REPORT NO.: RES46480

RESTRUCTURING PAPER

ON A

PROPOSED PROJECT RESTRUCTURING

OF

DIGITAL MALAWI PROGRAM PHASE I: MALAWI DIGITAL FOUNDATIONS PROJECT APPROVED ON JUNE 5, 2017

TO

THE REPUBLIC OF MALAWI

Digital Development Global Practice Eastern and Southern Africa Region

> Regional Vice President: Hafez M. H. Ghanem

> > Country Director: Mara K. Warwick Regional Director: Nicole Klingen

Maria Isabel A. S. Neto Practice Manager: Task Team Leaders: Tim Kelly, Luda Bujoreanu



ABBREVIATIONS AND ACRONYMS

EDRMS	Electronic Document and Records Management System
ICT	Information and Communication Technology
IDA	International Development Association
IRU	Indefeasible Right of Use
ISP	Internet Service Provider
ISR	Implementation Status and Results Report
MACRA	Malawi Communications Regulatory Authority
MASDAP	Malawi Spatial Data Platform
MAREN	Malawi Research and Education Network
MEAIF	Malawi Enterprise Architecture Implementation Framework
MDAs	Ministries, Departments, and Agencies
MIXP	Malawi Internet Exchange Point
MS	Moderately Satisfactory
MTR	Mid Term Review
PAD	Project Appraisal Document
PDO	Project Development Objective
PIU	Project Implementation Unit
PPA	Project Preparation Advance
PPP	Public-Private Partnership
PPPC	Research and Education Network
REN	Research and Education Network
SOP	Series of Projects
USD	United States Dollars
USA	Universal Service Access



BASIC DATA

Product Information

Project ID	Financing Instrument
P160533	Investment Project Financing
Original EA Category	Current EA Category
Partial Assessment (B)	Partial Assessment (B)
Partial Assessment (B) Approval Date	Partial Assessment (B) Current Closing Date

Organizations

Borrower	Responsible Agency
Republic of Malawi	Public Private Partnership Commission

Project Development Objective (PDO)

Original PDO

To increase access to affordable, high quality internet services for government, businesses and citizens and to improve the government's capacity to deliver digital public services.

Summary Status of Financing (US\$, Millions)

					Net		
Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Commitment	Disbursed	Undisbursed
IDA-60500	05-Jun-2017	09-Jul-2018	03-Aug-2018	30-Jun-2022	72.40	27.98	46.61

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No



I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

A. SUMMARY

1. Phase 1 of the Digital Malawi Foundations series of projects (SOP) was approved by the World Bank Board on June 5, 2017 and was declared effective on August 3, 2018. The project is in its fourth year of implementation. The project development objective (PDO for Phase I of the SOP) is "to increase access to affordable, high quality Internet services for government, businesses, and citizens and to improve the Government's capacity to deliver digital public services". The mid-term review mission was conducted from July 12 to August 3, 2021, and the project is rated as "Moderately Satisfactory" (MS) in both the achievement of the PDO and Implementation Progress. Table 1 summarizes the current state of the disbursement by component. The PDO was confirmed to be a key priority for the Government of Malawi and remains unchanged in this restructuring.

Component **Funding allocation** Actual disbursements (US\$ m) Disbursements as % of (US\$ m) allocation 9.50 1. Digital Ecosystem 3.43 36.1% 2. Digital Connectivity 34.00 6.19 18.2% 3. Digital Platforms and services 23.90 2.89 12.1% 5.00 2.91 4. Project Management 58.2% Total 72.40 15.42 21.3%

Table 1: Funding allocations and actual disbursements, in US\$ m, as of December 1, 2021.

B. Project Status

2. Overall project disbursement as of February 11, 2022, stands at US\$28.1 million, representing 38.8 percent of the total financing of US\$72.4 million and commitments were US\$36.2 million (50 percent of the total financing) as of December 1, 2021. A significant increase in commitments and disbursements are expected in the coming months with the completion of procurement and contract awards for several large contracts, notably for Government Connectivity (estimated at US\$21 million), the Data Center (estimated at US\$5.9 million) and Government e-Procurement system (estimated at US\$1.6 million), for which the bidding was completed in November – December 2021.

