



# Appraisal Environmental and Social Review Summary

## Appraisal Stage

### **(ESRS Appraisal Stage)**

Date Prepared/Updated: 05/06/2024 | Report No: ESRSA03483



**I. BASIC INFORMATION**

**A. Basic Operation Data**

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P505095	Investment Project Financing (IPF)	DMAP	2024
Operation Name	Digital Malawi Acceleration Project (DMAP)		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Malawi	Malawi	EASTERN AND SOUTHERN AFRICA	Digital Development
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Ministry of Finance and Economic Affairs	Public Private Partnership Commission	02-May-2024	27-Jun-2024
Estimated Decision Review Date	Total Project Cost		
25-Apr-2024	90,000,000.00		

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**Proposed Development Objective**

Increase access to, and inclusive use of, the internet and improve the Government's capacity to deliver digitally-enabled services.

**B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project Activities**

*[Description imported from the PAD Data Sheet in the Portal providing information about the key aspects and components/sub-components of the project]*

Digitalization can be a powerful tool for development in Malawi, transforming entire sectors and delivery of services as well as for creating employment. Given the importance of the digital economy to increased productivity and efficiency, its potential benefits are amplified in the context of addressing and dealing with natural disasters and health pandemics as the world faced the COVID-19 pandemic. Malawi will need to rely increasingly on digital technologies to ensure that public services, businesses, and individuals are able to withstand current and future events and to develop a set of



resilience measures, in order to ensure business continuity of government, and avoid service interruptions in service delivery. A combination of widespread access to broadband, digitally enabled services and payments can offer a powerful platform to remove barriers of distance and lower cost in the delivery of services and improve human development while also contributing to economic growth and reduced poverty. It is proposed to include Malawi in the first wave of countries in the Inclusive Digitalization in Eastern and Southern Africa (IDEA) MPA (P502532), starting in FY24, with an appraised amount of US\$150m in national and IDA regional plus a further US\$50m leveraged in unguaranteed commercial financing from the private sector, under the Digital Malawi Acceleration Program (DMAP). The Government of Malawi, by a letter of December 18, 2023, has requested participation in the new regional program. The Digital Malawi Acceleration Project (DMAP) is structured around four components that are aligned with the IDEA program, as follows: Component 1: Affordable broadband and secure data hosting. This component focuses on expanding essential, high-quality, resilient and affordable broadband infrastructure and services while supporting investment in secure data infrastructure and the development of cloud and data hosting markets. Specifically, in Malawi it will focus on enhancing rural connectivity to 500 additional Government institutions and 2,000 schools as part of a drive towards universal internet access. Component 2: Interoperable and secure data platforms. This Component will focus on deploying interoperable digital public infrastructure (DPI) to enhance efficiencies in both public and private sectors, strengthening institutions and developing the cross-cutting enablers and digital safeguards needed to promote trusted and safe use of digital technologies and digitally-enabled services at the national level and across borders. In Malawi the aim is to provide an additional two million people with digitally-verifiable Identification and access to digitally-enabled services. Component 3: High-impact digital services and productive digital usage. This Pillar focuses on (i) advancing digitally-enabled applications and services that can potentially have a high impact on economic and social activities (prioritizing social protection, education, digital financial services and climate-related applications in the initial phases); (ii) increasing digital and financial literacy to support general uptake of digital services; (iii) strengthening digital skills and competencies among citizens, businesses and the public sector; and (iv) developing digitally-enabled entrepreneurial ecosystem to increase productive usage and the development of these services. In Malawi this will include grants to tech hubs and sectoral deep dives Component 4: Project management and capacity building. This will cover the standard functions of project coordination, procurement, financial management and environmental and social safeguards, as well as monitoring and evaluation, communications and gender. The Project will benefit households (especially low-income households), disadvantaged women and girls (especially in remote areas), digital start-ups, and public facilities in Malawi with enhanced access to affordable, high-quality broadband, affordable devices and enhanced data protection. A specific target will be to connect a further 500 government institutions and 2,000 schools to high-speed internet. The Project will utilize the implementation arrangements of the ongoing Digital Malawi project (P160533), with a few improvements, notably a bigger role for the Malawi Research and Education Network (MAREN) as an implementing partner for the internet in schools initiative. The project will include additional beneficiaries, such as the Data Protection Authority (DPA), the National Registration Bureau (NRB) and the planned Malawi Information Technology Authority (MITA).

