



DIGITAL MALAWI PROGRAM PHASE 1: DIGITAL FOUNDATIONS PROJECT

CREDIT NUMBER: 60500MW

PROJECT NUMBER: P160533

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR GOVERNMENT LOCAL AREA
NETWORK (GLAN) CONNECTIVITY**

JULY 2020

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ABBREVIATIONS & ACRONYMS

EAD:	ENVIRONMENTAL AFFAIRS DEPARTMENT
EDO:	ENVIRONMENTAL DISTRICT OFFICER
EIA:	ENVIRONMENTAL IMPACT ASSESSMENT
EPA:	EXTENSION PLANNING AREA
ERP:	EMERGENCY RECOVERY PLAN
ESMP:	ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN
ESSO:	ENVIRONMENTAL AND SOCIAL SAFEGUARDS OFFICE
HDPE:	HIGH DENSITY POLYETHYLENE
HIV/AIDS:	HUMAN IMMUNODEFICIENCY VIRUS/ ACQUIRED IMMUNODEFICIENCY SYNDROME
HR:	HUMAN RESOURCES
GBV:	GENDER-BASED VIOLENCE
GLAN:	GOVERNMENT LOCAL AREA NETWORK
GRC:	GRIEVANCE REDRESS COMMITTEE
GRM:	GRIEVANCE REDRESS MECHANISMS
ICT:	INFORMATION COMMUNICATION TECHNOLOGY
ISO:	INTERNATIONAL STANDARDIZATION ORGANISATION
LAN:	LOCAL AREA NETWORK
MACRA:	MALAWI COMMUNICATIONS REGULATORY AUTHORITY
MAREN:	MALAWI RESEARCH AND EDUCATION NETWORK
MGDS II:	MALAWI GROWTH AND DEVELOPMENT STRATEGY II
MS:	MALAWI STANDARDS
NACIT:	NATIONAL COMMUNICATION AND INFORMATION TECHNOLOGY
OHS:	OCCUPATIONAL HEALTH AND SAFETY
PCR:	PHYSICAL CULTURE RESOURCES
PPE:	PERSONAL PROTECTIVE EQUIPMENT
SEA:	SEXUAL EXPLOITATION AND ABUSE
SH:	SEXUAL HARASSMENT
STDs:	SEXUALLY TRANSMITTED DISEASES
UPS:	UNINTERRUPTED POWER SUPPLY
USB:	Universal Serial Bus

1. PROJECT OVERVIEW

The Government of Malawi through the Ministry of Finance has received financing from the World Bank towards the cost of implementing the Digital Malawi Program Phase I: Digital Foundations Project. The project is located at the Department of E-government which falls under the Ministry of Information. The project implementation unit (PIU) is The Public Private Partnership Commission which is located at the following address: 2nd Floor, Livingstone Towers, P.O Box 937, Blantyre, Malawi.

The overarching aim of the Digital Malawi Program series of projects is to contribute to a digital transformation of Malawi's economy, society and government. The program seeks to leverage digital technology to drive economic growth, innovation and job creation, access to services, information and markets, and to increase government efficiency and transparency by mainstreaming of ICT in all sectors of the economy in line with the Malawi Growth and Development Strategy II (MGDS II).

The Digital Foundations Project is to extend and improve access to critical ICT infrastructure for the public and private sectors; improve ICT governance; improve access to government services and reduce infrastructure costs by providing reliable, fast and adaptive government digital systems that will facilitate provision of e-services thereby enhancing public service delivery. The Digital Malawi Program Phase I: Digital Foundations Project has four components with each component further divided into sub-components.

1.1. Project Components

The components of the project are briefly described as follows:

- i. **Component I – Digital Ecosystem** aims at creating an enabling environment through legal and regulatory reform; regulatory capacity building and institutional development; and improved ICT skills development and innovation. Under this component, the project will support MACRA in developing regulatory bylaws, data collection and analysis tools required for the effective implementation of the laws and new mandates stipulated in the new act.
- ii. **Component II – Digital Connectivity** is intended to increase access to connectivity nationwide, by addressing connectivity gaps for government, higher education and private consumers. The component will support a long-term capacity purchase and service contract to connect all priority public institutions such as government offices, hospitals and education institutions throughout the country. The component will also support deployment and scaling up of innovative broadband access networks to secondary cities and rural areas.
- iii. **Component III – Digital Platforms and Services** aims at creating opportunities to transform public service delivery in Malawi using digital technologies. The component will focus on development of a shared Digital Public Service Platform, with the aim to establishing a solid foundation upon which all future digital services and applications will be built; and developing human and institutional capacity of the government to deliver. The digital platform and services will provide opportunity to transact business through mobile and online platforms. Such services could include processing of passports, licenses,

business registration, birth certificates and payments of utilities. The component will also focus on development of citizens facing digital application and services that leverage the shared platform.

- iv. **Component IV – Project Management** designed to support project management including support for an overall project manager, a digital government services coordinator and specialist in procurement, financial management and safeguards. The component will also provide funding for strategic communications and partnerships, monitoring and evaluation activities as well as funding for audits, logistics and operational overheads.

1.2. Government Local Area Network Sub-Component

The Government Local Area Network (GLAN) falls under **Component II – Digital Connectivity** of the Digital Foundations Project. The aim of this component is to leverage strategic public investments and incentives to improve access to high speed, affordable connectivity for government, citizens and businesses across Malawi. Priority government institutions have been identified to benefit from this project based on projected bandwidth demands, location, cost and overall impact. The project will involve the design, hardware recommendations, supply, installation, configurations, and commission of Local Area Network (LAN) Infrastructure & Systems for the Government of Malawi.

2. NATURE OF THE PROJECT

The Government LAN project will be addressing the LAN challenges in government buildings housing various ministries and departments at the Capital Hill, and in Salima district through rehabilitation and installation of LAN systems and provision of additional equipment and services including Core Network, Controllers and Desktop USB Wireless Adapters, and Network Infrastructure Servers. A total of 14 sites at the Capital Hill and 11 sites in Salima district will benefit from this project. The 14 sites are distributed amongst five buildings that house various ministries and other government offices within the Capital Hill. The project will install the LAN between and within existing Government buildings.

2.1. Project Sites

The sites and the buildings in which they are located in are listed below:

Lilongwe Capital Hill Building 1

1. Office of the President and Cabinet
2. Office of the Vice President + National Registration Bureau + Public Events + Ministry of Sports and Culture
3. Public Procurement & Disposal of Assets

Lilongwe Capital Hill building 2

1. Ministry of Finance, Economic Planning and Development
2. New Gochi: Ministry of Labour, Gender and Statutory Corporations

Lilongwe Capital Hill building 3

1. Department of Accountant General, Ministry of Defense
2. Ministry of Agriculture, Irrigation and Water Development
3. Ministry of Education Science and Technology

Lilongwe Capital Hill building 4

1. Ministry of Health and Population
2. Ministry of Homeland Security, Department of Human Resources Management and Development
3. Department of E-Government and NACIT

Lilongwe Capital Hill building 5

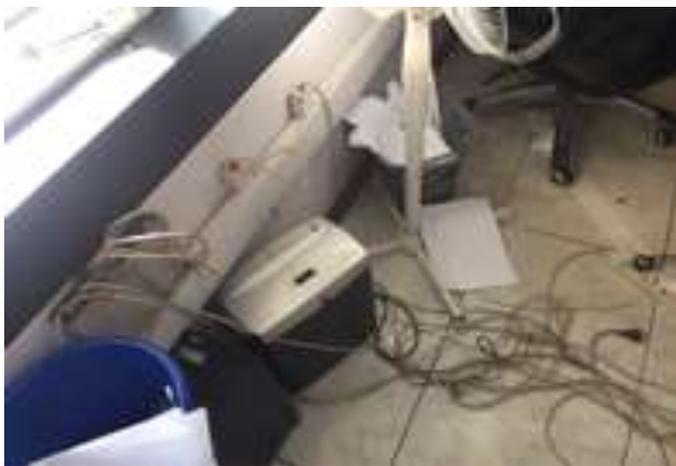
1. Ministry of Local Government and Rural Development, Ministry of Foreign Affairs and International Cooperation
2. Ministry of Transport and Public Works
3. Ministry of Information and Communications Technology

Salima District

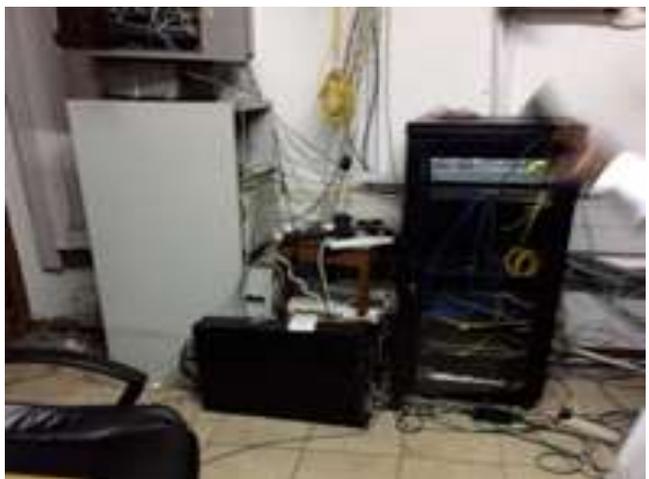
In Salima District, the 11 sites are distributed in various government offices that house the different functions of government and are listed below:

1. Salima District Commissioners Office
2. Salima Police Office
3. Salima District Hospital Office
4. Salima Former Town Council
5. Salima District Education Management Office
6. Salima Community Technical College (Mesh)
7. Salima Agriculture Office
8. Salima Tembwe Extension Planning Area (EPA)
9. Salima Health Management Information System
10. Salima Msalula Secondary (Mesh)
11. Salima Msalula Primary (Mesh)

The government buildings will be supplied with modern equipment and high-speed cable infrastructure in both wired and wireless technology. The structure cabling system and activities shall meet the cabling standards and local construction and telecommunications regulations including the ANSI/TIA-568-C. The project cost is included in the US\$26 million for LAN connectivity in 500 public and private institutions.



Status of network equipment at the Ministry of Finance offices



Status of network equipment at Accountant General offices

Figure 1: Photos of network equipment status at Capital Hill offices

The project will involve installation of LAN equipment which will necessitate drilling on building walls and some minor clearing of vegetation to allow excavations for cable burying. Excavations will be conducted close to the buildings. As the work is wholly restricted to within existing Government campuses there will be no loss of or impact on habitats of high conservation value. Most of the areas surrounding the buildings will have a small number of trees or bushes and grass which may be affected by cable trenches. However as these are Government office blocks the majority of the surrounding surfaces are bare earth, gravel or sealed with concrete. As these are Government buildings, access to the public is already restricted however Government employees and visitors to the buildings will still be present as the offices will continue to work as the LAN installation is underway. The building drawings show the internet access points within the building and those outside of the buildings. There are poles that will be fixed into the ground to hold access points outside the buildings and they will be fixed very close to the buildings. A drawing of one of the buildings at the Capital Hill which accommodates the Office of the President and Cabinet is presented in the figure below to show points where the access points will land. A full set of drawings are available within the contract documents.

Floor	Floor Plan
Ground	 <p>The diagram is a detailed architectural floor plan of a large, rectangular building labeled 'GROUND FLOOR PLAN (OPC BLOCK)'. The plan shows a complex network of rooms, corridors, and structural elements. Numerous small icons are placed throughout the plan, representing LAN access points. Some icons are green with a white 'W' symbol, while others are blue with a white 'W' symbol. The plan also shows a large octagonal structure at the bottom right, which appears to be an outdoor area or a specific room. The overall layout is symmetrical and highly organized.</p>

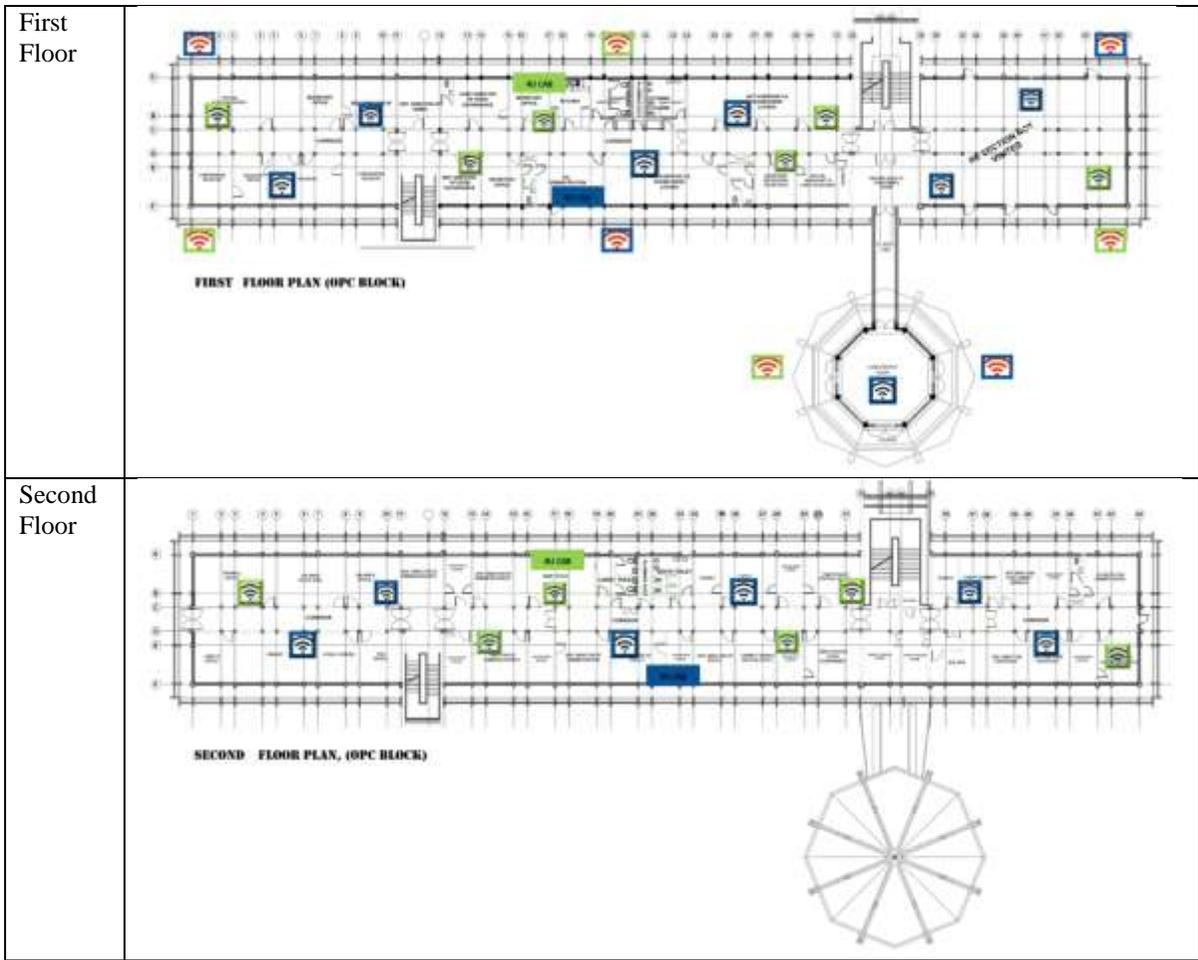


Figure 2: Building drawing showing access point positions at Office of the President and Cabinet.

