- The Authority imposes and collects levies on behalf of the Trust; and
- The Authority administers the Trust for the functions and management of the Fund.

1.1 Significant judgements and sources of estimation uncertainty (continued)

Impairment of financial assets

The impairment provisions for financial assets are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's historical loss experiences, existing market conditions as well as forward looking estimates at the end of each reporting period.

The Group assesses its trade receivables and other receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in profit or loss, the Group makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

The impairment for trade receivables and other receivables except major operators which are assessed individually, is calculated on a portfolio basis, based on historical loss ratios, adjusted for national and industry-specific economic conditions and other indicators present at the reporting date that correlate with defaults on the portfolio.

The key assumptions used in estimating the expected credit loss are as follows:

- The probability of default calculated based on historical loss pattern will continue to be appropriate for future periods;
- That all receivables included in the portfolio assessment that are more than 90 days past due are not recoverable; and
- That the movement in the forecast in GDP has a direct impact on the collectability of trade receivables.

In determining the probability of default a 24 months period has been considered, meaning that the payment, loss and recovery patterns of receivables over the past 24 months have been considered.

Management believes that changes in GDP has a direct impact on the collectability of receivables, even though sufficiently detailed data is not available to fully substantiate a strong correlation. In the absence of such detailed data, Management has used the percentage change in forecast GDP as a factor to adjust the estimated impairment as this is the most reliable information available. This is a significant management judgement which may have material impact on the estimated provision for impairment.

Note 6 to the financial statements discloses information on loss allowances estimated on lifetime expected credit loss model.

Management considered a 1% change in the GDP factor (with all other variables being equal) and found the impact thereof to be immaterial.

Significant assumptions used in the estimation of loss allowances of individually assessed receivables are as follows:

• Where the counter-party is another Government entity, it is assumed that the loss given default is minimal. This is based on the Government's international credit rating standing which presently stands at A2 (Moody's definition: Judged to be upper medium grade and are subject to low credit risk).

Measurement and recognition of expected credit losses

The Group applies the simplified approach and measures the loss allowance for trade and other receivables at an amount equal to lifetime expected credit losses (lifetime ECL), which represents the expected credit losses that will result from all possible default events over the expected life of the receivable.

The Group makes use of a provision matrix as a practical expedient to the determination of expected credit losses on trade and other receivables. The provision is based on historic credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current and forecast direction of conditions at the reporting date, including the time value of money, where appropriate.

The customer base is widespread and does not show significantly different loss patterns for different customer segments. The loss allowance is calculated on a collective basis for all trade and other receivables that possess shared credit risk characteristics except for large Operators. The Group individually assess exposure to credit risk of each of these entities. Details of the provision matrix is presented in note 6.

The main source of revenue for the Group; being the fees paid by licensed communications operators, with the bulk of it derived from the telecommunications sector, is not expected to go down since this sector has seen an upward effect during the pandemic because of increased use of broadband services. Accordingly, Management have not factored the impact of Covid-19 to the impairement model.

An impairment gain or loss is recognised in profit or loss with a corresponding adjustment to the carrying amount of trade and other receivables, through use of a loss allowance account. The impairment loss is included in other operating expenses in profit and loss as a movement in credit loss allowance (note 13).

Write-Off Policy

The Authority writes off a receivable when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Receivables written off may still be subject to enforcement activities under the Authority recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognised in profit or loss.

1.2 Consolidation

a) Subsidiaries

Subsidiaries are all entities (including structured entities such as the Universal Access and Service Fund Trust) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of acquiree's identifiable net assets. Acquisitionrelated costs are expensed as incurred.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such remeasurement are recognised in statement of comprehensive income.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration that is deemed to be an asset or liability is recognised in accordance with IAS 39 either in statement of comprehensive income or as a change to other comprehensive income. Contingent consideration that is classified as equity is not re-measured, and its subsequent settlement is accounted for within equity.

Transactions eliminated on consolidation

Inter-Group transactions, balances and unrealised gains on transactions between Group entities are eliminated in preparing the consolidated financial statements. Unrealised losses are also eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment. The accounting policies for subsidiaries are consistent with the policies adopted by the Group.

1.3 Investment property

Investment property is recognised as an asset when, and only when, it is probable that the future economic benefits that are associated with the investment property will flow to the Group, and the cost of the investment property can be measured reliably.

Investment property is initially recognised at cost. Transaction costs are included in the initial measurement.

Costs include costs incurred initially and costs incurred subsequently to add to, or to replace a part of, or service a property. If a replacement part is recognised in the carrying amount of the investment property, the carrying amount of the replaced part is derecognised.

Subsequent to initial measurement investment property is measured at fair value. A gain or loss arising from a change in fair value is included in net surplus or deficit for the period in which it arises.

1.4 Property, plant and equipment

The cost of an item of property, plant and equipment is recognised as an asset when:

- it is probable that future economic benefits associated with the item will flow to the Group; and
- the cost of the item can be measured reliably.

Property, plant and equipment is initially measured at cost and subsequently carried at cost less accumulated depreciation and any impairment losses.

Costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it. If a replacement cost is recognised in the carrying amount of an item of property, plant and equipment, the carrying amount of the replaced part is derecognised.

Property, plant and equipment are depreciated on the straight line basis over their expected useful lives to their estimated residual value.

1.4 Property, plant and equipment (continued)

The useful lives of items of property, plant and equipment have been assessed as follows:

Average useful life
Not depreciated
50 years
6-7 years
4 years
4 years
2 years
2-25 years

The residual value, useful life and depreciation method of each asset are reviewed at the end of each reporting period. If the expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

The depreciation charge for each period is recognised in the statement of comprehensive income unless it is included in the carrying amount of another asset.

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in the statement of comprehensive income when the item is derecognised. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

1.5 Financial instruments

Financial instruments held by the Group are classified in accordance with the provisions of IFRS 9 Financial instruments.

Broadly, the classification possibilities, which are adopted by the Group, as applicable, are as follows:

Financial assets which are debt instruments:

- Amortised cost
- Fair value through other comprehensive income

Financial liabilities

Amortised cost

Trade and other receivables

Classification

Trade and other receivables, excluding, when applicable, VAT and prepayments, are classified as financial assets subsequently measured at amortised cost (note 6).

They have been classified in this manner because their contractual terms give rise, on specified dates to cash flows that are solely payments of principal, and the Group's business model is to collect the contractual cash flows on trade and other receivables.

Recognition and measurement

Trade and other receivables are recognised when the Group becomes a party to the contractual provisions of the receivables. They are measured, at initial recognition, at fair value plus transaction costs, if any.

They are subsequently measured at amortised cost.

The amortised cost is the amount recognised on the receivable initially, minus principal repayments, plus cumulative amortisation (interest) using the effective interest method of any difference between the initial amount and the maturity amount, adjusted for any loss allowance.

Derecognition

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership.

Impairment of financial assets

Impairment of fincancial assets has been disclosed under note 1.1.

Trade and other payables

Trade payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

1.5 Financial instruments (continued)

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are initially and subsequently recorded at fair value.

Off-setting financial instruments

Financial assets and liabilities are off-set and the net amount reported in the statement of net assets available for benefits when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

IFRS 9 requires that the Group assess the business model in relation to each financial asset to determine the classification. Group financial assets include trade and other receivables and cash and cash equivalents, and are classified as follows:

Amortised cost

A debt instrument that meets both of the following conditions are classified as financial asset at amortised cost

- Held within a business model whose objective is to hold the debt instrument (financial asset) in order to collect contractual cash flows: and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

1.6 Tax

Current tax assets and liabilities

Current tax for current and prior periods is, to the extent unpaid, recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset.

Current tax liabilities (assets) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the tax authorities, using the tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and liabilities

A deferred tax liability is recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction which at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised. A deferred tax asset is not recognised when it arises from the initial recognition of an asset or liability in a transaction at the time of the transaction, affects neither accounting profit nor taxable profit (tax loss).

A deferred tax asset is recognised for the carry forward of unused tax losses to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilised.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates that have been enacted by the end of the reporting period.

Tax expenses

Current and deferred taxes are recognised as income or an expense and included in profit or loss for the period, except to the extent that the tax arises from:

• a transaction or event which is recognised, in the same or a different period, to other comprehensive income.

Current tax and deferred taxes are charged or credited to other comprehensive income if the tax relates to items that are credited or charged, in the same or a different period, to other comprehensive income.

Current tax and deferred taxes are charged or credited directly to equity if the tax relates to items that are credited or charged, in the same or a different period, directly in equity.