## D. Environmental and Social Overview

### D.1 Overview of Environmental and Social Project Settings

*[Description of key features relevant to the operation's environmental and social risks and opportunities (e.g., whether the project is nationwide or regional in scope, urban/rural, in an FCV context, presence of Indigenous Peoples or other minorities, involves associated facilities, high-biodiversity settings, etc.) – Max. character limit 10,000]*



The project design is to scale up the connectivity of 500 government institutions and 2,000 schools with high-speed internet nationwide in Malawi. The connections will be done in a manner that no vulnerable groups will be excluded. Depending on the technology used, the project may construct new towers for cell reception. The actual sites to be connected are not yet known. Still, these proposed beneficiary institutions can be found in or in proximity to the diverse landscapes of Malawi, which include mountains, rivers, forests, watersheds, and valleys, with the likelihood of areas of high biodiversity and brown environments.

## **D.2 Overview of Borrower’s Institutional Capacity for Managing Environmental and Social Risks and Impacts**

*[Description of Borrower’s capacity (i.e., prior performance under the Safeguard Policies or ESF, experience applying E&S policies of IFIs, Environmental and social unit/staff already in place) and willingness to manage risks and impacts and of provisions planned or required to have capabilities in place, along with the needs for enhanced support to the Borrower – Max. character limit 10,000]*

The Malawi Environment Protection Authority (MEPA) regulates environmental management including guiding and approving environmental impact assessments and mitigation plans. The Environmental Management Act was updated in 2017 and EIA guidelines are under review to align with international practice in the management of Environmental and Social (E&S) risks through the provision of environmental and social management frameworks (ESMF) and strengthening social risk assessments. However, the country lacks the capacity to manage e-waste including lack of specific regulations and infrastructure to contain and dispose of e-waste.

The Project Implementation Unit (PIU) implementing Digital Malawi Foundation Project - P160533 has one E&S officer but inadequate to manage E&S risk for 530 sites being connected to the internet and construction of a data center. Hence, a third-party monitoring (TPM) firm was hired. The third-party monitor was contracted to provide monitoring support to at least 50 percent of the sites spread across the country and not confined to some sites. The spread of the sites posed logistical challenges and firm did not adequately support the Project as per contract. The third-party monitor would have been more effective if they were allocated to a particular geographic location with specific number of sites.

The Digital Malawi Foundation Project has an Assistant Environmental and Social officer (AESO) and much as the AESO is technically capable, she is limited in her ability to advance E&S risk management decisions at management level because there is no representation of E&S considering her grade. Additionally, Digital Malawi Foundation project was under safeguards policy and the AESO does not have ESF capacity. The project is rated Moderately Satisfactory; resulting from the AESO vigilance in E&S risk management despite the challenges explained, however, training on the Environmental Social Framework is required to Project team to meet the ESF requirements. The client has committed to maintain the PIU and recruit additional staff according to the demands of this operation (DMAP).

Lessons learnt from E&S risk management in the Digital Malawi project, ending in June 2024, will be utilized in the proposed Digital Malawi Acceleration Project (P505095) operation.

Considering that

- i) E&S demands have increased following scaling up internet connections of 500 government offices and 2,000 schools;
- ii) Implementation of the Digital Malawi Foundation project has brought some lessons on E&S capacity gaps (including inadequate E&S capacity at PPPC, insufficient number and seniority of E&S personnel)
- iii) there is lack of ESF capacity,



the E&S capacity structure for DMAP will be strengthened by having an Environmental Standards Specialist and a Social Standards Specialist. Depending on the number of connections that will use fiber connectivity, and the number of towers erected, and learning from the Digital Malawi Foundations project on the number of sites the TPM firm was able to support, adequate number of TPM firms will be hired to support contractors undertaking internet connection activities with E&S risk management.

## II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

### A. Environmental and Social Risk Classification (ESRC)

Substantial

#### A.1 Environmental Risk Rating

Moderate

*[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]*

Erection of antenna reception towers may result in construction related health and safety risks including noise, dust, occupational health and safety, working on height risks, community health and safety, as well as possible contribution to deforestation due to land clearing for tower erection and risk of impacting biodiversity sensitivity. TA activities including development of regionally harmonized standards and guidelines for climate resilient infrastructure, data transfer, trainings, study tours etc may have minor downstream impacts on biodiversity. Though sites are not yet known, some public offices and education facilities are in remote areas and while this project is an opportunity to have such areas more connected to the central government and others, it may impact forest resources and biodiversity. The project will produce significant e-waste, considering that it is targeting more than 2500 sites, in addition to the 530 sites in the first phase, while the country for now has inadequate capacity such as lack of national regulations and infrastructure to safely dispose e-waste. The gap in e-waste regulations and infrastructure present medium to low probability of reversible serious adverse effects to human health and/or the environment due to exposure to e-waste however, the project design has incorporated measures to mitigate e-waste and to develop a national e-Waste strategy. Data migration of MDA to the existing national data center will prevent proliferation of mini-server room. In accordance with ES Directive and the Technical Note on Screening and Risk Classification, under ESF the environmental risk is rated Moderate.

