Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 09-Apr-2024 | Report No: PIDDC00433

BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Operation ID	Operation Name	
Malawi	P505095	Digital Malawi Acceleration F	Project (DMAP)
Region EASTERN AND SOUTHERN AFRICA	Estimated Appraisal Date 06-May-2024	Estimated Approval Date 27-Jun-2024	Practice Area (Lead) Digital Development
Financing Instrument Investment Project Financing (IPF)	Borrower(s) Ministry of Finance and Economic Affairs	Implementing Agency Public Private Partnership Commission	

Proposed Development Objective(s)

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

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)?

Yes

Is this project Private Capital Enabling (PCE)?

Yes

SUMMARY

Total Operation Cost	200.00
Total Financing	200.00
of which IBRD/IDA	150.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	150.00
IDA Grant	150.00

Non-World Bank Group Financing

Commercial Financing		50.00	
Unguaranteed Commercial Financing		50.00	
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Environmental and Social Risk Classification Concept Review Decision		ViDecision	
Substantial	The review did	The review did authorize the preparation to continue	
	I		

Other Decision (as needed)

B. Introduction and Context

Country Context

- 1. Malawi faces significant challenges that have impeded sustained growth and structural transformation over the past decades. Since achieving independence in 1964, Malawi has averaged only 1.5 percent annual per capita GDP growth. Poverty remains persistently high, at 72 percent at the US\$2.15 poverty line (2017 Purchasing Power Parity). The country faces numerous challenges that perpetuate a low-growth equilibrium. These include both structural factors, including high trade and transport costs due to its landlocked position, as well as policies maintained over successive administrations that have prioritized low-productivity subsistence farming instead of the development of more productive and commercially oriented production. Meanwhile, the environment for private sector-led job creation has been impacted by significant market distortions (such as government interventions in agricultural markets) and lack of access to reliable electricity, digital technologies, and finance.
- 2. The post-pandemic recovery has been severely affected by large macroeconomic imbalances and numerous external shocks. Growth decelerated to 0.8 percent of GDP in 2022, due to the impact of two tropical cyclones, which disrupted electricity generation and reduced agricultural production. In addition, prolonged external imbalances and foreign exchange shortages hindered the importation of essential raw materials, further weakening the economy. The impact of external crises on commodity prices placed significant strains on the country given its dependence on fuel and fertilizer imports. Inflation has increased progressively since 2021 driven primarily by supply constraints in domestic markets, high commodity prices, and the depreciation of the Malawi kwacha. This resulted in headline inflation averaging 20.8 percent in 2022, up from 9.3 percent in 2021.

Sectoral and Institutional Context

3. Malawi has a relatively competitive telecommunications market, with three licensed mobile operators (Airtel, TMN and ACL), at least six ISPs, and an experienced regulatory authority, MACRA. However, the growth of the market is constrained by low incomes and relatively high prices, compounded by high excise duties on imported ICT equipment. Internet penetration, at around 24 users for every 100 inhabitants, is below the AFE regional average of 28 percent. During the implementation period of the *Digital Malawi* Foundations project (2017-2024), the wholesale price of international internet bandwidth was reduced to below 10 percent of its previous level, but at around US\$35 per Mbit/s for today, is it still well above the typical price of below US\$5, experienced in coastal countries like Kenya. A monthly data bundle of 2

Gb costs almost 10 percent of annual GNI per capita. However, the market entry in October 2022 of LEO satellite operator, StarLink, may bring greater price competition to the market, and should provide new connectivity options in rural areas.

