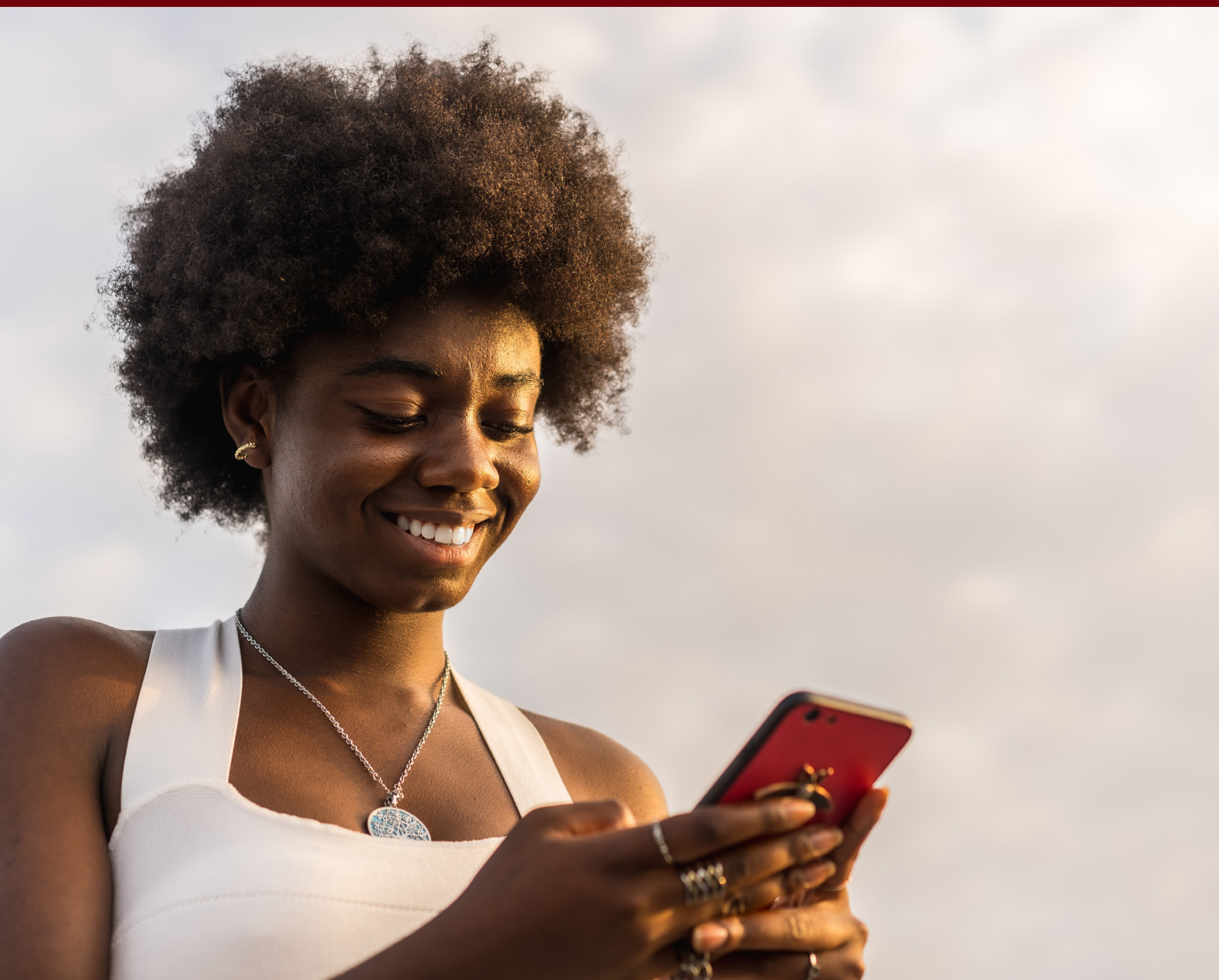


Driving digital transformation of the economy in Malawi

Opportunities, policy recommendations
and the role of mobile



Contents

Executive Summary	4
1. Introduction	7
1A Digital transformation and the role of mobile sector	7
1B This report	8
2. Malawi digital landscape	10
2A Economic and digital policy contex	10
2B Mobile telecoms sector	15
2C Mobile money sector	21
2D Malawi digital economy case studies	23
3. Policy challenges and recommendations	27
3A GSMA Digital Africa Index	27
3B Prioritise telecom infrastructure as critical national infrastructure for forex access and sustainable infrastructure investment environment reforms	29
3C Enable mobile money contribution to financial inclusion	47
3D Use of digital technologies to increase domestic revenue mobilisation and optimise sector taxation	53
3E Entry-level smartphone affordability, digital skills & other demand-side reforms	58
3F National Digital Economy Strategy development and Regulatory Modernisation	64
4. Conclusion: Policy recommendations contribution to Malawi's digital objectives	70
Annexure 1 — Malawi digital strategies and programmes	83
Annexure 2 — Impact methodology and assumptions	94
Annexure 3 — GSMA Digital Africa Index 2025 — Malawi	98
Glossary of Abbreviations	99