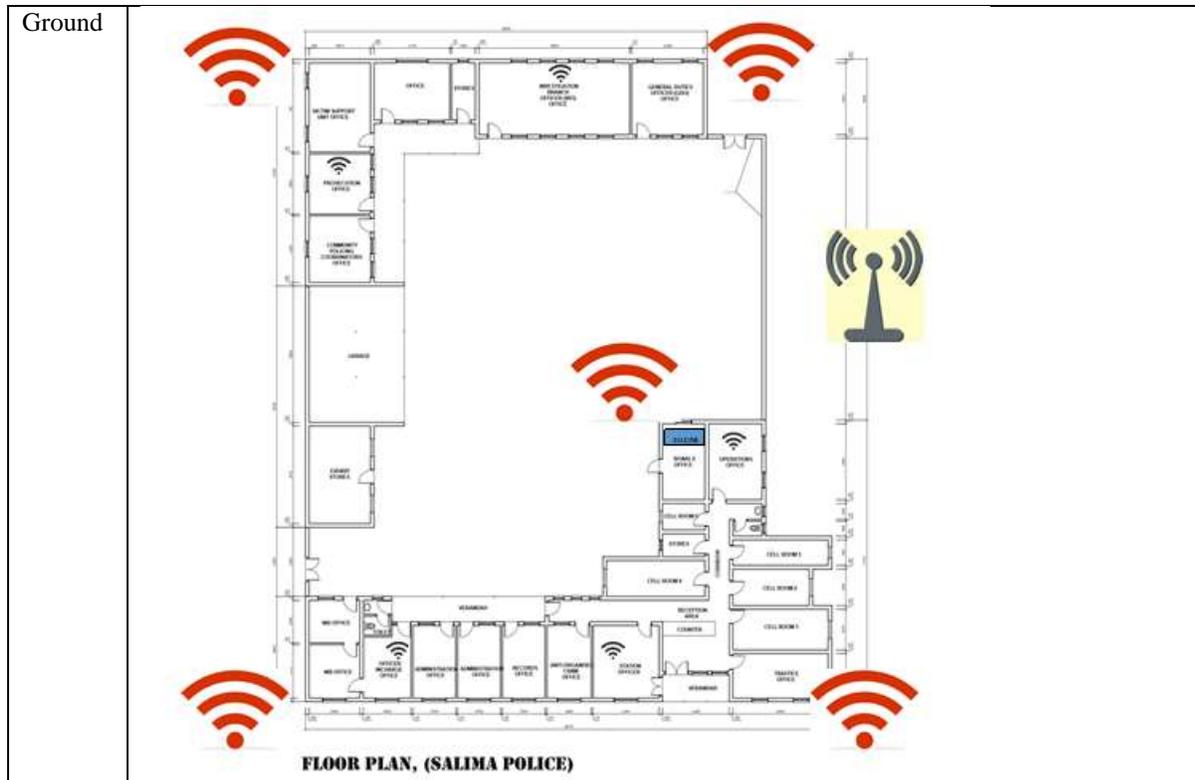


Figure 3: Building drawing showing access point positions at Salima Police Office.

2.2. Project Activities

The LAN installation activities will be undertaken in all the 14 sites at the Capital Hill and the 11 sites in Salima district as indicated above. The LAN installation work will be conducted both inside and, in surrounding areas of the buildings. The work will require some minor works to remove the obsolete LAN equipment including cables and old trunking; drilling to allow movement of cables into other rooms and ducting and trunking to fix the cables to the walls. Excavations will be conducted outside the buildings to lay cables and fix poles into the ground from the incoming hub to the office blocks. The nature of the activities may necessitate the use machinery and equipment comprising hand and power tools. These will include delivery trucks, drilling machines, hoes, picks, shovels and wheel barrows. The project is expected to employ 9 technical staff including the safeguards officer and 10 unskilled labour per project site to provide manual labour services. The general works to be to be done will include:

- Laying of optic fibre/CAT6e cable using best practices which include keeping sufficient cable loop future maintenance.
- Configuration of Routers, Firewalls, Aggregation Switches, Access Switches and Access Points.
- Configuration of network services for each site, which include but not limited to: routing, switching, DHCP, RADIUS, etc
- Document and label all equipment, cable (optic fibre/CAT6e) ports, patch panels etc.

- Install and register Nano USB Wi-Fi 802.11 AC Adapters for desktop computers.
- Testing of all equipment, ports, cables and access points to ensure they are fully functional.
- Maintaining and reinstalling network cabling, trunking and labelling, which is not in good state, to make sure all the needed and installed data points are working in all the offices;
- Trenching to remove obsolete cables and replace with new cables;
- Providing new UPSs in the offices;
- Upgrading core distribution switches with the replacement models for Cisco support purpose and removing D-Link and TP-Link Switches from the Network.

2.3. Proposed Activity Schedule

Table 1. The proposed activity Schedule

No	Activities	Deliverables	Week
1	<ul style="list-style-type: none"> • Project Kick-Off Meeting • Write Inception Report • Review Network/System Design • Develop Final Network/System Design • Develop Project Plan 	Inception Report Final Network/Equipment Design Network/System Test Plan Environmental and Social Management Plan (ESMP)	1
2	<ul style="list-style-type: none"> • Mobilise Network Resources (Equipment, etc) • Draft Inventory of existing Network Equipment to be removed and equipment to be reused • Install the New Network/System (while old network is still operational) • Undertake onsite Installation and Configuration Training • Remove existing network equipment and deliver at determined site; and sign off delivery • Label all network equipment installed • Install Wireless USB Adapters in all desktop computers and maintain the device register • Test network installed • Develop final documentation of the network developed 	Inventory of Existing Network Equipment to be Removed & Reused Network/Equipment Test Report Network/Equipment Documentation Report	11

	<ul style="list-style-type: none"> Perform final acceptance test and inspection of network 		
3	<ul style="list-style-type: none"> Undertake Operation and Maintenance Training Write Training Report Write final report of installation Project closing 	Training Report Final Report	12
4	<ul style="list-style-type: none"> Undertake Network Operations Assessment 	Network Operation Verification Report –3 months after Final Report	12

2.4. Project Machinery and Equipment

The LAN rehabilitation activities will be conducted with specific technical equipment including access points, cables and switches. The specialized technical equipment will have to be procured externally if not locally available. The rest of the tools are attainable locally. The machinery/tools and equipment envisaged for use in the installation activities are presented below.

Table 2. Project Machinery and Equipment

Activity	Machinery/ Tools	Materials/ Equipment for Construction
Removal of obsolete LAN cables and equipment	<ul style="list-style-type: none"> Hammers Lorries Ladders Pliers 	
Erection of poles, Mounting of access points	<ul style="list-style-type: none"> Hoes, shovels and picks Lorries Mobile cranes and ladders Harnesses and ropes 	<ul style="list-style-type: none"> Poles Common fill gravel Weather boxes Network equipment
Installation of LAN and Wi-Fi equipment.	<ul style="list-style-type: none"> Trucks, lorries Ladders Harnesses and ropes 	Network equipment

	<ul style="list-style-type: none"> • Screw drivers, pliers and wrenches 	
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3. BIOPHYSICAL CHARACTERISTICS AND SOCIO-ECONOMIC ENVIRONMENT

The biophysical characteristics and socio-economic environment of the project sites in Lilongwe at the capital hill offices and in Salima at the Boma area are discussed in this section. The sites at Capital Hill are within the heart of the Lilongwe city. The project sites are within a fenced area which has mostly sealed surfaces with tarred roads. The sites which are within the heart of the Lilongwe city are surrounded by infrastructure including government buildings and private offices, business centres, staff houses, health centres, schools, trading centres and residential areas. The topology of the capital hill sites ranges from flat terrains to sloped areas. A stream runs downstream the southern side of the campus. The site has a vegetation cover of trees and In Salima, the sites are within the Salima Boma township. Some sites are covered with concrete as they are government institutions while others do have bare grounds. Loan grass cover is also found at most of the sites. The vegetation cover within some of the sites boasts of both natural and planted trees species. In addition to trees, shrubs, flowers and exotic grass are found at the sites and in the surrounding areas.

The socio-economic environment varies between the peri-urban and city areas where the project sites are located. In Salima, the people who live in the Boma area have low to moderate levels of education and income. Occupation is generally through small scale businesses, agriculture, fishing and non-skilled work. Formal employment is there but at a smaller scale than agriculture and small-scale businesses. The socio-economic environment in this district is also characterized by poor access to health and education services. Women are mostly involved in agriculture and small-scale businesses than in formal employment.

The sites that are located in cities have a better socio-economic environment. Levels of education are moderate to high in the Lilongwe city where the capital hill sites are located. The income levels are on the higher side as people earn from a majority of formal employment and large-scale businesses.

4. LEGAL AND OTHER REQUIREMENTS

The legal and other requirements pertaining to the project are provisioned through the various relevant legislation and policies. This legal framework forms the compliance base for the project. The primary environmental legislation and policy framework forming part of the environmental and social assessments for the project are listed below:

4.1. Legal Framework Relevant to the Project

The legal and other requirements pertaining to the project are provisioned through the various relevant legislation and policies. This legal framework forms the compliance base for the project. The primary environmental

legislation and policy framework forming part of the environmental and social assessments for the project are listed below:

a) The Constitution of the Republic of Malawi (1995)

The Constitution of the Republic of Malawi of 1995 sets out a broad framework for sustainable environmental management at various levels in Malawi. Among other issues, section 13 (d) provides for prudent management of the environment and accords future generations their full rights to the environment. The constitution aspires to prevent the degradation of the environment, provide healthy living and working environment, ensure intergenerational equity through environmental protection and sustainable development of natural resources.

Section 28 (2) of the Constitution of the Republic of Malawi states that “No person shall be arbitrarily deprived of property” and section 44 (4) states that “Expropriation of property shall be permissible only when done for public utility and only when there has been adequate notification and appropriate compensation, provided that there shall always be a right to appeal to a court of law for redress.

The proposed project has a responsibility of ensuring that the implementation of project activities is undertaken in an environmentally sustainable manner in order to prevent environmental degradation and not to compromise the socioeconomic environment.

b) The National Environmental Action Plan (NEAP) 1994

The NEAP, adopted in 1994, estimated that the discounted economic cost of the major forms of degradation, which include soil erosion, deforestation, water resources degradation, fisheries depletion and biodiversity loss amounted to 10% of the formal Gross Domestic Product (GDP). The NEAP is still being used as a framework for all development plans in the country to ensure environmentally sustainable development in line with the strategic objectives of Vision 2020.

The ESMP should be guided by the state of the problems isolated by the NEAP from the baseline assessment of different sites; and the mitigation measures aimed at the various issues identified by NEAP, as key generic environmental problems in Malawi such as soil erosion, biodiversity loss, degradation and depletion of water resources

c) The National Environment Policy (2005)

The National Environmental Policy guides different lead agencies and stakeholders in their activities, as they affect the environment and natural resources management; including how to minimize impacts of environmental degradation. “The overall policy goal is the promotion of sustainable social and economic development through the sound management of the environment and natural resources”. The policy seeks among other things, to secure for all people and future generations an environment suitable for their health and well-being. This ESMP is to ensure that implementation of the proposed project activities is done in a sustainable manner.

d) National HIV and AIDS Policy (2012)

The policy highlights that HIV and AIDS impact on the country is quite significant and affects a range of socio-economic activities. The highest rate is in the Southern Region and the lowest in the Northern Region. The rates are higher in urban areas as compared to the rural areas. The Policy also identifies migrant workers and women among highly vulnerable people to transmission of HIV and AIDS and other sexually transmitted diseases.

The implication of the policy on the proposed project is that single male migrant workers would be at an increased likelihood of contracting HIV and AIDS since they may approach and indulge in casual sexual intercourse with infected local female partners in the surrounding local communities, in the same vein these males if infected, may spread the virus to females within the community. Adding to that, increased disposal of income from migrant workers may enhance some workers to indulge in extra-marital affairs with either local girls or married women within the surrounding villages. These sexual activities would enhance the spread of HIV and AIDS among workers and local people if the mitigation measures in the ESMP are not implemented.

e) The National Gender Policy (2000)

The policy recognizes that women play important roles in socio-economic development of the country. This contribution is however not matched with their access to and control over resources such as land and capital and their enjoyment of benefits from management and use of natural resources. The National Gender policy provides for gender mainstreaming in the planning and implementation of projects to ensure that the needs of different groups of people affected by a project are taken care of in a manner that promotes equity. In this project, the developer should ensure that principles that promote equity among different groups are applied.

f) Environment Management Act (1996)

The Environment Management Act (EMA), provides the basic legal framework for environmental planning including the preparation of environmental management plans for projects likely to have negative impacts on people and the environment. The Act provides for protection and management of the environment and the conservation and utilization of natural resources. Section 24 of Environment Management Act, 1996 requires environmental and social considerations to be integrated in various development activities in Malawi.

To integrate environmental considerations into the activities of the project, this ESMP will provide guidance in environmental and social management of adverse impacts to be generated by project activities.

g) Telecommunications Act (2016)

The Telecommunication Act provides guidance for the regulation and provision of services in the communication sector in Malawi. The Act also provides for the establishment of the Malawi Communications Regulatory Authority (MACRA) whose major responsibility is to regulate the provision of telecommunication services through:

- Licensing of service providers;
- Providing advice to the minister on regulations or policies;

- Monitoring the activities of licensees to ensure compliance with the terms and conditions of their license and applicable regulations, and related activities.

Other duties for the authority include to:

- Ensure that reliable, affordable and sufficient communication services are provided throughout Malawi;
- Protect the interests of consumers, purchasers and other users of communication services, in respect of the prices charged for the quality and variety of services provided and terminal equipment supplied;
- Promote open access to information by means of communication services;
- Encourage the introduction of new communication services;
- Foster the development of communications services and technology in accordance with recognized international standards; and
- Promote efficiency and competition among persons engaged in provision of communication services or supply of communication equipment.

h) Public Health Act, Cap 34:01

The Act is for the protection of public health from activities that might endanger human life. It prohibits any person from causing nuisance on any land or premises owned or occupied by another. The project activities should therefore not cause any nuisance during installation of ICT infrastructure in the country.

The Act requires developers to provide adequate sanitary and health facilities to avoid harmful effects of waste on public waters. It is therefore incumbent upon the contractor to comply with the requirements of this Act by providing potable water, toilets and proper solid waste disposal mechanisms for use by workers throughout the construction period.

i) Occupational Safety, Health and Welfare Act, Cap 55:07

The Act regulates working conditions with respect to safety, health and welfare of workers. The Act stipulates the requirement of a health and safety management plan in a workplace where the work activities pose occupation healthy and safety risk to employees and surrounding communities. The Act seeks to ensure that work places are safe and that the welfare of workers is protected. The Act also requires that workers should be provided with appropriate protective wear to ensure that they are safe while they are working. These may include gloves, heavy duty boots, helmets and overalls.

The workers who will be undertaking any civil works, cable and electrical installations under the project should be provided with proper personal protective wear that will make them comfortable and safe from occupation healthy and safety hazards.

j) Waste Management and Sanitation Regulations 2008

Among other conditions, the Waste Management and Sanitation Regulations require any person who generates or collects solid waste to separate hazardous waste from the general or municipal solid waste. The general or municipal solid waste must be further sorted into wastes that can be recycled or reclaimed and waste that is earmarked for disposal. Every generator of waste shall be responsible for the safe and sanitary storage of all general or municipal solid waste accumulated on his or her property.

Any generator of waste may, without licence under the Regulations, but with special permission from a local authority, dispose of general or municipal solid waste which is non-hazardous in an environmentally sound manner, in accordance with by-laws made by a local authority; provided that this shall not apply to the disposal of large amounts of such waste.

Regarding liquid waste, the Waste Management and Sanitation Regulations state that no person shall introduce effluent to water unless the effluent quality standards for discharges to water are met; and there is adequate proof that the receiving water body shall efficiently dilute the effluent to prevent any hazard to the environment or public health. No person shall discharge effluent into the environment unless it meets prescribed environment standards.

The Contractor must therefore adhere to the Waste Management and Sanitation Regulations in the implementation of the proposed project.

4.2. Relevant Environmental Standards

a) Malawi Bureau of Standards

The project will trigger a number of Environmental Standards set by the Malawi Bureau of Standards, as provided in the Table 3. E-Government and the construction contractor must ensure that these standards are met.