1.7 Leases

Operating leases - lessor

Operating lease income is recognised as an income on a straight-line basis over the lease term. The difference between the amounts recognised as income and contractual receipts is recognised as an operating lease asset.

Initial direct costs incurred in negotiating and arranging operating leases are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease income.

Income for leases is disclosed under other income in the statement of comprehensive income.

1.8 Impairment of assets

Management assesses at each reporting date whether there is any indication that an asset may be impaired. If any such indication exists, management estimates the recoverable amount of the asset.

If there is any indication that an asset may be impaired, the recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the recoverable amount of the cash-generating unit to which the asset belongs is determined.

The recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use. If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment loss.

An impairment loss of assets carried at cost less any accumulated depreciation or amortisation is recognised immediately in the statement of comprehensive income.

Management assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for assets may no longer exist or may have decreased. If any such indication exists, the recoverable amounts of those assets are estimated.

The increased carrying amount of an asset attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss of assets carried at cost less accumulated depreciation or amortisation is recognised immediately in surplus or deficit. Any reversal of an impairment loss of a revalued asset is treated as a revaluation increase.

1.9 Employee benefits

Short-term employee benefits

The cost of short-term employee benefits, (those payable within 12 months after the service is rendered, such as paid vacation leave and sick leave, bonuses, and non-monetary benefits such as medical aid), are recognised in the period in which the service is rendered and are not discounted.

The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non-accumulating absences, when the absence occurs.

The Group operates a defined contribution pension fund for its permanent citizen employees. The fund is registered under the Pension and Provident Fund Act (Cap 27:03). Payments to defined contribution retirement benefit plans are charged as an expense as they fall due.

1.10 Provisions and contingencies

Provisions are recognised when:

- the Group has a present obligation as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- · a reliable estimate can be made of the obligation.

The amount of a provision is the present value of the expenditure expected to be required to settle the obligation. Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement shall be recognised when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement shall be treated as a separate asset. The amount recognised for the reimbursement shall not exceed the amount of the provision.

Provisions are not recognised for future operating losses.

Contingent assets and contingent liabilities are not recognised. Contingencies are disclosed in note 20.

1.11 Revenue from contracts with customers

The Authority's revenues are earned mainly from the following sources:

- Turnover related fees;
- System and Services License Fees;
- Radio License fees:

Turnover fees

The Authority principally generates revenue from turnover-based fees that charges the telecommunications, broadcasting and postal service operators of Botswana as agreed in the contract.

The turnover fees are charged at a fixed percentage on monthly statistical information provided by the operator. The operators certify the information provided and subsequently provide turnover certificates from their auditors on an annual basis.

For certain months where monthly information is not received, the management recognises revenue based on the average of the turnover provided for the immediate preceding 2 months. This is subsequently adjusted with the certified information provided by the auditors of operators for the year.

System and Services License Fees

System and service license fees are fees earned from licence issued to the operators based on the terms of the contract and within the provision of the CRA Act. These licenses are functional in nature and right of use licence; hence, revenue is recognised at the point in time. The Authority recognises revenue when the control of the license is transferred to the user as per the terms of the contract. The fees are fixed as per the contract and there are no separate performance obligations identified.

Radio License Fees

These are fees charged to users of radio who are assigned certain frequencies that they can use within the appropriate allocations so that the spectrum is used efficiently and without interference between users. These licenses are functional in nature and right of use licence, where revenue is recognised at the point in time. The Authority recognises revenue based on the license issued for the number of radios used by the users and spectrum issued and they are normally for a period of one year. The fees are fixed as per the contract and there are no separate performance obligations identified.

Interest income is recognised on a time-proportion basis using the effective interest method.

1.12 Related party transactions

Related parties comprise the Government of Botswana, joint ventures, Government departments, members of the Executive Management Committee and members of the Board. A related party transaction is a transfer of resources, services or obligations between related parties, regardless of whether or not a price is charged.

1.13 Translation of foreign currencies

Foreign currency transactions Functional and presentation currency

Items included in the financial statements are measured using the currency that best reflects the economic substance of the underlying events and circumstances relevant to that entity ("the measurement currency"). The financial statements are presented in Botswana Pula, which is the measurement currency of the entity.

Transactions and balances

Foreign currency transactions are translated into the measurement currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement. Such monetary assets and liabilities are translated at the exchange rates prevailing at the year end.

2. Basis of preparation

The annual financial statements have been prepared in accordance with International Financial Reporting Standards on a basis consistent with prior year.

3. New standards and intepretations

 a) Standards, amendments and interpretations relevant to the Group and Authority and effective for 31 March 2021 year end.

Amendment to IAS 1, 'Presentation of financial statements' and IAS 8, 'Accounting policies, changes in accounting estimates and errors' on the definition of material (effective on or after 1 January 2020).

These amendments to IAS 1 and IAS 8 and consequential amendments to other IFRSs:

- use a consistent definition of materiality through IFRSs and the Conceptual Framework for Financial Reporting;
- clarify the explanation of the definition of material; and
- incorporate some of the guidance in IAS 1 about immaterial information.

The amended definition is:

"Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity."

The impact of the amendment for the group is not material.

b) Standards, amendments and interpretations not relevant to the Group and Authority and not effective for 31 March 2021 year end.

Amendments to IFRS 9 'Financial Instruments', IAS 39 'Financial Instruments: Recognition and Measurement', IFRS 7 'Financial Instruments: Disclosures', IFRS 4 'Insurance Contracts' and IFRS 16 'Leases' – interest rate benchmark (IBOR) reform (Phase 2) (effective on or after 1 January 2021).

The Phase 2 amendments address issues that arise from the implementation of the reform of an interest rate benchmark, including the replacement of one benchmark with an alternative one.

IFRS 17, 'Insurance contracts' (effective on or after 1 January 2023).

The IASB issued IFRS 17, 'Insurance contracts', and thereby started a new epoch of accounting for insurers. Whereas the current standard, IFRS 4, allows insurers to use their local GAAP, IFRS 17 defines clear and consistent rules that will significantly increase the comparability of financial statements. For insurers, the transition to IFRS 17 will have an impact on financial statements and on key performance indicators.

Under IFRS 17, the general model requires entities to measure an insurance contract at initial recognition at the total of the fulfilment cash flows (comprising the estimated future cash flows, an adjustment to reflect the time value of money and an explicit risk adjustment for non-financial risk) and the contractual service margin. The fulfilment cash flows are remeasured on a current basis each reporting period. The unearned profit (contractual service margin) is recognised over the coverage period.

Aside from this general model, the standard provides, as a simplification, the premium allocation approach. This simplified approach is applicable for certain types of contract, including those with a coverage period of one year or less.

b) Standards, amendments and interpretations not relevant to the Group and Authority and not effective for 31 March 2021 year end (continued).

IFRS 17. 'Insurance contracts' (effective on or after 1 January 2023) (continued).

For insurance contracts with direct participation features, the variable fee approach applies. The variable fee approach is a variation on the general model. When applying the variable fee approach, the entity's share of the fair value changes of the underlying items is included in the contractual service margin. As a consequence, the fair value changes are not recognised in profit or loss in the period in which they occur but over the remaining life of the contract.

IFRS 17, 'Insurance contracts' Amendments (effective on or after 1 January 2023).

In response to some of the concerns and challenges raised, the Board developed targeted amendments and several proposed clarifications intended to ease implementation of IFRS 17, simplify some requirements of the standard and ease transition. The amendments are not intended to change the fundamental principles of the standard or unduly disrupt implementation already underway.

IFRS 16. 'Leases' COVID-19-Related Rent Concessions Amendment (effective on or after 1 June 2020).

The IASB has provided lessees (but not lessors) with relief in the form of an optional exemption from assessing whether a rent concession related to COVID-19 is a lease modification, provided that the concession meets certain conditions. Lessees can elect to account for qualifying rent concessions in the same way as they would if they were not lease modifications. In many cases, this will result in accounting for the concession as a variable lease payment.

Amendment to IFRS 3. 'Business combinations' (effective on or after 1 January 2022).

The Board has updated IFRS 3, 'Business combinations', to refer to the 2018 Conceptual Framework for Financial Reporting. in order to determine what constitutes an asset or a liability in a business combination.