Malawi digital economy - key findings and recommendations

Mobile telecoms and mobile sector in 2025



87% *

4G population network coverage

64% *

total mobile connections penetration

12.5% *

unique mobile internet subscribers penetration

37% *

unique mobile subscribers penetration

48% **

total population mobile money (90 day active) subscribers

75% **

15 years+ population mobile money (90 day active) subscribers

576m

mobile money *** transactions

MWK 8.6 trillion

in mobile money *** transaction value

Usage Gap

80% *

population living within mobile internet coverage, but are not using it

33% *

population using smartphones

GSMA Digital Africa Index 2025:

36/100

Digital Nations and Society Index score

55/100

Digital Policy and Regulatory Index score

Policy recommendations to contribute to Malawi's National Digitalisation Policy 2023-2028 objectives:

- 1 | Prioritise telecom infrastructure as critical national infrastructure for forex access and sustainable infrastructure investment environment reforms
- 2 | Enable mobile money contribution to financial inclusion
- 3 | Use of digital technologies to increase domestic revenue mobilisation + Optimise sector taxation
- 4 | Entry-level smartphone affordability, digital skills & other demand side reforms
- 5 | National Digital Economy Strategy and modernise regulatory framework

Policy recommendations impact by 2030:

99%

4G population network coverage (remaining remote areas to be covered by alternative technology)

3.8m

new mobile money accounts
→ 28M total accounts
24% of adults pop.

810K

new mobile internet subscribers (3.2% population, 5.1% adults)

490,000

new jobs and MWK 1,103 billion value

5m

Total mobile internet subscribers, ~20% population penetration (up from 12.5% in 2025)
Usage gap reduced by 5pp

MWK 179bn

net tax impact, incl. MWK 51bn from digitalised tax receipts.

36 → 54/100

Improve Malawi's Digital Nations and Society Index by 2030

55 → 74/100

Improve Malawi's GSMA Digital Policy and Regulatory Index 2025

* GSMA Intelligence 2025

** Calculation based on 10 million 90-day active mobile money accounts, 20.7 million total population and 13.3 million population of 15 years above. Sources: RBM National Payment System Report, Quarter 2, 2025; Malawi National Statistics Office; and UN WPP estimate.

*** Reserve Bank of Malawi Quarter 2 2025.

Executive Summary

Mobile at the centre of Malawi's digital transformation

Digital technology¹ is a core enabler of Malawi 2063 and the Government (Democratic Progressive Party) Manifesto 2025–2030 objectives, with mobile networks and mobile money representing the most effective platforms for expanding access to services, driving inclusion, and supporting economic growth.² While Malawi has made progress in expanding digital infrastructure, stronger policy coordination and targeted reforms are required to translate connectivity into widespread digital usage and impact.

Good network coverage but low usage

Mobile broadband coverage in Malawi is relatively high, with 3G and 4G reaching 92% and 87% of the population³ respectively, yet adoption remains low. Only 12.5% of the population uses mobile internet (“unique mobile internet subscribers”)⁴, resulting in an 80% usage gap.⁵ This reflects affordability challenges, limited access to entry-level smartphone devices, sector taxation, and gaps in digital skills. Addressing demand-side barriers is critical to achieving Malawi 2063 and wider digital objectives.

Mobile money as a foundation for digital services

Mobile money is Malawi's most advanced digital service, with around 48% of the population actively using mobile money accounts.⁶ It plays a central role in financial inclusion, household resilience, and MSME activity. Mobile money also provides a scalable platform for digitising government payments, social protection systems, agricultural value chains, and public service delivery.

Constraints on Malawi's digital progress

Malawi underperforms regional peers on the GSMA Digital Africa Index, particularly in the Policy and Regulatory Index. Fragmented policy execution, constrained investment conditions, and a high tax burden on the sector continue to limit network expansion, innovation, and affordability. Improving the enabling environment for mobile telecoms, mobile money, and digital services is essential to unlock further investment and accelerate Malawi's digital progress.

1 Throughout this study, the terms as digital technology and digitalisation (sometimes referred to as Information Communication Technologies (“ICT”)) are used to denote the adoption of new technologies by consumers, businesses and governments across economic sectors. Digital transformation is the economic transformation resulting from such adoption. The digital economy encompasses the actors and exchanges taking place in the economy as a result of digitalisation.

2 Malawi Vision 2063, Page 43, published 2020. Democratic Progressive Party Manifesto 2025 - 2030, Page 38. State of the Nation Address “The Path to Economic Recovery: Delivering A People-Centered Development” by H.E. President Mutharika, February 2026.

3 GSMA Intelligence - 4G Coverage and Investment in Malawi, February 2026. See Figures 13 and 14 for analysis, including 4G population coverage total (87%), urban (100%), peri-urban 92%, and rural (71%). Please note that population 4G coverage is calculated from combined MNO network coverage data and mapped against Global Human Settlement Layer (GHSL) population estimates for 2025. This is used to calculate the state of coverage for each population settlement in the country, and the average geographic and population coverage for each administrative area in the country.

4 GSMA Intelligence 2025. Unique subscriber penetration rates are lower than reported by MACRA because many customers have multiple SIM cards. The GSMA estimates the number of unique users to measure how many individual people have access to mobile services. The GSMA uses mobile operator data and a range of different techniques, including surveys and modelling, to estimate the number of unique mobile users using a consistent methodology that allows cross-country comparison for economic analysis and policy development.

