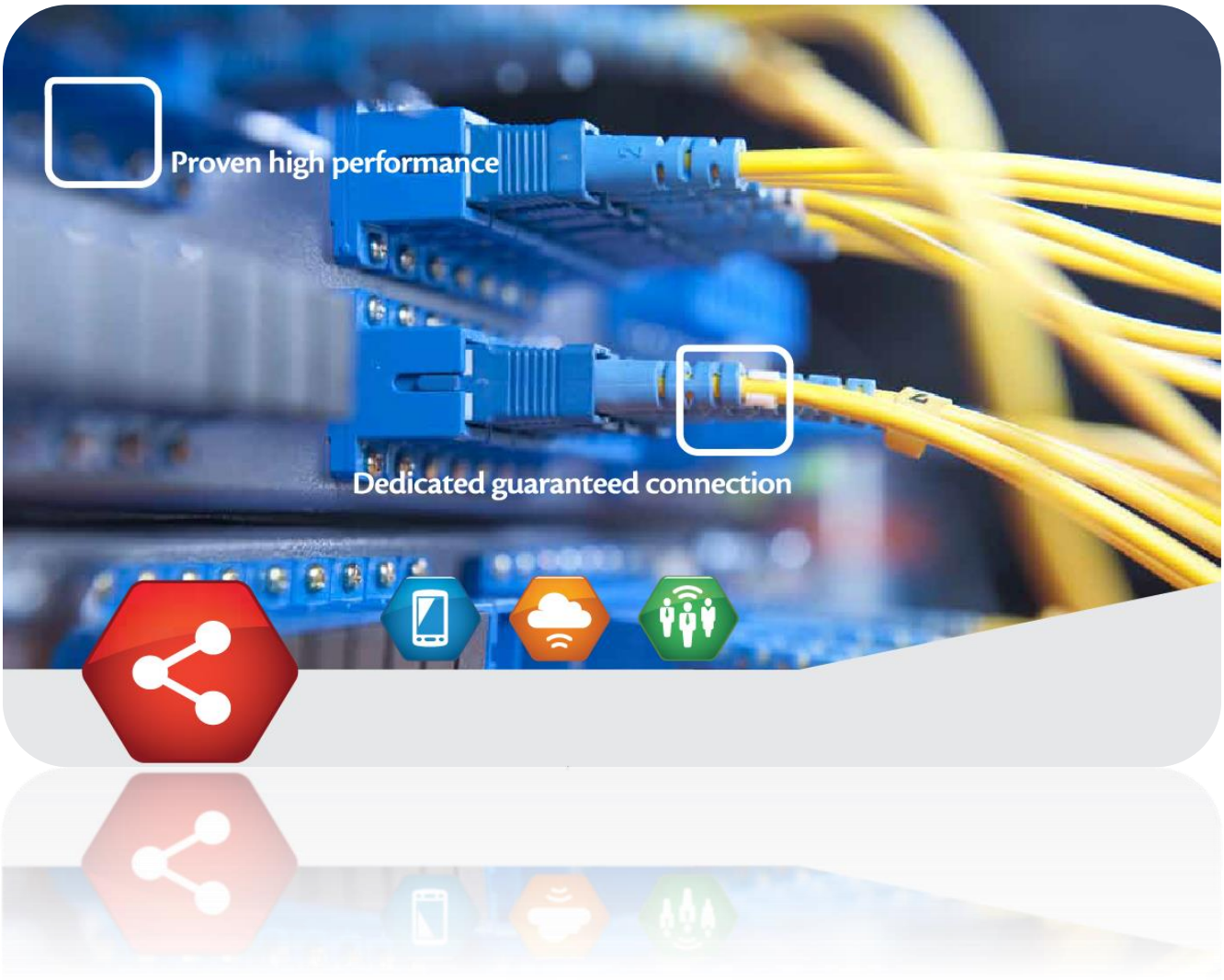

Proposal for provision of Dedicated Internet Access Link to

CUSTOMER

July, 2023

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1 Introduction

Axian is a pan-African group that operates in 5 industries with high growth potential, namely real estate, telecoms, finance, energy and open innovation. Axian operates in 6 countries across mainland Africa and the Indian Ocean and acts in furtherance of social and economic growth in all markets where the group has a foothold.

