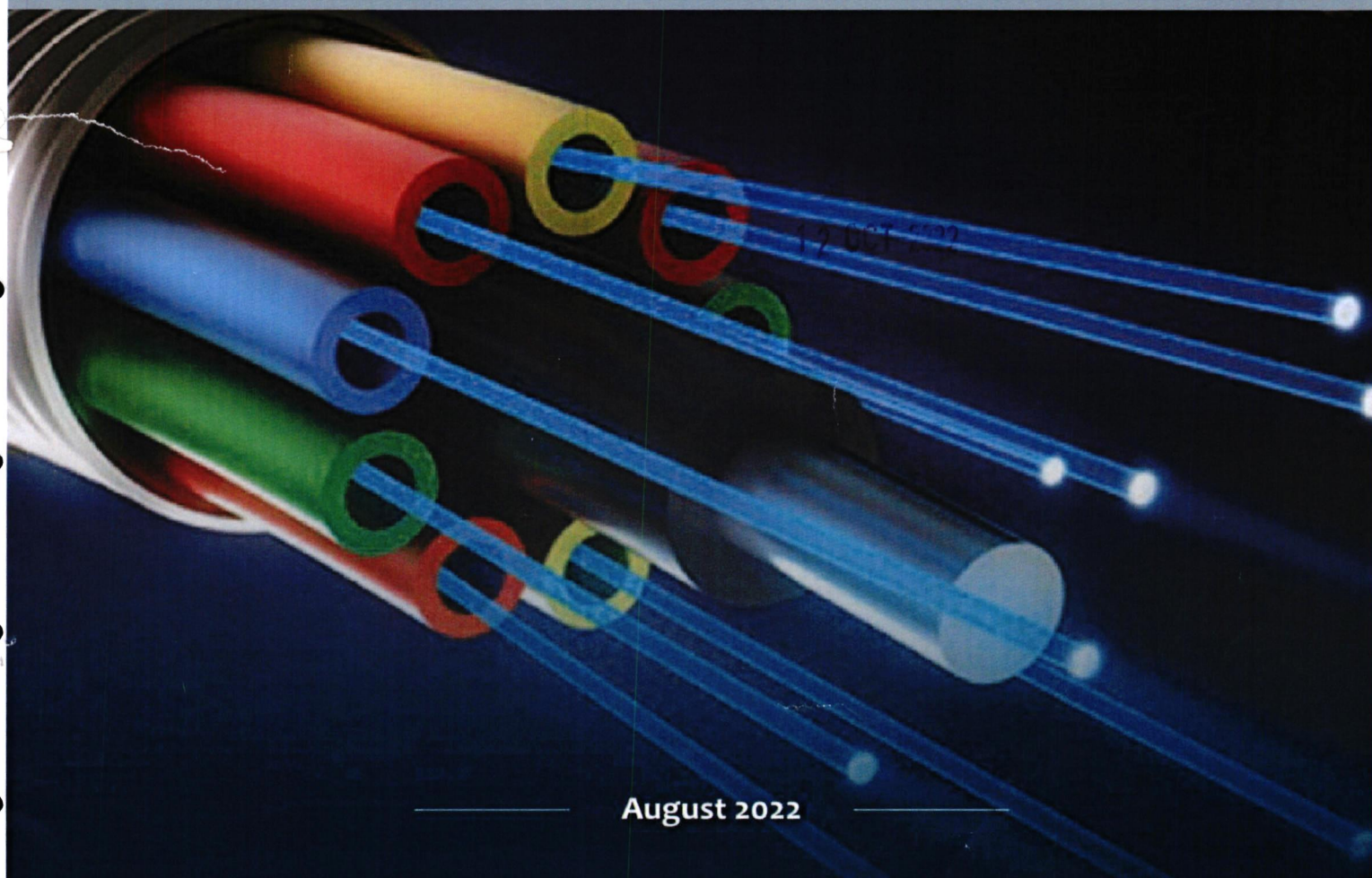


FORENSIC AUDIT REPORT OF THE AUDITOR-GENERAL

ON

**THE STATE DEPARTMENT FOR INFORMATION
COMMUNICATIONS, TECHNOLOGY AND INNOVATION**

**THE NATIONAL OPTIC FIBRE BACKBONE INFRASTRUCTURE
AND IP BASED HIPATH 4000 NETWORK PROJECTS**



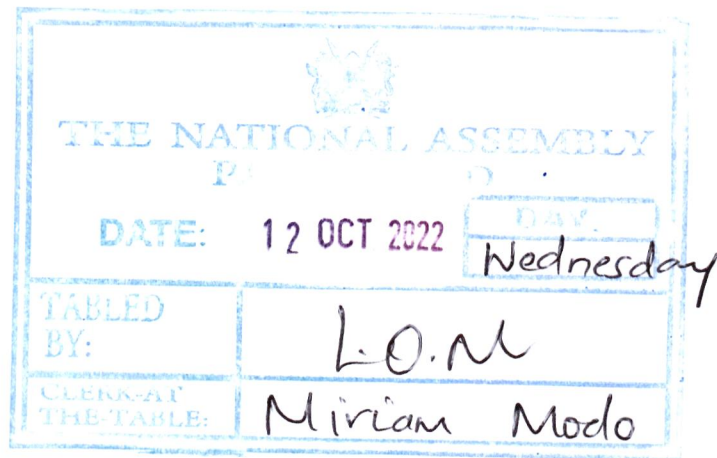
August 2022

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LIST OF ABBREVIATIONS

Table 1:List of Abbreviations

Abbreviation	Full Name
ACC	Assistant County Commissioner
AG	Auditor - General
CBK	Central Bank of Kenya
CC	County Commissioner
CCP	County Connectivity Project
CID	Criminal Investigation Department
CRS	Children Registration Services
CRD	Civil Registration Department
CS	Cabinet Secretary
DCC	Deputy County Commissioner
DCI	Directorate of Criminal Investigations
EXIM	Export Import
FY	Financial Year
GCCN	Government Common Core Network
GOK	Government of Kenya
GOVT	Government
Hqs	Headquarters
ICT	Information and Communication Technology
IP	Internet Protocol
ISP	Internet Service Provider
ICTA	ICT Authority
KCB	Kenya Commercial Bank
KNA	Kenya News Agency

KSHS	Kenya Shillings
KRA	Kenya Revenue Authority
LAN	Local Area Network
LTD	Limited
MDA	Ministry, Department and Agency
NMDA	National Management Drought Authority
NOC	National Operating Centre
NOFBI	National Optic Fibre Backbone Infrastructure
NRB	National Registration Bureau
ODF	Optical Distribution Frame
OFC	Optic Fibre Cable
O & M	Operations and Maintenance
OSP	Open Settlement Protocol
PAC	Provisional Acceptance Certificate
PFMA	Public Finance Management Act
PPDA	Public Procurement and Disposal Act
PS	Principal Secretary
Qty	Quantity
TKL	Telkom
TORs	Terms of Reference
USD	United States Dollars
VOIP	Voice Over Internet Protocol

LIST OF DEFINITIONS

Access Control- Is a security technique that regulates who can view or use resources in a computing environment.

Active Equipment – All the equipment in the NOFBI Network that need power supply to function and have the capability to receive input signals and process (modify or amplify) them to produce a difference output signal.

CCTV (Closed Circuit Television) Cameras are closed system consisting of video cameras, display devices and wired or wireless data networks that allow you to transfer images from Video Cameras to Monitors.

Core – Is the central part of an Optical Fibre that provides the transmission region for an Optical signal. The Core is manufactured of an optically pure glass of a high refractive index surrounded by a lower refractive index cladding.

Collocation – Is the hosting of NOFBI equipment or Infrastructure on the Telkom (K) Ltd.'s property or Points of Preference and includes the equipment installed at the Telkom Nodes, use of Telkom Ducts and Telkom (K) Ltd. Fibre in some regions.