Status of Project Components

- 3. **Component 1. Digital Ecosystem** -- comprises three sub-components: 1.1 the Information and Communication Technology (ICT) Regulation, Strategy and Policy Development; 1.2 Capacity Building and Institutional Development; and 1.3 Digital skills and development and Innovation. All major activities are underway with procurement completed, and it is rated "Satisfactory" with current disbursements at 36.1 percent. Key achievements to date include the preparation of key ICT legislation, including on Data Protection, the adoption of the National Broadband Strategy and allocation of the first round of grants to six tech hubs, selected through a competitive bidding process.
- 4. **Component 2. Digital Connectivity** -- comprises three sub-components: 2.1 Connectivity for Public Institutions; 2.2 Connectivity for Higher Education Institutions; and 2.3 Innovative Rural Broadband Access Solutions. The current disbursement is 18.2 percent out of the allocated budget of US\$34 million. It is rated "Moderately Satisfactory". The main



achievements under this component to-date are the completion of a digital mapping exercise for Ministries, Departments and Agencies (MDAs), and provision of the enhanced bandwidth for higher education, leveraging additional funds from the European Union's Africa Connect 3 program. This currently serves approximately 46,000 students in some 43 different higher educational institutions. In addition, a universal service access gap study was completed. The competitive bidding process for the government connectivity transaction was completed in November 2021 and it is expected that contracts will be awarded to bandwidth suppliers, under five lots, in early 2022. While this activity took a while to get started, it is expected to significantly contribute to achievement of the PDO, quickly absorb funds using fast-disbursing Indefeasible Rights of Use (IRU) contracts and dramatically increase internet availability in the targeted 500 MDAs.

- 5. **Component 3.Digital Platforms and Services** -- comprises three sub-components: 3.1 Strengthening Institutional Capacity to deliver digital services; 3.2 Shared digital public services platforms; and 3.3 Demonstration digital applications. Up to date disbursement is equivalent to 12 percent out of the total appraised amount of US\$23.9 million. It is rated as "Moderately Satisfactory". The major achievements have been the provision of advisory services for completion of a Digital Government strategy and to develop the Malawi Enterprise Architecture Implementation Framework (MEAIF). In addition, bidding for two major procurements were completed in December 2021, with contracts for the national data center and for a government eProcurement System expected to be awarded in February 2022. This should result in a significant increase in disbursement.
- 6. **Component 4. Project Management** -- continues to disburse at a regular rate, mainly through payments to Project Implementation Unit (PIU) staff, and currently stands at 58 percent of the available budget. It is rated as "Satisfactory". The overall procurement performance continues to be Moderately Satisfactory. There is continued steady progress on implementation of activities in the approved procurement plan since the mid-term review (MTR) mission in July-August 2021. Financial Management, Project Management and Monitoring and Evaluation are all rated Satisfactory. There are no outstanding audit reports to be completed.
- 7. Eight of the fifteen PDO and intermediate indicators have now been met or surpassed their targets. For instance, the rate of access to affordable, high quality services, for which the end target was 30 percent, currently stands at 37 percent. Also, some 2,116 people have now obtained new digital skills or knowledge under the project surpassing the original end target by 616. Therefore, some of the targets will be raised as part of this restructuring.

C. Rationale for Restructuring

- 8. The MTR mission for the Digital Malawi project was completed on August 3, 2021. From discussions during the MTR and the most recent implementation support mission that took place in beginning of December 2021, it became clear that although a number of solid achievements can be reported, project implementation nevertheless remains uneven between various project activities. Some activities are progressing well, while others, particularly under Shared services component 3, have not yet started. Therefore, the Government of Malawi, has requested a project restructuring through a letter dated January 11, 2022 to make some adjustments to the project. As described in the letter and in the MTR Aide-memoire from the last mission, these changes include (a) extension of the closing date from June 30, 2022 to June 30, 2024; (b) reallocation of budget between components and some changes within components and costs; (c) reallocation between disbursement categories; (d) revision of the results framework; (e) revision of implementation schedule and disbursement estimates. With the proposed restructuring the PDO continues to remain achievable. The proposed changes are summarized below.
- 9. The project was developed as a Series of Projects (SOP). Discussions about Phase II and the possible scope of the follow up projects have started. Consideration of Phase II of this project would be subject to management approval and

successful acceleration of Phase I implementation and respective increase in disbursements. Nevertheless, certain activities have been proposed for deferral to Phase II of the project, as further explained in the next section.