The group's 5,000 dedicated employees ensure that its brands—all of which are dedicated to 5 crucial industries—have a sustainable, positive impact on the day-to-day lives of millions of Africans.

The Axian Group is also a UN Global Compact signatory and is committed to making its ten principles an integral part of present and future group operations.

AXIAN Telecom is a pan-African telecommunications services provider operating in eight markets through its subsidiaries in Madagascar, Comoros, Reunion, Mayotte, Senegal, Togo, Uganda and Tanzania.

It operates across three key business segments, providing mobile and fixed network services as well as digital infrastructure and mobile financial services. AXIAN Telecom serves around 33 million CUSTOMERs and is a market disruptor, having expanded from one market (Madagascar) until 2015 to eight markets today, through active acquisitions and major network investments.

We systematically ensure that our business have a sustainable and positive impact on the daily lives of millions of people.

MIC Tanzania PLC ("Tigo") is an AXIAN Telecom's company. MIC Tanzania PLC ("Tigo") is a leading mobile telecommunications operator in Tanzania, providing a comprehensive range of 2G, 3G and 4G products and services under the Tigo brand. The Company's products and services primarily comprise voice and SMS, data, mobile money and B2B solutions, which are offered to retail and business CUSTOMERs, through an extensive sales and distribution network, which includes a large team of independent sales agents ("Independent Sales Agents").

Tigo became the first mobile operator in Tanzania in 1994 and has a strong track record of pioneering innovations, such as the Swahili language version of Facebook, Swahili

language smartphones, the Tigo Music streaming service and a number of market-leading solutions in its Tigo Pesa MFS platform, including full interoperability with other major MFS providers in Tanzania and East Africa's first cross-border mobile money transfer with currency conversion. Tigo Pesa has the biggest merchant network in Tanzania (with approximately 19,000 active merchants) and is connected with almost all banks in Tanzania. Tigo believes that the enterprise market, ranging from the small and medium-size business right up to large multinational businesses, represents a particularly attractive opportunity for our Tigo Business brand to grow.

In the past seven years, the number of small and medium-size businesses has doubled in areas served by Tigo. In 2018, Tigo Business served more than 250,000 CUSTOMERs in Latin America and Africa.

Increasingly, the success of businesses across all segments depends on being connected. Tigo products facilitate leading edge online distribution and sales channels, enabling web-based CUSTOMER communications and service, and operating business-critical functions in the cloud.

As demand for secure, high-speed business broadband services in Tanzania grows in line with wider economic growth, we are investing in Tier III datacenters and expanding our fiber and next generation networks. This allows Tigo scope to offer a more complete suite of Information and Communications technology (ICT) services than before, and to grow faster in conjunction with our CUSTOMERs.
Tigo's strategy is to selectively evolve our portfolio into ICT-managed services to avoid excessive fragmentation and operational risk, while building Tigo Business and differentiating ourselves through our CUSTOMER focused service model and frontline execution.

Driving digital connectivity so businesses are better equipped for tomorrow's world lies at the heart of our business. Tigo Business has vast experience in providing products, services and solutions which are cost-effective, highly reliable, and profit-enhancing.

Tigo Business commits to keeping CUSTOMER ahead of the game by solving complex business problems while delivering value though innovation and cost saving telecommunication services.

2 The CUSTOMER and CUSTOMER requirement

2.1 The CUSTOMER

CUSTOMER

2.2 CUSTOMER Requirement

CUSTOMER wishes to have dedicated internet access to the office located at Mwanza With the following coordinates (Enter Coordinates)

Initial Bandwidth required is

3 Network connectivity

3.1 Access network Connectivity

Tigo will connect CUSTOMER office via Licensed Microwave Link or Fiber Link to nearby Tigo site and make them part of the Tigo Metro Fiber. The Optical fiber cable link will provide reliable connectivity between CUSTOMER and Tigo Metro Fiber Network. Once traffic to and from CUSTOMER reaches Tigo site, it will be routed through Optical fiber network. The Metro Fiber network which is in a ring form will provide the much-needed network availability, resilience and higher capacity and support offering of high Quality of Service (QoS). From the Metro Fiber it will be connected to Internet Gateways connecting to the Submarine cables for internet Accessing.