In addition, the Board added a new exception in IFRS 3 for liabilities and contingent liabilities. The exception specifies that, for some types of liabilities and contingent liabilities, an entity applying IFRS 3 should instead refer to IAS 37, 'Provisions, Contingent Liabilities and Contingent Assets', or IFRIC 21, 'Levies', rather than the 2018 Conceptual Framework. The Board has also clarified that the acquirer should not recognise contingent assets, as defined in IAS 37, at the acquisition date.

c) Standards, amendments and interpretations relevant to the Group and Authority and not effective for 31 March 2021 year end

The group has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the group's accounting periods beginning on or after 01 April 2021 or later periods:

Amendment to IAS 1 'Presentation of Financial Statements' on Classification of Liabilities as Current or Non-current (effective on or after 1 January 2022).

The amendment clarifies that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period. Classification is unaffected by expectations of the entity or events after the reporting date (for example, the receipt of a waiver or a breach of covenant).

It is unlikely that the amendment will have a material impact on the group's consolidated and separate financial statements.

Amendments to IAS 16 'Property, Plant and Equipment' on Proceeds before Intended Use (effective on or after 1 January 2022).

The amendment to IAS 16 prohibits an entity from deducting from the cost of an item of PPE any proceeds received from selling items produced while the entity is preparing the asset for its intended use (for example, the proceeds from selling samples produced when testing a machine to see if it is functioning properly). The proceeds from selling such items, together with the costs of producing them, are recognised in profit or loss.

It is unlikely that the amendment will have a material impact on the group's consolidated and separate financial statements.

Amendments to IAS 37 'Provisions, Contingent Liabilities and Contingent Assets' on Onerous Contracts—Cost of Fulfilling a Contract (effective on or after 1 January 2022).

The amendment clarifies which costs an entity includes in assessing whether a contract will be loss-making. This assessment is made by considering unavoidable costs, which are the lower of the net cost of exiting the contract and the costs to fulfil the contract. The amendment clarifies the meaning of 'costs to fulfil a contract. Under the amendment, costs to fulfil a contract include incremental costs and the allocation of other costs that relate directly to fulfilling the contract.

It is unlikely that the amendment will have a material impact on the group's consolidated and separate financial statements.

c) Standards, amendments and interpretations relevant to the Group and Authority and not effective for 31 March 2021 year end (continued)

Annual improvements cycle 2018 -2020 (effective on or after 1 January 2022).

These amendments include minor changes to:

- IFRS 1, 'First time adoption of IFRS' has been amended for a subsidiary that becomes a first-time adopter after its parent. The subsidiary may elect to measure cumulative translation differences for foreign operations using the amounts reported by the parent at the date of the parent's transition to IFRS.
- IFRS 9, 'Financial Instruments' has been amended to include only those costs or fees paid between the borrower and the lender in the calculation of "the 10% test" for derecognition of a financial liability. Fees paid to third parties are excluded from this calculation.
- IFRS 16, 'Leases', amendment to the Illustrative Example 13 that accompanies IFRS 16 to remove the illustration of payments from the lessor relating to leasehold improvements. The amendment intends to remove any potential confusion about the treatment of lease incentives.
- IAS 41, 'Agriculture' has been amended to align the requirements for measuring fair value with those of IFRS 13. The amendment removes the requirement for entities to exclude cash flows for taxation when measuring fair value.

It is unlikely that the amendment will have a material impact on the group's consolidated and separate financial statements.

d) Standards, amendments and interpretations not relevant to the Group and Authority but effective for 31 March 2021 year end

Amendment to IFRS 3, 'Business combinations' (effective on or after 1 January 2020).

This amendment revises the definition of a business. According to feedback received by the IASB, application of the current guidance is commonly thought to be too complex, and it results in too many transactions qualifying as business combinations. More acquisitions are likely to be accounted for as asset acquisitions.

To be considered a business, an acquisition would have to include an input and a substantive process that together significantly contribute to the ability to create outputs. The new guidance provides a framework to evaluate when an input and a substantive process are present (including for early stage companies that have not generated outputs). To be a business without outputs, there will now need to be an organised workforce.

Amendments to IFRS 9, Financial Instruments, IAS 39, Financial Instruments: Recognition and Measurement and IFRS 7, Financial Instruments: Disclosure – Interest rate benchmark reform (Phase 1) (effective on or after 1 January 2020).

These amendments provide certain reliefs in connection with interest rate benchmark reform (IBOR). The reliefs relate to hedge accounting and have the effect that IBOR should not generally cause hedge accounting to terminate. However, any hedge ineffectiveness should continue to be recorded in the income statement.

	Gro	ир	Authority	
	2021	2020	2021	2020
	Р	Р	Р	Р
3. Investment property				
Investment property				
Valuation	10,100,000	10,100,000	10,100,000	10,100,000
Carrying value	10,100,000	10,100,000	10,100,000	10,100,000
Investment property				
Opening balance	10,100,000	9,900,000	10,100,000	9,900,000
Fair value adjustment	-	200,000	-	200,000
Closing balance	10,100,000	10,100,000	10,100,000	10,100,000

Group and Authority

Details of valuation

A valuation of the investment properties was performed on 29 April 2021 by an independent professional valuer, Mr. Lloyd Mulambya Bsc. (Real Estate) Mr. EIB, Mr. EAC, of Stocker Fleetwood Bird. The valuation conforms to International Valuation Standards and was based on recent market data on similar properties transacted on an arm's length basis.

	Gro	ир	Authority		
	2021	2020	2021	2020	
	Р	Р	Р	Р	
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Rental income from investment property	478,979	440,023	478,979	440,023	
Repairs and maintenance of the investment property	(75,316)	(256,971)	(75,316)	(256,971)	

4. Property, Plant and Equipment

Group						
		2021		2020		
	Cost	Accumulated Depreciation	Carrying Value	Cost	Accumulated Depreciation	Carrying Value
	Р	Р	Р	Р	Р	Р
Buildings	62,604,830	(12,758,693)	49,846,137	55,012,480	(11,716,122)	43,296,358
Furniture and fixtures	15,523,997	(12,667,534)	2,856,463	14,357,162	(11,203,903)	3,153,259
IT equipment	13,250,037	(12,899,912)	350,125	12,959,512	(11,920,167)	1,039,345
Land	2,135,700	-	2,135,700	2,135,700	-	2,135,700
Motor vehicles	10,377,594	(6,411,217)	3,966,377	9,132,677	(5,486,818)	3,645,859
Office equipment	13,827,596	(13,397,717)	429,879	13,564,972	(13,275,106)	289,866
Technical equipment (ASMS)	152,111,681	(104,406,190)	47,705,491	153,763,606	(96,579,306)	57,184,300
Capital work-in-progress	3,985,017	-	3,985,017	8,564,894	-	8,564,894
Total	273,816,452	(162,541,263)	111,275,189	269,491,003	(150,181,422)	119,309,581

Reconciliation of Property, Plant and Equipment - 2021

	Opening Balance	Additions	Transfers	Disposals / Write-off	Depreciation	Total
	P	P	P	P	P	P
Buildings	43,296,358	1,289,642	-	-	(1,042,571)	43,543,429
Furniture and fixtures	3,153,259	7,592,350	-	(4,119)	(1,582,319)	9,159,171
IT equipment	1,039,345	354,183	-	-	(1,043,403)	350,125
Land	2,135,700	-	-	-	-	2,135,700
Motor vehicles	3,645,859	2,001,943	-	-	(1,681,425)	3,966,377
Office equipment	289,866	262,624	-	-	(122,611)	429,879
Technical equipment (ASMS)	57,184,300	51,025	-	-	(9,529,834)	47,705,491
Capital work in progress	8,564,894	-	(4,579,877)	-	-	3,985,017
Total	119,309,581	11,551,767	(4,579,877)	(4,119)	(15,002,163)	111,275,189

Reconciliation of Property, Plant and Equipment - 2020

	Opening			Disposals /		
	Balance	Additions	Transfers	Write-off	Depreciation	Total
	Р	Р	Р	Р	Р	Р
Buildings	39,612,016	4,712,444	-	-	(1,028,102)	43,296,358
Furniture and fixtures	3,581,408	1,092,996	-	(251)	(1,520,894)	3,153,259
IT equipment	1,558,697	1,242,926	-	(40,796)	(1,721,482)	1,039,345
Land	2,135,700	-	-	-	-	2,135,700
Motor vehicles	977,414	4,189,206	-	-	(1,520,761)	3,645,859
Office equipment	906,302	229,139	-	-	(845,575)	289,866
Technical equipment (ASMS)	52,396,866	12,931,913	-	-	(8,144,479)	57,184,300
Capital work in progress	8,456,504	108,390	-	-	-	8,564,894
Total	109,624,907	24,507,014	-	(41,047)	(14,781,293)	119,309,581