Table 3: Statutory Relevant Environmental Standards

Standard	Title
MS 714:2005	Occupational Safety and Health Management Systems – Specification
MS 719:2005	Hazardous Waste – Management, Classification and Disposal – Code of Practice
MS 59:2002	Solid waste – handling, transportation and disposal – code of practice
MS 730:2005	Solid waste disposal sites, guidelines for design

b) World Bank Environmental and Social Safeguards Policies

The World Bank Environmental and Social Safeguards policies are there to provide guidance on management of

the impacts that may be realized from the project activities. The World Bank has rated the environmental and social impacts of the Digital Malawi Program Phase I: Digital Foundations projects moderate and assigned them **Category B**. In this category the projects are envisaged to result in reversible adverse impacts. **Category B** projects have potential adverse environmental and social impacts (on human populations or environmentally important areas - including wetlands, forests, grasslands, and other natural habitats) which are less adverse than those of Category A projects. These impacts are site specific and easy to deal with; few if any of them are irreversible; and in most cases appropriate mitigatory measures can be designed more readily than for Category A projects. The appraisal for category B of Operational Policy 4:01 (Environmental Assessment) indicates that the project activities would generate adverse environmental and social with moderate significance therefore requiring environmental and social management plan to address and manage these impacts. In addition to Environmental Assessment, other safeguards policies are presented below, however they are not applicable to this sub-component.

Table 4: World Bank Environmental and Social Safeguards Policies

OP/BP	Safeguard	Policy Objectives
4.01	Environmental Assessment	Help ensure the environmental and social soundness and sustainability of investment projects. Support integration of environmental and social aspects of projects in the decision-making process.
4.04	Natural Habitats	Promote environmentally sustainable development by supporting the protection, conservation, maintenance, and rehabilitation of natural habitats and their functions.
4.11	Physical Cultural Resources (PCR)	Assist in preserving PCR and in avoiding their destruction or damage. PCR includes resources of archaeological, paleontological, historical, architectural, religious (including graveyards and burial sites), aesthetic, or other cultural significance.
4.12	Involuntary Resettlement	Avoid or minimize involuntary resettlement and, where this is not feasible, assist displaced persons in improving or at least restoring their livelihoods and standards of living in real terms relative to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
4.36	Forests	Realize the potential of forests to reduce poverty in a sustainable manner, integrate forests effectively into sustainable economic development, and protect the vital local and global environmental services and values of

		forests.
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c) Environmental, Health and Safety Guidelines

The World Bank’s (International Finance Corporation) general and industry specific Environmental, Health and Safety (EHS) guidelines are used to provide guidance to users on EHS issues that are potentially applicable to the respective industries and on good international industry practice. The Government LAN sub-component of the Digital Malawi Project fall under the Telecommunications industry hence is required to follow the general as well as the telecommunication EHS guidelines. The Telecommunication EHS guidelines are applicable to telecommunication infrastructure development such as fixed line and wireless voice and data transmission infrastructure including fiber optic cables, and associated telecommunication installations and equipment. These guidelines should be implemented to ensure effective management of the environmental, health and safety issues emanating from the project activities. Effective management of EHS issues involves the identification of risks and hazards prior to project implementation, assessment of the likelihood and magnitude of the EHS risks and development of appropriate management measures to prevent and/or control the impacts. The environmental, health and safety issues to be considered under the Government LAN sub-component include:

Environmental:

- Air emissions
- Soil erosion
- Hazardous materials
- General and e-waste management
- Noise
- Land contamination
- Electrical magnetic fields

Occupational Health and Safety:

- Communication and training
- Physical hazards (working at heights, confined spaces(trenches), slips and falls, falling objects)
- Accidents from vehicles
- Optic fiber hazards
- Electrical accident
- Electrical magnetic fields
- Personal Protective Equipment

Community Health and Safety:

- Stagnant water in trenches

- COVID-19 risks
- Site access

5. APPROACH AND METHODOLOGY TO PREPARATION OF THE ESMP

The Environmental and Social Management Plan (ESMP), for the design, hardware recommendations, supply, installation, configurations, and commission of Local Area Network (LAN) Infrastructure & Systems for the Government of Malawi has been prepared after an environmental and social screening exercise was conducted for the overall Digital Malawi Programme, Phase 1: Digital Foundations Project. The ESMP has been prepared in line with the requirements of the project's Environmental and Social Management Framework (ESMF) which was disclosed in February 2017, to offer guidance on the expected environmental and social impacts from the project activities and the required response activities. This plan has been prepared to generally guide the contractor in developing the Contractors ESMP. The project activities have been identified through review of the available Digital Malawi Project documents, including the Request for Bids document, observation of LAN systems in some buildings and discussions with project staff. For this project, the environmental and social impacts as well as the mitigation measures for the adverse impacts have been determined through the following methodology:

5.1. Desktop Study

Project related documents including the Project Appraisal Document, Project Implementation Manual, the Environmental and Social Management Framework and Request for Bids documents for the Government LAN sub-component, the Project Screening Report and other government environmental and social related documents were reviewed to identify the nature of the project and the related project activities.

5.2. Site Surveys of Project Areas

Environmental and social screening of the sites was conducted to identify the environmental and social risks of the project activities. Observations were made on buildings around the city that have similar installations. The surrounding environment was screened for biophysical characteristics that may be impacted by the project activities. Through the site visits and observations, project activities were identified and their aspects leading to the identification of potential environmental and social impacts. These activities are likely to cause low to medium adverse environmental and social impacts, which will easily be mitigated through adherence to the mitigation measures in this environmental and social management plan, Codes of Conduct and through alignment to best project implementation practices.

5.3. Stakeholders Consultations

Discussions were held with the project specialists with the aim of soliciting project information about the project. The discussions solicited information on the activities that will be involved in project. The officers responsible for Information Communication and Technology in the institutions targeted by the project were also interviewed to establish the proposed scope of work to be undertaken for the connectivity project and environmental and social

implications. Generally, stakeholder consultations were aimed at soliciting project information and views from selected key informants on the project.

6. PUBLIC CONSULTATION AND DISCLOSURE

Public consultations were conducted with the ICT personnel, the administrative officer and the director at the Ministry of Health offices at the Capital Hill. The consultation register is presented in appendix 15. The primary purpose of the consultations was to brief the beneficiaries on the government LAN connectivity project, present to the stakeholders the benefits and negative environmental and social impacts expected from the project activities and collect their views on the benefits and negative impacts of the project. Generally, stakeholder consultations were aimed at soliciting views and concerns from selected key informants about the project and the collective identification of mitigation measures to the concerns raised. The views have been included in the environmental and social management plan (ESMP).

The total number of people who were involved in the public consultations was four with three men and one woman. The consultations were initially conducted in August 2020. The public consultations elicited key benefits and issues to be addressed by the contractor and the project as provided below.

6.1. Benefits Identified by Stakeholders

- The project will bring about the digital transformation of government businesses which results in efficiency in government business and improves transparency in business transactions.
- Project will provide fast internet connectivity at the Ministry of Health and Population Services offices and also in the other four buildings at the Capital Hill, and at government offices in Salima, consequently improving work efficiency.
- There will be connectivity between the Capital Hill's Ministry of Health headquarters offices and the local district health institutions. This will reduce the need for physical meetings and visits to and from the headquarters and district offices as with the fast internet, meetings can be held online and other transactions can also be done online.
- The reduction of physical visits and meetings will reduce the cost of doing business in the beneficiary institutions.
- The internet connectivity will also assist in timely decision making as flow of information will be faster through online communications and online business transactions.

6.2. Concerns Raised and Mitigation Measures Identified by Stakeholders

The concerns raised by the stakeholders are presented in the table 5 below. The stakeholders identified measures to be employed by the contractor to manage the impacts and these measures are also presented in the table.

Table 5: Stakeholder concerns and mitigation measures

Concerns raised	How concerns should be addressed
The installation works may collide with other ICT systems that are already in place at the ministry buildings and affect their functionality.	The Contractors will work hand in hand with the IT Technicians at the project sites to workout better ways of undertaking the installations without affecting the existing systems.
The ministry buildings have other ICT service providers that still have their infrastructure at the premises and care should be taken to avoid destroying their equipment during the LAN installation.	Drilling on walls should be minimized as the wall concrete is too strong to drill on. Trunking should be used for cabling. Where possible, Wi-Fi should be used to reduce the amount of cables and drilling.
The Contractor should take note of the existing networks that are currently working and should not be disturbed.	Contractor should liaise with the IT Technicians/ Specialists at the institutions on how to manage the existing networks, or how to phase them out if required.
Generation and disposal of general and e-Wastes during the installation activities.	Contractor should properly manage their general wastes and e-wastes. The wastes should not be disposed of on site more especially the e-wastes.
Generation of dust from drilling on the wall to install cables.	<p>Drilling on walls should be minimized as the wall concrete is too strong to drill on. Trunking should be used for cabling. Where possible, Wi-Fi should be used to reduce the amount of cables and drilling.</p> <p>Where drilling is inevitable, dust masks and goggles should be worn by the workers</p>

6.3. Public Disclosure

The World Bank and Malawi government environmental and social safeguards policies require that the ESMP be disclosed to the public. This is done for the public to be given a chance to verify that their concerns are considered and included in the ESMP. The Government LAN ESMP which is in English language will be published on the World Bank website with hard copies accessible at the World Bank country office. Copies of the same will be presented at the District Councils in Districts where the project sites are located for public disclosure. The ESMP will be made available to the public for at least 14 days with a notification about the disclosure placed in the daily

newspapers. Comments, concerns and suggestions raised by the public on the project and its expected environmental, health, safety and social impacts should be taken into consideration in the ESMP.

7. ENVIRONMENTAL AND SOCIAL IMPACTS AND PROPOSED MITIGATION MEASURES

The World Bank has rated the social and environmental impacts of the Digital Malawi Program Phase I: Digital Foundations projects moderate and assigned them the environmental assessment risk category 'B'. In this category the projects are envisaged to result in reversible adverse impacts. The environmental and social safeguards policy that has been triggered by this sub-component is OP/BP 4.01 for environmental assessment. In addition, the Director of Environmental Affairs Department has, through their letter dated 17 December 2019, categorized the project under their “List B” of the Environmental Impact Assessment Guidelines of 1997. Hence, the two categorizations have classified the project as having low or minimal adverse environmental and social impacts. Through environmental and social screening exercise, adverse environmental and social impacts were identified with the significance of the impacts ranging from very low to medium. Positive impacts were also identified through the same process. The environmental and social screening included project document reviews, observation of similar projects as well as interviews with the technical team for the project to understand the nature of the project.

7.1. Identification and assessment of project impacts

Potential project impacts were identified through environmental and social screening of the project sites; analysis of the on-site fiber and LAN installation activities and also from information acquired from literature and stakeholder consultations. Assessment of the impacts considered the size of the area to be affected by the impact (areal extent), impact duration, and the magnitude. These determinants and professional judgement assisted to classify the impacts as either Low, Medium or High as described in Table 6 below.

Table 6: Guide for significance rating for impacts

Low	Medium	High
Impacts will occur only on site	Impacts will occur within a 3-5 km radius of the site.	Impacts will occur regionally.
Short term, during the construction phase only	Medium term, during early operations.	Long term, for the entire operational phase.
A small change that is hardly detectable.	Moderate. An impact that is measurable, but does not alter processes.	High. Many organisms lost or affected. Major disruption of ecosystem processes.

The sub-sections below provide a general summary of potential positive and negative impacts of the project. The proposed mitigation measures are outlined for each expected impact.

7.2. Potential Positive Impacts of the Project

- a. **High-quality and high-speed internet connectivity to public and private institutions:** the project will have many benefits through the provision of fast internet resulting in efficient service delivery in government and private institutions.
- b. **Employment opportunities:** installation of ICT facilities such as laying of cables which involves trenching to some extent will provide employment opportunities to most unskilled and semi-skilled labour. Network installation and maintenance will present employment opportunities for ICT technicians and engineers and other support staff.
- c. **Business opportunities:** the project will also generate business opportunities for construction materials. Local material suppliers and traders within the areas where civil works will be implemented will benefit from these opportunities.
- d. **Improved financial management:** with increased and improved internet connectivity, the need to travel for meetings and other government duties will be reduced hence reduction of unnecessary expenditures in MDAs.
- e. **Opportunity for skills transfer:** Those who will be involved in the project Implementation will have an opportunity for acquiring skills through exchange of knowledge and experience with other workers.

7.3. Potential Negative Impacts of the Project and Mitigation Measures

From the screening exercise, it was derived that during the removal and installation of cables, trenching or drilling, there may be disturbances to workers including noise, dust as well as safety incidents. This follows that Occupational Health and Safety need to be reflected in the operational procedure to ensure the safety of workers and these should be derived from the Contractor's Occupation Health and Safety Manual Appendix 6. At the same time safe working practices will also have to ensure that Government workers are not exposed to hazards (e.g. tripping, dust, falling debris, noise) as the work will be undertaken in operational offices.

The project activities will also lead to the generation of general wastes, rubble and e-wastes. The removal of obsolete LAN equipment will lead to generation of the e-wastes while some drilling may lead to rubble. e-wastes contains hundreds of substances many of which are toxic including lead, arsenic, mercury, cadmium and flame retardants. Workers handling e-wastes should always wear protective gear. The contractor will ensure the provision of suitable waste bins for the different types of wastes identified. The District or City Councils where the project will be implemented will be consulted on waste disposal methods and the appropriate waste facilities Appendix 7.

Ground pollution is also envisaged to emanate from the project activities through spillages of hydrocarbons and paints. These materials emit fumes and contaminate the ground rendering it infertile for vegetation growth. The

spillages may be minor and may be controlled by placing sheeting that will catch the spillage. Spill kits can also be used to contain the spillages.

The COVID-19 pandemic also poses a higher risk to workers as the rate of infections is increasingly impacting communities where workers come from. The nature of the project activities present opportunities for increased infections amongst the workers due to the proximity at which they interact in their work activities. Measures should be put in place to minimise the risk of contamination amongst workers Appendix 12. A list of the impacts and mitigation measures is discussed below with the full management plan presented in section 9.

Environmental Impacts

- i. **Soil erosion:** Excavation of trenches to connect fiber cables within the sites; and holes from which to erect poles for wi-fi, making them susceptible to washing away (during the rainy season). In addition, stored excavated materials may be washed away into natural water courses.

Mitigation measures

- Backfill and compact trenches and holes immediately after excavation and laying the cables.

- ii. **Pollution to land from diesel and oil spills;** Oil spills from vehicles, construction machinery and other waste from construction materials is expected to contribute to land.

Mitigation measures

- Maintain/service vehicles and machinery regularly as recommended by the dealers;
- Remove oil contaminated soils and place them in a treatment facility.
- Line the floor during use of solvents/ lubricants.
- Monitoring of areas impacted by spillages to ensure clean-up and restoration.
- Line floors during use of lubricants to catch spills;
- Dispose waste oil and oil containers in approved disposal areas, in collaboration with the Local Authority.

- iii. **Nuisance from noise and dust:** During construction, noise would come from vehicles and installation equipment during drilling of walls and mounting of access points.

Mitigation measures:

- As much as possible, carry out the installation activities during normal working hours;
- Provide eye goggles and dust masks to workers.
- Moisten the area where possible to lessen the production of dust.
- Alert office workers about noise and dust.
- Provide ear plugs to workers where the noise is above the recommended levels and prolonged (Appendix 6).

- iv. **Air emissions from delivery vehicles exhausts:** Emissions associated with the project may be primarily from vehicles exhaust gas, and dust particulate matter from vehicle movements, drilling activities, shoveling of excavated soils.

Mitigation measures.