5 GSMA Intelligence 2025. “Usage gap” refers to populations that live within the footprint of a mobile broadband network but who are not using mobile internet.

6 RBM National Payment System Report, Quarter 2, 2025.

Five key policy recommendations

To unlock the full potential of the digital economy, and working in partnership with the sector to support investment, service delivery, and innovation, this report recommends that Malawi should:

- Prioritise telecoms as critical national infrastructure, including improved access to foreign exchange and measures to create a sustainable investment environment.
- Enable mobile money's full contribution to financial inclusion, including its role in public service delivery and economic formalisation.
- Use digital technologies to increase domestic revenue mobilisation, while optimising sector taxation to support affordability, adoption, and investment.
- Address demand-side barriers, including entry-level smartphone affordability, digital skills development, and targeted inclusion initiatives.
- Adopt and implement a National Digital Economy Strategy, alongside modernisation of the regulatory framework to improve coordination and certainty.
- This report provides targeted measures for each of these five recommendations, consolidated in Section 4.

Transformational impact by 2030

If implemented, these policy recommendations could deliver significant economic and social impact by 2030, including:

- Increasing 4G population coverage to 99%.
- Connecting over 800,000 new unique mobile internet users, bringing total users to around 5 million.
- Reducing the mobile internet usage gap by 5 percentage points, from 80% to 75%.
- Enabling an estimated 3.8 million additional registered mobile money accounts, reaching around 28 million accounts.
- Adding around MWK 1.1 trillion in economic value.
- Supporting approximately 490,000 jobs.
- Generating a net fiscal impact of around MWK 179 billion. Improving Malawi's GSMA Digital Policy & Regulatory Index score from 55 to 74 out of 100 and Digital Nations and Society Index from 36 to 54 by 2030, positioning the country among Africa's leading digital nations.
- Making a significant contribution to Malawi 2063, the Government Manifesto 2025–2030, and national digital development objectives.



1. Introduction



Introduction

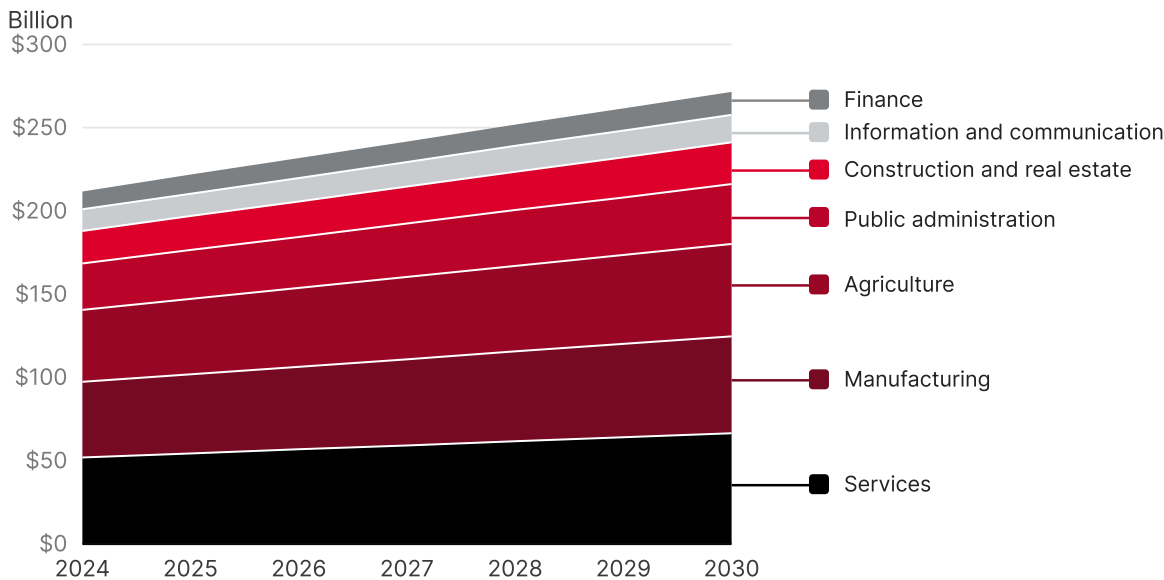
1A Digital transformation and the role of mobile

Digital technologies including connectivity, big data, cloud, and Artificial Intelligence across public services and economic sectors are unlocking improvements in productivity, job creation and formalisation of the economy in Africa and globally. This digital transformation leads to increased living standards, higher economic growth, and improved government and public services.⁷ A 2025 report estimated that Africa’s digital economy was projected to contribute USD 180 billion to GDP in 2025 and could contribute USD 2.9 trillion by 2030.⁸

The mobile telecommunications – together with mobile money – sector provides connectivity and services that form a critical foundation on which digital transformation is built. The GSMA reports:

- Research shows that a 10% increase in mobile internet penetration is estimated to increase GDP per capita by up to 2.5% in Africa.
- The mobile sector contributed USD 220 billion to Africa’s economy, representing 7.7% of GDP in 2024. By 2030, this is expected to increase to USD 270 billion (7.4% of GDP) as shown in Figure 1 below.
- The mobile ecosystem (i.e. mobile operators, infrastructure companies, and content and services) contributed USD 30 billion to public funding in 2024.
- The mobile ecosystem supported 5 million jobs directly and an additional 3 million indirect jobs in 2024.
- Mobile money contributed USD 190 billion to Africa’s GDP, representing 4.5%, in 2023.⁹

Figure 1
Africa - mobile contribution to GDP by industry.