Dark Fibre – Provision of Fibre Pair from NOFBI Network without any active telecom equipment.

Escrow Account- A bank account established to collect revenue generated by NOFBI to secure payment and repayment of Concessional Loan.

IP Phones sometimes called Voice over the Internet Protocol (VoIP) telephones are devices that supports transmission of voice over the internet.

LAN (Local Area Network) Connections- A computer network that consists of access points, cables, routers and switches that enable devices to connect to Web servers and

internal servers within a single building or home network and other LANs via Wide Area Network or Metropolitan Area Network.

Lit Capacity- This is the capacity available in an optical Fibre with active equipment on both ends.

OSN (Optical Service Networks)- Is a new generational optical transmission system developed by Huawei Technologies Ltd. which adopts a unified switching architecture.

Passive equipment – These are devices in the Network that do not need power to function and are mostly mediums in which signals can pass through. These devices include but are not limited to the NOFBI Optic Fibre Cable and Optical Fibre Distribution Frame (ODF).

PABX Exchange (Private Automated Branch Exchange)- Is a type of telephone network used by call center or a medium to large companies or organizations. It provides multiple lines for in-house and outside calls.

EXCHANGE RATE

The Exchange Rates applied for NOFBI and IP based HiPath 4000 Network Projects are as follows and detailed in **Appendix I**.

- (i) NOFBI Phase I- Estimated Cost of USD 80,000,000 at prevailing CBK exchange rate on 24 August 2006 of 1USD= Kshs. 72.78
- (ii) NOFBI Phase I- CBK exchange rate prevailing on 07 June 2007 when Commercial Contract was signed of 1 USD= Kshs. 70.90.
- (iii) NOFBI Phase II- Average of CBK exchange rates for payments made to the Contractor of 1 USD= Kshs. 102.17.
- (iv) NOFBI Phase II- Exchange rate prevailing on 28 June 2012 when Concessional Loan Agreement was signed of 1 Yen (¥) = Kshs. 13.23.
- (v) NOFBI Phase IIE- Exchange rate prevailing on 16 December, 2015 when Concessional Loan Agreement was signed of 1 Yen (¥) = Kshs. 15.23.
- (vi) NOFBI Phase IIE- Average of CBK exchange rates for payments made to the Contractor of 1 USD= Kshs. 102.51.
- (vii) IP based 4000 Network Phase I- CBK exchange rate prevailing on 01 December 2010 when Commercial Contract was signed of 1 Euro= Kshs. 100.01.
- (viii) IP based 4000 Network Phase II- CBK exchange rate prevailing on 15 April 2013 when Commercial Contract was signed of 1 Euro= Kshs. 109.59.
- (ix) IP based 4000 Network Phase III- Average of CBK exchange rate for payments made to the Contractor of 1 Euro= Kshs. 118.