- Avoid, minimize, and control adverse impacts to human health, safety, and the environment from emissions to air (Appendix 6).
- Use vehicle exhaust emission control techniques.
- Regular servicing of the vehicle fleet.

- v. **Generation of waste:** Waste will constitute general waste (12m³) produced by the workers on the sites.

Mitigation measures:

- Reduce waste by reusing some of the equipment that is in good shape.
- Sensitize workers to avoid littering and dump wastes in designated waste receptacles.
- Discard waste material in approved disposal areas.
- Provide appropriate waste receptacles at every building.

- vi. **e-waste generation from obsolete LAN equipment and maintenance of servers:** Operation and maintenance activities may result in the generation of electronic wastes (2m³) (e.g. nickel-cadmium batteries and printed circuit boards from electronic equipment as well as waste cables and access points).

Mitigation measures

- Liaise with City and District authorities for designated sites for disposal of e-wastes (Appendix 7).
- Store the e-wastes in secure containers until a disposal site is identified.
- e-wastes disposed of in designated disposal sites once the councils have identified the sites.
- Contractors are required to present evidence that the disposal of e-wastes has been carried out in certified/officially designated areas.

- vii. **Electric and magnetic fields:** Electric and magnetic fields (EMF) are invisible lines of force surrounding any electrical device such as power lines and electrical equipment. Electric fields are produced by voltage and increase in strength as the voltage increases. Magnetic fields result from the flow of electric current and increase in strength as the current increases. Radio waves and microwaves, emitted by transmitting antennas are one form of electromagnetic energy.

Mitigation measures:

- Limiting public access to antennae tower locations;

- Following good engineering practices in the siting and installation of directional links (e.g. microwave links);

Occupational Health and Safety Impacts

viii. Occupational Health and Safety Impacts

The Occupational Safety, Health and Welfare Act (1997) regulates the requirements for adequate environmental, health and safety measures within workplaces. During operation, occupational health and safety hazards or impacts will be associated with exposure to electrical risks, noise, cuts, trips and falls.

Mitigation measures:

- Occupational Health and Safety will have to be managed throughout the operations to ensure the safety of workers. Safety procedures and the Occupation Health and Safety Manual should be developed to guide the operations in identifying hazards and how to manage them (Appendix 6).
- Assign only trained and certified workers to carryout required works and maintenance of the equipment;
- Ensure that all maintenance staff, including trained workers strictly adhere to specific safety standards and Code of Conduct;
- Ensure that staff use appropriate safety equipment;
- Ensure the availability of first aiders on work site.
- Clearly defined specific training, safety measures, personal safety devices and other precautions in the health and safety plan.

- ix. Accidents from working at heights:** Construction scaffolding, ladders and elevated platforms used for stringing cables and installing Wi-Fi equipment can pose physical hazards to workers who may accidentally fall from heights. People under elevated or overhead working areas may be injured due to falling objects.

Mitigation measures:

- Secure elevated work areas, platforms and ladders to prevent accidental fall;
- Prohibit staff from working under other people on elevated areas;
- Use certified and well-maintained platforms and ladders and train operators in their use;
- Maintain and operate elevating platforms according to established safety procedures;
- Use ladders according to pre-established safety procedures including proper placement, climbing, standing and extension; and
- Train workers to refrain from placing loose objects on elevated platforms;
- Provide protective wear to workers including, harnesses, helmets and safety boots.

- x. **Accidents from power tools (drilling machines):** Mounting of access points on the building walls will involve use of drilling machines which have the high risk of injuring workers.

Mitigation measures:

- Work to be carried out in a safe manner and safe environment.
- Ensure only trained or skilled personnel to carry out the work.
- Ensure safe and well-maintained equipment is used.
- Ensure workers are adequately supervised during work activities.

- xi. **Trip and falls within the work area:** Trips and falls would be caused by objects lying around the work area.

Mitigation measures:

- Good housekeeping procedures including cleaning of surfaces and equipment,
- Proper and adequate storage of materials and equipment, containment of loose cables.

- xii. **Cuts from sharp objects:** Workers may be cut by sharp objects including screw drivers, screws and nails during drilling work.

Mitigation measures:

- Workers to be trained on safe work and housekeeping practices.
- Regular disposal of wastes within the work sites.
- Have a first aid trained personnel on site.

- xiii. **Optical fibre risks:** Construction workers may be exposed to minute or microscopic glass fibre shards that can penetrate human tissue through skin or eyes, or by ingestion or inhalation.

Mitigation measures:

- Train workers on specific hazards associated with handling optic fibre material;
- Use protective clothing, including breathing masks, to prevent inhalation of and skin contact with glass fibre shards;

Community Health and Safety Impacts

- i. **Spread of HIV and other Sexually Transmitted Infections:** There is a chance of spreading HIV and Aids if workers engage in sexual activity with the local population.

Mitigation measures

- Develop an HIV/AIDS policy for the workers (Appendix 11)
- Employ local people wherever possible;
- Provide civic awareness to workers on HIV and AIDS
- Provide condoms to workers.

- Provide the necessary support to those living with HIV/AIDS.

ii. Transmission of COVID-19 infections amongst workers within the worksite

There is also a risk of increased Corona virus cases if workers do not respect social distancing and other recommended COVID-19 prevention measures.

Mitigation measures

- PMT will ensure the contractor is taking adequate precautions to prevent or minimize an outbreak of COVID-19, and have identified what to do in the event of an outbreak in line with national guidance and the World Bank's ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects.
- Provide COVID-19 preventive measures including provision of sanitation products and protective masks and shields;
- Enforce hygiene practices including hand washing and hand sanitising
- Enforce the wearing of masks and shields all time whilst at the worksite.
- Divide the workers into shift rotations to decongest the work area and improve social distancing.
- Provide medical assistance to suspected COVID-19 cases by referring them to approved testing centres and hospitals
- Provide continuous communication and awareness on COVID-19 issues

Health and safety risks: to Government workers and members of the public close to work sites including offices.

Mitigation measures

- Awareness raising of Government staff in advance of works.
- Displaying appropriate warning signs around work zones.
- Adequate risk assessment by Contractor and implementation of necessary mitigation measures when initiating work in new location e.g. new room, floor, building.

Social Impacts

i. Disruption of walkways or roads

- Put notification and signage to alert people of the changed walkways.
- Provide alternative pathways.
- Backfill trenches promptly.

ii. Sexual exploitation and abuse (SEA): Female Workers may be subjected to sexual exploitation and abuse in exchange for favours and/ or employment benefits

Mitigation measures:

- Sensitise the workers on the appropriate Codes of Conduct and enforce the same.
- Develop policy for use of internet to avoid abuse and malicious intent.
- Develop a code of conduct to guide workers on issues of sexual exploitation and harassment.

- iii. **Gender Based Violence (GBV) and Violence Against Children (VAC):** Constitute acts of gross misconduct and are therefore grounds for sanctions, penalties and/ or termination of employment and/ or contract. All forms of Social risks including grooming are unacceptable; be it on the work site, the work site surroundings, or at worker's camps.

Mitigation Measures:

- Sensitize communities on GBV and VAC risks of the project during stakeholder's engagement prior to implementation of the project (Appendix 10);
- Continuously sensitize workers on GBV throughout the project cycle
- Sensitize the community on the grievance redress mechanism (GRM) before implementation of project;
- Ensure that Codes of Conduct are signed and understood by all contractor staff;
- Provide separate facilities for men and women; and
- Provide appropriate signage on GBV in local language.

- iv. **Loss of employment opportunities due to Preferential recruitment, and marginalisation:** Community members may lose out on job opportunities due to preferential employment, and marginalisation based on gender and other social differences.

Mitigation measures:

- Contractor and Client must adhere to the labour laws and gender policy as well as the appropriate Codes of Conduct for the contractor and workers (Appendix 14).

- v. **Use of internet for malicious intents (internet bullying, stalkers, and crime); unlawful content (Pornographic and violent images) and Identity theft & hacking:** The internet may be used for malicious intents including: internet bullying, stalkers, and crime; unlawful content including pornographic and violent images and Identity theft and hacking.

Mitigation measures:

- Develop policy for use of internet to avoid abuse and malicious intent.
- Restrict internet to relevant websites.
- Track and monitor internet usage.
- Provide internet safety mechanism to prevent hacking incidents.

- vi. **Changes in communication patterns:** using the internet affects the nature of social relationships. With the availability of internet connectivity, the nature of social relationships is bound to shift due to increased individualistic and online communication.

Mitigation measures:

- Ensure the inclusion of awareness on impacts of internet use and the changes in modes of communication
- Develop policy for use of internet to avoid abuse and malicious intent.

8. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS

8.1. Environmental and Social Management Plans

The Environmental and Social Management Plan (ESMP) has been prepared to highlight the potential negative impacts of the project and provide mitigation measures to address these impacts. These mitigation measures will be implemented for the respective negative environmental and social impacts that have been identified. The mitigation measures have been prepared to address the following issues:

- Waste management
- Pollution
- Dust
- Noise
- Injuries to workers, Government staff and the public
- Social inclusion
- Internet use
- The other social issues contained in this plan include issues to do with labour management, Sexual Exploitation and Abuse (SEA) including sexual harassment, HIV/AIDS, gender, grievance redress mechanisms and occupational health and safety and COVID-19 pandemic.

Table 7. Management plans for potential adverse environmental impacts

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
Environmental Impacts						
Soil erosion from trench and hole excavations	Backfill and compact trenches and holes immediately after excavation and laying the cables.	Excavated areas properly backfilled and compacted.	Ongoing	Contractor	Hoes, shovels	20,000
Pollution to land from hydrocarbons (diesel & oils) from delivery trucks.	Maintain/ service vehicles	Vehicles well maintained and not leaking hydrocarbons.	Monthly	Contractor	Vehicle maintenance equipment	300,000
	Remove oil contaminated soils and place them in a treatment facility.	No hydrocarbon contamination in soil.	Ongoing	Contractor	Shovels, drums, transportation to treatment site.	100,000
	Line the floor during use of solvents/ lubricants.	No spillages of paints and oils.	On going	Contractor	HDPE liners, contaminated waste bins	50,000
	Monitoring of areas impacted by spillages to ensure clean-up and restoration.	Contaminated areas cleaned up. Monitoring Reports.	Quarterly	Contractor & Employer	Inspection forms	

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
Nuisance from noise and dust during drilling and excavations.	Provide ear muffs, eye goggles and dust masks to workers.	All workers provided with the necessary PPE	Ongoing	Contractor	PPE	200,000
	Moisten the area where possible to lessen the production of dust.	Excavation or drilling area moistened	Twice a day	Contractor	Water bowser truck, Watering cane, hose pipe	200,000 (Water Bowser truck)
	Alert office workers about noise and dust.	Notice about drilling or excavations	Ongoing	Contractor	Notice/Signage	100,000
Air emissions from delivery vehicles exhausts	Avoid, minimize, and control adverse impacts to human health, safety, and the environment from emissions to air.	Zero incidents on human health from emission inhalation	Ongoing	Contractor		
	Use vehicle exhaust emission control techniques.	Exhaust emission controls in place for all vehicles			Emission control gadgets	1000000
	Regular servicing of the vehicle fleet.	Records of vehicle service			Vehicle service equipment	400,000
Generation of general wastes	Reduce waste by reusing some of the equipment that is in good shape.	Waste volumes register	Monthly	Contractor	N/A	N/A
	Sensitize workers to avoid littering and dump wastes	All workers sensitized on waste		Contractor	Waste materials training	

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	in designated waste receptacles.	management procedures	Commencement of project & ongoing		Training Register	
	Discard waste material in approved disposal areas.	All waste dumped in approved disposal facilities.	Ongoing	Contractor	Trucks, waste bins, PPE	1,200,000
	Provide appropriate waste receptacles at every building.	Bins available	Ongoing	Contractor	Waste bins	200,000
e-waste generation and disposal from the removal of old cables and redundant LAN equipment.	Store the e-wastes in secure containers until a disposal site is identified.	e-wastes stored in covered containers.	Ongoing	Contractor	Drums with covers.	200,000
	Store the e-wastes in secure containers until a disposal site is identified.	e-waste disposal site identified.	Commencement of project	Contractor & City/District Council	Dump site	N/A
	Liaise with City and District authorities for designated sites for disposal of e-wastes. Contractors are required to present evidence that the disposal of e-wastes has	e-wastes disposed of in designated disposal sites once the councils have identified the sites e-waste disposal forms should be filled	At the provision of e-waste disposal site & ongoing thereafter Ongoing	Contractor	Vehicles	500,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	been carried out in certified/officially designated areas.	with the disposed waste volumes and should be signed by council authorities. A disposal certificate should be obtained from the council authorities.	Ongoing	Contractor Contractor	Waste volumes forms Certificate	N/A N/A
	Inspection of project area to ensure proper waste management	Wastes properly managed. Inspection forms	Quarterly	Contractor & Employer	Inspection forms	N/A
Electric and magnetic fields	Limiting public access to antennae locations; Following good engineering practices in the siting and installation of directional links (e.g. microwave links);	Good engineering practice adhered to.	Quarterly	Contractor	MACRA regulations on siting of ICT equipment	NA
Occupational Health and Safety Impacts						
Occupational health and safety	Contractor develops and implements an OHS management system which		Ongoing	Contractor		500,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	<p>identifies risks, makes efforts to avoid hazardous work practices and implements appropriate mitigation measures including adequate training and supervision.</p> <p>Provide PPE (Dust masks, goggles, gloves, harnesses, overalls and safety boots) for workers.</p> <p>Notification should be given to government workers and the public within the sites of the works and their safety requirements.</p>	<p>Contractor's OHSMS in place and operational.</p> <p>Workers appropriately trained and supervised.</p> <p>All workers provided with necessary PPE.</p> <p>Notices and signage posted in the work area.</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	<p>Contractor</p> <p>Contractor</p> <p>Contractor</p>	<p>Training materials</p> <p>PPE</p> <p>Signage posts</p>	<p>200,000</p> <p>200,000</p> <p>200,000</p>
Trips and falls from working with the cables.	<p>Work to be carried out in a safe manner and safe environment.</p> <p>Workers to be trained on safe work and housekeeping practices.</p> <p>Good housekeeping procedures including cleaning of surfaces and equipment, proper and adequate storage of materials and equipment,</p>	<p>Zero safety incidents within the work sites.</p> <p>All workers on site trained on housekeeping requirements.</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>	<p>Contractor</p> <p>Contractor</p> <p>Contractor</p>	<p>Training materials</p> <p>Cleaning equipment Trunking</p>	<p>200,000</p> <p>400,000</p>