Source: GSMA Intelligence

7 GSMA, Driving digital transformation of African economies - Evidence and Methodology Document, 2024.
8 Heirs Technology Report, Africa’s Digital Leap: Cloud, Connectivity & AI in the Next Decade, 2025.
9 GSMA The Mobile Economy Africa, 2025. GSMA State of Industry Report on Mobile Money, 2025.

1B This report

This report examines how the mobile sector's infrastructure and digital services can drive socio-economic development through enhanced productivity, job creation, and improved efficiency of government and public services.

The report **identifies policy recommendations to address challenges and opportunities**, and then **quantifies the impacts of these policy recommendations on digitalisation of key sectors of the economy and public services, and contributing to Malawi's 2063 Vision and digital objectives**. In doing so, this report has considered information provided by government, regulators, telecoms operators, industry and other stakeholders; public source reports from national agencies and international organisations; and the GSMA's Digital Africa Index.

The GSMA Digital Africa Index includes the Digital Nations and Society Index and the Digital Policy and Regulatory Index in providing a comprehensive assessment of African countries to understand how advanced they are in terms of integrating digital technologies into society and offering guidance on policy and regulatory interventions required to accelerate digital growth.¹⁰

This report provides a quantitative model of Malawi's mobile sector to evaluate the impacts on the wider economy of the proposed policy recommendations to address the challenges and to maximise the digital economy potential to contribute to Malawi's national economic and digital objectives.¹¹

The base case forecast projects market developments, assuming that the policy environment remains as it is today. It is based on historical trends and sector analysis which are used to extrapolate market outcomes to 2030. This base case focuses on unique mobile subscriptions, mobile broadband adoption and mobile money usage.

The impact of changes in regulation and policy on the sector is modelled by analysing how these changes would affect the operators in general and how they would affect the adoption and usage of mobile broadband and mobile money.

In contrast to many models used to evaluate policy changes, the model developed for this report is dynamic rather than static. This means it is able to model the impact of policy changes over time on the growth of the mobile market. For example, a reduction in excise duties, will not immediately raise the number of mobile users, but rather will increase the rate of adoption. In this way the model more accurately reflects the build-up of policy change impacts over a number of years.

The base case scenario shows a steady increase in mobile broadband connections. In this scenario, unique mobile broadband connections are expected to increase from 2.8 million in 2025 to 4.2 million in 2030.

The following sections of this report consider how digitalisation affects outcomes in the essential economic sectors and public service delivery:

- Section 2 summarises Malawi's economic context and digital policies, and then focuses on the mobile sector, assessing its performance in terms of infrastructure, access, and adoption of digital services and mobile money.
- Section 3 identifies important policy challenges and recommendations, and then quantifies the impact of each policy recommendation.
- Section 4 concludes with a summary of the policy recommendations, the estimated impact of increased mobile adoption and digitalisation from these recommendations on economic growth, job creation, taxation revenue to the government, and their contribution to Malawi's 2063 Vision and digital objectives.

¹⁰ See Section 3A and Annexure 3 for more information on Malawi's scores in the GSMA Digital Africa Index 2025. For the complete Index: [Digital Africa Index - GSMA Sub Saharan Africa](#). For Methodology: [Digital Africa Index and Digital Policy & Regulatory Index: Methodology](#)

¹¹ Further information on the methodology and modelling: Annexure 2 of this Malawi digital economy report, and also the GSMA Driving Digital Transformation of African Economies - Evidence and Methodology Document, 2024.

2. Malawi digital landscape



2. Malawi digital landscape

This section summarises Malawi’s economic context and digital policies, and then focuses on the mobile sector, assessing its performance in

terms of infrastructure, access, and adoption of digital services and mobile money.

