



CRAN

Communications Regulatory Authority of Namibia



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DISCUSSION DOCUMENTS

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MARKET REPORT 2020



Market Report

- ❖ The review assesses developments in the telecommunication sector for 2020.
- ❖ It takes into account the financial health and performance of Namibian operators; consumer price developments in the telecommunications sector; changes in the competitive landscape; and general trends for 2020.

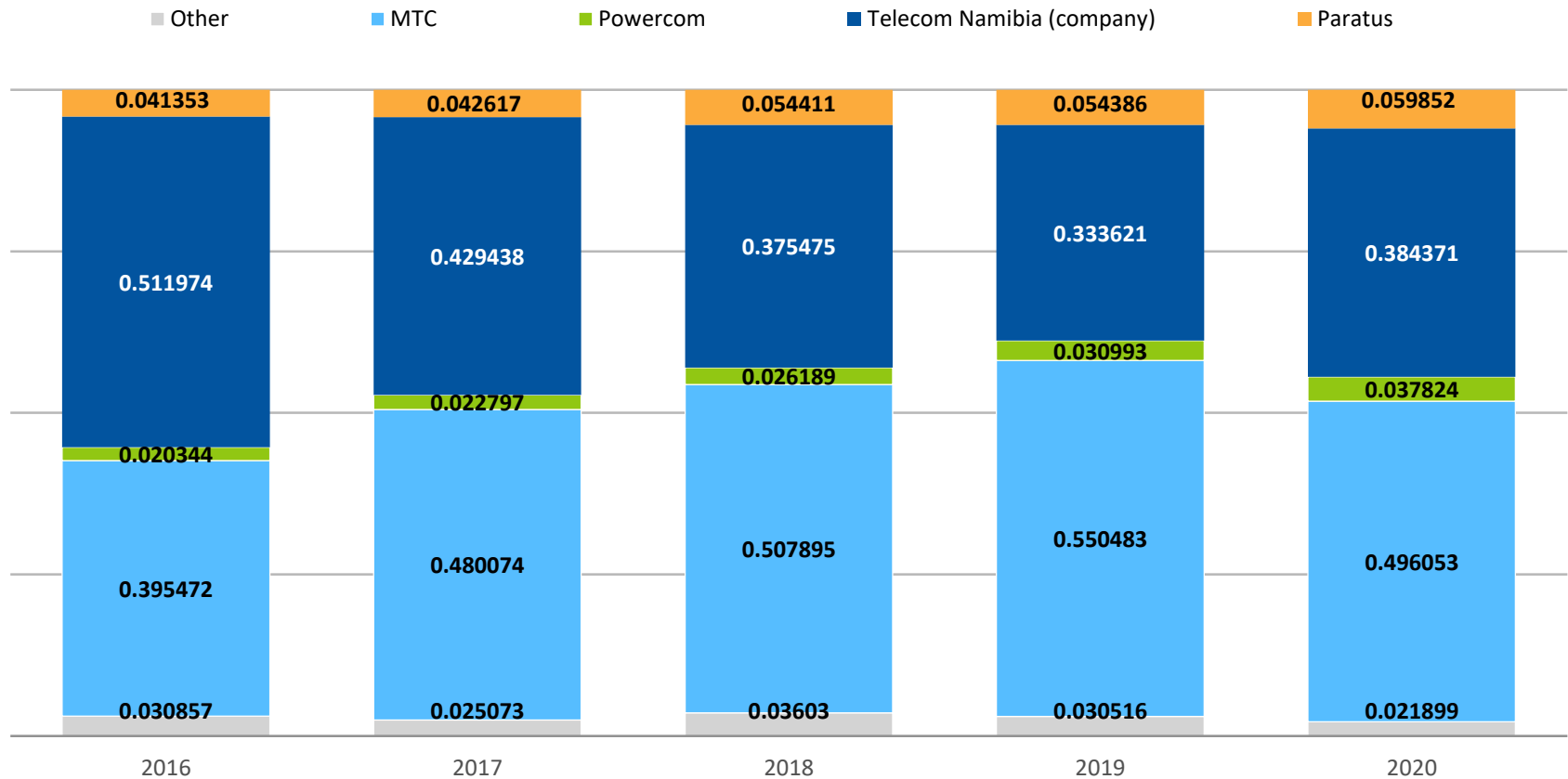
Financial Performance of the Sector

		2012	2013	2014	2015	2016	2017	2018	2019	2020	Change since 2012
Revenue	NAD million	2,840	3,371	3,770	4,156	4,475	4,499	4,821	4,897	5,116	
	YoY %		19%	12%	10%	8%	1%	7%	2%	4%	
	USD million	345	349	347	325	304	338	364	339	311	-10%
Net Profit	NAD million	409	346	-35	419	552	777	787	837	853	
	USD million	50	36	-3	33	38	58	59	58	52	4%