#### A.2 Social Risk Rating

Substantial

*[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]*

The social risk of the Project is considered Substantial. The proposed operation seeks to increase access to and inclusive internet use and improve the government’s capacity to deliver digital-enabled services in Malawi. The intervention is structured around 4 components, each of which was assessed, and social risks requiring attention and mitigation during both the planning and implementation phases were identified. The key social risks identified include (a) potential exclusion of vulnerable groups of stakeholders, particularly where appropriate measures are not put in place to ensure people have equal access to the internet or digital services; (b) potential loss of data or risk of exposure of the same to unauthorized persons where systems’ security is weak; (c) potential exposure of children to inappropriate online materials following connecting schools to internet; (d) labor risks, particularly associated with (d1) contractor workers (the PIU is known for poor contract labour management), (d2) potential for sexual harassment in the workplace, (d3) lack of inclusiveness and fairness in selecting beneficiaries when developing digital

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skills and capabilities, financing access to digital services for women, and supporting the digitalization of businesses and jobs; (e) potential for health and safety-related risks (both workers and the community); and (f) resettlement risk because the Project is considering connecting sites that were dropped in the Digital Malawi Foundation Project (P160533) due to land acquisition and resettlement issues. The capacity of the client to manage resettlement risk is still not certain. Although the risks can be mitigated, the PIU has a safeguards capacity gap. One of the two Safeguards Specialists recently resigned, and the unit currently has only one safeguards consultant in place. This capacity level is too thin to adequately cover the number of proposed subprojects spread across the country. In addition, the incumbent safeguards specialist in the Project is a consultant, and as such, there is limited institutional capacity building for E&S in the relevant ministries. Finally, there is low monitoring capacity in the district councils where the sub-projects will be implemented. The district councils should ordinarily support the PIUs in the implementation of safeguards but they also have serious capacity gaps. Each district should have 1 Environmental District Officer and a Community Development Officer to support the implementation of E&S for Projects in the respective districts. However, the reality is that there are only 8 Environmental District Officers (EDOs) in the country implying that 20 districts have no E&S capacity at the district level.

*[Summary of key factors contributing to risk rating. This attribute is only for the internal version of the download document and not a part of the disclosable version – Max. character limit 8,000]*

## **B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered**

### **B.1 Relevance of Environmental and Social Standards**

**ESS1 - Assessment and Management of Environmental and Social Risks and Impacts**

Relevant

*[Explanation - Max. character limit 10,000]*

Environmental risks include e-waste, general waste generation, and poor management. Mitigation will focus on segregation at source, storage, transportation, and disposal. There are minor risks of water, air and soil contamination from heavy metals, OHS risks to workers, health and safety risks to communities, and small-scale risks of deforestation and loss of biodiversity. Social risks are related to labor aspects, loss of data or risk of exposure of the same to unauthorized persons and exclusion of certain groups in the design, preparation and implementation of the Project. Based on preliminary assessment, ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8 and ESS10 apply. Mitigating the risks will be i) an Environmental and Social Management Framework (ESMF) that considers all known risks and impacts and proposes mitigation measures. Relevant World Bank guidelines such as EHS general guidelines and EHS guidelines for health care wastes, will be prepared, cleared and disclosed per ESS10 requirements. The ESMF will also include OHS risk mitigation measures for workers and the community, and exclusion list criteria for environmentally sensitive areas; ii) The Stakeholder Engagement Plan (SEP) which includes the Project’s Grievance Redress Mechanism (GRM) will guide all project consultations, feedback receiving channels and community grievance redress platforms. The Project’s GRM will be adopted for the Digital Malawi Project (P160533) ; iii) An Environmental and Social Commitment Plan (ESCP) has been prepared, setting out the substantive measures and actions required for the project to meet environmental and social requirements over a specified period before project appraisal and will be agreed with the borrower during negotiations. The proposed project will also ensure that the technical designs, consultancies, studies, capacity building, and any other TA activities under the Project including, inter alia, any E&S



assessments and related environmental and social instruments, are carried out following terms of reference acceptable to the Bank that incorporate the relevant requirements of the ESSs. Any outputs from the TA activities, including, inter alia, any environmental assessment and related E&S instruments, shall be consistent with the ESSs. TORs for TA activities will be consistent with ESF in line with the requirements of the OESRC Advisory Note for TA and ESF and will exclude and screen out all activities that have adverse irreversible impacts on natural habitats and environmentally vulnerable areas.