- 4. Digitalization can be a powerful tool for development in Malawi, transforming service delivery in key sectors as well as creating employment opportunities. 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 increasingly need to rely on digital technologies to ensure that public services, businesses, and individuals are able to withstand current and future hazards and to develop a set of resilience measures, to ensure business continuity of government, and avoid 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, lower cost and improve efficiencies in the delivery of services, create new job opportunities and improve human development, while also contributing to economic growth and reduced poverty.
- 5. Digitalization can also play a critical role in tackling challenges in Malawi, such as climate vulnerability and health emergencies. For example, under the *Digital Malawi Foundation Project SOP-1*, 2017-2024 (P160533), an emergency program of over 100 public WiFi hotspots was rolled out in schools, post offices, markets, community centers and airports, which was key during recent natural disasters such as cyclone Freddy. It helped people to get access to critical services and maintain business continuity. The recent wave of natural disasters in Malawi only highlights the need to develop a resilient digital infrastructure designed to withstand impacts from climate events. Digital Malawi project also supported internet connectivity to over 80 higher education institutions, which allowed continued learning during the pandemic, when on-site access was limited due to lock downs.
- 6. **Malawi is included in the first wave of countries in the IDEA MPA**, with an appraised amount of US\$150m¹ in national and IDA regional plus a further US\$50m leveraged in UCF from the private sector, under the *Digital Malawi Acceleration Program* (DMAP). The Government of Malawi, by a letter of December 18, 2023, has requested that Malawi is included in this new regional program.

Relationship to CPF

7. The Project is fully aligned with the World Bank's CPF for Malawi FY21-25², and will support all three pillars of bolstering the foundations for growth and accountability, promoting private sector -led jobs and livelihoods and strengthening human capital development. The project also responds to the AU's Digital Transformation Strategy (DTS) which calls for achieving universal access by 2030. In line also with UN Sustainable Development Goal (#9), the 2022 Dakar Call to Action, and Agenda 2063, It will advance the 'Single Digital Market Framework' for East Africa³, reducing barriers for regional telecom infrastructure and digital services across borders. It will also aid in narrowing gender gaps in alignment with the upcoming WBG Gender Strategy (FY24-30).

C. Proposed Development Objective(s)

¹ Depending on the availability of IDA under the current and subsequent cycles, it is possible that the full appraised sum may not be available at project approval but may become available later.

² Report No. 154505-MW, at: https://documents1.worldbank.org/curated/en/573101618580009934/pdf/Malawi-Country-Partnership-Framework-for-the-Period-FY21-FY25.pdf

³ Single Digital Market for East Africa, 2019. Report 136699. World Bank, Washington, DC.

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

Key Results (From PCN)

PrDO Indicators	Baseline (2021)	Target (2033)
People using broadband internet (additional number, millions)*	0	200
-Of which percentage female	-	49%
People with digitally verifiable ID (additional number, millions)*	0	150
- Of which percentage female	-	35%
People using digitally-enabled service (additional number, millions)*4	0	100
- Of which percentage female	-	48%
Volume of international data traffic (used international bandwidth in kbit/s per capita)	34.5	90

D. Concept Description

- 8. The IDEA MPA will have four pillars in line with the focus areas, within the priorities outlined in the WB Evolution Roadmap, and adapted to AFE needs. Each pillar covers a menu of options from which participating countries will have the flexibility to select based on their needs, priorities, readiness, and available resources, provided these are well-aligned with the PrDO and the results chain. The proposed menu of options will incorporate the OneWBG approach, facilitate PCM and incorporate climate mitigation, adaptation principles.
- 9. **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 will cover the following activities:

1.1 Rural connectivity

Expanded broadband coverage in rural areas with the aim of achieving universal coverage of mobile broadband, including to traditionally marginalized and climate vulnerable communities/climate-hotspots that are unserved or underserved by affordable and quality broadband internet services. This will be achieved through private sector investment leveraged through matching investments from project funds and the national Universal Access Fund. This investment will be used to roll out mobile broadband coverage (4G/5G cellular and/or LEO satellite) in uncommercial rural areas and to upgrade 2G cell sites to more energy efficient 4G/5G cellular technologies⁵. In line with good practice elsewhere, it is expected that a reverse auction mechanism will be used for allocation of awards. This component is expected to leverage private sector investments, roughly in the ratio of 2:1, in other words, US\$1 of private capital co-invested for every US\$2 of project funds.