The Service Levels Agreement (SLA) exists between the Metro Fiber cable maintenance subcontractor and Tigo and is managed and monitored on 24/7 by both Tigo NOC and Maintenance Subcontractor.

3.2 Submarine Cable connections

Tigo connects with two major Submarine cable providers SEACOM and EASSY. The cables use both North and South routes to reach Tigo Internet POP located in Telephone house London. Tigo has three independent routes from Tanzania to our POP in London. The Submarine fiber cable provides high quality and redundancy for all traffics going in and out of Tigo network. The cables provide low latency connectivity to the internet. The large capacity provides the best environment for triple play applications VOICE, DATA and VIDEO streaming. The Service Levels Agreement (SLA) exists between the Submarine cable provider and Tigo and is managed and monitored on 24/7 by both Tigo NOC and Maintenance Subcontractor.

3.3 Local Internet routing

Tigo is an active member of Tanzania Internet Exchange (TIX), having a direct Optical Fiber interconnection link, which allows all local internet traffic to flow fast and reliably. This enables the local traffic to be routed locally and hence saves the international bandwidth which is a critical resource. From TIX Tigo gets connected to contents from Netflix and AKAMAI to continue improving our Internet services user experiences.

3.4 International Internet Routing

Tigo directly connects Tigo owned POP Located in London Tel House West. The POP allows and facilitates international traffic to reach the intended Global destination with high quality of service and reliably. Tigo uses Cogent as our Tier 1 Global Internet Service Provider to exchange Internet traffic with the rest of the World. Tigo also peers at Mombassa, Kenya and NAP Africa in Johannesburg South Africa to improve and better internet user experiences.

3.5 Hosted Cache engines

Tigo hosts locally both Google and Facebook caches, which enable internet users to get a great browsing experience when downloading contents related to those cache engines. Tigo also connect to the higher-level caches hosted in Mombassa, Kenya to increase the amount of content to be cached and hence better user experience and quality of service.

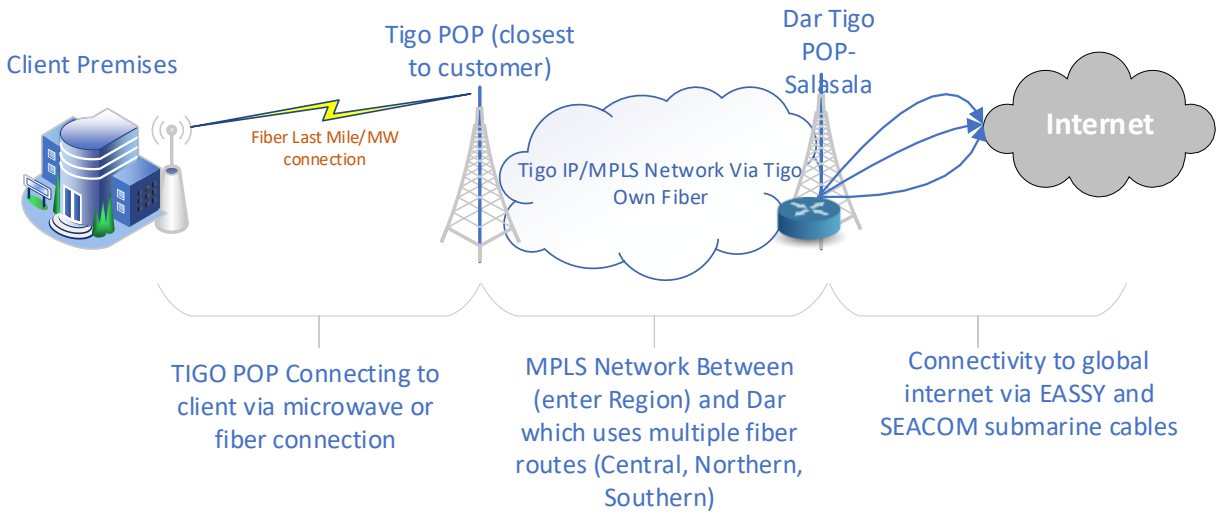
3.6 Public IP Addresses allocation

Tigo is a member of AFRINIC and is allocated with enough IP Address blocks for different internet users. Tigo shall provide several IP public addresses according to CUSTOMER needs. Extra IP Addresses can be allocated whenever requested to support CUSTOMER new requirements or changes.