II. DESCRIPTION OF PROPOSED CHANGES

A. Extension of the project closing date

10. At the time of the MTR mission in August 2021, the Government requested an extension of 18 months to the project's closing date to December 31, 2023. However, following a more detailed review of implementation timelines for key activities, during the implementation support mission in December 2021, the Government requested to extend the closing date to May 31, 2024. This will enable the completion of activities such as establishment of the new data center, the eProcurement implementation, and the provision of enhanced connectivity to 500 sites. In addition, it will provide a buffer for an appropriate warrantee period and unexpected developments, such as a resurgence of COVID-19 and related disruptions to global supply chains. At the request of the country management unit, this was extended to June 30, 2024, which represents an extension of 24 months. This will be the first extension of the project closing date.

B. Reallocation between components and changes in components and costs

Component 1. Digital Ecosystem

11. The changes proposed for Component 1 are relatively minimal as this has been disbursing well. The provision of grants to tech hubs which are used for digital skills development and innovation, forms a special category in the financing agreement, with SDR 2.2 million (equivalent to around US\$3 million), set aside for grants. Following the successful implementation of the first round of grants, it was decided to scale up this impactful initiative by using the full allocation under the category, which will entail shifting funds from other activities under the same sub-component 1.3. In particular, the digital internships program, which has been delayed by COVID-19 restrictions, will be reduced to US\$0.5 million from the originally planned US\$2.5 million. Also, the implementation of the planned mass digital literacy program will be integrated into the grants program, to be executed through the tech hubs, while the project preparation for Phase II can commence under this project. Other savings on unallocated funds will permit a slight reduction in the overall size of this component. The net impact of these changes is summarized in the datasheet below.

Component 2. Digital Connectivity

- 12. Changes proposed for Component 2 are intended to accelerate disbursement and to scale up certain well performing activities. Originally, under sub-component 2.1, it was planned to provide enhanced broadband to 400 different MDAs but following the digital mapping exercise, this target was raised to 500. Accordingly, the overall funding allocated to this sub-component has been raised slightly from US\$26 million to US\$27 million.
- 13. Sub-component 2.2, on higher education connectivity, which is managed by Malawi Research and Education Network (MAREN), the national research and education (REN) organization, has also been relatively fast disbursing and has had a very positive and welcome impact, as the provision of additional bandwidth has coincided with a shift to virtual learning, under pressure from COVID-19 restrictions. Under the restructuring, additional funding will be allocated to this sub-component to provide for an improved link to the Malawi Internet Exchange Point (MIXP) and to allow MAREN to purchase additional routers and switches to replace those currently on loan from UbuntuNet, the regional REN. The overall budget for this sub-component is thus raised from US\$4 million to US\$6.5 million.
- 14. Sub-component 2.3, on rural broadband, has however been slower to disburse. For this sub-component, a special category of expenditure was created for reverse subsidy auctions, at SDR2.6 million (equivalent to around US\$3.5 million). However, this was reduced during the period of effectiveness because there was a perception that this would duplicate