⁴ The target for digitally-enabled service use is based on digital payments use. Types of service counted may be expanded within the scope of the CSI definitions.

⁵ World Bank. 2024. Green Digital Transformation: How to Sustainably Close the Digital Divide and Harness Digital Tools for Climate Action. Climate Change and Development Series.

b) Closing last-mile connectivity gaps for government institutions (offices, hospitals, post offices) in rural areas. Under *Digital Malawi* Phase 1, some 530 institutions were provided with access to high-speed internet through the provision of last-mile fiber and the pre-purchase of international internet capacity under long-term supply agreements. Under DMAP, an additional 500 institutions will be targeted, including for new beneficiaries, such as Lands Management and the National Registration Bureau (NRB), though not necessarily using last-mile fiber as other technologies, such as LEO satellite, are now able to provide an equivalent level of service with a lower level of fixed investment. Every effort will be made to Increase energy efficiency and climate-smart solutions following international standards and best-practice.

1.2 Education sector connectivity:

- a) Universal school connectivity building upon Phase 1, which connected 80+ higher educational institutions (HEIs); the next phase will start upon the task of connecting Malawi's 11,000+ schools, beginning with some 2,000 schools under DMAP. It is proposed to work again with MAREN (the Malawi Research and Education Network), which proved to be an able partner under Phase 1, and to use the existing connected HEIs under a hub-and-spoke model to reach surrounding schools. The expected PCM ratio is slightly lower than for sub-component 1.1, at 2.33:1. The attraction for the private sector is the possibility of having an anchor tenant (school or HEI) to cover their base investment, so they can then reach out to other clients in each locality on the principle of "build once, use by all". An "ecosystem approach" will be followed in which provision of connectivity will be coordinated with the supply of renewable energy, computer labs, digital skills training, O&M to the same schools.
- b) Sponsoring Malawi's participation in the **EU Africa Connect 4 program**, in partnership with the UbuntuNet Alliance. This will enable the program to leverage additional EU funding. The pre-purchase of internet capacity for Malawi's schools and HEIs will be coordinated at the regional level, drawing upon the resources of the planned regional financing facility, to leverage cost savings through economies of scale.

1.3 Regional connectivity:

- a) Addressing gaps in missing cross-border broadband links, drawing upon a regional financing facility. To this end, a survey of missing broadband links has been commissioned. Investment will be coordinated with IDEA programs in neighboring countries (e.g., DRC and Zambia), and with other development partners, to ensure that there is end-to-end connectivity and efficient route planning.
- b) Integrated infrastructure planning of "Digital Corridors" for Southern Africa. At the 2023 Transform Africa Summit, hosted at Victoria Falls, April 2023, Heads of State from four countries Botswana, Malawi, Zambia and Zimbabwe came together to commit to build "digital corridors" that would facilitate the growth of trade in the region. The project can support this initiative through further integrated regional planning of investments.
- c) **Demand aggregation** at the regional level for internet connectivity for education, health and government. The planned regional facility under IDEA can play a role in administering a framework contract for bandwidth suppliers to bid for competitively-awarded connectivity contracts, to serve the region's users.
- d) **Climate resilience TA,** including development of regionally harmonized standards and guidelines for climate resilient infrastructure.

1.4. Enhancing data hosting capacity and transition to cloud computing

a) Providing ongoing support to the **national data center** and enabling cloud services at national and regional levels. Under the late stages of phase 1 of Digital Malawi, project funds were used to establish a national data center in Lilongwe. But additional TA will be required to oversee the development of a sustainability plan, including looking at options for leasing co-location space to the private sector, and handling the transition to a cloud first national data strategy.

- b) Supporting **migration of government data** from existing server rooms to the newly built data center, the disaster recover site in Blantyre and cloud computing resources.
- c) Provision of managed IT services and a help desk to ensure smooth functioning of the national datacenter.