3.7 Dedicated Internet Access connectivity to CUSTOMER Office

Sketch depicts below information: -

- Global internet connectivity via upstream providers, EASSY and SEACOM
- Diversity and resiliency on transport Layer between Dar Es Salaam and Tigo POP at Salasala



3.8 SLA and Reporting

i. **Lead Time:** The project shall be completed within seven (7) calendar days.

ii. **Monitoring and Reporting:** Tigo will do a 24/7*365 days monitoring on the CUSTOMER link and provide network availability reports on a monthly basis and at hoc basis when required.

iii. **Accessibility:** CUSTOMER will also be provided with the latest Bandwidth monitoring tools (PRTG and Solarwinds) with capability to measure and/or provide utilization graphs and reports.

iv. **Availability:** Fiber Last mile with a protection Link via Licensed IP microwave radio that will ensure 99.5% uptime as per the contract (support for a period of one (1) year).

v. Mean Time to Restore is within 4 hours.

vi. In the event that the Provider fails to meet the SLA, Penalty deductions shall be deducted from the monthly rental for the following month of service. Proof of penalty shall be shared prior to the penalty deductions.

vii. (Enter CUSTOMER Name) shall be entitled to claim a credit equal to the percentage of the monthly Recurring Charge of the affected internet Service for that calendar month as performance remedy in accordance with table below.

Credit for Service Availability Level	
Service Availability (A)	Credit (Percentage of variable portion of one month's Recurring Charge of affected Service)
98.0%<= A < 99.0%	3%
97%<= A < 98.0%	6%
96.0% <= A < 97.0%	10%
95.0% <= A < 96.0%	15%
Less than 95.0%	20%

3.9 Tigo Backbone Topology

Tigo owns and operates its own national and metro fiber networks

The Tigo fiber network is designed to provide its services with maximum service availability.