a proposed investment by the China EXIM Bank, in the Electricity Supply Corporation of Malawi (ESCOM), which would have seen the provision of cell towers for use in rural areas. It was further reduced to US\$1.5 million with the aim to allocate funds to a new activity, proposed in response to COVID-19, which was added to provide free public WiFi, successfully launched in October 2021. When the rural broadband bid was put out to tender, with a reduced estimated cost, it failed on two occasions to attract sufficient commercial interest because of a lack of scale. Under the restructuring, it is proposed to defer the use of reverse auctions for rural broadband to a much bigger program to be included under the proposed Phase II. This will remove the need for a separate category of expenditure for reverse auctions. Instead, as the public WiFi program has proved very popular since its introduction in 2021, some of the money now saved from rural broadband will be redirected towards scaling up the provision of free public WiFi in additional sites. The new locations will be chosen from among the 500 MDAs included in the Government Connectivity transaction under sub-component 2.1. This will simplify safeguards requirements and will also translate in cost savings to assure a supply of low-cost bandwidth. Overall, this sub-component 2.3 would be reduced from US\$4 million to US\$2.5 million under the restructuring.

Component 3: Digital Platforms and Services

- 15. The changes proposed for this component are the most significant, as it has been the slowest disbursing, and there may not be sufficient time to start certain activities which have not yet completed procurement. Better progress is expected now that the tendering for an eProcurement system was completed in December 2021. The contract award for a national data center has also been decided, following initial delays in connection with government's decision to reallocate the physical premises. The new building is in need of extensive refurbishment and, together with installation of datacenter equipment, this may take up to two years. This will have a knock-on effect on implementation of activities that depend on availability of the data center, which would therefore be deferred to the proposed Phase II.
- 16. Under sub-component 3.1, the urgent next step is to finalize the recruitment of key team members to strengthen the technical capacity of the eGovernment department and eventually an independent agency responsible for digital transformation in the country, now under consideration. While this is now underway, savings have been achieved by not paying these experts during the first four years of the project, and thus reallocating the funds for this activity will fall slightly from US\$3.4 million to US\$2.9 million.
- 17. Under sub-component 3.2, which covers the development of a shared public services delivery platform, there has been almost no disbursement to date, in part as a result of delays related to the establishment of the data center. It is proposed that one specific activity, on development of a government ePayment gateway (US\$1 million) which is already being financed out of the *Financial Inclusion and Entrepreneurship Scaling Project* (P168577, FInES), will be moved to that project. The implementation of a public key infrastructure (PKI) system for government (US\$2.5 million), which has not started yet, would also be deferred to Phase II, although the preparatory work, such as preparation of tender documents, should continue. In the interim, the World Bank encouraged the government to explore opportunities to use private sector PKI solutions and various options that involve "pay it as you go" for the required e-signatures, which can be financed from the project. As a result, the planned allocation for sub-component 3.2 under the restructuring would be reduced from US\$15 million to US\$12.5 million.
- 18. Similarly, under sub-component 3.3, intended to develop and pilot digital applications and services, there has been only relatively modest disbursement to date, but this is expected to increase with the completion of the bidding for the eProcurement system for Government, in December 2021 with contract award expected in February 2022. Under the restructuring, it is also proposed to defer the planned activity on the Electronic Document and Records Management System (EDRMS), with an originally planned budget of US\$1.2 million, to the next Phase. However, the activity for



eProcurement will be reinforced with some additional training activities and other support. Accordingly, the budget for this activity would be reduced from US\$5.5 million at approval to US\$4.0 million.

Component 4: Project Management

19. A need has been identified to reinforce some functions within the PIU, notably through the recruitment of an additional safeguards assistant, to accommodate the increase in sites served under the project, and an additional project accountant. With the requested project closing date extension to June 30, 2024 (an additional 24 months), the running costs of the PIU will expand. Thus, under the project restructuring, it is proposed to increase the allocated budget from US\$5.0 million to US\$7.5 million.

C. Reallocation between disbursement categories

20. The funds under Category 3, on the use of reverse auction for rural broadband subsidies (under sub-component 2.3) are no longer needed, given the changes proposed as part of this restructuring. Similarly, the undisbursed funds under Category 4 on the use of the project preparation advance (PPA) are also no longer needed as the PPA has been refinanced. These funds will therefore be reallocated to Category 1.