Component 2: Interoperable and secure data platforms. This component will cover the following activities:

2.1 Next Generation Digital ID and identity verification services, including eKYC

a) The roll-out of first-generation digital ID in Malawi was implemented by the NRB and supported by UNDP. However, the limitations of the system, which was based on physical ID cards, with a smart chip, are now apparent with millions of those cards expiring and too expensive to replace. Moreover, the chip technology was never used and more advanced solutions have emerged over the years, such as QR codes. Project funds will support the government to transition to a next generation cost-effective Digital ID with streamlined identity verification services such as enabling secure digital authentication services, including for electronic Know-Your-Customer (eKYC) techniques, e-Signature capability in support of transactions that require higher level of assurance, scaling mobile ID, and development of cross border mutual recognition mechanisms of IDs in SADC.

2.2 Extending the Bomalathu data exchange platform for Government and Financial Institutions

- The *Digital Malawi* Foundations project supported the development of a **Government data exchange platform**, now known as *Bomalathu* ("my Government") which has onboarded seven Government agencies so far and developed an eservices portal, as a pilot. However, much more needs to be done to extend the data exchange platform to integrate more government agencies and to expand the e-services portal to offer more e-services in key sectors. This will require investment in the development of Application Programming Interfaces (APIs), additional consultancy services and capacity building among newly on-boarded Government institutions.
- b) To become truly transformational, it will be necessary to **extend the functionality of** *Bomalathu* **to the private sector**, notably by developing APIs for the financial institutions that have a requirement for eKYC and seamless identity verification. It is expected that this extension will also generate revenue for the government from identity verification fees, to help with sustainability. The eGovernment department, which runs *Bomalathu*, may require additional TA to develop a competitive price structure for these services as well as to support effective operation of this brand-new data exchange platform.
- c) The Digital Malawi Foundations project also supported the development of the e-services portal that benefits from the data exchange platform. However, only a few e-Services have thus far been tested with many more expected to go live under this project. Support will also be provided to develop a **public key infrastructure (PKI)** and e-Signature capability for e-Services that require a higher level of assurance.

2.3 Enhancing policy and regulatory frameworks, and operationalization of the Data Protection Authority

- a) Regional policy and regulatory harmonization to support digital integration, cross-border digital services and data flows, with the goal of increasing digital trade. This will cover, for instance, guidelines on data classification (in conjunction with the e-Government department, NRB and other stakeholders), e-Commerce, taxation of cross-border digital services, modernization of the relevant legal and regulatory framework for e-transactions/e-commerce etc. Under EARDIP, regulatory harmonization work is underway at the EAC and a coordination agreement will be developed between ECA and COMESA under this new MPA. Extending this work also to COMESA, and potentially also SADC, will greatly increase the number of countries that will benefit.
- b) **Operationalization of the Data Protection Authority (DPA),** for which the Data Protection Bill was approved by Parliament on December 7, 2023⁶, as well as support to MACRA, the regulatory authority, which will hosts the DPA.

⁶ The text of the Bill can be found at: https://parliament.gov.mw/uploads/doc bills 87718172-12d2-4a15-a397-9ec52ec079b81701965503149.pdf. The drafting of the Bill benefited from TA under the Digital Malawi program and further work is underway to develop secondary legislation and guidelines.

TA for the DPA will include provision of expert consultant services, study tours, capacity building and support for the development of various regulations.