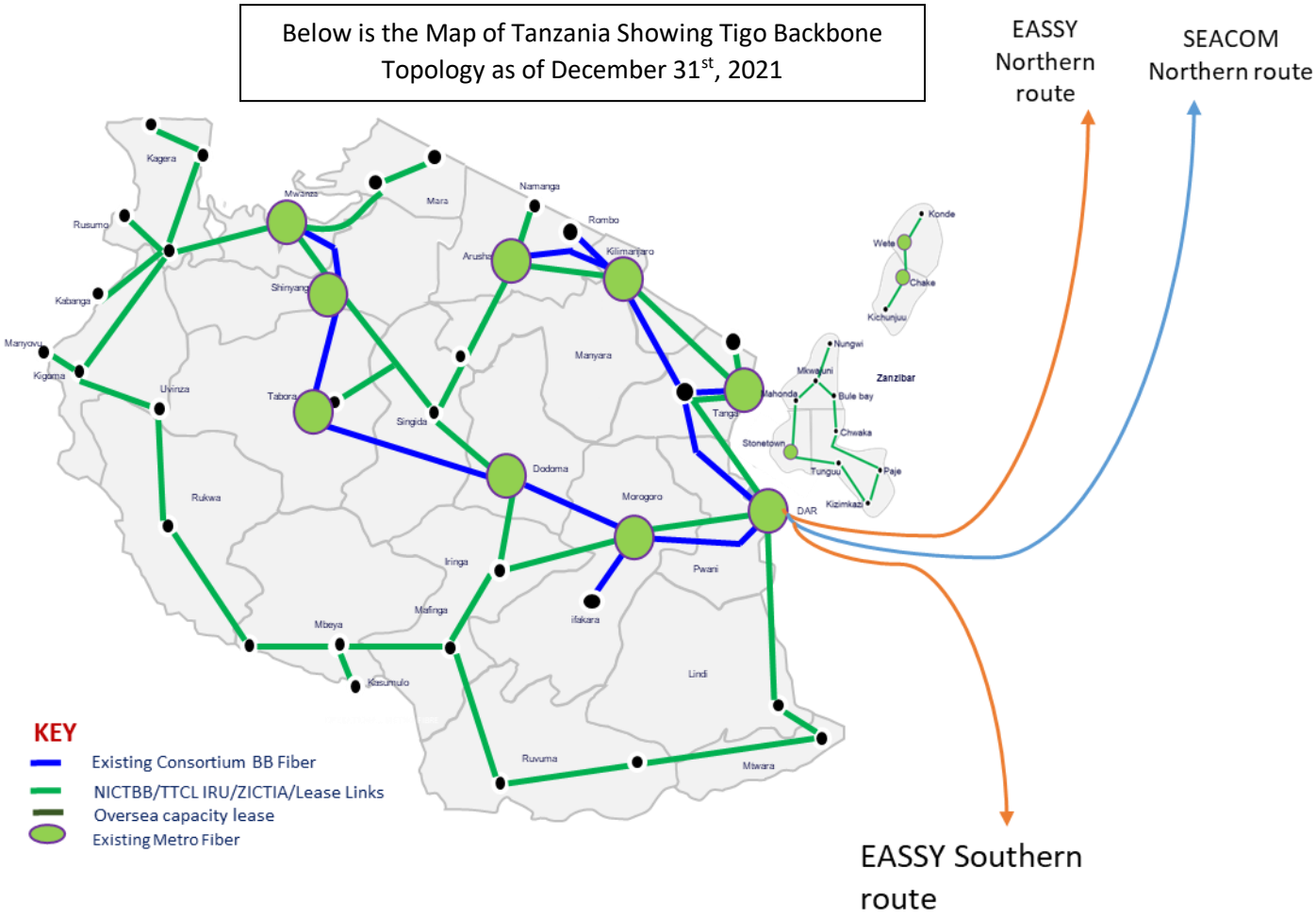
The fiber network is a combination long term leases and own national fiber.

The metro fiber is owned and operated by Tigo.

Tigo operates its own national fiber which is diverse from NITCBB. We have a robust network: NICTBB fiber, Tigo National fiber and the Tigo microwave network

The combination of NICTBB fiber, Tigo National fiber and the Tigo microwave network are combined to increase service availability.

Below is the Map of Tanzania Showing Tigo Backbone Topology as of December 31st, 2021



tigo business
A solution for every company

4 Pricing

Tigo is offering the following commercial proposition.

Client	Service	BW (Mbps)	Monthly cost (TZS)	Setup cost (TZS)
CUSTOMER	Dedicated internet	20	1,092,000	960,000
CUSTOMER	Dedicated internet	30	1,512,,000	960,000
CUSTOMER	Dedicated internet	40	1,884,000	960,000
CUSTOMER	Dedicated internet	50	2,160,000	960,000

5 CUSTOMER testimonial and Enterprises with similar Projects

As a full-service business solution partner, with a wide range of capabilities, we offer our CUSTOMERs tailored solutions to solve their business challenges. We specialize in analyzing the business needs of our CUSTOMERs and provide them with the solutions to make effective business decisions that increase efficiency and productivity.

PCCW Global	My experience with Tigo Business was that of sheer professionalism and efficiency. My colleague and I, upon visiting their Tier 3 certified, state-of-the-art, Data Centre, were met with politeness and transparent engagement. The team was well prepared for us – always quick to answer all our questions and concerns. No wonder we chose Tigo Business to be our partner.' Shantele Rugber, Senior Manager Global Vendor Management
AccessBank	"AccessBank uses voice, data, E1 and data centre services from Tigo Business and we deem Tigo as a trusted partner for our business activities. A fast and reliable service that has kept this partnership going for more than 10 years." Armando Massimiliano, CEO Access Bank
Deloitte.	Deloitte Consulting Limited has been working with Tigo Business for the past year in which we have been served timely and efficiently. Therefore, we are confident to recommend them as the best telecommunication provider. Permachius Mukulasi Admin and Procurement Officer
ERICSSON	Special appreciation for the support offered over the years and for the stand out year (2018) where zero escalations were observed. We thank Tigo Business for the excellent support and look forward to a great journey ahead. Brian Arodi; ICT Delivery Manager