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	containment of loose cables.	Work areas free of clutter and loose cables	Ongoing	Contractor	Waste bins	100,000
Accidents from working at heights	<p>Secure elevated work areas, platforms and ladders to prevent accidental fall;</p> <p>Prohibit staff from working under other people on elevated areas;</p> <p>Use certified and well-maintained platforms and ladders and train operators in their use;</p> <p>Maintain and operate elevating platforms according to established safety procedures;</p> <p>Train workers to refrain from placing loose objects on elevated platforms;</p> <p>Provide protective wear to workers including,</p>	Zero accidents involving work at heights.	Ongoing	Contractor	Training material, safe and certified ladders and platforms, Safety procedures	1,000,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	harnesses, helmets and safety boots.					
Accidents from power tools (drilling machines).	Work to be carried out in a safe manner and safe environment.	Equipment in good condition	Ongoing	Contractor		400,000
	Ensure only trained or skilled personnel to carry out the work.	Work procedures on safety in place.	Ongoing	Contractor	Procedures	500,000
	Ensure safe and well-maintained equipment is used. Provide safety procedures for equipment use. Ensure workers are adequately supervised during work activities.	Adequate supervision provided	Ongoing	Contractor		N/A
Cuts from sharp objects	Workers to be trained on safe work and housekeeping practices.	Workers trained on safe work practices.	Ongoing	Contractor	Training materials	250000
	Regular disposal of wastes within the work sites. Have a first aid trained personnel on site.	No wastes lying around. First aider on site			First aid kit	
Optical fibre risks:	Train workers on specific hazards associated with	Workers trained on optic fiber hazards	Ongoing	Contractor	Training materials	250000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	handling optic fibre material; Use protective clothing, including breathing masks, to prevent inhalation of and skin contact with glass fibre shards;	PPE provided to workers			PPE	
Community Health and Safety Impacts						
Spread of HIV/AIDS and STDs	Employ local people wherever possible.	No new HIV/AIDS infections	Commencement of project	Contractor		N/A
	Provide HIV/AIDS information and education to workers.	HIV/AIDS awareness materials Training register	Ongoing	Contractor	Training materials	200,000
	Provide condoms to workers.	Condoms made available to workers	Ongoing	Contractor	Condoms	150,000
	Provide the necessary support to those living with HIV/AIDS.	HIV/AIDS support provided	Ongoing	Contractor		N/A
Transmission of COVID-19 infections amongst	Provide COVID-19 preventive measures including provision of sanitation products and	COVID-19 protective equipment	Duration of the pandemic	Contractor	Masks, face shields, hand sanitisers, pails	500,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
workers within the worksite	protective masks and shields;				and basins, handwash soaps	
	Encourage hygiene practices including hand washing and hand sanitising	Handwash facilities in place	Duration of the pandemic	Contractor	Handwash soaps, pails and basins	
	Enforce the wearing of masks and shields all time whilst at the worksite.	Workers wearing masks on worksites	Duration of the pandemic	Contractor	Masks and face shields	
	Divide the workers into shift rotations to decongest the work area and improve social distancing.	Decongested worksite	Duration of the pandemic	Contractor	N/A	N/A
	Provide medical assistance to suspected COVID-19 cases by referring them to approved testing centres and hospitals	Emergency vehicles on standby	Duration of the pandemic	Contractor	Vehicles	N/A
	Provide continuous communication and awareness on COVID-19 issues	Awareness materials and training registers	Duration of the pandemic	Contractor	Training and awareness materials	100,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	PMT will ensure the contractor is taking adequate precautions to prevent or minimize an outbreak of COVID-19, and have identified what to do in the event of an outbreak in line with national guidance and the World Bank's ESF/Safeguards Interim Note: COVID-19 Considerations in Construction/Civil Works Projects.					
Health and safety risks to Government workers and members of the public close to work zones	Awareness raising of Government staff in advance of works.	Risk assessments	Ongoing	Contractor	Awareness materials	100,000
	Displaying appropriate warning signs around work zones.	Signage around work zones	Ongoing	Contractor	Signage	200,000
	Adequate risk assessment by Contractor and implementation of necessary mitigation measures when initiating work in new location e.g. new room, floor, building.	Measures to prohibit unauthorized access to hazardous work areas. Risk assessments conducted	Where necessary	Contractor		

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
Social Impacts						
Disruption of walkways or roads	Put notification and signage to alert people of the changed walkways.	Warning signs provided to guide traffic diversions.	Ongoing	Contractor	Warning signage	50,000
	Provide alternative pathways.	Alternative pathways identified.	As required	Contractor	Warning signage	50,000
	Backfill trenches promptly.	All trenches backfilled	As required	Contractor	Hoes, shovels and wheelbarrows	500,000
Sexual exploitation and abuse at work site including harassment using the internet.	Develop policy for use of internet to avoid abuse and malicious intent.	Internet Use Policy should be in place	Ongoing	Government	Internet Use Policy	N/A
	Develop a code of conduct to guide workers on issues of sexual exploitation and harassment.	Code of conduct should be in place	Commencement of project	Government	Code of Conduct Forms	N/A
Gender Based Violence (GBV)	Continuously sensitize workers on GBV throughout the project cycle	Workers and beneficiaries aware of the gender-based violence, grievance mechanism and	During construction	Contractor	Training resources Signage posts	500,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
	<p>Sensitize the community on the grievance redress mechanism (GRM) before implementation of project;</p> <p>Ensure that Codes of Conduct are signed and understood by all contractor staff;</p> <p>Provide separate facilities for men and women; and</p> <p>Provide appropriate signage on GBV in local language.</p>	<p>code of conducts signed,</p> <p>Signage posts on GBV displayed on site</p>				
Loss of employment opportunities due to Preferential recruitment, and marginalisation	Contractor and Client must adhere to the labour laws and gender policy as well as the appropriate Codes of Conduct for the contractor and workers	Non-discrimination during recruitment.	Recruitment period	Contractor	Non-discrimination policy	NA
Use of internet for malicious intents (internet bullying, stalkers, and crime); unlawful content (pornographic and	<p>Develop policy for use of internet to avoid abuse and malicious intent.</p> <p>Restrict internet to relevant websites.</p> <p>Track and monitor internet usage.</p>	Internet Use Policy should be in place	Implementation	e-Government/ Contractor	Internet use Policy	10,000,000

Expected Impacts	Proposed Mitigation Measures	Output Indicator	Timing	Responsibility	Resources	Estimated Costs (MK)
violent images) and Identity theft and hacking.	Provide internet safety mechanism to prevent hacking incidents. Restrict internet to relevant websites.					
Changes in communication patterns using the internet affects nature of social relationships.	Ensure the inclusion of awareness on impacts of internet use and the changes in modes of communication Develop policy for use of internet to avoid abuse and malicious intent.	Social cohesion maintained	Ongoing	e-Government	ICT Use Awareness Campaigns	N/A

8.2. Institutional Arrangements, Environmental Responsibility and Accountability

Institutional Arrangements

The institutions for the project implementation will cascade from national level (formal and informal players) to community level and these stakeholders will relate within the project in different roles.

The Digital Malawi Project will be implemented by the **Public Private Partnership Commission**, which operates under the Ministry of Finance and Economic Planning. The commission is the Government body mandated to coordinate all PPP projects, including ones in the ICT sector. As such it will coordinate all connectivity initiatives at national level. At the same level, the PPPC, would be responsible for overall coordination and monitoring application of ESMP during project design and implementation. It will also be responsible for coordination with the contractor, the World Bank, Environmental affairs Department and District Executive Committees on environmental and social safeguards requirements. PPPC will ensure that all project activities are properly screened and that appropriate instrument is used to manage environmental and social impacts. PPPC will recruit **Environmental and Social Safeguards Consultants** to prepare the ESMP that may be required for project activities, to monitor and evaluate environmental performance of the project activities to verify compliance with applicable legal and other requirements. The Consultant will also be responsible for reporting on the contractor's performance on ES issues.

The **World Bank Group** will offer support in approving the safeguards instruments to ensure that the project activities do not result in harm to the environment and communities. Effort will also be made to link the existing ICT initiatives at national level to those within the region.

Contractor will be responsible for the implementation of mitigation measures to address the project impacts and will also be responsible for inspections and monitoring the environmental and social management works required under the project.

The **Environmental Affairs Department** is bestowed with responsibility for reviewing the environmental and social protection aspects of projects. This is also the department to which telecommunications operators in the country submit applications for safeguards approvals in advance of network development. The department will be represented on DMP Governance Structure and so will be fully updated on project implementation. During project implementation, the project team and the private implementing partners will be required to go through EAD for environmental approval, as per the legal framework in Malawi. The Governance Structure will provide an additional institutional mechanism to ensure that the regulatory framework is being complied with in Malawi. In cases where additional technical capacity on environmental issues is required in the project team, the project will hire expertise on contract.

At district level, the **District Executive Committee (DEC)** comprising of heads of department will ensure that environmental screening has been conducted and will approve screening forms through the Environmental District Officers (EDO). The DEC will also undertake monitoring and inspection of project activities and assist grievance redress committees in resolving grievances.

At local level, the **Area Development Committee (ADC)** comprising of local leaders, extension workers and representatives of **Village Development Committees (VDCs)** will report to DEC. This committee will co-opt representative of the host community. The committee will carry out awareness and sensitization campaigns on proposed projects and impacts.

Roles and Responsibilities

The Project Implementation Unit is responsible for ensuring contractor’s compliance with the ESMP requirements. The contractor is also responsible for ensuring the provision of qualified environmental and social safeguards personnel, a code of conduct as well as development and implementation of the Environmental and Social Management Plans. The contractor is also responsible for ensuring that sufficient resources are available to achieve desired results. All employees who will be working under the Campus Wi-Fi sub-component project are responsible for safeguarding the environmental and social aspects of project.

Table 8: Roles and Responsibilities of Stakeholders

Position	Responsibility
Project Implementation Unit (PPPC-Environmental and Social Safeguards Officer)	<ul style="list-style-type: none"> • Responsible for development and review of the ESMP as required by the Environmental Affairs Department (EAD) and the World Bank Safeguard Office. • Review and approval of Contractors ESMP for mitigation of environmental and social impacts expected from the project. • Ensuring that the Contractor’s ESMP is implemented effectively to avoid and minimise environmental and social impacts of the project. • Conducting environmental and social risk assessments to ensure compliance with all World Bank policies, statutory requirements and permit conditions pertaining to the ESMP; and preparing assessment reports. • Ensuring that all staff follow rules and procedures set by Contractor on site and reporting to the Site Manager. • Closely monitoring activities related to the ESMP on site. • Assisting the Site Manager to develop and deliver capacity development and training programs for environmental and social management plan implementation. • Overseeing and reviewing environmental monitoring/reporting and assistance to the Site Manager in implementing the ESMP.

	<ul style="list-style-type: none"> Overseeing the implementation of the Grievance Redress Mechanisms.
Contractor – (Site /Project Manager)	<ul style="list-style-type: none"> Ensuring that all site staff, including sub-contractors comply with this ESMP or revision thereof and instructions given by the relevant licensing authorities. Planning and mobilization of manpower. Determining equipment to be used and ensuring that they are in good working condition; guaranteeing safety for the workers and operators. Ensuring that all activities are carried out to schedule and in accordance with Project specifications, procedures and environmental and social requirements, including codes of conduct. Ensure workers have the required PPE
Contractor – (Supervisor/ Foreman)	<ul style="list-style-type: none"> Working in close coordination with the ESS Officer. Providing supervisory role to contractor employees working on the project. Responsible, with the assistance of the Site Environmental Team, for ensuring that all site staff, including sub-contractors, work in accordance with the environmental and social requirements relevant to their activity. Reporting to the Project Manager any deviation from the environmental and social management requirements, or any environmental incident that occurring and observed on the site. Ensure all workers are using the required PPE at all times Recording GBV, OHS incidents and reporting the same to the Manager Ensure workers are aware of the Grievance Redress Mechanism
Ministry of Natural Resources, Energy and Environment - (Environmental Affairs Department)	<ul style="list-style-type: none"> Environmental and social regulations are complied with and that the ESMP is followed. Ensuring that local development projects are implemented sustainably.
Ministry of Labour	<ul style="list-style-type: none"> Ensure good working conditions and labour practices at the project site.

9. ENVIRONMENTAL AND SOCIAL MONITORING PLANS

The Environmental and Social Monitoring Plan presented in Table 9 provides for monitoring, to check implementation of the enhancement and mitigation measures proposed in the Environmental and Social Management Plan (ESMP). The monitoring plan gives monitoring indicators, means of their verification, frequency of monitoring and the stakeholders responsible for monitoring.

The Environmental and Social Monitoring Plan helps to verify the magnitude, duration and scope of the predicted impacts during and after implementing the enhancement and mitigation measures. It also helps to detect any unforeseen impacts at an early stage so that corrective measures can be taken, before significant damage takes place on society or the environment. Hence, monitoring implementation of the ESMP requires dedication and persistent follow up, especially during the construction phase of the project. It requires coordination with professionals from the various key stakeholders to verify that all mitigation measures in the ESMP are being implemented on time and as recommended. The estimated budget for the monitoring exercise s for the project is MK5 million.

Table 9. Monitoring plans for potential adverse environmental and social impacts

Expected impacts	Proposed Mitigation Measures	Monitoring indicators	Means of monitoring	Responsibility	Monitoring frequency	Estimated Costs (MK)
Noise	-Inform neighbouring offices; -Provide ear muffs to workers	Complaints against noise	Grievance logs	Contractor's ESSO and EAD	Once a month	N/A
Air Emissions	-Regular vehicles servicing; -Buy environmentally friendly equipment	Number of complaints	Grievance records	Contractor's ESSO and EAD	Once a month	N/A
Increased generation of solid waste and rubble	Disposal of waste in designated sites	Number of complaints	Grievance records	Contractor's ESSO and EAD	Weekly	N/A
Hazardous material and waste	Prevent fuel spills and use environmentally friendly equipment	-Number of spills, -Equipment specification	Visual inspection	Contractor, ESSO, EAD	During ordering equipment and construction	N/A
Exposure to electricity and magnetic fields	Engage only certified workers	Worker certificates and references	Contacting referees,	Contractor, ESSO, ministry of Labour	Once during recruitment	N/A
Optical fibre risks	Adhere to safety standards and code of conduct (CoC)	Number breaches of safety (CoC)	Checking employees' files		All the time on duty	N/A
	Training on safety	Number trained	Training records		Before construction	TBD
	Induction in personal safety in the health	Number of staffs inducted in H&S	Training records		During maintenance	N/A

Expected impacts	Proposed Mitigation Measures	Monitoring indicators	Means of monitoring	Responsibility	Monitoring frequency	Estimated Costs (MK)
	-Worker training on hazards of optic fibre -Use of protective clothing	-Number trained -Number not wearing PPE	Training records Observation		Monthly	N/A
Increase in Spread of STIs and HIV and AIDS	-Employ local people -Provide civic awareness -Provide condoms	-Locals employed, -Awareness and condoms given	Employment, Meetings record, PPE register	Contractor, ESSO, EAD	During employment and construction	TBD
Risk of infection from COVID 19	Provide PPE, hand sanitisers and soap; Avoid over-crowding	Quantity of PPE, soap and sanitizer	PPE supplies register	Contractor, ESSO, DHO	During hire and construction	TBD
Working in elevated and overhead areas	-Secure elevated work areas -Use appropriately rated and maintained hoisting	Number of times staff breach safety procedures	Inspection of equipment and records	Site supervisor, ESSO, Ministry of Labour	Daily and Monthly	N/A
Preferential recruitment, worker harassment and marginalization	Adhere to the labour laws, gender policy and codes of conduct	Staff register and number of complaints	Employment and Grievance registers	Contractor, ESSO, Ministry of Labour, Ministry of gender	During employment and construction	N/A
Sexual exploitation and abuse (SEA)	Sensitise the workers on the appropriate codes of conduct. All employees to sign the CoC	SEA Complaints. Signed CoC	-Employee files -Grievance log	Contractor, ESSO, EAD, Ministry of gender	During recruitment and construction	N/A

Expected impacts	Proposed Mitigation Measures	Monitoring indicators	Means of monitoring	Responsibility	Monitoring frequency	Estimated Costs (MK)
Gender Based Violence	<ul style="list-style-type: none"> -Sensitize workers on GBV, VAC risks and (GRM); -CoC signed /understood by all -Separate facilities for men and women; -Appropriate signage on GBV in local language. 	<ul style="list-style-type: none"> -Sensitisations on GBV, VAC risks; and on GRM Number of employees who signed the CoC 		Contractor, ESSO, Ministry of gender	During employment and during construction	N/A

10. GRIEVANCE REDRESS MECHANISM

The Employer will launch a Grievance Redress Mechanism (GRM) for the GLAN sub-component together with the Contractor and is to be accessed and used by the contractor's employees and all stakeholders involved and those that will use the internet service.

The GRM will be launched at the contractors work site where the Human Resources (HR) will be trained to record grievances as they come from all that intend to register their grievances including contractor's workers and users of the internet service.

An email address will be provided for use by those that do not wish to go through the contractors HR. A hotline will also be provided for those who further wish to register their grievances telephonically.