2A Economic and digital policy context

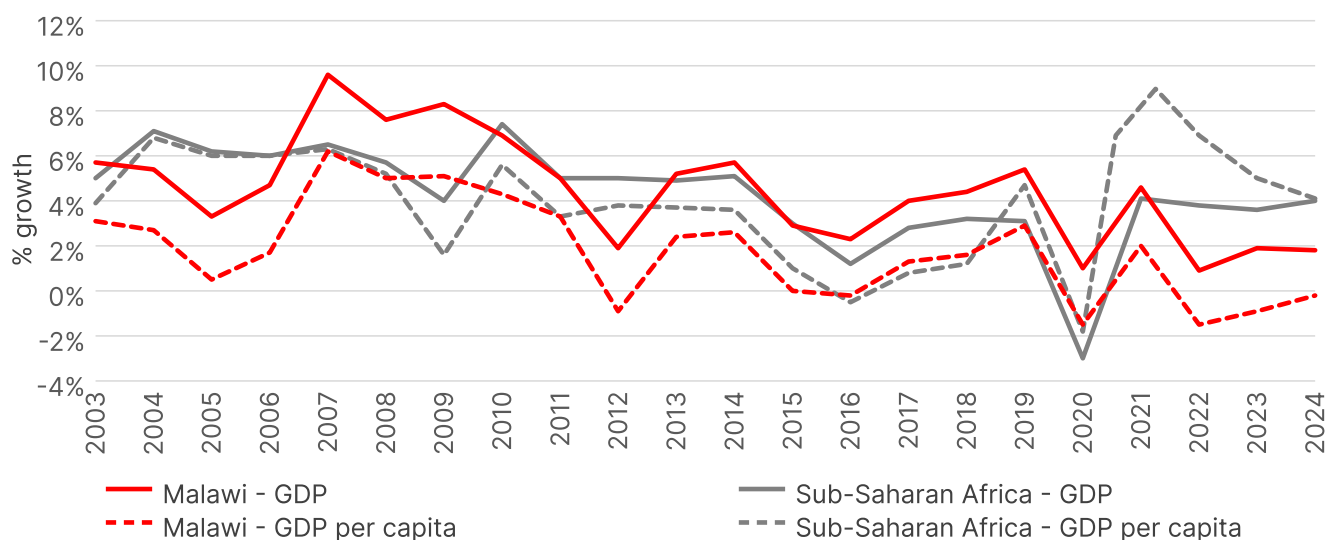
2A.1 Economic context

Malawi, with a population of 21.6 million, is located in Eastern and Southern Africa and is landlocked, bordered by Zambia, Tanzania, and Mozambique. It has a young demographic profile, with a median age of around 18 years. Economically, the country is characterised by slow growth and high inflation. GDP growth has averaged 2.2% since 2020, below the 2.6% population growth rate, leading to declining incomes, a trend further exacerbated by global and regional macroeconomic pressures and climate shocks resulting in food insecurity, fuel

shortages, and rising living costs.¹² In September 2025, the Democratic Progressive Party won the general election and has set economic recovery as a key government objective.

The underperformance of the Malawian economy relative to the Sub-Saharan African average is shown in both GDP and GDP per capita. GDP per capita has declined over the period 2022-24.

Figure 2
GDP and GDP per capita in Malawi compared to Sub-Saharan Africa.

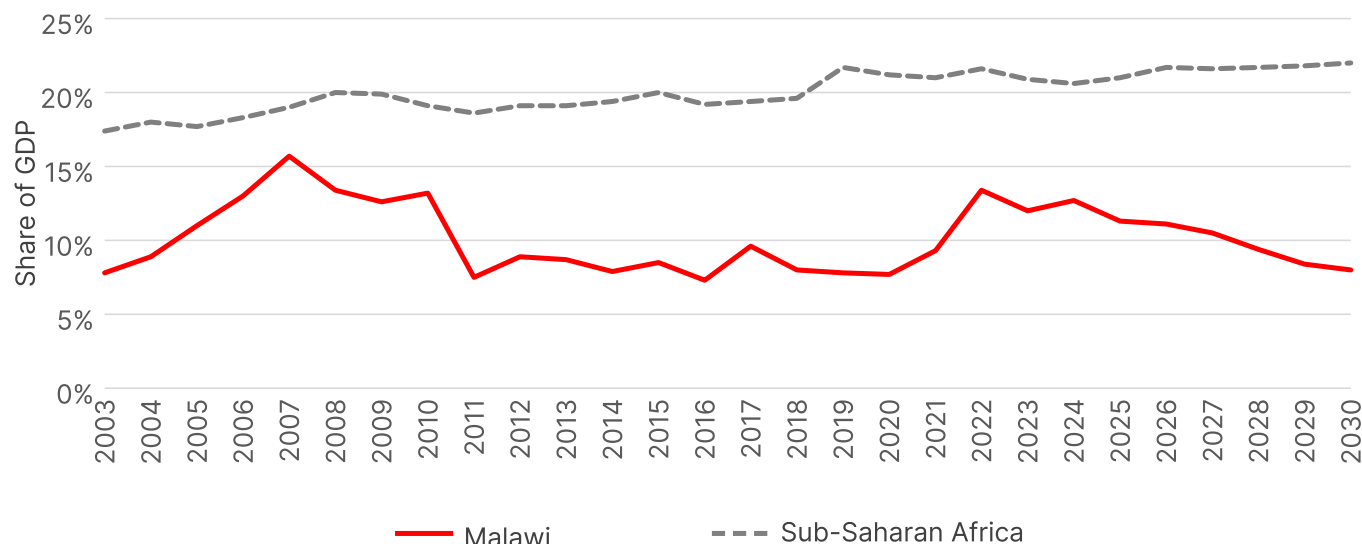


Source: World Economic Outlook (October 2025) for GDP, World Bank Development Indicators for GDP per capita

Structural challenges facing the economy are low levels of investment compared to the Sub-Saharan average (see Figure 3) and the reliance on the agricultural sector (see Figure 4).