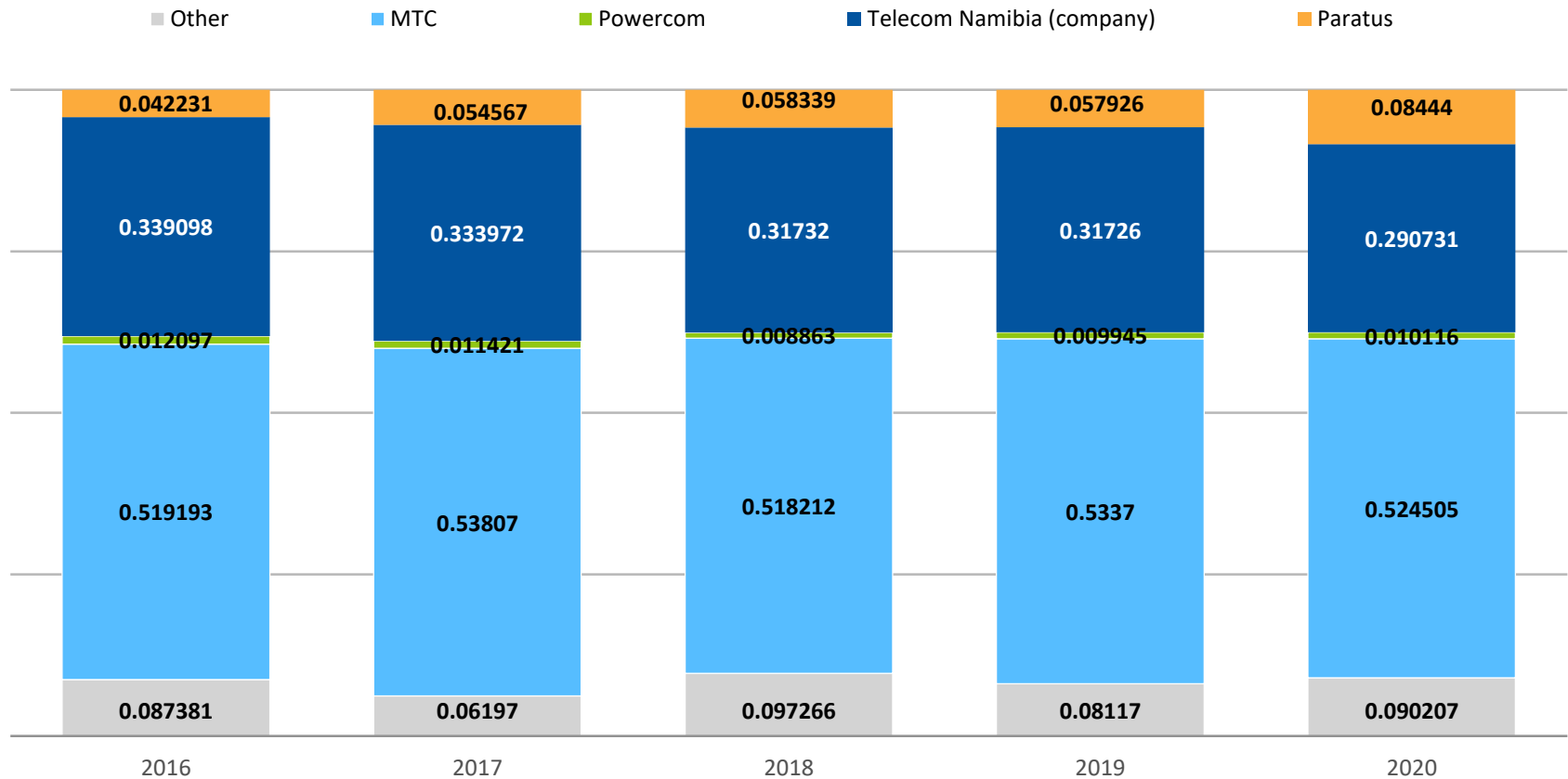
Financial Performance of the Sector

		2012	2013	2014	2015	2016	2017	2018	2019	2020	Change since 2012
Assets	NAD million	4,339	4,798	4,762	4,817	4,973	4,856	5,305	5,555	6,577	
	USD million	528	497	438	377	338	365	400	384	399	-24%
Liabilities	NAD million	1,954	2,459	2,924	2,811	3,571	2,965	3,321	3,191	4,271	
Shareholder Equity	NAD million	2,385	2,338	1,837	2,006	1,402	1,891	1,984	2,364	2,306	
	YoY %		-2%	-21%	9%	-30%	35%	5%	19%	-2%	

Asset Share



Revenue Share



Subscribers

- ❖ Landline subscribers continue to decline and xDSL connections continue to increase.
- ❖ In comparison, nearly 1,8 million mobile SIM cards use data in Namibia, or 61% of active SIM cards are used to access the Internet.