The Project will receive any kind of grievances and complaints from workers and the communities. The types of grievances expected from the project may include:

Dust and noise issues, health concerns, safety requirements including poor working environment and lack of PPE, deviation from employment contract requirements, sexual exploitation and abuse, sexual harassment, gender-based violence, child employment, lack of HIV/AIDS support, unresolved safety incidents and environmental damage concerns among others.

The grievances will be reported on the Grievance Reporting Form and the measures agreed upon by the two parties will be updated on the Resolution Agreement Forms. Both forms are presented in Appendix 4 below. The forms will be completed by the complainant and submitted to the Contractors Human Resources Officers. For those who wish not to use their HR department to report grievances, they can contact the PPPC through the following contact details: Phone number: +265 999 988 870 and Email: digitalmalawi.grm@pppc.mw.

As a guiding principle, emphasis shall be placed on simplicity and proximity of the conflict resolution mechanisms to the affected persons and the general public and the following shall be noted: -

- I. Negotiation and agreement by consensus will provide the best avenue to resolving any grievances expressed by the individual landowners or households affected by sub projects.
- II. Public Private Partnership Commission (PPPC) and the Project Contractor shall ensure that the main parties involved achieve consensus freely. The relevant representative and/ or the PPPC shall clearly advise the PAPs, as to who is responsible for the activity and the procedure for handling grievances or compensation claims; and
- III. If a suitable solution to grievances is not found, PPPC or Project Contractor shall defer the concerned project activities until consensus is reached.

Mediation process will be implemented according to traditional methods of mediation/ conflict resolution. The resolution will then be documented on the relevant consent forms and verified.

The PIU will ensure these measures are undertaken before the start of any works by the contractor and supervising engineer/clerk of works. Awareness raising will be carried out before commencement of any works at all beneficiary sites.

11. CAPACITY BUILDING AND AWARENESS

For the implementation of this ESMP to be successful, there is need to ensure there is sufficient awareness in the ESMP and capacity to undertake the measures identified within it. The Digital Malawi PIU will therefore be required to ensure that the contractor, supervising engineer/clerk of works, Government departments within whose buildings the works are being undertaken, and Government staff working within these buildings are aware of the ESMP and the responsibilities of all parties to ensure efficient and safe completion of the works.

The Contractor shall develop a training program to promote effective implementation of this Environmental and Social Management Plan. The Contractor shall identify training needs for his work force and develop a program to train his workers in the implementation of the ESMP. The training program should specifically be targeted to increase the capability of different workers and the roles they will play in the mitigation measures including waste management, provision of appropriate PPE and provision of first aid. In addition to training, the contractor should put in place measures and resources that are necessary for the effective implementation of the ESMP.

To permit this the following will be undertaken by the PIU and the Contractor:

- Onboarding of the contractor – on the World Bank Safeguards and EHS Guideline requirements, compliance requirements, labour laws and working conditions, pollution control, waste management, occupational health and safety, Government worker and public health and safety, Code of Conduct, Grievance Redress Mechanisms, inspection and monitoring reporting that is required when working at the campuses;
- Onboarding of supervising engineer by the Contractor's Environmental and Social Safeguards Specialist on the World Bank Safeguards and ESHS Guideline requirements, labour laws and working conditions, pollution control, waste management, occupational health and safety, Government worker and public health and safety, Code of Conduct, Grievance Redress Mechanisms;
- Onboarding of Contractor workers by Contractor's Environmental and Social Safeguards Specialist on – safe working practices, waste management, Contractor's Code of Conduct, the Grievance Redress Mechanism, emergency procedures, COVID-19 mitigation measures;
- Onboarding of the beneficiary sites personnel and relevant Private and government institutions (Environmental Affairs Department, Department of E-government, Department of Lands, District Technical Committees, MAREN, Project beneficiaries) – on the World Bank Safeguards and EHS Guideline requirements, compliance requirements, labour laws and working conditions, pollution control, waste management, occupational health and

safety, Government worker and public health and safety, Code of Conduct, Grievance Redress Mechanisms, inspection and monitoring reporting that is required for the project.

The PIU will ensure these measures are undertaken before the start of any works by the contractor and supervising engineer/clerk of works. Awareness raising will be carried out before commencement of any works at all beneficiary sites.

11.1. Capacity Building and Training for Contractor's Workers

The Contractor shall develop an inhouse training and awareness program to promote effective implementation of this Environmental and Social Management Plan. The Contractor shall identify training needs for his work force and develop a program to train his workers in the implementation of the ESMP. The training program should specifically be targeted to increase the capability of different workers and the roles they will play in the mitigation measures including waste management, use of appropriate PPE and provision of first aid treatment to injured workers. In addition to training, the contractor should put in place measures and resources that are necessary for the effective implementation of the ESMP.

The PIU will ensure these measures are undertaken before the start of any works by the contractor. Awareness raising will be carried out before commencement of any works at college campuses and buildings.

The PIU Environmental and Social Safeguards Consultant will work hand in hand with the Contractor's Environmental and Social Safeguards Specialist on the training and awareness program.

The Contractor is expected to employ an Environmental and Social Safeguards Specialist who will take a lead in the implementation of the ESMP requirements.

The Contractor workers will undergo inductions on the environmental and social issues expected from the projects works and their role in managing the impacts.

The Contractor is responsible for the budget for training his workers.

Table 10: Training Plan for Contractor Workers

Type of Training	Responsibility	Duration	Who to be trained
Induction	Contractor's ESSS	Before start of project activities	Contractor Workers
ESMP Implementation	Contractor's ESSS	Before start of project activities/ Ongoing	Contractor, Contractor Workers
Compliance Requirements	PIU	Before start of project activities	Contractor/ ESSS

Health and Safety	Contractor's ESSS	Before start of project activities/ Ongoing	Contractor and Workers
Grievance Redress Mechanism	PIU/ Contractor's ESSS	Before start of project activities	Contractor and Workers

11.2. Capacity Building and Training for Stakeholders

In addition to the employees training by the Contractor, the PIU is required to conduct a training session for the project staff members, public and private employees in institutions that will be involved in the project especially in the implementation of the environmental and social safeguards policies and the contractor's safeguards specialists in order to improve their technical capacity to effectively implementation of the policies.

This training will be done once to cover all the nine subcomponents of the digital connectivity components as the same institutions will be involved in the different sub-components. The training activities presented in table 11 are designed to suit the technical capacity needs of the trainers and participants at the district and national level. The training, which should include practical sessions for the use of the Environmental and Social Management and Monitoring Plans (Tables 7 and 9), are designed to cover other aspects of the ESMP and the Environmental and Social Safeguards Policies in whole. The objective is that the project implementers and key stakeholders will have to understand the policy framework for effective and efficient management of the environmental and social impacts of the Campus Wi-Fi implementation activities.

Table 11: Training Programme for PIU and Public and Private Sector Institutions

Programme for Trainers			
Days of Training	Recommended Type of Training (Training Activity)	Target Group / Trainer	Means of Verification
1 Day	<ul style="list-style-type: none"> Brief Project description Environmental setting of the project Relevant Environmental Policies and laws in Malawi World Bank safeguard policies Environmental and Social Impacts and their mitigation 	PPPC staff MAREN staff e-Government staff Contractor's Safeguards personnel (15)	6 members in total, from PPPC, MAREN and e-Government trained. 15 Safeguards Specialists for the various contractors

	<ul style="list-style-type: none"> • Strategic action planning for Environmental and Social Management and monitoring • Public Consultation • Compensation issues and agreements • Grievance Redress Management • Use of checklists for monitoring and recording • Report preparation and distribution 	<u>Trainer: EAD or Private Consultant</u>	
Programme for Public and Private Sector Frontline Staffs			
1 Day	<ul style="list-style-type: none"> • Relevant Environmental Policies and Laws in Malawi • World Bank safeguard policies • Environmental and Social Impacts • Planning for Environmental Management • Awareness campaign programmes • Monitoring of Impacts and mitigation measures • Compensation agreements and payments • Grievance management (flow of communication) • Use of checklists for assessment of impact management • Reporting and record keeping 	<p>22 members of the DTC and 61 members of the target institutions</p> <p>Trainer: Trainers, under supervision of a qualified person</p>	<p>22 members of DTC trained.</p> <p>61 members of the target institutions trained</p>

11.3. Proposed Capacity Building and Training Budget

Six (6) trainers will be trained in Blantyre. Out of the six, four (two from PPPC and two from MAREN) will come from Blantyre. The remaining two will come from e-Government in Lilongwe and will therefore need transport and accommodation allowances. 15 Safeguards Specialists

for the various contractors will be involved in the training where available. Those to be engaged later will be trained by the PIU Consultant Safeguards officer.

Forty-six (46) people from the Central Region will be trained in Lilongwe. The majority will come from Lilongwe District, while a few will come from outside Lilongwe and will therefore need travel and accommodation allowances. Similarly, forty-six people for the Southern Region will be trained in Blantyre where the majority of the people will come from. Finally, twenty-four people from the Northern Region will be trained in Mzuzu where the majority come from.

The training budget has therefore taken into account the travel, accommodation, venue, meals and refreshments for the one-day trainings in each of the three regions as well as the trainers' costs. Table 12 provides a breakdown of the training expenses whose total is \$37,908.30.

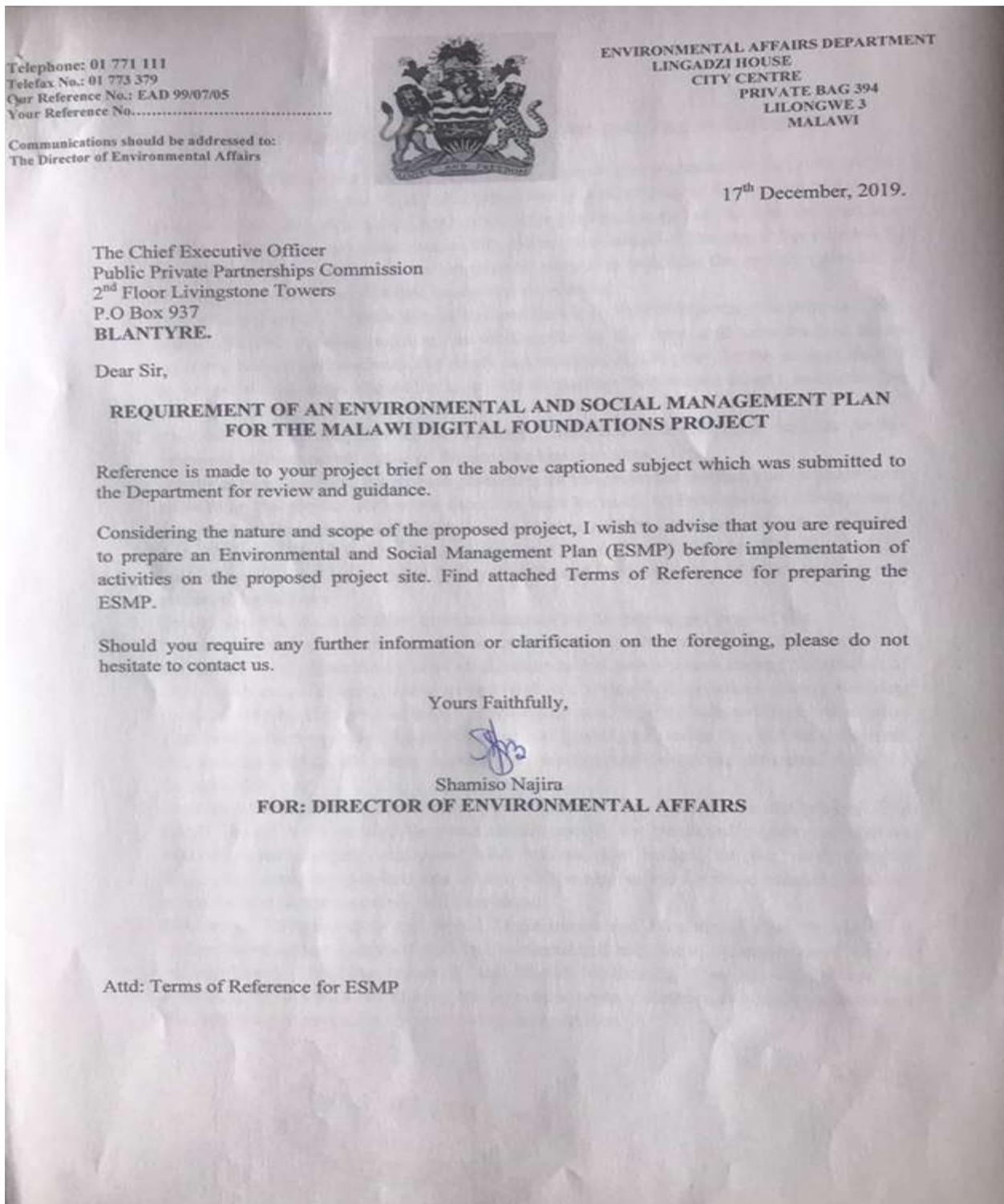
Table 12: Training Budget

Training for Trainers				
Allowances Drivers	No	3	54.79	164.38
Participants	No	21	82.19	1725.99
Fuel	Sum	1	96.84	96.84
Refreshments	No	25	27.40	685
Meals	No	25	20.55	513.75
Sub-total				3,185.96
Training of Central Region Participants in Lilongwe				
Allowances Drivers	No	15	54.79	803.65
Participants	No	46	82.19	3,780.82
Fuel	Sum	1	216.80	216.80
Car hire	Sum	1	767.12	767.12
Refreshments	No	63	27.40	1,716.89
Meals	No	63	20.55	1,287.67
Sub-total				8,572.96
Training of Southern Region Participants in Blantyre				
Allowances Drivers	No	15	54.79	821.92
Participants	No	46	82.19	3,780.82
Fuel	Sum	1	343.01	343.01
Car hire	Sum	1	986.30	986.30
Refreshments	No	63	27.40	1,726.03
Meals	No	63	20.55	1,294.52
Sub-total				8,952.60
Training of Northern Region Participants in Mzuzu				

Allowances Drivers	No	7	54.79	401.83
Participants	No	24	82.19	1,972.60
Fuel	Sum	1	546.48	546.48
Car hire	Sum	1	219.18	219.18
Refreshments	No	33	27.40	913.24
Meals	No	33	20.55	684.93
Sub-total				4,738.26
Support Staff	No	8	14	112.00
ACCOMMODATION	No	29	27.40	794.52
WORKSHOP STATIONERY	No	4	100	400.00
CONFERENCE HALL	No	4	288	1,152.00
TRAINERS				10,000.00
Sub-total				12,458.52
GRAND TOTAL				37,908.30

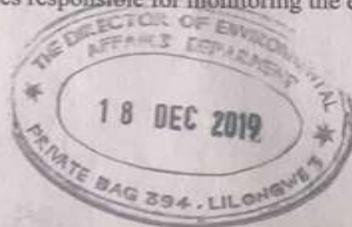
12. APPENDICES

12.1. Appendix 1: Terms of References for The Malawi Digital Foundations Project



**TERMS OF REFERENCE OFFOR THE MALAWI DIGITAL FOUNDATIONS
PROJECT**

1. Provide a brief description of the nature and location of the proposed Project with respect to the name of the proponent, postal address, aim and objectives of the project, the spatial location of the site with aid of appropriate topographical maps of the area (at least at a scale 1:50,000); the estimated cost of the project, the nature of the project in relation to the site specific project sites, the number of people to work on the project (provide a breakdown of males and females, locals and non-locals).
2. Provide a site specific visible map of the area (scale 1: 50,000) showing the proposed site and (1:10,000) showing existing establishments in the area and surrounding areas including natural endowments like rivers and streams. A site plan for the project should be provided. All maps should be in colour to portray the themes clearly and must be printed on A3 paper.
3. Provide a brief description of the existing biophysical characteristics and the socio-economic environmental status of the proposed project sites.
4. Briefly review the legal framework pertaining to the proposed project and indicate their impacts on the project. Reference should at least be made to Environment Management Act, Waste Management and Sanitation Regulations, New Land Acts, Water Resources Act, National Water Policy, Malawi National Land Policy, Gender Equality Policy, Public Health Act, Occupational Safety, Health and Welfare Act, and other policies and pieces of legislations.
5. Briefly describe main activities to be undertaken for the project per project site
6. Briefly describe main activities to be undertaken for the project. In the description include the type of machinery to be used, occupational safety issues during installation of cables and trench digging, noise impact and any type of disturbances during working hours in offices, theft and safety of office equipment, type of infrastructure installation associated with the proposed project, nature and quantity of wastes that will be generated, facilities for appropriate waste disposal and management including estimated costs for the activities
7. Propose an Environmental and Social Management Plan (ESMP) for the project. The ESMP should be in tabular form and should specify the predicted impacts, mitigation measures/ enhancement measures. Also indicate the budget for the recommended mitigation measures, specifications of who will be responsible for these measures and the schedule when these measures will take place.
8. Propose an Environmental and Social Management and Monitoring Plan by which all mitigation measures recommended in Environmental and Social Management Plan will be monitored. The Environmental and Social Monitoring Plan should include the activities, frequency of monitoring, the key monitoring indicators, resources required and the authorities responsible for monitoring the exercises.