**ESS10 - Stakeholder Engagement and Information Disclosure**

Relevant

*[Explanation - Max. character limit 10,000]*

This project involves multiple stakeholders across all levels – national, regional, district, and community levels, with varying backgrounds, expertise, interest, and influence. There is a need to undertake proper mapping of all the stakeholders and ensure they are adequately consulted right from project preparation to implementation. The consultations have to be systematic and targeted, rather than being generic. This will have to be guided by a Stakeholder Engagement Plan. Once all project E&S instruments are prepared, these will have to be disclosed to the stakeholders through multiple platforms and methods. In addition, the project has to ensure that a grievance redress mechanism and necessary structures are developed and embedded in the project to enable the receiving, handling, and resolving of grievances.

**ESS2 - Labor and Working Conditions**

Relevant

*[Explanation - Max. character limit 10,000]*

This operation will involve direct workers, contracted workers, and primary supply workers. The client will engage direct workers to work specifically for the project. Contracted workers will undertake various construction activities and the installation of supporting infrastructure for the project. Finally, primary supply workers will be suppliers of electronic equipment and materials. All this will involve hiring and maintaining a work force. As such, ESS2 is applicable and the client will ensure that all ESS2 requirements as outlined in the ESF and in applicable national labour laws are complied with throughout the project life. This will include developing Labour Management Procedures that includes OHS risks with special attention to working on heights and corresponding mitigation measures.

**ESS3 - Resource Efficiency and Pollution Prevention and Management**

Relevant

*[Explanation - Max. character limit 10,000]*

Digital interventions significantly reduce waste from paper, however, e-waste is mostly an environmental liability considering life time of the e-gadgets becomes of concern. The project design has included support to e-waste initiatives to recycle and sell or safely dispose e-waste; regulation development and infrastructure and skills. Use of LEO satellite technology will contribute to energy efficiency and climate-smart solutions and should be promoted. General wastes such as cartons and plastics for packaging could be generated. The project will ensure general waste management measures, e-waste management plan are part of the ESMF and will include World Bank EHS general guidelines, Telecommunications EHS guidelines and Good International Industry Practice for proper treatment and disposal.

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**ESS4 - Community Health and Safety**

Relevant

*[Explanation - Max. character limit 10,000]*

This project targets rural communities, the education sector (i.e. schools) and public institutions as the primary beneficiaries of connectivity and related services. Project activities will take place in areas where there are members of the general public or community who will be in contact with workers, presenting risks such as accidents, exposure to e-wastes, construction hazards, and transmission of communicable diseases. Therefore, community health and safety requirements, as outlined in ESS 4, will have to be met at the outset and throughout project implementation by being incorporated into the ESMF. A SEA/SH Action Plan will also be prepared. Proposed mitigation measures will be included in the ESMFs in line with the requirements of ESS4 and the World Bank Group Environment, Health, and Safety Guidelines (EHSG).

**ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

Relevant

*[Explanation - Max. character limit 10,000]*

Implementation of the project may require use of land, for example for laying fiber cables, installing poles and/ or other infrastructure necessary for connectivity. The project will seek to utilize existing rights-of-way (RoW) designated and provided for in national laws and development plans. Governmental entities including Ministry of Lands, Ministry of Local Government, District Councils and Roads Authority will be consulted regarding RoW. Where infrastructure has to pass through or be installed in a protected zone, private property or settlements, necessary steps and measures will be taken in accordance with the provisions of ESS 5 and national land laws and policies. The ESMF to be developed will include screening criteria (exclusion list) for significant economic and/or physical displacement activities and site-specific, streamlined RAPs will be developed as part of ESMPs

**ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources**

Relevant

*[Explanation - Max. character limit 10,000]*

A moderate risk on biodiversity and deforestation was identified especially with reception tower erection activity in green environments. The risk can be eliminated if LEO satellite technology is used for this project. All significant biodiversity risks will be screened out in the ESMF and TA TORS however the moderate risk will be addressed in the ESMF and specific ESMPs that will be prepared with guidance from ESS 6 requirements.

**ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

Not Currently Relevant

*[Explanation - Max. character limit 10,000]*

Not Applicable as Malawi does not have indigenous people

**ESS8 - Cultural Heritage**

Relevant

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[Explanation - Max. character limit 10,000]

Works involving excavations and/ or working at cultural heritage sites will necessitate compliance with the requirements of ESS 8. Archaeological studies to be conducted will review cultural heritage risks and impacts associated with potential construction sites selected to benefit from the project. Chance Find Procedures will be included in the ESMF to manage unknown archeological or historical remains and objects that may be found in the course of project implementation.