Revenue

- ❖ Mobile data revenues, as a percent share of voice revenues, continues to increase.
- ❖ Fixed data revenues are on the increase from USD million 17 to USD million 115 between 2012 and 2020.
- ❖ Landline revenues continue to decline.

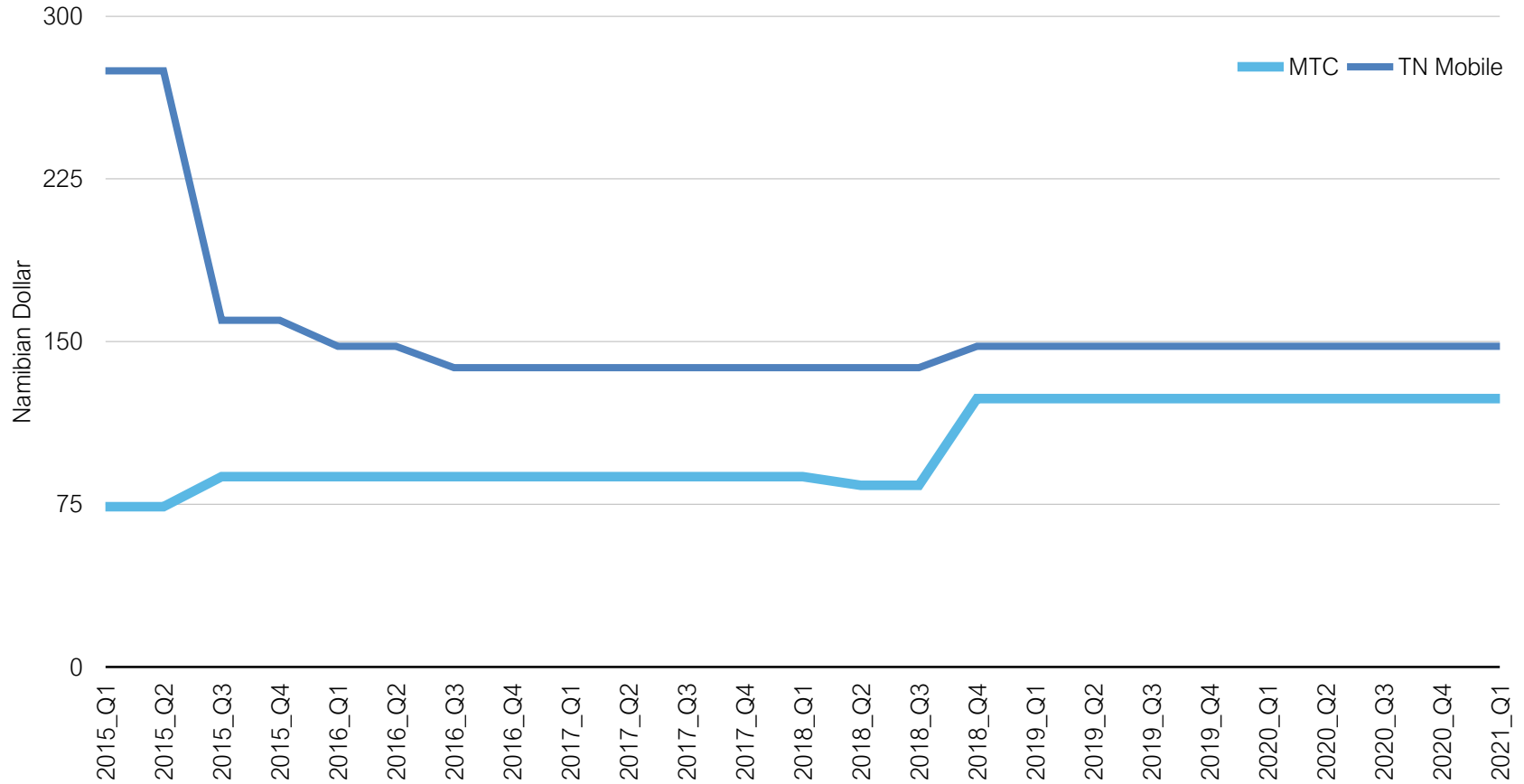
Traffic

- ❖ The trend for landline voice has been declining for the past five years.

Connectivity

- ❖ Namibia's first mile connectivity is sufficient and could be expanded with increasing demand.
- ❖ 26 countries in Africa had faster average broadband speeds than Namibia.
- ❖ Namibia's 3G can hardly be called broadband. The average download speed on 3G was 1 Mbps.