9. Undertake stakeholder consultation to ensure key interested and affected stakeholders are involved in coming up with the ESMP. Incorporate their views in the report and indicate a record of consultations in the appendices as part of the report.
10. Submit 5 hard copies and a soft copy of the ESMP to the Director of Environmental Affairs. Submit a copy of the ESMP to the District Commissioners and EDOs in the Districts concerned.

12.2. Appendix 2: Environmental and Social Screening Report



THE DIGITAL MALAWI PROGRAM PHASE I: DIGITAL FOUNDATIONS PROJECT

Environmental & Social Screening Form

Project Name: Government LAN	Project Location: Capital Hill & Salima	
Name & Signature of Evaluator: E Lijoni	Date of Field Evaluation: August 2020	
	Appraisal	Significance
Will the project generate the following impacts		Low [] medium [] high []
Loss of trees	Yes [] No [x]	N/A
Soil erosion/siltation in the area	Yes [] No [x]	N/A
Pollution to land-diesel, oils	Yes [x] No []	Low
Dust emissions	Yes [x] No []	Low
Solid and liquid wastes	Yes [x] No []	Low
Spread of HIV/AIDS and other STIs	Yes [x] No []	Low
Rubble/heaps of excavated soils	Yes [x] No []	Low
Nuisance from noise or smell	Yes [x] No []	Low
Impact cultural site, graveyard land	Yes [] No [x]	N/A
Conflicts over use of local water resources	Yes [] No [x]	N/A
Disruption of important pathways, roads	Yes [] No [x]	N/A

Loss of livelihood means	Yes [] No [x]	N/A
Blockages to footpath/roads	Yes [] No [x]	N/A

From observations made on similar projects and the scope of activities to be undertaken for the installation of the LAN within the country, the overall level of impacts is insignificant and will be localised on site. The period of the installation works will be within weeks making the duration of the impacts short-term. These impacts could be easily mitigated through adherence and alignment to best practice during project implementation and through specific environmental and social management plans.

The identification of typical potential project impacts was done after reviewing the nature of the sub-project activities, visiting the project areas where project activities will be implemented and after several discussions with technical staff from the Public Private Partnership Commission and ICT personnel within the institutions.

The proposed project is neither on List A (projects for which an ESIA is required) nor on List B (projects which may require an ESIA) in the Malawi Guidelines for Environmental Impact Assessment of 1997. Hence, ordinarily the project would not require an ESIA.

A review of the project documentation, expected project activities of the project and site visits of areas with wi-fi connectivity facilitated completion of the screening forms to identify potential impacts of the project. The overall evaluation of the screening is summarised as follows:

- The nature and size of this project does not necessitate requirement of an Environmental and Social Impact Assessment, as per the Malawi Guidelines for Environmental Impact Assessment of 1997.
- The sub-projects have been categorised as “B” under the World Bank categorisation and does not require an ESIA.

The nature and duration of the project activities with will not result in significant impacts. The impacts can easily be managed by a management plan.

12.3. Appendix 3: Environmental and Social Screening Form



THE DIGITAL MALAWI PROGRAM PHASE I: DIGITAL FOUNDATIONS PROJECT

Environmental & Social Screening Form

Guidelines:

Inspection of project site

The evaluation results to be a consensus of at least three officials.

Project Name:		District:		
Project Location:		Nature/Size:		
Name & Signature of Evaluator:		Date of Field Evaluation:		
		Appraisal	Significance	Potential Mitigation Measures
		Yes/No	Low, medium,	
1.0	Environmental Screening (OP 4:01)			
	Will the project generate the following impacts			
1.1	Loss of trees			
1.2	Soil erosion/siltation in the area			
1.3	Pollution to land-diesel, oils			
1.4	Dust emissions			
1.5	Solid and liquid wastes			
1.6	Spread of HIV/AIDS and other STI			

1.7	Borrow pits and pools of stagnant water			
1.8	Rubble/heaps of excavated soils			
1.9	Invasive tree species			
1.10	Long term depletion of water			
1.11	Reduced flow of water			
1.12	Nuisance from noise or smell			
1.13	Loss of soil fertility			
1.14	Incidence of flooding			
2.0	Resettlement Screening (OP 4:12)			
	Will the project generate the following negative social and economic impacts?			
2.1	Loss of land to households			
2.2	Loss of properties –houses, structures			
2.3	Loss of trees; fruit trees by households			
2.4	Loss of crops by people			
2.5	Loss of access to river/forests/grazing area			
2.6	Impact cultural site, graveyard land			
2.7	Conflicts over use of local water resources			
2.8	Disruption of important pathways, roads			
2.9	Loss communal facilities –churches			
2.10	Loss of livelihood system			
2.11	Spread of HIV/AIDS			

2.12	Blockages to footpath/roads			
------	-----------------------------	--	--	--

Overall evaluation of Screening Exercises

The results of the screening process would be either the proposed sub-projects would be exempted or subjected to further environmental and resettlement assessments. The basis of these options is listed in the table below:

Review of Environmental Screening (OP 4.01, OP 4.09, OP 4.36)	Tick	Review of Resettlement Screening (OP 4.12)	Tick
1. The project is cleared. No serious impacts. (When all scores are “No” in form)		1. The project is cleared. No serious social impact. (Where scores are all “No”, “few” in form)	
2. There is need for further assessment. (when some score are “Yes, High” in form)		2. There is need for resettlement/compensation. (When some scores are “Yes, High” in form)	
Endorsement by Environmental District Officer		Endorsement by Director of Planning and Development	
Name		Name:	
Signature:		Signature:	
Date		Date:	

NOTES:

1. The Safeguard specialist or EDO shall ensure that a completed form is submitted to Project Implementation Unit and Environmental Affairs Department
2. Project Management Committee will maintain a copy of completed form
3. It is the duty of Environmental District Officer and Project Implementing Unit to ensure mitigation measures outlined in form are implemented.
4. The Safeguard specialist or EDO shall prepare a monthly monitoring report on implementation of mitigation measures.

12.4. Appendix 4: Grievance Reporting and Resolution Forms



FORM I

GRIEVANCE REPORTING

SUBPROJECT NAME
.....

1. Complainant's Information		
Names and Titles (Dr/Mr./Ms./Mrs.)	Addresses:	E-mail:
	Contact Tel.	Location:
Please indicate how you prefer to be contacted (e-mail, mobile, etc.):		
2. Description of the issue:		
3. How are you affected:		
(a) What harm do you believe the project caused or is likely to cause to you?		
(b) Why do you believe that the alleged problem resulted from the project activities?		

(c) Do you have any other supporting documents that you would like to share as proof of the alleged problem?

4. Previous Efforts to Resolve the Complaint

(a) Have you raised your complaint with any other authorities? No Yes

If Yes (Please, provide the following details): When?

How and with whom the issues were raised?

Please describe any response received from and/or any actions taken by the project level grievance mechanism. Please also explain why the response or actions taken are not satisfactory.

If No, Why?

(b) How do you wish to see the complaint resolved?

5. Name of the person who completed this form:

Signature:

Date:

(b) Brief description of Resolution

SIGNATURES

Respondent Signature		Complainant Signature	
Name of Respondent		Name of Complainant	
Date		Date	
Witness Signature		Witness Signature	
Name of Respondent's Witness		Name of Complainant's Witness	
Date		Date	

12.5. Appendix 5: Environmental and Social Rules or Contractors

These Environmental and Social Rules for Contractors are prepared for all the contractors to be engaged on connectivity works under the Digital Malawi Project. The guidelines include provisions for proper management of work sites.

General Considerations

- The contractor shall, in all his activities ensure maximum protection of the environment and the socio-economic wellbeing of the people affected by the project, whether within or outside the physical boundaries of the project area.
- Before any construction works begin, the contractor shall ensure that the relevant environmental and land acquisition certificates of authorization for the works have been obtained from the Director of Environmental Affairs and/or the Commissioner for Lands
- In general, the contractor shall familiarize himself with the Environmental and Social Management Plans and Resettlement Action Plans. Specifically, the contractor shall make every effort to follow and implement the recommendations and mitigation measures of the ESMP to the satisfaction of client and all relevant agencies.
- The contractor shall work in cooperation and in coordination with the Project Management Team and/or any other authority appointed to perform or to ensure that the social and environmental work is performed according to the provisions of the Environmental and Social Screening and environmental management plans for sub-projects.
- The contractor shall always keep on site and make available to Environmental Inspectors or any authorized persons, copies of the ESMPs for the monitoring and evaluation of environmental and social impacts and the level or progress of their mitigation.

Acquisition of Project Materials

- The contractor shall ensure that all materials to be used during installation of wi-fi are acquired from approved suppliers and that the production of these materials by the suppliers or the contractor does not violate the environmental regulations.

Movement and Transportation of Construction Materials

- The movement and transportation of construction/installation materials/equipment to and within the construction sites shall be done in a manner that generates minimum impacts on the environment and on the community, as required by the ESMPs.

Storage of Construction/Installation Materials and Equipment

Construction materials shall be stored in a manner to ensure that:

- There is no obstruction of service roads, passages, driveways and footpaths;
- Where it is unavoidable to obstruct any of the service paths, the contractor shall provide temporary or alternate by-passes without inconveniencing the flow of traffic or pedestrians;
- There is no obstruction of drainage channels and natural water courses;

- There is no contamination of surface water, ground water or the ground;
- There is no access by public or unauthorized persons, to materials and equipment storage areas;
- There is no access by staff, without protective clothing, to materials and equipment storage areas;

Community Interaction

- Workers will be subjected to the laws of the land should they be found in gender violence, inappropriate relationships with minors, rape and impregnation without consent.
- The contractor and workers will settle all bills incurred within the community before their final payment is made by the client.
- The contractor will enable free and open access of the Grievance Redress Mechanism as need by the communities.
- The contractor has the responsibility to relay these rules to workers.

Commitment to Abiding by the Rules

- All contractors will distribute and explain these rules and all workers regardless of rank, position, origin, skills, race and qualifications will be required to sign the commitment.

12.6. Appendix 6: Occupational Health and Safety of Workers Commitment

- The contractor shall provide all necessary protective clothing for workers exposed to hazardous and risky work activities.
- All workers shall be regularly sensitized on safety regulations on the site.
- The contractor shall be guided by and shall adhere to the relevant national occupational health and safety regulations on the site.
- The contractor will enable facilitation of the Grievance Redress Mechanism (GRM) to be freely used and accessed by contractor workers and managed by the Employer.
- The contractor shall maintain on the site first aid kits for male and female workers.
- Workers shall be provided with clean potable water on the site.
- Workers shall be provided with washrooms.

12.7. Appendix 7: Waste Management Plan

Safe Disposal of Construction/Installation Waste

- Construction waste includes but is not limited to combustion products, dust, metals, cables, rubble, timber, and oil. Hence construction waste in the case of this project constitutes solid, and gaseous waste.
- In performing his activities, the contractor shall use the best practical means for preventing emissions of noxious or offensive substances into the air, land and water. He shall make every effort to render any such emissions (if unavoidable) inoffensive and harmless to people and the environment.
- The contractor shall, in particular, comply with the regulations for disposal of construction/installation wastes, dust, metals, cables, rubble and timber.
- Hazardous wastes shall be treated and disposed of in conformity with the national regulations and where applicable, with the supervision of qualified personnel.

12.8. Appendix 8: Labour Management Measures

- The contractor will be expected to draw contracts for all workers and a simplified version for non-skilled labourers. The contract will contain commitments on remuneration amounts to be paid during the works period, holidays, leave grants if applicable, dates of payments, modalities of payments and commitment to accepting the offer as proposed.
- Worker's rights relating to working hours, wages, occupational health and safety of workers, forced labour etc shall be addressed through the set GRM for the project. Supervisors will also be required to sign and adhere to a code of conduct that includes clauses on protection of worker's rights.
- The contractors will ensure that the rights of the children will be protected from any environment, which abuses their rights through GRMs and codes of conduct.
- The contractor shall ensure that a non-discrimination Policy is in place, and is implemented to ensure that workers are recruited according to the job requirements and not personal characteristics. This shall include non-discrimination against people due to their social identity including race, ethnicity, religion, gender and disability among others

12.9. Appendix 9: Child Protection Plan

The safety of the children in the surrounding community is paramount. The objective of this procedure is thus to ensure that all works within the project is done in a safe manner safeguarding the lives of the children. This Plan provides simple steps for safeguarding children for the duration of the project. It is the responsibility of all workers to ensure that the guidelines stipulated in this plan are adhered to.

Highlighted on this document are the actions and procedures that they are expected to adhere to during project implementation:

- The contractor will ensure that minors as per the stipulated age limit in the child protection laws are not recruited for employment under the project.
- It is strictly forbidden for Employees of this Project to engage in sexual relations with a minor. According to the laws of Malawi, a minor is classified as 18 years and below. Such act will entail immediate dismissal as well as reporting to the Malawi Police Service.
- All workers will go through the induction prior to commencement of works and child safety will be part of the initial induction.

12.10. Appendix 10: Gender management Plan

Gender equality refers to the equal rights, responsibilities and opportunities of women and men and is recognised as an important component in development work of which this project is one. Projects if not considerate of gender disparities have the potential to affect employment opportunities, safety and general benefits of one gender over the other. This project will have to develop a gender management plan to include issues of inequality, prevention of gender-based violence (GBV), identify gender needs and constraints, availability and appropriateness of resources, gender capacity gaps and non-discrimination based on gender.

To mitigate and manage the risks of gender inequalities and gender-based violence of the project, the following general mitigation measures will have to be applied before and during the implementation of sub-components:

- Develop, implement and communicate a Gender Policy which will include issues identified in the Gender management Plan.
- Ensure the Code of conduct includes stipulations against GBV on fellow workers and government employees and the public.
- Ensure equal opportunity to men and women employed in the project.
- Develop and institute an effective Grievance Redress Mechanism for gender related issues and sensitize the project workers as well as government employees on the same before implementation of the project.
- Increase access to well-coordinated GBV response services including medical services and counselling to GBV survivors.
- The GBV response should ensure a survivor-centered approach focusing on safety, confidentiality and respect.
- Provide separate facilities for men and women.
- Report to the Police as early as possible on serious GBV cases such as rape, sexual assault, physical violence and GBV cyber bullying as they are criminal in nature
- Identify gender capacity gaps and consequently build capacity of the employees to ensure equal opportunities.
- Provide work resources that does not discriminate against one gender.