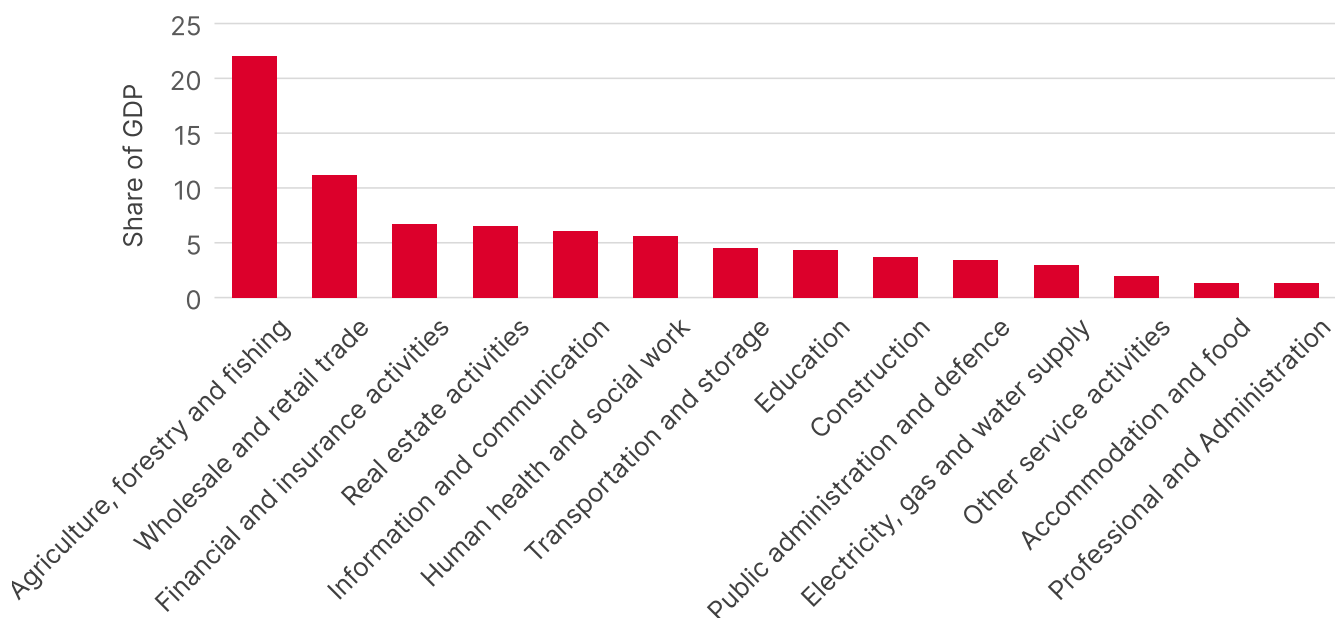
The agricultural sector has averaged growth of only 2.5% since 2018, compared to 3.1% for the economy as a whole.¹³

Figure 3
Investment share of GDP in Malawi compared to Sub-Saharan Africa.



Source: World Economic Outlook (October 2025).

Figure 4
Sector shares of GDP.



Source: Reserve Bank of Malawi, National Accounts.

13 Calculated from National Accounts, Table 2, Reserve Bank of Malawi.

2A.2 Digital policy

Malawi has embraced the importance of digital transformation contribution to the Malawi 2063 Vision objective to become an inclusively wealthy and self-reliant industrialised upper-middle-income country by 2063.¹⁴ Malawi 2063 identifies “**robust ICT infrastructure with cross-country coverage of reliable and affordable services fostering technological adoption and digital access**” as an important enabler, and sets targets including increasing internet penetration from 2019 from 14.6% to 20% in 2030, and 50% in 2063.¹⁵

The Government, elected in 2025, has prioritised digitalisation as a key strategy in the first State of Nation Address in February 2026¹⁶, and included ICT and Artificial Intelligence objectives “to transform Malawi into a 10 top African nation in cybersecurity and innovation readiness, with a smart, competitive, innovation-driven, and inclusive digital economy” in its 2025-2030 manifesto to support Malawi 2063. This includes achieving:

- 80% population affordable broadband coverage;
- 150,000 digital jobs and 5,000 tech-enabled small businesses; and
- +70% government services online and AI optimised.¹⁷

Current digital strategies and programmes include the **Digital Malawi Acceleration Project, the Inclusive Digital Transformation for Malawi including UNDP Digital Readiness Assessment 2024, the Last Mile Connectivity Project, the National Digital Transformation Strategy 2026 consultation, and the National Artificial Intelligence Strategy 2026 consultation, and for financial services through the National Financial Sector Development Strategy 2022-2026 and the National Financial Inclusion Strategy III (2024-2028)** as summarised below in Figure 5 and in more detail in Annexure 1.

This builds on prior policies and strategies (including the National ICT Policy 2013, the National ICT Masterplan, the National Digital Policies and Strategies 2021-2026 and 2023-2028, and the National Cyber Security Strategy 2019-2024) and the applicable regulatory framework (including the National Communications Act 2016, Electronic Transactions and Cyber Security Act 2016, Payment Systems Act 2016, Payment Systems (E-Money) Regulations 2019), and Data Protection Act 2024). In 2025, MACRA established a Digital Laws Taskforce to undertake a review of the Communications Act 2016 and the applicable regulatory framework and the RBM is consulting on digital financial services regulation.¹⁸

14 Malawi Vision 2063, Page 3.

15 Malawi Vision 2063, Page 43.

16 State of the Nation Address “The Path to Economic Recovery: Delivering A People-Centered Development” by H.E. President Mutharika, February 2026.