Mobile Prices



Mobile Prices

- ❖ Namibia slipped in the African Affordability ranking from 4th cheapest in Q1 2016 to the 33rd cheapest country in Q1 2021 for 5GB per month.
- ❖ Namibia is one of the most expensive countries in Africa for mobile broadband. The price of the cheapest product available in Namibia in Q1 2021 for 1GB monthly prepaid usage was USD 8.3. In comparison, the same basket costs 60 US cents in Egypt, USD 4.7 in South Africa or even USD 4.3 in DRC Congo

UNIVERSAL SERVICES AND GAP ANALYSIS REPORT

dreamstime



Policy Objectives

Policy Objectives are as follows:

Objective	Detail
1	<p>To ensure universal access to broadband infrastructure and services</p> <p>Provide quality and affordable broadband countrywide</p>
2	<p>To promote the development of content, applications and innovation</p> <p>Enable the use of e-application in government and other sectors of the economy to improve service delivery</p>
3	<p>To support efforts aimed at capacity building, create awareness and reducing the digital divide</p> <p>Drive demand and stimulate public and private sector innovation and investment</p> <p>Improve digital literacy</p> <p>Promote the continued development of the broadband ecosystem</p>
4	<p>To provide an enabling environment for broadband deployment,</p> <p>Create an enabling policy, legislative and regulatory environment for broadband deployment.</p> <p>Promote consumer protection through appropriate regulations</p>

Policy Objectives

- ❖ Broadband is defined to mean a minimum of 2 Mbps download speed available to 80% of the population.”

UAS Study

- This study focuses on the infrastructure aspects of mobile broadband, namely access, usage and affordability, which fall under CRAN's supervision.
 - **Access** is measured via population coverage. For nationwide coverage, only mobile 4G or better is suitable as an indicator in the short to medium term. 3G in Namibia is too slow to be counted as broadband with average speeds of around 1Mbps.
 - **Usage** is measured in speed (Mbps). The faster the average download speed, the more services can reasonably be accessed. Streaming requires, for example, a higher download speed than emails. Also, video conferencing requires higher upload speeds than video streaming, which mostly requires fast download speeds.
 - **Affordability** will be measured as the price for a broadband user basket as a percentage of average individual income. The UN Broadband Commission sets the target at less than 2% of Gross National Product per month for 1GB. This study sets the bar higher at 20GB per month.

Broadband

- ❖ Namibia's 3G is not broadband based on the definition in the Broadband Policy. The average download speed on 3G is 1 Mbps. 4G speeds are reasonable at 19.33 Mbps.

Population Coverage

	4G Population coverage	Policy Objective	People not covered by 4G
Kunene	33%	Below	73,110
Kavango West	40%	Below	55,271
Omaheke	48%	Below	41,581
Zambezi	60%	Below	41,985
Kavango East	69%	Below	50,734
Otjozondjupa	72%	Below	45,866
Hardap	72%	Below	26,711
!Karas	73%	Below	24,113
Oshikoto	73%	Below	57,636
Omusati	82%	Above	48,504
Ohangwena	90%	Above	26,486
Erongo	92%	Above	17,616
Oshana	96%	Above	7,533
Khomas	96%	Above	17,447
Namibia	79%	just below	534,593

Pricing/Affordability

- ❖ There is very little movement in the Namibia's mobile market in terms of price competition. MTC increased its prices in Q1 2015, for the first time ever.
- ❖ The cheapest product from MTC that qualifies for the 1GB basket per month is Aweh-o-Yeah, costing for 30 days N\$ 123.71. The cheapest product from TN Mobile is JIVA with N\$ 147.86 for 30 days.

Pricing/Affordability

- ❖ TN Mobile is cheaper for larger usage baskets than MTC. For the 20GB basket per month TN's Jiva Supreme with a 10GB data allocation for 7 days at N\$246.43 was the cheapest in Q2 2021.
- ❖ The cheapest product from MTC for 20GB per month is dramatically more expensive with N\$ 783.64 for the 10GB per week data top-up.

Pricing/Affordability

- ❖ Namibia is far from the UN Broadband Commission objective of 2% of GNI per capita for 1 GB per month.
- ❖ At a national average, 1 GB per month makes up 4.4% of average expenditure per capita per month. In Kavango West, Kavango East and Zambezi it is even above 10%.

Pricing/Affordability

- ❖ The high broadband prices in Namibia are due to a lack of competition and thus are outside of the scope of a Universal Service Fund.
- ❖ One way the USF can be used to alleviate the high prices for the poor is by paying for Wi-Fi for schools and clinics. This way teachers and health care workers are able to use the Internet for skills upgrade and remote support.
- ❖ Students and patients could also be granted Wi-Fi access and Wi-Fi could be made available to everyone in the community after hours.