6 Our Competitive Strengths

Tigo believes that it benefits from the following competitive strengths that positions Tigo Business as the telecommunications partner of choice for all businesses in Tanzania:

- A leading mobile telecommunications operator in Tanzania
  Tigo is a leading mobile telecommunications operator in Tanzania, with 12.6 million subscribers and a 29% market share as of 31 December 2018 (Source: TCRA).
- One of Tanzania's leading digital brands
  In 2015, Tigo became the first major operator in Tanzania to launch a 4G service, providing its subscribers with high-speed mobile broadband data services. Tigo is also a leading innovator in the smartphone segment in Tanzania, including the launch of the first smartphone with Swahili interface. As of 31 December 2018, the Company was the number one brand in Tanzania for 4G service and smartphones based on coverage (Source: GSMA Intelligence).
- World-class mobile money business
  Tigo Pesa, the Tigo's MFS platform, is the second largest MFS ecosystem in Tanzania and, according to Tigo's estimates, one of the five biggest MFS platforms globally (Source: Delta Partners).

- The leading 4G provider in Tanzania
  Tigo has been the 4G leader in Tanzania since April 2015, when it became the first major operator in Tanzania to launch 4G services. In February 2016, it expanded its coverage from Dar es Salaam, Morogoro, Tanga, Arusha and Dodoma to the municipality of Moshi and the Kilimanjaro region. By the end of 2018, 4G coverage extended to all regions in Tanzania. In September 2018, Tigo announced the launch of an LTE-A network, branded "4G+", which became available in five cities (Dar es Salaam, Arusha, Morogoro, Moshi and Dodoma) and supports maximum download speeds of 170 Mbps.
- Product offering tailored to CUSTOMER' needs

  Recognizing that its CUSTOMER base is diverse, Tigo Business has developed a broad product offering designed to meet its current CUSTOMERs' needs, as well as the anticipated needs of its future CUSTOMERs. These products and services include, among others, a variety of pricing plans and promotions, which are specifically targeted and offered based on a business's profile, location and demand for services.

7 Escalation Matrix

7.1 Escalation Time

Status	When No response from NOC	No Progress Updates	No Resolution	No Resolution.
Time Lapse	After 15Minutes	After 60 min	after 3 Hours	After 5th hour
Escalate to	NOC Manager	NETWORK OPERATION MANAGER	HOD's	CTO

7.2 Escalation Levels and Contacts:

	Escalation Level	Function	Full Name	Phone Number	Email ID
KEY CONTACTS	Level 1	NOC Engineer	NOC Engineer on Duty	713123888	B2BNOC@Tigo.co.tz
		ICT Pre-sales Engineer	Iddi Mbelwa	713123579	iddi.mbelwa@tigo.co.tz
	Level 2	NOC Manager Support Engineer	Agnes Mgeni Amar Kessy	713123581 658123502	b2btech@tigo.co.tz
		Project Manager	Ganuel Lulandala	713123074	ganuel.lulandala@tigo.co.tz
	Level 3	Network Operations Manager	Andrew Goodluck	658123203	andrew.goodluck@tigo.co.tz

		Head of B2B Marketing, Products & ICT	Norman Kiondo	658123684	norman.kiondo@tigo.co.tz
	Level 4	Network Operations Manager	Andrew Goodluck	0658 123 203	andrew.goodluck@tigo.co.tz
	Level 5	Head of Network Operations	Amos Bwire	713123019	amos.bwire@tigo.co.tz
		HOD-Services Delivery	Lucas Nchimbi	0658 123 346	Lucas.Nchimbi@tigo.co.tz
	Level 6	CTO	Emmanuel Mallya	713123830	emmanuel.mallya@tigo.co.tz
		CBO	John Sicilima	713123984	john.sicilima@tigo.co.tz

7.3 SLAs for Complaints Resolution:

- The Services provided under all technical agreements shall be 24/7*365.
- The Provider guarantees an uptime of 99.5% on monthly basis.
- MIC Tanzania will provide 24/7*365 days monitoring of the internet links.