17 Democratic Progressive Party Manifesto 2025 - 2030, Page 38.

18 Africa Tech News article - Malawi moves to update Communications Act, August 2025.

Figure 5
Summary of Malawi digital strategies and programmes.

Malawi 2063 Vision

ICT is a key economic infrastructure enabler. Targets:

Internet penetration

14.6% (2019) → 20% (2030) → 50% (2063)

World Bank ICT Development Index

1.5 (2015) → 2 (2030) → 5 (2063)

Government (DPP) Manifesto 2025 - 2030

ICT and Artificial Intelligence objective to transform Malawi into 10 top African nation in cybersecurity and innovation readiness, with a smart, competitive, innovation driven, and inclusive digital economy

2030 TARGETS INCLUDE (BUT NOT LIMITED TO):

- 80% pop affordable broadband coverage.
- 150,000 digital jobs and 5,000 tech-enabled small businesses
- +70% government services online and AI optimised

Malawi Digital Acceleration Project 2024 – 2030

Components

1. Affordable Broadband and Secure Data
2. Interoperable and Secure Data Platforms.
3. High Impact Digital Services and Productive Digital Usage.

Last Mile Connectivity Project

Infrastructure components

1. National fibre broadband project — Phase II (3,000 km)
2. MACRA Universal Service Fund rural connectivity

MOFEA National Financial Services Development Strategy 2022-2026

Pillar VII — digital financial services target

Over 70% of eligible Malawians accessing formal digital financial services and products including credit, insurance, etc. by 2026.

RBM National Financial Inclusion Strategy III (2024 – 2028)

Goal to increase access to at least one formal financial service to 95% of the country's adult population by 2028 and reduce financial exclusion from 12% to 5.

Ministry of Information and Digitalisation, UNDP & partners Inclusive Digital Transformation for Malawi 2024

Key areas

1. Secure & inclusive digital identity
2. Strengthening digital governance
3. Bridging the digital gender gap

Ministry of Information and Digitalisation, UNDP & partners: Strategic Framework for Responsible AI Adoption Supporting Economic Stabilisation and Inclusive Development 2026 – 2031 consultation, February 2026

Vision statement: Apply AI in a disciplined and responsible manner to strengthen public sector performance, improve productivity in priority sectors, and support Malawi's economic stabilisation agenda.

INFORMED BY ARTIFICIAL INTELLIGENCE LANDSCAPE ASSESSMENT 2026

UNDP & partners Malawi Digital Readiness Assessment 2024

Recommendations

- Strengthen regulatory enforcement and develop future-facing policies, including a National AI and Data Strategy
- Improve public sector coordination, interoperability, and user experience in e-services.
- Promote digital trust and citizenship through inclusive and accessible platforms.
- Invest in rural broadband infrastructure and reduce the cost of internet access.
- Develop a National Digital Skills Framework focused on inclusion and workforce alignment.
- Establish the Department of e-Government as an Independent Authority with a stronger implementation mandate.

Ministry of Information and Digitalisation, UNDP & partners - Malawi National Digital Transformation Strategy and roadmap, consultation, February 2026

Vision

A public sector that delivers priority services in a way that is simpler for people and businesses, more reliable, and supports economic reform.

Whilst the combination of these strategies and programmes has made some progress towards their objectives (Figure 6), urgent action is required to ensure all Malawi citizens,

businesses, and government benefit from digitalisation and that Malawi is amongst Africa's Top 10 digital nations (Figure 7).

Figure 6
Malawi status against digital objectives.

- Vision 2063 internet penetration of 20% in 2030: 27.7%, however Malawi is below the African region average (37.5%).¹⁹
- Vision 2063 ITU ICT development index score: 35.4, an increase of 7% year on year however Malawi is behind Africa region average (56).²⁰
- Malawi Digital Acceleration Plan universal mobile broadband coverage objective and DPP Manifesto 2025 - 2030 80% population affordable broadband coverage objective: **national 3G and 4G coverage currently stand at 92% and 87% respectively**, falling to 80% and 71% in rural areas.²¹
- National Financial Development Strategy 2022-2026 objective to achieve over 70% of eligible Malawians accessing formal digital financial services and products: 75% 15 years+ population mobile money (90 day active) subscribers.²²
- National Financial Inclusion Strategy III objective - increase mobile phones per 100 inhabitants from 52 to 75: 74%.²³

Figure 7
International organisation assessments of Malawi digitalisation.