Interventions

- ❖ The USF could be used to subsidise another submarine cable, build out national fibre networks and extend mobile broadband coverage.
- ❖ The more projects the USF undertakes, the more funds are required and the higher the USF fee needs to be.
- ❖ CRAN has taken the position that it will use the USF funds as little possible but as much as necessary.
- ❖ Given that the 4G population coverage target has nearly been reached, the first phase of the USF will focus on new RAN sites to provide 4G coverage to secondary schools and clinics that currently are outside of 3G or 4G coverage.

Interventions

- ❖ The main principle for the RAN site rollout is the stimulation of demand. The USF will pay for 4G routers with uncapped data to secondary and vocational schools, adult education and learning centers and clinics in areas with insufficient coverage.
- ❖ At the same time, paying for Wi-Fi for institutions provides anchor tenants for a new RAN site and may make uneconomical sites economical.
- ❖ If the demand stimulation is not enough to lift the demand above the cost of a RAN site, then a direct subsidy will be required for an operator to invest.

Interventions

- ❖ **GIS based selection of interventions.** The selection of interventions centered around educational institutions that are secondary or higher and clinics that were not covered by 4G signal. These were then split into two groups, those within a 12km radius of a RAN site and those without any RAN sites close by.
- ❖ **Upgrade to 122 RAN sites required.** 227 institutions have no 4G coverage but have a RAN site close by so that they can receive 4G coverage through a RAN site upgrade. In total, 122 sites need to be upgraded to cover these institutions.
- ❖ **36 New RAN sites required.** 49 institutions do not have a RAN site within 12km. New RAN sites were placed using QGIS to safeguard that these institutions would have good 4G coverage through the new RAN sites. The exact location of new RAN sites is not cast in stone and can be discussed with the party winning the tender, subject to the institutions being covered.
- ❖ Six RAN sites are already included in a MTC universal service obligation(USO) Notice 435 GG 7609 27 Aug 2021, which also cover seven institutions.

Interventions

- ❖ Direct subsidies are only offered if unmet demand and demand stimulation are not enough to tilt the balance towards profitability.
- ❖ The subsidies that are calculated through the UAS portal serve as a subsidy ceiling. The RAN sites will be tendered and the tender with the lowest subsidy requirement will win the tender. Subsidy payments will be made monthly or annually.

Interventions

- ❖ The 36 New RAN sites will increase 4G population coverage by about 4.5%
- ❖ 227 institutions have no 4G coverage but have a RAN site close by can receive 4G coverage through a RAN site upgrade.
- ❖ The RAN site upgrade will go on tender, site by site, i.e., 122 tenders. Any licensee with 4G spectrum and an infrastructure sharing agreement (if it does not own the site) may bid.
- ❖ Assumption of no unmet demand. Since the sites to be upgraded already provide 2G and mostly also 3G signal, the assumption is that no additional income will be generated through the 4G upgrade, except the demand stimulus for the institutions that have been given Wi-Fi routers and uncapped Internet.

Interventions

- ❖ The cost up upgrading 122 RAN sites is estimated be close to N\$14.2 million per year. The cost per RAN site of N\$ 800,000 is split across its economic life of seven years, leading to an annual cost of N\$115,000 per RAN site per year.
- ❖ The estimated subsidy for the 36 new RAN sites and 122 upgraded RAN sites is N\$25 million in the first year and N\$20 million in subsequent years. Based on ICT sector revenues for 2020, this requires a USF levy of **0.5%** to cover the costs of the USF.

Other possible Interventions

- ❖ CRAN will engage the Government of Namibia since there are other possible interventions such as:
- ❖ Tax reductions to reduce the cost of telecommunication equipment and devices;
- ❖ Waiving of VAT for prepaid services;
- ❖ Taking up of e-government services; and
- ❖ All stakeholders working together.



DATA STUDY REPORT

Introduction

- ❖ Purpose of the report is to assess data prices and their affordability.
- ❖ Two main outcomes:
 - ❖ International benchmarking shows that Namibia is no longer a price leader in Africa.
 - ❖ Insufficient competition leads to higher prices and insufficient investment for fast and affordable Internet for all segments of society.