12.11. Appendix 11: HIV/AIDS Work Place Policy and Training on HIV/AIDS for workers.

- The contractor shall prepare and adopt an HIV/AIDS Work Place Policy.

- The contractor shall arrange for HIV/AIDS training programmes for the workers to ensure their understanding of the relevant issues.
- Both male and female condoms shall be distributed to workers on the site.
- Provide all the necessary support for those living with HIV/AIDS.

12.12. Appendix 12: COVID-19 Response and Management Plan.

The COVID-19 pandemic has warranted projects to undertake extra measures to ensure protection of work sites and project employees and the surrounding communities. In addition to mitigation measures provided in this document, further guidance is provided in this section to assist contractors and their employees to manage and respond to COVID-19.

COVID-19 Information

Information dissemination and training are an effective way to reduce the risk for both the company and the general public.

- The Contractor is advised to develop and provide information on good practices for preventing COVID-19 transmission, particularly observing recommendations on social distancing, and for training staff to recognize the symptoms of COVID-19 and understand their required response, following suggestions provided within this document.
- There should be no discrimination against or stigmatization of persons affected by COVID-19 or their families.
- The Contractor should identify communication channels (for example, SMS, Whatsapp and email) within the company to address workers' concerns on an ongoing basis.

Management of Sick or Potentially Sick Employees

- To prevent potentially infected staff from entering the workplace and infecting co-workers, the company should ask workers to stay away from work in cases where they exhibit any COVID-19 symptoms or have been in close contact with a confirmed COVID-19 patient during the previous 14 days.
- The company should review its human resources policies related to sick leave and consider changes, which may be temporary, to ensure that potentially sick staff do not feel pressured to attend work, thereby risking transmitting the virus to the rest of the workforce.

A short questionnaire could be used. Workers should only report to work if they answer “no” to all the questions.

The following is an example:

- Have you, in the last two weeks, been in close contact with a person who has COVID-19?
- Have you, in the last two weeks, been in a country/region with a high number of cases of COVID-19?
- Do you have a fever?
- Have you used medications such as paracetamol or aspirin to suppress fever in the last 24 hours?
- Are you coughing (even mildly)?
- Do you currently experience shortness of breath?

COVID-19 Prevention measures

i. Cough hygiene

Workers should be instructed to follow the cough etiquette outlined below to reduce these risks:

Cover the mouth and nose with a tissue when coughing or sneezing, and dispose of the used tissue in a wastebasket.

When no tissue is available, cough or sneeze into the upper sleeve or elbow, not into the hands.

Clean hands after coughing or sneezing, preferably by thorough water-soap handwashing or use a hand sanitizing gel.

ii. Social distancing

To prevent person-to-person infection, it is important to minimize direct contact as much as possible. Where people are

regularly working or meeting, a safe distance of 2 meters (six feet) between people should be observed.

The Contractor should Adjust workplace design and work processes to improve social distancing.

Inform people about the hazards of close contacts, including with direct coworkers, and promote alternative behaviors, such as maintaining safe distances and using alternatives for handshakes.

Consider establishing alternating work days or adding extra shifts to reduce the total number of employees in a facility at a given time, allowing them to maintain the recommended distance from each other, while maintaining a full onsite work week.

iii. Hand sanitation

Frequent water-soap handwashing is critical in preventing infection in the workforce. WHO recommends rinsing and washing hands with soap for at least 20 seconds, rinsing again, and then using paper, such as a paper towel, when turning off the faucet.

The company should promote frequent and thorough water-soap hand washing and provide enough places for employees to wash their hands. If soap and running water are not immediately available, provide alcohol-based hand rubs containing at least 60% alcohol.

iv. Cleaning and disinfecting

To prevent the spread of the virus, the Contractors employees should frequently – and at least daily - clean touched surfaces, instruments and equipment used in the project.

v. Health care in remote areas

Ensure, where possible, that staff have adequate access to medical consultation.

Primary health care should always be provided by qualified medical professionals in accordance with local regulations.

12.13. Appendix 13: Emergency Preparedness Plan

An emergency event is an unanticipated incident, arising from both natural and man-made hazards, typically in the form of fire, explosions, leaks or spills, which may occur for a variety of different reasons, including failure to implement operating procedures that are designed to prevent their occurrence, extreme weather or lack of early warning.

The contractor will prepare an Emergency Response Plan (ERP) in coordination with the relevant local authorities and the affected community, and will consider the emergency prevention, preparedness and response arrangements put into place with project workers. An ERP will include, as appropriate:

- Engineering controls (such as containment, and shutoff systems) proportionate to the nature and scale of the hazard;
- Identification of and secure access to emergency equipment available on-site and nearby;
- Notification procedures for designated emergency responders;
- Diverse media channels for notification of the affected workers, community and other stakeholders;
- A training program for emergency responders including drills at regular intervals where relevant;
- Designated coordinator for ERP implementation; and
- Measures for restoration and cleanup of the environment following any major accident.

The contractor will document its emergency preparedness and response activities, resources, and responsibilities, and will disclose appropriate information, as well as any subsequent material changes thereto, to affected communities, relevant government agencies, or other relevant parties.

12.14. Appendix 14: Code of Conduct

This Appendix presents two Codes of Conduct (CoC) for use as:

1. Contractors Code of Conduct: Commits the contractor to addressing Gender Based Violence (GBV) and Violence Against Children (VAC) issues;
2. Individual Code of Conduct: Code of Conduct for each individual working on the Digital Malawi Program Phase I: Digital Foundations Project

Contractors Codes of Conduct

Contractors are obliged to create and maintain an environment which prevents social risks. They have the responsibility to communicate clearly to all those engaged on the project, the behaviours which guard against any form of abuse and exploitation. In order to prevent Social risks, the following core principles and minimum standards of behaviour will apply to all employees without exception:

1. GBV or VAC constitutes acts of gross misconduct and are therefore grounds for sanctions, penalties and/or termination of employment and/or contract. All forms of Social risks including grooming are unacceptable, be it on the work site, the work site surroundings, or at worker's camps of those who commit GBV or VAC will be pursued.
2. Treat women, children (persons under the age of 18) and people with disability with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic, cultural beliefs/practices, or other status.
3. Do not use language or behaviour towards men, women or children that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.

4. Sexual activity with children/learners under 18 (including through digital media) is prohibited. Mistaken belief regarding the age of a child and consent from the child is not a defence.
5. Exchange of money, employment, goods, or services for sex, including sexual favours or other forms of humiliating, degrading or exploitative behaviour is prohibited.
6. Sexual interactions between contractor's employees and communities surrounding the work place that are not agreed to with full consent by all parties involved in the sexual act are prohibited (see definition of consent above). This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex.
7. Where an employee develops concerns or suspicions regarding acts of GBV or VAC by a fellow worker, whether in the same contracting firm or not, he or she must report such concerns in accordance with established Grievance Redress Mechanism (GRM) that protects the identities of victims and whistle-blowers.
8. All contractors are required to attend an induction prior to commencing work on site to ensure they are familiar with the social risks and Codes of Conduct.
9. All employees must attend a mandatory training once a month for the duration of the contract starting from the first induction prior to commencement of work to reinforce the understanding of the institutional social risks Code of Conduct.
10. The Contractor shall ensure provision of financial resources and support compliance to occupation health and safety requirements for all workers.
11. The Contractor shall ensure that workers dress appropriately i.e. dress in a way that: -
 - Is unlikely to be viewed as offensive, revealing, or sexually provocative.
 - Does not distract, cause embarrassment or give rise to misunderstanding
 - Is absent of any political or otherwise contentious slogans
 - Is not considered to be discriminatory and is culturally sensitive
12. The Company shall ensure provision of financial resources and trainings to prevent spread of HIV/AIDS.
13. The company shall comply with the national, international labour laws and all applicable laws.
14. All contractors must ensure that their employees sign an individual Code of Conduct confirming their agreement to support prevention of social risks activities.
15. The contractor should ensure equitable access to limited natural resources (e.g. water points) to avoid conflicts with local communities
16. Contractors shall ensure that the rights of workers including working hours, wages etc are protected at all times.
17. Where possible, the contractor should ensure employment of local workforces especially where unskilled labour is required to mitigate social risks

18. Contractor should provide hoarding around the construction site

I do hereby acknowledge that I have read the foregoing Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities. I understand that any action inconsistent with this Code of Conduct or failure to act mandated by this Code of Conduct may result in termination of the contract.

FOR THE CONTRACTOR

Signed by: _____

Signature: _____

Title: _____

Date: _____

Workers Code of Conduct

I, _____, acknowledge that preventing any misconduct as stipulated in this code of conduct, including gender-based violence Gender Based Violence (GBV), child abuse/exploitation (CAE) are important. Any activity, which constitute acts of gross misconduct are therefore grounds for sanctions, penalties or even termination of employment. All forms of misconduct are unacceptable be it on the work site, the work site surroundings, or at worker’s camps. Prosecution of those who commit any such misconduct will be pursued as appropriate.

I agree that while working on this project, I will:

1. Consent to security background check;
2. Treat women, children (persons under the age of 18) and persons with disability with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, birth or other status; Not use language or behaviour towards men, women or children/learners that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate;
3. Not participate in sexual activity with children/learners—including grooming or through digital media. Mistaken belief regarding the age of a child and consent from the child is not a defence;

4. Not exchange money, employment, goods, or services for sex, with community members including sexual favours or other forms of humiliating, degrading or exploitative behaviour;
5. Not have sexual interactions with members of the communities surrounding the work place, worker's camps and fellow workers that are not agreed to with full consent by all parties involved in the sexual act (see definition of consent above). This includes relationships involving the withholding, promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex - such sexual activity is considered "non-consensual" within the scope of this Code;
6. Attend trainings related to HIV/AIDS, GBV, CAE, occupational health and any other relevant courses on safety as requested by my employer;
7. Report to the relevant committee any situation where I may have concerns or suspicions regarding acts of misconduct by a fellow worker, whether in my company or not, or any breaches of this code of conduct provided it is done in good faith;

With regard to children under the age of 18

- Not invite unaccompanied children into my home, unless they are at immediate risk of injury or in physical danger.
 - Not sleep close to unsupervised children unless absolutely necessary, in which case I must obtain my supervisor's permission, and ensure that another adult is present if possible.
 - Refrain from physical punishment or discipline of children.
 - Refrain from hiring children for domestic or other labour, which is inappropriate given their age, or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.
 - Comply with all relevant local legislation, including labour laws in relation to child labour.
8. Refrain from any form of theft for assets and facilities including from surrounding communities.
 9. Remain in designated working area during working hours;
 10. Refrain from possession of alcohol and illegal drugs and other controlled substances in the workplace and being under influence of these substances on the job and during working hours;
 11. Wear mandatory PPE at all times during work;
 12. Follow prescribed environmental occupation health and safety standards;
 13. Channel grievances through the established grievance redress mechanism.

I understand that the onus is on me to use common sense and avoid actions or behaviours that could be construed as misconduct or breach this code of conduct.

I acknowledge that I have read and understand this Code of Conduct and the implications have been explained with regard to sanctions on-going employment should I not comply.

Signed by: _____

Signature: _____

Date: _____

FOR THE EMPLOYER

Signed by: _____

Signature: _____

Date: _____

12.15. Appendix 15: Consultation Register



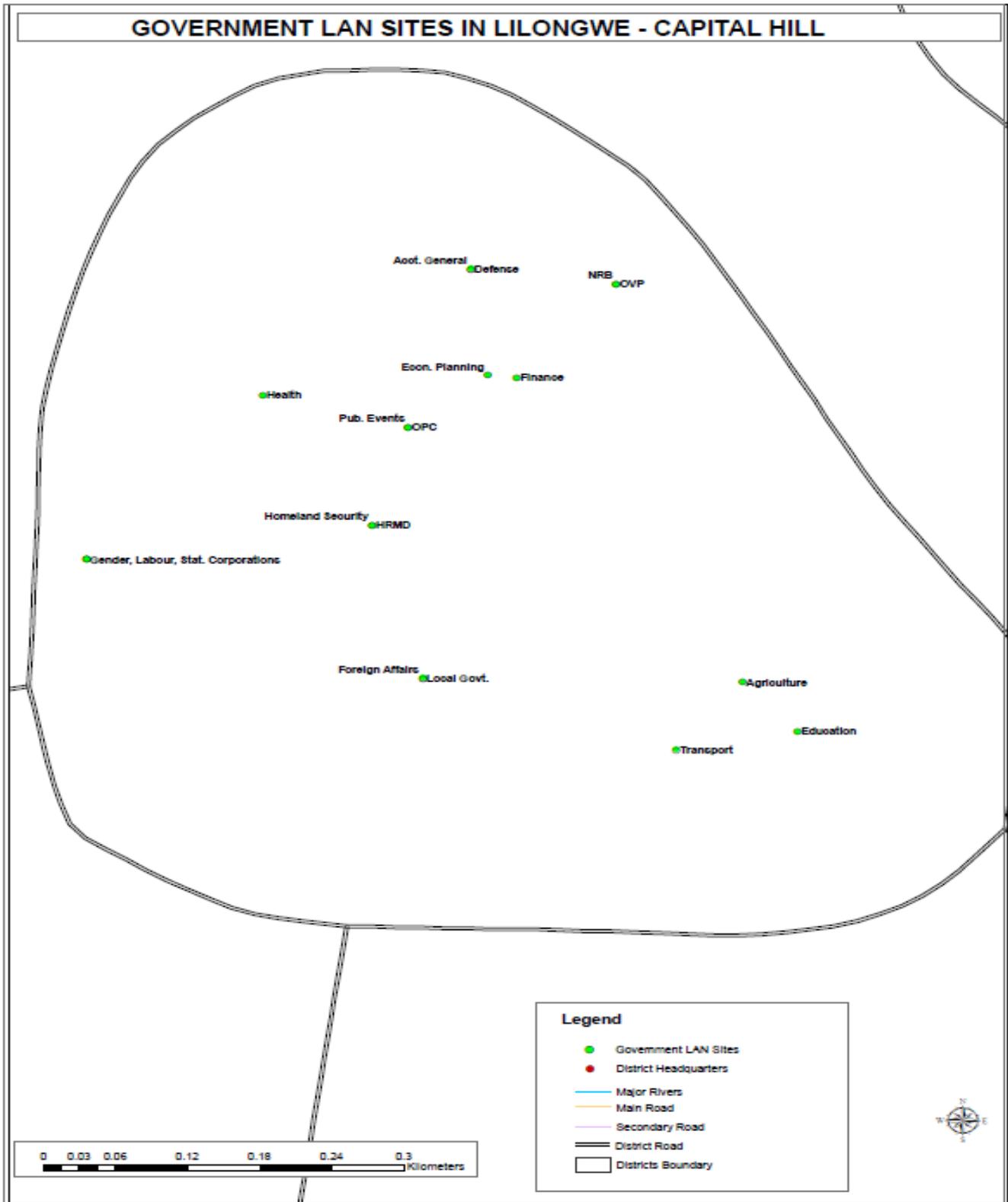
THE DIGITAL MALAWI PROGRAM PHASE I: DIGITAL FOUNDATIONS PROJECT

PUBLIC CONSULTATION ATTENDANCE REGISTER

DISTRICT: *Kilangwe - Gospel Hill*
Min of Health

DATE	NAME	POSITION/ INSTITUTION	CELL NO. & EMAIL ADDRESS	SIGNATURE
29/9/20	Kondwani Kondwani	PAO	0994957981 kondwani.kondwani@gmail.com	<i>[Signature]</i>
29/9/20	John Edward Mtingwi	CSA/P	0999265454 john.mtingwi@gmail.com	<i>[Signature]</i>
29/9/20	Grace Banda	SA/P	0991220121 gbanda188@gmail.com	<i>[Signature]</i>

12.16. Appendix 16: Government Local Area Network Connectivity Site Maps



GOVERNMENT LAN SITES IN SALIMA