Component 3: High impact digital services and productive digital usage. This will cover the following activities:

3.1 Support to tech hubs and sub grants for digital start-ups

- a) The Digital Malawi project Phase 1 provided seed funding to ten **tech hubs** across the country and trained over 19,000 youth in digital literacy, advanced digital skills (such as AI, drones) and digital entrepreneurship. Under DMAP, it is planned to expand support to the tech hubs through a further round of competitively awarded performance-based grants, disbursed in tranches, with agreed targets for offering higher level ICT skills and digital entrepreneurship.
- b) DMAP will also initiate a **sub-grants program for digital entrepreneurs** of up to US\$100,000 for around 20 grants to digitally enabled start-ups and high growth firms. The program will be administered by the tech hubs under overall supervision of the Bank and will use matching grants to leverage private investment while the focus on the digital sector will ensure continuity with other aspects of the DMAP program. Those firms receiving grants will be tracked over time to identify what factors contribute to their success, so that these learning can be built into future phases, and the number of jobs created will be closely monitored.

3.2 Participation in regional program on device affordability

- a) Malawi, one of the world's poorest markets, is too small to attract major device manufacturers to invest, yet the excise duty on some imported ICT devices is close to 35 percent. Thus, **device affordability** is a major barrier to further market development, particularly, for higher end devices like smartphones and laptops. The project will support a variety of schemes to decrease the cost of device to the end-user and to improve the ability of the poorest to acquire a mobile phone. Some of these schemes may involve working through a financial intermediary, such as IFC or other. Malawi will also participate in a planned regional device affordability program that will offer a derisking platform to organizations (such as mobile operators, banks, micro-lenders etc.) that provide "pay-as-you go" lending for devices. Digital start-ups that support innovative device affordability activities in the energy and digital sectors, such as Yellow⁷, can also be supported through the digital start-ups program in sub-component 3.1.
- b) The device affordability program will be complemented by an e-Waste initiative for recycling and resale or safe disposal of laptops and phones. This will be carried out in conjunction with the tech hubs, with a focus on skills development and job creation for young people and persons with disabilities. This activity will also include development of a national eWaste strategy, capacity building and TA to support drafting of the necessary e-Waste related regulations.

3.3. Sectoral deep dives: social protection, disaster and emergency response, financial inclusion and lands management In line with national priorities, and in coordination with other projects in the WB portfolio in Malawi, four key priority sectors have been selected for deep dives in digitalization and automation: 1) social protection, with a focus on facilitating identity verification needed for proper functioning of the dynamic social registries; 2) financial sector, including implementation of eKYC, activities related to credit reference system, upgrade of collateral registry, and support for deposit insurance system; 3) disaster and emergency response, which may include support for establishing early warning systems and addressing the urgent needs arising when disaster strikes (including climate disasters); and 4) lands management, where the project will assist with the connectivity, development of APIs for identity verification, streamlining payments, capacity building in cyber security and software development, digitization of paper records and

⁷ <u>Http://Yellow.africa</u>, a company active in Malawi, is an example of a new generation of micro-lenders that provide pay-as-you-go support for both solar-powered devices and smartphone.

certain aspects of rolling out the existing lands information management system launched by Government in 2024. Seed funding provided under DMAP will complement the financing made already available to Malawi in these sectors, and additional support to update the legal and regulatory framework will be provided under sub-component 1.5.

Component 4: Project management and capacity building. This component will cover the following activities:

- a) Coordination and program management, including procurement, financial management and environmental and social safeguards. Other standard project management functions include communications, monitoring and evaluation, security and gender awareness.
- b) DMAP will provide funding for the operationalization of the newly created Malawi Information Technology Authority (MITA), including support for selected consultants to be embedded in MITA. It is expected that some of the staff of the existing eGovernment department will transition into MITA, on a competitive selection basis.
- c) A targeted program of capacity building for all DMAP beneficiaries will also be provided under this component.

Triggered?	
Last approved	Current
No	
No	
	Last approved No

The project may include construction of 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. 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, contribution to deforestation due to land clearing for tower erection and risk of impacting biodiversity sensitivity, downstream impacts on biodiversity and cumulative 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. The project will support regional corridors that may have potential for cumulative and/or transboundary impacts. 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) that included exclusion list to avoid irreversible environmental risks, Stakeholder Engagement Plan (SEP), ESMF that includes exclusion list, OHS, 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.

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APPROVAL

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