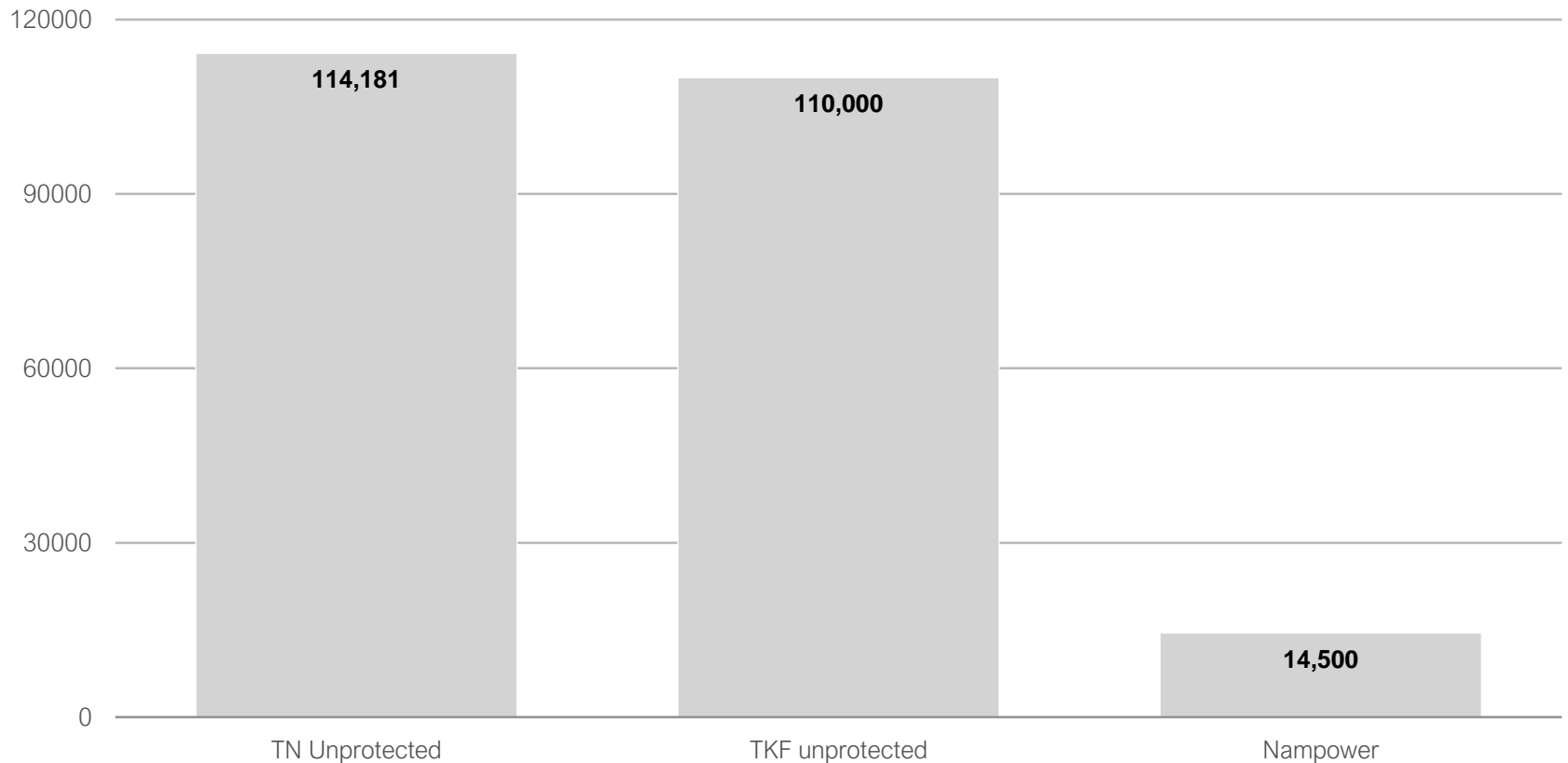
Broadband Comparisons

- ❖ 26 countries in Africa had faster average broadband speeds than Namibia.
- ❖ While Africa has seen rapidly declining mobile broadband prices, in Namibia, they have increased.
- ❖ Namibia slipped in the African Affordability ranking from 4th cheapest in Q1 2016 to the 33th cheapest country in Q1 2021 for 5GB per month.

Mobile broadband as a growth engine

- ❖ Fast, high-quality and affordable broadband internet is the foundation of the digital economy.
- ❖ Lower prices and a subsequently higher broadband penetration would translate into productivity gains and economic growth.

Cost per month of a STM-1 from Walvis Bay to Windhoek of Telecom Namibia, Paratus and NamPower



Implied cost of providing mobile broadband services

Direct Cost	Direct costs	NAD 1000's	384,696
	Depreciation property, plant and equipment	NAD 1000	213,788
	Total direct cost	NAD 1000	598,484
	Attributable to service revenues (82%)	NAD 1000	493,387
	Data share of usage share of total expenses (59%)	NAD 1000	291,098
	Voice share of usage share of total expenses (32.7%)	NAD 1000	161,338
	SMS share of usage share of total expenses (8.3%)	NAD 1000	40,951
	Direct cost per GB	NAD	4.51
	Direct cost per minutes	NAD	0.022788
	Direct cost per SMS	NAD	0.003988

Implied cost of providing mobile broadband services

	Full cost	Direct Cost
Cost per GB	11.80	4.51
Cost + Profit margin of 25%	14.75	5.64
Potential retail price	15.00	6.00
Implied profit margin based on retail price	27.1%	33.0%
MTC Implied price per GB for FY 2019/2020	20.80	20.80
Price reduction if potential retail price would be set as price ceiling	27.9%	71.2%

Implied Cost cont.