4. Property, Plant and Equipment (continued)

Authority						
		2021		2020		
	Cost	Accumulated Depreciation	Carrying Value	Cost	Accumulated Depreciation	Carrying Value
	Р	Р	Р	Р	Р	Р
Buildings	62,604,830	(12,758,693)	49,846,137	55,012,480	(11,716,122)	43,296,358
Furniture and fixtures	15,523,997	(12,667,534)	2,856,463	14,357,162	(11,203,903)	3,153,259
IT equipment	13,002,218	(12,665,883)	336,335	12,761,107	(11,732,447)	1,028,660
Land	2,135,700	-	2,135,700	2,135,700	-	2,135,700
Motor vehicles	9,312,517	(5,346,140)	3,966,377	8,067,600	(4,421,741)	3,645,859
Office equipment	13,827,596	(13,397,717)	429,879	13,564,972	(13,275,106)	289,866
Technical equipment (ASMS)	152,111,681	(104,406,190)	47,705,491	153,763,606	(96,579,306)	57,184,300
Capital work-in-progress	3,985,017	-	3,985,017	8,564,894	-	8,564,894
Total	272,503,556	(161,242,157)	111,261,399	268,227,521	(148,928,625)	119,298,896

Reconciliation of Property, Plant and Equipment - 2021

	Opening Balance	Additions	Transfers	Disposals / Write-off	Depreciation	Total
	Р	Р	Р	Р	Р	Р
Buildings	43,296,358	7,592,350	-	-	(1,042,571)	49,846,137
Furniture and fixtures	3,153,259	1289642	-	(4,119)	(1,582,319)	2,856,463
IT equipment	1,028,660	286,137	-	-	(978,462)	336,335
Land	2,135,700	-	-	-	-	2,135,700
Motor vehicles	3,645,859	2,001,943	-	-	(1,681,425)	3,966,377
Office equipment	289,866	262,624	-	-	(122,611)	429,879
Technical equipment (ASMS)	57,184,300	51,025	-	-	(9,529,834)	47,705,491
Capital work in progress	8,564,894	-	(4,579,877)	-	-	3,985,017
Total	119,298,896	11,483,721	(4,579,877)	(4,119)	(14,937,222)	111,261,399

Reconciliation of Property, Plant and Equipment - 2020

	Opening			Disposals /		
	Balance	Additions	Transfers	Write-off	Depreciation	Total
	Р	Р	Р	Р	Р	Р
Buildings	39,612,016	4,712,444	-	-	(1,028,102)	43,296,358
Furniture and fixtures	3,581,408	1,092,996	-	(251)	(1,520,894)	3,153,259
IT equipment	1,444,699	1,230,826	-	-	(1,646,865)	1,028,660
Land	2,135,700	-	-	-	-	2,135,700
Motor vehicles	754,288	4,189,206	-	-	(1,297,635)	3,645,859
Office equipment	906,302	229,139	-	-	(845,575)	289,866
Technical equipment (ASMS)	52,396,866	12,931,913	-	-	(8,144,479)	57,184,300
Capital work in progress	8,456,504	108,390	-	-	-	8,564,894
Total	109,287,783	24,494,914	-	(251)	(14,483,550)	119,298,896

	Gro	oup	Authority		
	2021	2020	2021	2020	
	Р	Р	Р	Р	
5. Financial assets by category					
Financial assets at amortised cost					
Trade and other receivables	52,693,554	66,776,933	38,705,164	44,832,955	
Cash and cash equivalents	483,628,100	425,993,160	214,564,988	194,262,017	
	536,321,654	492,770,093	253,270,152	239,094,972	

The carrying value of the financial assets approximate their fair value due to their short term nature.

Credit quality of financial assets

The credit quality of financial assets that are neither past due nor impaired can be assessed by reference to historical information about counterparty default rates.

There are no credit ratings available in Botswana. The above banks have reported sound financial results and continued compliance with minimum capital adequacy requirements set by the regulator. None of the financial assets that are fully performing have been renegotiated during the year.

		Group		Authority	
		2021	2020	2021	2020
	Ratings	Р	Р	Р	Р
Trade receivables	Group 1	-	-	-	-
	Group 2	34,933,784	51,500,892	23,343,147	35,145,026
Receivable from CRASA	Not rated	17,834	-	17,834	-
Staff debtors	Not rated	73,103	120,647	73,103	120,647
Cash at bank and Short-term deposits	Not rated	483,626,100	425,991,160	214,562,988	194,260,017
Deposits	Not rated	54,007	54,007	54,007	54,007
Other receivables	Not rated	2,945,297	6,122,581	2,106,045	6,060,409

Key:

Group 1 = new customers (less than 6 months).

Group 2 = existing customers (more than 6 months) with no default in the past.

	Gro	ир	Autho	rity
	2021	2020	2021	2020
	Р	Р	Р	Р
6. Trade and other receivables				
Trade receivables	53,199,545	64,541,469	39,597,639	41,690,193
Less: Impairment	(3,122,613)	(3,826,642)	(2,669,845)	(2,857,172)
Trade receivables (net)	50,076,932	60,714,827	36,927,794	38,833,021
Other receivables	2,945,297	6,122,581	2,106,045	6,060,409
Deposits	54,007	54,007	54,007	54,007
Staff debtors	73,103	120,647	73,103	120,647
Receivable from CRASA	17,834	-	17,834	-
Prepayments	2,308,866	1,166,415	2,187,479	1,146,415
less impairment on other receivables	(473,619)	(235,129)	(473,619)	(235,129)
Total other receivables (net)	4,925,488	7,228,521	3,964,849	7,146,349
Total receivables and other receivables (net)	55,002,420	67,943,348	40,892,643	45,979,370
Trade debtors are unsecured and do not attract interest.				
Trade receivables which are fully performing	34,933,784	51,500,892	23,343,147	35,145,026

Exposure to credit risk

Trade receivables inherently expose the Authority to credit risk, being the risk that the Authority will incur financial loss if regulated entities fail to make payments as they fall due.

Management evaluates the credit risk relating to customers on an on-going basis especially on major customers by obtaining their latest financial statements, budgets, etc, and where appropriate, makes adequate provisions for bad and doubtful debts.

There have been no significant changes in the credit risk management policies and processes since the prior reporting

A loss allowance is recognised for all trade receivables in accordance with IFRS 9 Financial Instruments, and is monitored at the end of each reporting period. In addition to the loss allowance, trade receivables are written off when there is no reasonable expectation of recovery, for example, when a debtor has been placed under liquidation. Trade receivables which have been written off are not subject to enforcement activities.

The Authority measures the loss allowance for trade receivables by applying the simplified approach which is prescribed by IFRS 9. In accordance with this approach, the loss allowance on trade receivables is determined as the lifetime expected credit losses on trade receivables. These lifetime expected credit losses are estimated using a provision matrix, which is presented below. The provision matrix has been developed by making use of past default experience of debtors but also incorporates forward looking information and general economic conditions of the industry as at the reporting date.

Trade receivables also include large operators comprising Public Telecommunications Operators (PTOs). The Authority individually assess the exposure to credit risk of each of these entities and measures the loss allowance on these entities based on balances that are outstanding more than 90 days.

The Authority's historical credit loss experience does not show significantly different loss patterns for different customer segments. The provision for credit loss is therefore based on past due status without disaggregating into further risk profiles. The loss allowance provision has been disclosed in page 125.

6. Trade and other receivables (continued)

Group				
	2021	2021	2020	2020
	Р	Р	Р	Р
	Estimated gross carrying amount at default	Loss allowance (Lifetime expected credit loss)	Estimated gross carrying amount at default	Loss allowance (Lifetime expected credit loss
Current	30,333,333	72,675	51,158,210	32,463
1-30 days	4,600,451	8,605	342,683	57,257
Fully performing	34,933,784	81,280	51,500,892	89,720
31-60 days	6,051,338	47,284	134,829	541
61-90 days	4,475,808	48,004	3,575,014	74,666
Past due but not impaired	10,527,146	95,288	3,709,843	75,207
Over 90 days- impaired	7,738,615	2,946,045	9,330,734	3,661,715
Total	53,199,545	3,122,613	64,541,469	3,826,642

Authority				
	2021	2021	2020	2020
	Р	Р	Р	Р
	Estimated gross carrying amount at default	Loss allowance (Lifetime expected credit loss)	Estimated gross carrying amount at default	Loss allowance (Lifetime expected credit loss)
Current	22,355,779	69,590	34,802,343	30,379
1-30 days	987,368	8,329	342,683	57,257
Fully performing	23,343,147	77,919	35,145,026	87,636
31-60 days	6,024,932	47,284	77,306	428
61-90 days	3,521,094	30,716	69,859	27,541
Past due but not impaired	9,546,026	78,000	147,165	27,969
Over 90 days - impaired	6,708,466	2,513,926	6,398,002	2,741,567
Total	39,597,639	2,669,845	41,690,193	2,857,172