**ESS9 - Financial Intermediaries**

Not Currently Relevant

[Explanation - Max. character limit 10,000]

Not Applicable

**B.2 Legal Operational Policies that Apply**

**OP 7.50 Operations on International Waterways**

No

**OP 7.60 Operations in Disputed Areas**

No

**B.3 Other Salient Features**

**Use of Borrower Framework**

No

[Explanation including areas where "Use of Borrower Framework" is being considered - Max. character limit 10,000]

No Borrower Framework used

**Use of Common Approach**

No

[Explanation including list of possible financing partners – Max. character limit 4,000]

The project is not using a Common Approach

**B.4 Summary of Assessment of Environmental and Social Risks and Impacts**

[Description provided will not be disclosed but will flow as a one time flow to the Appraisal Stage PID and PAD – Max. character limit 10,000]

The project may include construction of reception towers depending on technology used and connecting 2,500 institutions. Activities will include the development of regionally harmonized standards and guidelines for climate resilient infrastructure, data migration and management to improve resilience and continuity of government operations, and dedicated trainings related to mitigation of environmental risks. Given the growing importance of proper e-waste management, the project will also support a number of e-waste management initiatives with the focus on recycling equipment from general users in the country (not limited to project users) that is also expected to lead to job creation.

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Potential environmental risks and impacts include construction-related health and safety risks such as noise, dust, occupational health and safety, working on height risks, community health and safety etc, moderate risk contribution to deforestation due to land clearing for tower erection and minor risk of impacting biodiversity sensitivity, downstream impacts on biodiversity impacts due to TA activities. The project will have environmental liability of e-waste mostly towards the end of the project and beyond, given that the life span of most of reception equipment is more than five years. Considering that it is targeting more than 2,500 sites, in addition to the 530 sites in the first phase, the volume of e-waste may be significant yet there is already inadequate capacity in country such as lack of national regulations and infrastructure to safely dispose of e-waste. Therefore, the project will upfront the work on e-waste to proactively mitigate the risks related to e-waste regulations and infrastructure, which present medium to low probability of serious adverse effects to human health and/or the environment due to exposure to e-waste. Main social risks are related to labor aspects and potential exclusion of certain groups of stakeholders in the design, preparation, and implementation of the Project including (a) potential exclusion of vulnerable groups of stakeholders, particularly where appropriate measures are not put in place to ensure people have equal access the internet or digital services; (b) potential loss of data or risk of exposure of the same to unauthorized persons where systems' security is weak; (c) labor risks, particularly associated with (c1) contractor workers, (c2) potential of sexual harassment in the workplace, (c3) lack of inclusiveness and fairness in selecting beneficiaries when developing digital skills and capabilities, financing access to digital services for women, and supporting the digitalization of businesses and jobs. In accordance with ES Directive and the Technical Note on Screening and Risk Classification, under ESF the project risk is classified substantial with environmental risk as moderate and social risk as Substantial. Based on preliminary assessment, ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8 and ESS10 apply. TORs for TA activities will be consistent with ESF in line with the requirements of the OESRC Advisory Note for TA and ESF and will exclude and screen out all activities that have adverse irreversible impacts on natural habitats and environmentally vulnerable areas. The project will prepare an Environmental and Social Commitment Plan (ESCP), Stakeholder Engagement Plan (SEP), ESMF that includes exclusion list for all environmentally sensitive areas, OHS, GBV/SEA/SH, e-waste management and stand-alone Labor Management Procedures, Resettlement Policy Framework, site-specific Environmental and Social Management Plans, and Resettlement Action Plans.

### C. Overview of Required Environmental and Social Risk Management Activities

#### C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

*[Description of expectations in terms of documents to be prepared to assess and manage the project's environmental and social risks and by when (i.e., prior to Effectiveness, or during implementation), highlighted features of ESA documents, other project documents where environmental and social measures are to be included, and the related due diligence process planned to be carried out by the World Bank, including sources of information for the due diligence - Max. character limit 10,000]*

The following instruments are required by appraisal  
Environmental and Social Commitment Plan  
Stakeholder Engagement Plan

The client will prepare Environmental and Social Management Framework that includes Occupational Health and Safety plan, E-waste management plan, GBV/SEA/SH plans and Resettlement Policy Framework before Effectiveness



During implementation, the client will prepare site specific Environmental and Social Management Plans and Resettlement Action Plans

**III. CONTACT POINT**

**World Bank**

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**IV. FOR MORE INFORMATION CONTACT**

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**V. APPROVAL**

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