- ❖ **A reasonable price per GB would be NAD15 per GB.**
- ❖ It is a conservative price based on full-cost and an added 27% profit margin. This price would be a 28% reduction over MTC's effective price per GB for the financial year 2019/2020 of NAD 20.8.
- ❖ The full cost plus markup price may guide retail price regulation while the direct cost estimate may guide wholesale price regulation.

Possible Remedies

- ❖ 3rd national mobile broadband operator
- ❖ Political initiatives
 - ❖ Selling a share of MTC and management control to a private investor: MTC was listed in November 2021 but the state has not given up management control of MTC.
 - ❖ Sell the mobile business of Telecom Namibia to a private investor, preferably an international operator group. A larger operator group would have the capital to modernise Telecom Namibia's mobile broadband network, expand its reach and compete with MTC by utilising economies of scale in access of international telecommunication equipment markets.

Possible Remedies

- ❖ Regulatory retail price ceiling
 - ❖ As a remedy that would not increase competition but reduce the negative impacts is retail price controls, CRAN could prescribe lower broadband prices.
 - ❖ A step by step approach with regulatory impact assessment is advisable for any retail price intervention.
 - ❖ All of MTC's data products would need to be revised to comply with a NAD15 per GB price ceiling.

Possible Remedies cont.

- ❖ The same is true for TN Mobile products, except for its unlimited products that are priced below the NAD 15 price ceiling.
- ❖ The postpaid data products of Paratus all have a per GB price that is lower than the NAD15 price ceiling.
- ❖ MTC, TN Mobile and Paratus would need to revise their data prices downwards
- ❖ Lower end-user prices and product innovations can be expected from a retail price ceiling to some extent. It will also allow for greater uptake of services under UAS.

Other possible Remedies

- ❖ In the absence of effective competition, CRAN could attempt to mitigate the negative effects for the economy and the consumers by consulting with MTC for voluntary price reductions or enforcing price controls:
 - ❖ The least intrusive intervention would be to consult with licensees to lower data prices, similar to the case in South Africa and in Malawi. This would not increase competition, however, it is a short term solution and if successful it would need to be complemented by other initiatives to safeguard a medium term competitive sector.
 - ❖ Enforcing infrastructure sharing would not increase competition, but it can potentially reduce cost for the supply of broadband services. This report shows, however, that the cost is not the primary problem but excessively high retail and wholesales prices are.

The image features a person's hands in a white shirt using a black cordless phone. The background is a blue-toned world map with glowing white lines representing a global network or communication system. The text "Asymmetric Termination Rates" is overlaid in the center in a bold, black, sans-serif font.