6. Trade and other receivables (continued)

Movement in the loss allowance for trade receivables

	Gro	oup	Auth	ority
	2021 2020		2021	2020
	Р	Р	Р	Р
Opening impairment allowance	3,826,642	4,027,967	2,857,172	3,346,509
Provision for the year	(309,311)	(201,325)	207,392	(489,337)
Reversal during the year	(394,719)	-	(394,719)	_
	3,122,612	3,826,642	2,669,845	2,857,172

Movement in the loss allowance for other receivables

	Gro	oup	Authority		
	2021 2020		2021	2020	
	Р	P	Р	Р	
Opening impairment allowance	235,129	-	235,129	-	
Reversal/Provision for the year	238,490	235,129	238,490	235,129	
	473,619	235,129	473,619	235,129	

Trade Receivables: Expected Credit loss Default Rates (%)

Date	Current	1 - 30 Past due	31 - 60 Past due	61 - 90 Past due	Over 90 Past due
31-Mar-20	9.35%	16.41%	24.96%	39.10%	100%
31-Mar-21	7.15%	12.12%	18.29%	31.98%	100%

	Gro	Group		ority
	2021	2020	2021	2020
	Р	Р	Р	Р
7. Cash and cash equivalents				
Cash on hand	2,000	2,000	2,000	2,000
Bank balances	64,433,569	57,071,135	30,155,184	25,019,780
Short-term deposits	419,192,531	368,920,025	184,407,804	169,240,237
	483,628,100	425,993,160	214,564,988	194,262,017
For the purpose of the cash flow statement the year-end cash and cash equivalents comprise of following;				
Cash on hand	2,000	2,000	2,000	2,000
Bank balances	64,433,569	57,071,135	30,155,184	25,019,780
Short-term deposits	419,192,531	368,920,025	184,407,804	169,240,237
	483,628,100	425,993,160	214,564,988	194,262,017

P P P P P P P P P P P P P P P P P P P		Group		Authority	
8. Deferred tax Deferred tax assets Deferred tax liabilities (3,120,709) (2,502,399) (3,120,709) (2,502,399) (2,803,473) (2,047,109) (2,803,473) (2,047,109) Movement in deferred taxation Deferred taxation at beginning of year (2,047,109) (1,068,582) (2,047,109) (1,068,582) Charged to the statements of comprehensive income (756,364) (978,527) (756,364) (978,527) Deferred taxation at end of year (2,803,473) (2,047,109) (2,803,473) (2,047,109) Broken down as: Provision for loss allowances 86,770 150,498 86,770 150,498 Deferred expenses 230,466 304,792 230,466 304,792 Differences in tax and accounting depreciation (3,120,709) (2,502,399) (3,120,709) (2,502,399) Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance 21,285,027 10,892,844 21,285,027 10,892,844 Transfer from accumulated surplus 21,628,234 15,457,202 - Condition (15,457,202) (5,065,019) Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202		2021	2020	2021	2020
Deferred tax assets Deferred tax liabilities (3,120,709) (2,502,399) (2,502,399) (3,120,709) (2,502,399) (2,502,399) (2,602,399) (3,120,709) (2,502,399) (2,502,399) (2,602,399) (3,120,709) (2,502,399) (2,602,399) (3,120,709) (2,803,473) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (2,803,473) (2,047,1		Р	Р	Р	Р
Deferred tax liabilities (3,120,709) (2,502,399) (3,120,709) (2,502,399) (2,502,399) (2,502,399) (2,502,399) (2,502,399) (2,502,399) (2,502,399) (2,502,399) (2,502,399) (2,6047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (2,638,642) (2,6	8. Deferred tax				
(2,803,473) (2,047,109) (2,803,473) (2,047,109)	Deferred tax assets	317,236	455,290	317,236	455,290
Movement in deferred taxation (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (2,047,109) (1,068,582) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (756,364) (978,527) (2,047,109) (2,047,109) (2,047,109) (2,047,109) (2,047,109) (2,048,347) (2,048,347) 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 150,498 86,770 15	Deferred tax liabilities	(3,120,709)	(2,502,399)	(3,120,709)	(2,502,399)
Deferred taxation at beginning of year (2,047,109) (1,068,582) (2,047,109) (1,068,582) Charged to the statements of comprehensive income (756,364) (978,527) (756,364) (978,527) Deferred taxation at end of year (2,803,473) (2,047,109) (2,803,473) (2,047,109) Broken down as: Provision for loss allowances 86,770 150,498 86,770 150,498 Deferred expenses 230,466 304,792 230,466 304,792 Differences in tax and accounting depreciation (3,120,709) (2,502,399) (3,120,709) (2,502,399) (2,803,473) (2,047,109) (2,803,473) (2,047,109) Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance 21,285,027 10,892,844 21,285,027 10,892,844 Transfer from accumulated surplus 21,628,234 15,457,202 (5,065,019) Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202		(2,803,473)	(2,047,109)	(2,803,473)	(2,047,109)
Deferred taxation at beginning of year (2,047,109) (1,068,582) (2,047,109) (1,068,582) Charged to the statements of comprehensive income (756,364) (978,527) (756,364) (978,527) Deferred taxation at end of year (2,803,473) (2,047,109) (2,803,473) (2,047,109) Broken down as: Provision for loss allowances 86,770 150,498 86,770 150,498 Deferred expenses 230,466 304,792 230,466 304,792 Differences in tax and accounting depreciation (3,120,709) (2,502,399) (3,120,709) (2,502,399) (2,803,473) (2,047,109) (2,803,473) (2,047,109) Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance 21,285,027 10,892,844 21,285,027 10,892,844 Transfer from accumulated surplus 21,628,234 15,457,202 (5,065,019) Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202	Movement in deferred toyation				
Charged to the statements of comprehensive income (756,364) (978,527) (756,364) (978,527) Deferred taxation at end of year (2,803,473) (2,047,109) (2,803,473) (2,047,109) Broken down as: Provision for loss allowances 86,770 150,498 86,770 150,498 Deferred expenses 230,466 304,792 24,502,399 (3,102,709) (2,803,473) (2,047,109) 2,803,473 (2,047,109) 2,803,473 21,285,027 10,892,844 21,285,0		(2 047 109)	(1 068 582)	(2 047 109)	(1 068 582)
Deferred taxation at end of year (2,803,473) (2,047,109) (2,803,473) (2,047,109)					
Broken down as: Provision for loss allowances 86,770 150,498 86,770 150,498 Deferred expenses 230,466 304,792 230,466 304,792 Differences in tax and accounting depreciation (3,120,709) (2,502,399) (3,120,709) (2,502,399) Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settle		` ' '	` ' '	. , , ,	(2,047,109)
Provision for loss allowances Deferred expenses Differences in tax and accounting depreciation (3,120,709) (2,502,399) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance Transfer from accumulated surplus Amount paid during the year to Universal Access and Service Fund Trust Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202 150,498 86,770 150,498 16,490 1					
Deferred expenses Differences in tax and accounting depreciation (3,120,709) (2,502,399) (2,803,473) (2,047,109) Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is expected to be settled after more than 12 months Deferred tax liability is e	Broken down as:				
Differences in tax and accounting depreciation (3,120,709) (2,502,399) (3,120,709) (2,502,399) (2,803,473) (2,047,109) (2,803,473) (2,047,109) Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance Transfer from accumulated surplus Amount paid during the year to Universal Access and Service Fund Trust Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202 - 21,628,234 15,457,202	Provision for loss allowances	86,770	150,498	86,770	150,498
Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance Transfer from accumulated surplus Amount paid during the year to Universal Access and Service Fund Trust Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202 (5,065,019) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109) (2,803,473) (2,047,109)	Deferred expenses	230,466	304,792	230,466	304,792
Deferred tax liability is expected to be settled after more than 12 months 9. Universal Access and Service Fund) Opening balance Transfer from accumulated surplus Amount paid during the year to Universal Access and Service Fund Trust Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202 (5,065,019) (15,457,202) (5,065,019) - 21,628,234 15,457,202	Differences in tax and accounting depreciation	(3,120,709)	(2,502,399)	(3,120,709)	(2,502,399)
9. Universal Access and Service Fund) Opening balance Transfer from accumulated surplus Amount paid during the year to Universal Access and Service Fund Trust Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202 (5,065,019) Excess and Service Fund Trust - 21,628,234 15,457,202		(2,803,473)	(2,047,109)	(2,803,473)	(2,047,109)
Opening balance 21,285,027 10,892,844 21,285,027 10,892,844 Transfer from accumulated surplus 21,628,234 15,457,202	· ·				
Transfer from accumulated surplus Amount paid during the year to Universal Access and Service Fund Trust Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202	9. Universal Access and Service Fund)				
Amount paid during the year to Universal Access and Service Fund Trust (15,457,202) (5,065,019) (15,457,202) (5,065,019) Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - 21,628,234 15,457,202	Opening balance	21,285,027	10,892,844	21,285,027	10,892,844
Fund Trust (15,457,202) (5,065,019) (15,457,202) (5,065,019) Excess of income over expenditure allocated to the Universal Access and Service Fund Trust - - - 21,628,234 15,457,202	Transfer from accumulated surplus	21,628,234	15,457,202	-	-
Access and Service Fund Trust 21,628,234 15,457,202		(15,457,202)	(5,065,019)	(15,457,202)	(5,065,019)
	·	-	-	21,628,234	15,457,202
	Closing balance	27,456,059	21,285,027	27,456,059	21,285,027