D. Revision of the results framework

21. The restructuring exercise also provides an opportunity to revisit the results framework for the project, and to propose more ambitious targets as 8 of the original 15 indicators already met or exceeded their targets. During the restructuring mission in November 2021, the World Bank reviewed the indicators and targets with the Government and it was agreed to make adjustments to some indicators, and to extend the closing dates, as detailed in the datasheet.

E. Revised implementation schedule and disbursement estimates

21. As a result of the extension to the closing date, the implementation schedule and disbursement schedule will also be revised, as indicated in the datasheet.

III. SUMMARY OF CHANGES		
	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Reallocation between Disbursement Categories	✓	
Disbursement Estimates	✓	
Implementation Schedule	✓	
Implementing Agency		✓



DDO Status	✓
Project's Development Objectives	✓
PBCs	✓
Cancellations Proposed	✓
Disbursements Arrangements	✓
Overall Risk Rating	✓
Safeguard Policies Triggered	✓
EA category	✓
Legal Covenants	✓
Institutional Arrangements	✓
Financial Management	✓
Procurement	✓
Other Change(s)	✓
Economic and Financial Analysis	✓
Technical Analysis	✓
Social Analysis	✓
Environmental Analysis	✓

IV. DETAILED CHANGE(S)

COMPONENTS

Current Component Name	Current Cost (US\$M)	Action	Proposed Component Name	Proposed Cost (US\$M)
Digital Ecosystem	9.50	No Change	Digital Ecosystem	9.50
Digital Connectivity	34.00	Revised	Digital Connectivity	36.00
Digital Platforms and Services	23.90	Revised	Digital Platforms and Services	19.40
Project Management	5.00	Revised	Project Management	7.50
TOTAL	72.40			72.40



Ln/Cr/Tf	Status Closing Closing(s) Closing		Proposed Closing	-	sed Deadline Withdrawal Applications	
IDA-60500	Effective	30-Jun-2022		30-Jun-2024		30-Oct-2024
REALLOCATION	N BETWEEN DISBURS	SEMENT CATEGORIES				
Curr	ent Allocation	Actuals + Committed	Proposed	l Allocation	Financi (Type T	
					Current	Proposed
IDA-60500-001	. Currency: XDR					
iLap Category S	Sequence No: 1	Current Expenditure (Category: Gds,V	Vks,NCS,CS, Mrsł	np fee,Tr,OC	
46,400,000.00		10,225,088.81	50,093,160.00 100.00			100.00
iLap Category S	Sequence No: 2	Current Expenditure (Category: Innov	ation Grants pt1	.3c,1.3d,2.3d	
	2,200,000.00	319,734.65	2,	200,000.00	100.00	100.00
iLap Category S	Sequence No: 3	Current Expenditure (Category: Least-	-cost subsidy Pt 2	2.3c	
	2,600,000.00	0.00		0.00	100.00	100.00
iLap Category S	Sequence No: 4	Current Expenditure (Category: Refun	d of Preparation	Advance	
	2,200,000.00	1,106,839.37	1,	106,840.00		100
Total	53,400,000.00	11,651,662.83	53,	,400,000.00		
DISBURSEMEN	NT ESTIMATES					
Change in Disk Yes	oursement Estimate	S				
Year			Curren			Proposed



The World Bank Digital Malawi Program Phase I: Malawi Digital Foundations Project (P160533)

2017	0.00	0.00
2018	6,000,000.00	0.00
2019	12,000,000.00	7,750,156.00
2020	19,000,000.00	10,171,529.00
2021	21,000,000.00	10,054,321.00
2022	13,000,000.00	25,000,000.00
2023	1,400,000.00	19,423,993.00

Results framework

COUNTRY: Malawi

Digital Malawi Program Phase I: Malawi Digital Foundations Project

Project Development Objectives(s)