Asymmetric Termination Rates

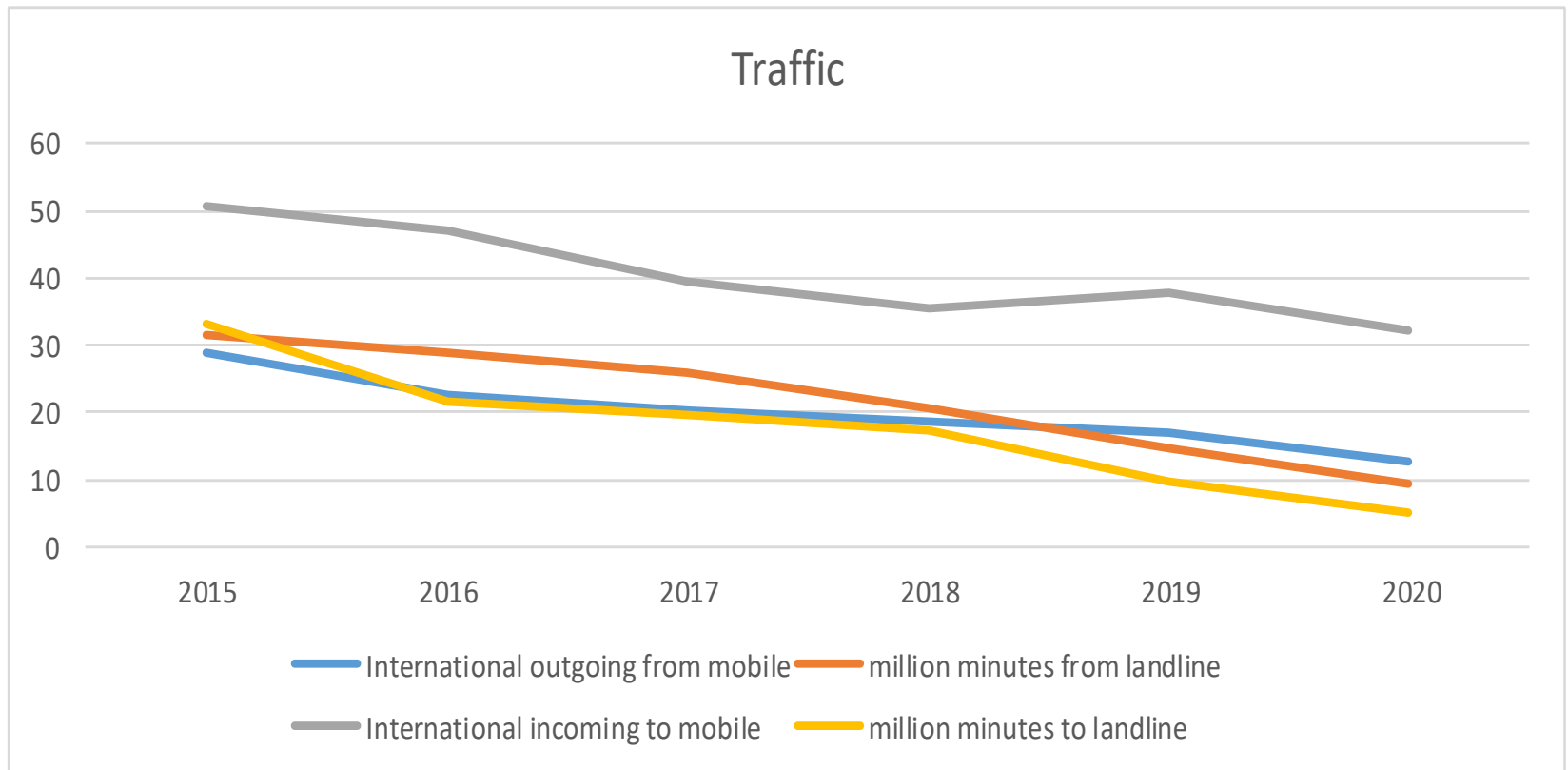
Asymmetric Termination Rates

- ❖ MTN requested CRAN to investigate the implementation of asymmetric termination rates.
- ❖ Input was requested from all licensees holding number licenses.
- ❖ MTC and Focus engineering responded.

Justification for Asymmetric Termination Rates

- ❖ MTC has 90% of the customers means that Namibia has a very high market concentration with MTC having a *de facto* monopoly when it comes to outgoing traffic calls made and SMS send.
- ❖ Landline traffic to mobile dropped from 69 million to 61 million minutes and traffic between landlines from 103 million to 45 million minutes. International traffic also more than halved during 2020.

Justification for Asymmetric Termination Rates



Justification for Asymmetric Termination Rates

- ❖ Evidence from studies indicate that entrant performance under regulatory regimes of asymmetric MTRs fared no better than under symmetric MTRs.
- ❖ Economic theory suggests a number of reasons why MTR regulation would not achieve its intended goal of assisting entrants' competitive market positions. The asymmetry in rates distorts competition and competitors' incentives.

Justification for Asymmetric Termination Rates

- ❖ What it means is that the rate for new entrants are reduced over a short period of time which reduces the burden on smaller licensees but with no other means to assist new entrants current the situation would repeat itself within a period of 3 -5 years.
- ❖ Reducing termination rates would therefore be a better solution.

Justification for Asymmetric Termination Rates

- ❖ Calculations indicates that the direct cost per minute results in only NAD 0.0228 per minute meaning that the termination rate could be reduced to 5c.
- ❖ SMS termination calculated to NAD 0.004 and could therefore be kept at the current 1c.

Recommendations

- ❖ There is a need to do an in-depth study on the problems experienced by new entrants and how to address these issues to ensure that new entrants become profitable. CRAN will conduct such a study in 2022;
- ❖ It is not recommended to implement asymmetric termination rates since most studies indicate that it is not effective in allowing new entrants in the market. At the same time voice is legacy technology and will be used less in future; and
- ❖ From the calculations made there is however room to reduce the termination rate to NAD 0.05. It is however recommended that all licensee holding a number licence be invited for consultation to reduce the termination rate for voice to 5c. This should give some relief to all the smaller licensees and would not negatively impact MTC's EBITA since currently 98% of all calls are on-net resulting in cash inflows and not outflows.

Thank you