The Trust was maintained in accordance with the requirements of Section 29(3) of the Communications Regulatory Act, 2012. This Fund is not distributable and cannot be utilised except for funds approved by Minister under section 29 (4).

Universal Access and Service Fund Trust came in to existence in April 2014 and consolidated for Group reporting purposes. Therefore the surplus has been classified as a liability in the Authority and classified as a reserve at the Group level.

The balance due to Universal Access and Service Fund Trust do not attract interest and do not have fixed payment terms.

	Gro	Group		ority
	2021	2020	2021	2020
	Р	Р	Р	Р
10. Trade and other payables				
Trade payables	2,590,778	1,282,007	2,590,778	1,282,007
VAT payable	1,454,100	1,120,842	1,454,100	1,120,842
Employee related provisions (Note 10a)	10,987,776	9,191,587	10,987,776	9,191,587
Other accrued expenses	7,574,677	10,061,839	7,574,677	10,061,839
Deposits received	102,447	102,447	102,447	102,447
Other payables	14,653,286	6,462,506	1,825,171	1,827,276
	37,363,064	28,221,228	24,534,949	23,585,998

10a. Employee related provisions

		Group			Authority		
	Gratuity	Leave	Total	Gratuity	Leave	Total	
2021	Р	Р		Р	Р	Р	
Opening balance	1,402,935	7,788,652	9,191,587	1,402,935	7,788,652	9,191,587	
During the year charge	2,642,397	2,591,951	5,234,348	2,642,397	2,591,951	5,234,348	
Payment during the year	(159,125)	(3,279,034)	(3,438,159)	(159,125)	(3,279,034)	(3,438,159)	
Closing balance	3,886,207	7,101,569	10,987,776	3,886,207	7,101,569	10,987,776	

		Group		Authority		
	Gratuity	Leave	Total	Gratuity	Leave	Total
2020	Р	Р		Р	Р	Р
Opening balance	1,597,586	6,691,352	8,288,938	1,597,586	6,691,352	8,288,938
During the year charge	697,163	3,444,854	4,142,018	697,163	3,444,854	4,142,018
Payment during the year	(891,814)	(2,347,555)	(3,239,368)	(891,814)	(2,347,555)	(3,239,368)
Closing balance	1,402,935	7,788,652	9,191,587	1,402,935	7,788,652	9,191,587

11. Financial liabilities by category

The accounting policies for financial instruments have been applied to the line items below. The carrying amounts of the financial liabilities in each category are as follows:

Financial liabilities at amortised cost

	Group		Authority	
	2021	2020	2021	2020
	Р	Р	Р	Р
Universal Access and Service Fund Trust	-	-	27,456,059	21,285,027
Trade and other payables	24,921,188	17,908,799	12,093,073	13,273,569
	24,921,188	17,908,799	39,549,132	34,558,596

	Group		Authority	
	2021	2020	2021	2020
Note	Р	Р	Р	Р
12. Revenue				
Turnover fees - Telecommunications	98,081,080	95,840,481	98,081,080	95,840,481
Turnover fees - Postal	1,851,909	1,009,297	1,851,909	1,009,297
Turnover fees - Broadcasting	964,993	1,277,846	964,993	1,277,846
Radio license fees	19,444,948	22,035,224	19,444,948	22,035,224
System license fees	9,398,129	8,901,076	9,398,129	8,901,076
Service license fees	2,339,737	2,128,442	2,339,737	2,128,442
UASF Levy	47,792,972	50,308,222	-	-
Domain name fees & Type approval fees	1,280,871	1,555,152	1,280,871	1,555,152
	181,154,639	183,055,740	133,361,667	132,747,518
13. Operating expenses Major categories of operating expenses: Employee costs Depreciation Impairment reversal/(charge) on trade receivables	15,002,163 (309,311)			53,733,101 14,483,550 (489,337)
Impairment charge on other receivables Bad debt write-off	238,490	235,129 361,244	238,490	235,129 361,244
Consulting and professional fees Project expenses	4,995,667 49,199,544	6,102,985 22,812,263	4,995,667 -	6,116,588
Conference expenses	514,879	8,373,860	514,879	8,130,120
Travel expenses	1,225,225	4,205,934	1,225,225	4,205,934
Repairs and maintenance	5,287,658	4,070,280	5,287,658	4,070,280
Security charges	2,233,945	2,102,591	2,233,945	2,102,591
Training	4,025,309	5,601,981	4,025,309	5,601,981
Internet charges	4,981,002	3,291,704	4,981,002	3,291,704
Advertising	2,794,532	2,467,546	2,472,972	2,084,522
Donations	550,480	2,235,222	550,480	2,235,222
Board expenses	712,120	1,816,278	370,684	1,649,164
Legal expenses	329,633	1,191,423	329,633	1,191,423
Other expenses	13,527,614	14,147,983	12,648,301	12,930,395
·	164,647,953	147,329,492	114,357,862	121,933,611

	Gro		Auth	
	2021	2020	2021	2020
	Р	Р	Р	Р
14. Surplus for the year before finance				
income for the year is stated after				
accounting for the following:				
Profit on sale of property, plant and equipment	303,555	128,337	303,555	128,337
Depreciation on property, plant and equipment	15,002,163	14,781,293	14,937,222	14,483,550
Project expenses	49,199,544	22,812,263	-	-
Consulting fees	4,995,667	6,102,985	4,995,667	6,116,588
Employee costs (refer note (a) below)	59,339,003	53,733,101	59,339,003	53,733,101
(a) Employee costs:				
Salary and wages	41,645,375	39,172,746	41,645,375	39,172,746
Pension - defined contribution plan	5,724,373	5,328,619	5,724,373	5,328,619
Other employee benefits	11,969,255	9,231,736	11,969,255	9,231,736
	59,339,003	53,733,101	59,339,003	53,733,101
Average number of employees	100	84	100	84
Bank Income from short-term investments	235,616 15,240,445 15,476,061	199,815 12,667,318 12,867,133	17,212 7,134,449 7,151,661	73,093 5,882,089 5,955,182
16. Taxation				
Current tax:				
Basic tax at 22% (2020: 22%)	5,917,530	4,065,462	5,917,530	4,065,462
Dasic tax at 2270 (2020, 2270)	3,317,330	4,000,402	3,317,330	4,000,402
Deferred income tax:				
Temporary differences	756,364	978,527	756,364	978,527
Income tax expense	6,673,894	5,043,989	6,673,894	5,043,989
The tax on Group and Authority's profit before tax differs from theoretical amount that would arise using the basic tax rate as follows:				
Surplus before income tax	34,132,914	52,346,777	28,302,128	20,501,191
Tax calculated at applicable tax rates of 22%	7,509,241	11,516,291	6,226,468	4,510,262
Tax effects of:				
- Expenses not deductible for tax purposes	477,782	564,083	477,782	564,083
Timing differences not recognised in the previous year	(30,356)	(30,356)	(30,356)	(30,356)
Income not chargeble for tax purposes	(1,282,773)	(7,006,029)	-	
Income tax expense	6,673,894	5,043,989	6,673,894	5,043,989

	Group		Authority	
	2021	2020	2021	2020
	Р	Р	Р	Р
17. Auditors' remuneration				
Fees	439,079	235,042	362,206	171,275
18. Cash generated from operations				
Surplus for the year before tax	34,132,914	52,346,777	28,302,128	20,501,191
Adjustments for: Depreciation Profit on sale of assets Interest received	15,002,163 (303,555) (15,476,061)	14,781,293 (128,337) (12,867,133)	14,937,222 (303,555) (7,151,661)	14,483,550 (128,337) (5,955,182)
Fair value adjustments Changes in working capital:	-	(200,000)	-	(200,000)
Trade and other receivables	12,940,928	(7,748,435)	5,086,727	1,468,202
Trade and other payables	9,141,835	1,605,310	948,950	7,129,827
	55,438,224	47,789,475	41,819,811	37,299,251
19. Commitments 19.1. Authorised capital expenditure for property,				
plant and equipment - already contracted for	5,395,827	14,938,947	5,395,827	14,938,947
This authorised expenditure would be financed by available cash resources and accumulated funds.				
19.2. Operating leases – as lessor (income) lease payments due				
- within one year	2,657	19,947	2,657	19,947

Lease agreements are cancellable and have the terms 1 to 2 years. The rentals are renegotiated at the anniversary of the lease agreements to align with the open market rates. There are no contingent rents receivable.