To increase access to affordable, high quality internet services for government, businesses and citizens and to improve the government's capacity to deliver digital public services.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline		Intermediate Targets					
			1	2	3	4	5		
Increase access to affordab	le, high	quality services							
Internet Users per 100 people (Percentage)		17.60	20.00	24.00	28.00	32.00	37.00	42.00	
Action: This indicator has been Revised	Rationa		o 42% as already e	exceeded the original	target of 30% already	exceeded			
Retail Price of Pre-Paid Mobile Broadband Monthly Bundle, 500MB Data Volume (Amount(USD))		4.08	4.00	3.50	3.00	2.50	2.25	2.00	
Action: This indicator has been Revised	_	a more ambitiou	is target of US\$2.0 I line with price tre		push for further redu	ction in pre-paid mobile	e broadband prices, as	s original target was already	
Number of Public Institutions Utilizing High		0.00	0.00	22.00	200.00	300.00	350.00	400.00	

Indicator Name	PBC Baseline	Baseline		Intermediate Targets					
			1	2	3	4	5		
Speed Internet Connections Jnder the Project (Number)									
onder the Project (Number)		,							
Action: This indicator has been Revised	Ration Revise		nclude MDAs to be co	nnected under connec	tivity transaction, MA	REN sites and public	WiFi		
Direct project beneficiaries Number)		0.00	4,300,000.00	4,700,000.00	5,200,000.00	5,700,000.00	6,280,000.00	6,280,000.00	
Action: This indicator has been Revised	Rationale: Clarifying definition and methodology for collecting data on direct beneficiaries.								
Female beneficiaries (Percentage)		46.00	46.00	46.00	47.00	47.00	48.00	48.00	
mprove the government's	capacity	y to deliver digita	public services						
Number of Transactions Per Year Utilizing the Shared Digital Services Platform Number)		0.00	0.00	0.00	10,000.00	15,000.00	25,000.00	25,000.00	
Action: This indicator has been Revised	Ration	-	ndicator. Should be m	et with implementation	on of eProcurement an	d e-services portal.			
People obtaining new		0.00	500.00	1,000.00	2,000.00	3,000.00	4,000.00	5,000.00	
under the project (Number)									



Indicator Name	PBC Bas	Baseline		Intermediate Targets				
			1	2	3	4	5	
Of which, Percentage of Women and Girls obtaining new digital skills or knowledge under the project (Percentage)		0.00						50.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets						
			1	2	3	4	5		
Digital Ecosystem									
Publication and Adoption of National Strategies for Broadband Access and Digital Government (Number)		0.00	0.00	2.00	2.00	2.00	2.00	2.00	
Average wholesale monthly price per Mbit/s of international internet bandwidth (Amount(USD))		466.00	400.00	300.00	200.00	100.00	75.00	50.00	
Action: This indicator has been Revised	Rationale: Original target close to being met and should be exceeded under connectivity transaction with extended closing date								

Indicator Name	РВС	Baseline		Intermediate Targets						
			1	2	3	4	5			
Digital Connectivity										
Percentage of the population covered by at least a 3G mobile network (Percentage)		32.00	40.00	50.00	60.00	70.00	80.00	90.00		
Action: This indicator has been Revised	Rationale: Increase original target by 50% to 90% as already exceeded									
Number of Higher Education Students Provided with Enhanced with Access to the Internet Under the Project (Number)		0.00	0.00	10,000.00	20,000.00	30,000.00	40,000.00	50,000.00		
Action: This indicator has been Revised	Rationale: Increase target by 500% to 50,000 as original target is already exceeded, thanks to implementation of sub-component 2.2.									
Digital Platforms and Service	es									
Number of e-Services and Applications Utilizing the Shared Services Platform (Number)		0.00	0.00	0.00	2.00	4.00	6.00	8.00		
Action: This indicator has been Revised	Rationale: Improved definition of the indicator. Should be met with implementation of eProcurement and e-services portal.									

Indicator Name	PBC	Baseline	Intermediate Targets						
			1	2	3	4	5		
Number of MDAs and LGAs using eProcurement System (Number)		0.00	0.00	0.00	2.00	4.00	6.00	6.00	
Action: This indicator has	Rationale: Should be met with implementation of eProcurement system								
Digital services developed based on priorities identified through citizen engagement (Yes/No) (Yes/No)		No	No	No	Yes	Yes	Yes	Yes	