20. Contingent Liabilities

The following matters are pending against the Authority:

	Estimated		
Claimant	loss amount	Reasons	Status
Sunset Glory (Pty) Ltd	P890 176	Sunset Glory claims unfair Termination of their Contract.	Matter to be placed before Mediator by quarter two of 2021/2022 for a decision.
SAGE People	P154 060	SAGE claims of alleged unpaid project costs which BOCRA disputes the liability.	Parties are still engaging internally.

As at year end the matters were still on going and no provisions have been made in the financial statements since it is presently not possible to determine the outcome of these matters.

21. Related parties

Related parties

The Authority is wholly owned by the Government of Botswana. It therefore has a significant number of related parties including other stated owned entities, Government departments and all other entities, within the national sphere of Government.

The revenue from the related parties has been quantified based on the information available.

Members of the Board - Refer to Page 98

Members of Key Management

- M. Mokgware (Chief Executive)
- T. Kepaletswe
- B. Mine
- B. Luke
- N. Katse (retired 31 March 2021)
- M. Setshwane
- T. Mmoshe
- P. Tladinyane
- C. Phiase
- J. Isa Molwane
- A. Nyelesi
- T. Mogopa

21. Related parties (continued)

	Group		Authority	
	2021	2020	2021	2020
	Р	Р	Р	Р
Related party balances				
Amounts included in Trade and other receivables/(Trade and other payables) regarding related parties as;				
Botswana Telecommunications Corporation (Government				
owned)	10,636,270	18,377,905	7,724,971	10,281,063
Botswana Post (Government owned)	1,564,676	2,866,812	1,120,369	747,341
Botswana Fibre Network (Government owned)	1,089,310	2,938,986	(253,564)	1,883,735
Communications Regulators' Association of Southern Africa				
(CRASA) - BOCRA is CRASA Treasurer	35,318	-	35,318	-
Other balances owing to related parties at year-end were:				
Universal Access and Service Fund Trust (subsidiary)	-	-	27,456,059	21,285,027
The balance due to Universal Access and Service Fund Trust do not attract interest and do not have fixed payment terms.				
Balance receivable from related party operators do not attract interest due within 30 days and are unsecured.				
Impairment provision of P 238 490 (2020: nil) was recognised on behalf of the related party receivables during the year.				
Related party transactions				
i) Board expenses				
Sitting allowances	417,150	263,781	246,150	204,381
Travelling allowances	8,460	647,525	6,985	576,473
Cell phone allowances	59,400	158,720		
•	227,110		36,450 81,099	128,120
Conferences expenses	712,120	746,252 1,816,278	370,684	740,190 1,649,164
	,		,	, ,
ii) Sale of services rendered				
Botswana Telecommunications Corporation Limited	45,904,017	18,959,233	31,956,541	30,990,216
Botswana Post	1,379,024	1,618,711	590,788	543,224
Botswana Fibre Network	9,378,071	10,814,939	6,288,146	7,915,034
iv) Compensation to key management				
Remuneration paid	16,292,390	17,553,279	16,292,390	17,553,279
Other long-term employee benefits	2,506,001	2,188,535	2,506,001	2,188,535
	18,798,391	19,741,814	18,798,391	19,741,814

22. Risk management

Capital risk management

The Group's objectives when managing funds are to safeguard the Group's ability to continue as a going concern in order to provide effective oversight on the telecommunication, broadcasting and postal services operators and create sufficient funds for development of world class facilities to monitor its activities.

The capital structure of the Authority consists of cash and cash equivalents disclosed in note 7, and accumulated surplus as disclosed in the statement of financial position.

There are no externally imposed capital requirements.

There have been no changes to what the entity manages as capital, the strategy for capital maintenance or externally imposed capital requirements from the previous year.

Financial risk management

The Group's activities expose it to a variety of financial risks: market risk (including fair value interest rate risk and cash flow interest rate risk), credit risk and liquidity risk.

The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Authority's financial performance.

Risk management is carried out by the key management of the Authority and under policies approved by the Board. The Board provides written principles for overall risk management.

Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities and the ability to close out market positions.

The Group's risk to liquidity is a result of the funds available to cover future commitments. The Group manages liquidity risk through an ongoing review of future commitments and credit facilities.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date.

The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

Group		
	Less than 1 year	Between 1 and 2 years
	Р	Р
As at 31 March 2021		
Trade and other payables	24,921,188	-
As at 31 March 2020		
Trade and other payables	17,908,799	-

22. Risk management (continued)

Liquidity risk (continued)

Authority	1 +1	Data and
	Less than	Between 1
	1 year	and 2 years
	Р	Р
As at 31 March 2021		
Trade and other payables	12,093,073	-
Universal Access and Service Fund Trust	27,456,059	-
	39,549,132	-
As at 31 March 2020		
Trade and other payables	13,273,569	-
Universal Access and Service Fund Trust	21,285,027	-
	34,558,596	-

Interest rate risk

The Group is exposed to various risks associated with the effect of fluctuations in the prevailing levels of market rates of interest on its cash resources and investments.

The cash resources are managed to ensure that surplus funds are invested in a manner to achieve maximum returns while minimising risks.

The Group places its funds both in fixed interest earning deposits (fixed deposits) and fluctuating interest earning deposits which are adjusted on a short-term basis based on changes in the prevailing market related interest rates.

Further, these deposits are due on demand. The deposits for the Group amount to P481 million (2020: P425 million) and for Authority amounts to P214 million (2020: P195 million). These deposits are exposed to cash flow interest rate risk.

However, considering the short-term maturity between 14 and 91 days for these deposits, these risks are minimised.

		Group	Authority
	Current	Due in less	Due in less
	Interest Rate	than one year	than one year
		Р	Р
Cash flow interest rate risk - 2021			
Financial Instrument			
3 months fixed deposits	4.25%	49,164,727	49,164,727
3 months fixed deposits	4.10%	65,087,616	65,087,616
3 months fixed deposits	5.40%	80,485,260	-
Stanlib Money Market fund	4.62%	224,454,928	70,155,461
Call accounts	0.025% to 1%	62,138,776	30,049,929
		481,331,307	214,457,733

22. Risk management (continued)

Interest rate risk (continued)

,			
		Group	Authority
	Current	Due in less	Due in less
	Interest Rate	than one year	than one year
		P	P
Cash flow interest rate risk - 2020			
Financial Instrument			
3 months fixed deposits	3.35%	39,600,547	39,600,547
3 months fixed deposits	4.50%	54,748,235	54,748,235
3 months fixed deposits	4.50%	47,108,962	47,108,962
3 months fixed deposits	3.75%	51,149,608	-
Stanlib Money Market fund	3.94%	176,312,583	27,782,403
Call accounts	0.025% to 1%	54,881,354	24,999,082
		423,801,289	194,239,229

At 31 March 2021, if the interest rates on interest bearing assets had increased / decreased by 0.5% with all other variables held constant, post-tax profit for the year would have been for the Group: P1 877 192 (2020: P1 652 825) and for the Authority: P836 385 (2020: P757 533) higher/lower, mainly as a result of interest income on interest bearing assets.

Credit risk

Credit risk consists mainly of cash deposits, cash equivalents, and trade debtors. The Group only deposits cash with major banks with high quality credit standing and limits exposure to any one counter-party.

Year-end trade receivables comprise mainly of three major operators from the telecommunication sector, amounting to P45.46 million for Group (2020: P50.52 million) and P35.24 million (2020: P32.53 million) for the Authority.

The Group only deposits cash with major banks with high quality credit standing and limits exposure to any one counterparty. The following table contain credit risk exposure of cash and cash equivalents.

	Group		Authority	
	2021	2020	2021	2020
	Р	Р	Р	Р
Barclays Bank Botswana Limited	13,632,829	42,902,551	13,632,829	42,902,551
Stanbic Bank Botswana Limited	32,081,517	29,874,942	-	-
Bank of Baroda Botswana Limited	65,100,276	101,869,910	65,100,276	101,869,910
First National Bank of Botswana Limited	16,504,402	17,680,219	16,504,402	17,680,219
Standard Chartered Bank of Botswana Limited	131,852,148	57,089,408	49,170,020	4,024,934
Investment in Stanlib Money Market Fund	224,454,928	176,574,130	70,155,461	27,782,403
	483,626,100	425,991,160	214,562,988	194,260,017

Foreign exchange risk

There are no foreign currency exposures outstanding at the year end. The Group does not hedge foreign exchange fluctuations.

	Group		Authority	
	2021	2020	2021	2020
	Р	P	P	Р
23.Fair value measurement				
Investment property Level 3: Inputs for the asset or liability that are not based on observable market data. Plot 4965, Extension 15, Village, Gaborone	10,100,000	10,100,000	10,100,000	10,100,000
The amounts shown above represents the level within the hierarchy of non-financial assets measured at fair value on a recurring basis at 31 March 2021.				
The freehold property fair value information disclosed above is based on the independent valuers report.				
The independent valuation was carried out on 29 April 2021. Refer to details under note 3.				
The investment property comprises of Plot 4965, Gaborone. The fair value of this property determined by independent valuers is P 10 100 000.				
The fair value of this property is estimated based on the data on recently transacted properties duly adjusted to reflect the subject assets uniqueness.				

The reconciliation of the carrying amounts of non financial assets classified within Level 3 is as follows:

	Group		Authority	
	2021	2020	2021	2020
	Р	Р	Р	Р
Investment property				
Opening balance	10,100,000	9,900,000	10,100,000	9,900,000
- increase in fair value of investment property	-	200,000	-	200,000
Balance at 31 March	10,100,000	10,100,000	10,100,000	10,100,000

24. Events after the reporting date

There have been no subsequent events identified by management which require disclosure or adjustment in these financial statements.

25. COVID-19

The COVID-19 pandemic and its possible impacts are considered to be adjusting events for the Group, However, there are no adverse effects noted on the Group's business activities during the year ended 31 March 2021. Subsequent to 11 March 2020, the World Health Organisation declared COVID-19 as a global pandemic. Since the identification of the first patient on 30 March 2020. The Government of Botswana has moved swiftly to put in place measures to contain the spread of the pandemic with the announcement of a State of Public Emergency, movement restrictions and lockdowns. Consequently, these measures have affected the operating environment of the Group since 1 April 2020, when the state of emergency came into effect.

The Group has carried out an assessment of potential disruption by COVID-19 on their businesses and believe that the Group's operations may not have significant negative impact due to lower economic activity in the market, movement restrictions and closure of borders for non-essential travel because the Group is in the industry of communication.

The Group has assessed the likely impact of these matters on its future business using best estimates, based on currently available information and has concluded that, based on its available cash resources, cash flow projections and financial position, the Group will remain a going concern for the foreseeable future.

DETAILED INCOME STATEMENT

	Gr	Group		Authority	
	2021	2020	2021	2020	
	P	Р	P	Р	
Revenue					
Turnover fees - Telecommunications	98,081,080	95,840,481	98,081,080	95,840,481	
Turnover fees - Postal	1,851,909	1,009,297	1,851,909	1,009,297	
Turnover fees - Broadcasting	964,993		964,993		
Radio license fees	19,444,948			22,035,224	
System licence fees	9,398,129		9,398,129		
Service license fees	2,339,737		2,339,737		
UASF Levy	47,792,972		-		
Domain name fees & Type approval fees	1,280,871		1,280,871	1,555,152	
	181,154,639	183,055,740	133,361,667	132,747,518	
Other income					
Gains on disposal of assets	303,555	128,337	303,555	128,337	
Other income	1,367,633	2,985,036	1,364,128	2,963,742	
Bad debts recovered	-	-			
Rental income	478,979	440,023	478,979	440,023	
	2,150,167	3,553,396	2,146,662	3,532,102	
Interest received	15,476,061	12,867,133	7,151,661	5,955,182	
Fair value adjustments	-	200,000	-	200,000	
	15,476,061	13,067,133	7,151,661	6,155,182	
Total income	198,780,867	199,676,269	142,659,990	142,434,802	
Expenses (refer to page 140)	(164,647,953)	(147,329,492)	(114,357,862)	(121,933,611)	
Surplus for the year before tax	34,132,914	52,346,777	28,302,128	20,501,191	

The detailed income statement does not form part of the audit opinion expressed on page numbers 101 to 104.

Detailed Income Statement (continued)

Operating expenses Advertising Assessment rates and municipal charges	2021 P (2,794,532)	2020 P	2021 P	2020 P
Advertising Assessment rates and municipal charges		Р	Р	Р
Advertising Assessment rates and municipal charges	(2 704 532)			
Advertising Assessment rates and municipal charges	(2 704 522)			
Assessment rates and municipal charges		(0.407.5.40)	(0.470.070)	(0.004.500)
·		(2,467,546)	(2,472,972)	(2,084,522)
	(101,131)	(74,854)	(101,131)	(74,854)
Auditors remuneration	(439,079)	(235,042)	(362,206)	(171,275)
Impairment reversal/(charge) on trade receivables	309,311	201,325	(207,392)	489,337
Impairment charge on other receivables	(238,490)	(596,373)	(238,490)	(596,373)
Bank charges	(152,570)	(163,717)	(138,807)	(152,441)
Board expenses	(712,120)	(1,816,278)	(370,684)	(1,649,164)
CERT costs	(108,035)	(51,183)	(108,035)	(51,183)
Cleaning	(530,462)	(371,388)	(530,462)	(371,388)
Computer expenses	(3,761,596)	(2,544,966)	(3,741,436)	(2,531,526)
Conference expenses	(514,879)	(8,373,860)	(514,879)	(8,130,120)
Consulting and professional fees	(4,995,667)	(6,102,985)	(4,995,667)	(6,116,588)
Consumables	(6,991)	(3,523)	(6,991)	(3,523)
Depreciation, amortisation and impairments	(15,002,163)	(14,781,293)	(14,937,222)	(14,483,550)
Donations	(550,480)	(2,235,222)	(550,480)	(2,235,222)
Employee costs	(59,339,003)	(53,733,101)	(59,339,003)	(53,733,101)
Entertainment	(2,417)	(5,281)	(2,417)	(5,281)
Functions hosted by Authority	(153,894)	(1,837,292)	(125,614)	(1,632,186)
Insurance	(784,888)	(710,909)	(712,537)	(675,005)
Internet expenses	(4,981,002)	(3,291,704)	(4,981,002)	(3,291,704)
Legal expenses	(329,633)	(1,191,423)	(329,633)	(1,191,423)
Magazines, books and periodicals	(171,972)	(179,426)	(171,972)	(179,426)
Motor vehicle expenses	(239,782)	(343,061)	(120,955)	(282,326)
Postage	(40,011)	(99,033)	(40,011)	(99,033)
Printing and Stationery	(654,383)	(1,070,624)	(556,589)	(833,594)
Project expenses	(49,199,544)	(22,812,263)	-	_
Protective clothing	(18,480)	-	(18,480)	-
QoS Monitoring Costs	(37,899)	(726,275)	(37,899	(726,275)
Repairs and maintenance	(5,287,658)	(4,070,280)	(5,287,658)	(4,070,280)
Secretariat Costs	(451,265)	(590,330)	-	(., 0 . 0, 200)
Security	(2,233,945)	(2,102,591)	(2,233,945)	(2,102,591)
Staff Recruitment expenses	(3,154)	(17,123)	(3,154)	(17,123)
Staff welfare	(1,714,898)	(1,854,754)	(1,714,898)	(1,854,754)
Subscriptions	(1,362,841)	(1,388,755)	(1,362,841)	(1,388,755)
Telephone and fax	(1,302,641)	(544,880)	(1,302,641)	(544,880)
Training	(4,025,309)	(5,601,981)	(4,025,309)	(5,601,981)
Training levy	40,597	(1,772)	40,597	(3,601,961)
				(4,205,934)
Travel Utilities	(1,225,225)	(4,205,934) (1,333,795)	(1,225,225) (1,512,812)	
	(1,512,812) (164,647,953)			(1,333,795)

The detailed statement income statement does not form part of the audit opinion expressed on page numbers 101 to 104.