Recent international organisation assessments and rankings commonly recognise the groundwork undertaken by Malawi digital programmes to date, however consistently rank Malawi behind many other African countries on digital transformation and inclusion:

- The United Nations Development Programme (UNDP) Digital Readiness Assessment 2024 ranks Malawi at “Opportunistic” level two out of five levels and highlights only 27.7% internet penetration level, citing key issues of need for cohesive strategy with enhanced capacity and funding of institutions, infrastructure and accessibility especially in rural areas and remote areas, cyber-security, access to digital resources, digital literacy, and need for AI and data strategy.²⁴
- The UNDP Malawi Artificial Intelligence (AI) Landscape Assessment 2026 also ranks the country at “Opportunistic” level. It recognises the progress being made, including digital identification and the introduction of the Data Protection Act 2024, however cites the need to invest in infrastructure, AI skills and literacy, and regulatory reform. It recommends the establishment of a national AI Taskforce to develop a national AI and data strategy.²⁵
- The International Telecommunications Union (ITU)’s Global ICT Development Index 2025 reported an improvement in Malawi’s overall score from 33.1 in 2023 to 35.4 in 2025, although this is behind East African countries such as Kenya (56), Rwanda (53.2), and Tanzania (53.2).²⁶

Sections 3 and 4, which follow, outline key challenges and provides policy recommendations to advance Malawi 2063 and digital policy objectives.

19 UNDP Malawi Digital Readiness Assessment 2024/25, Page 10. ITU ICT Development Index 2025.

20 ITU ICT Development Index 2025. Please note that the ITU changed the methodology for the Index in 2023, therefore Malawi 2063 vision targets using the old methodology does not correlate with the 2025 Index score. Malawi in 2015 was ranked 160 out of 167 countries and continues to be amongst the lower ranking countries in 2025.

21 GSMA Intelligence - 4G Coverage and Investment in Malawi, February 2026.

22 Calculation based on 10 million 90-day active mobile money accounts, 20.7 million total population and 13.3 million population of 15 years above. Sources: RBM National Payment System Report, Quarter 2, 2025; Malawi National Statistics Office; and UN WPP estimate.

23 MACRA key telecommunications indicators Q4 2024.

24 UNDP Digital Readiness Assessment - Malawi - 2024, Pages 10 - 12.

25 UNDP Malawi Artificial Intelligence Landscape Assessment 2026, Pages 3 - 5.

26 ITU Global ICT Development Index 2025.

2B Mobile telecoms sector

Malawi's mobile telecoms sector is making progress in mobile subscribers and network coverage; however mobile internet usage is

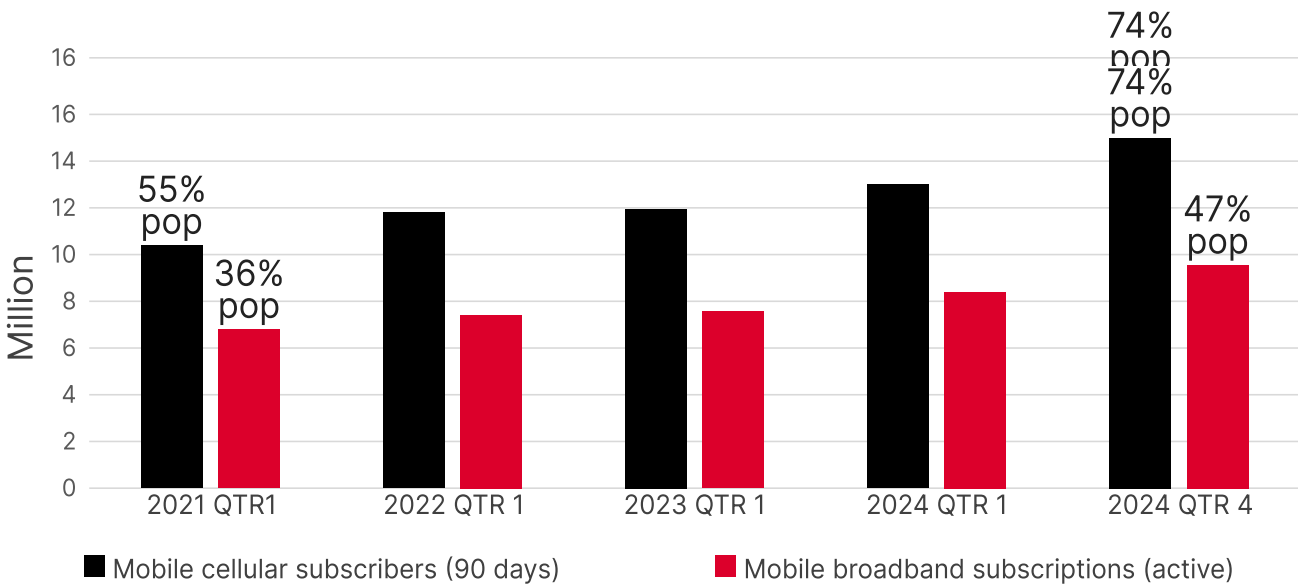
lower than leading African countries and is a key barrier to Malawi 2063 and digital objectives.

2B.1 Mobile Subscriber Penetration

Malawi has 2 leading national mobile operators - Airtel Malawi²⁷ and Telekom Networks Malawi (TNM)²⁸ - with a combined mobile telecommunications subscriber market share of 99%.²⁹ Other licensed operators include Malawi Telecommunications Limited (MTL)³⁰, which provides fixed wireless and 4G broadband data services primarily for enterprises in Blantyre and Lilongwe, and Access Communications Ltd (ACL),

which provides rural access broadband services. Mobile subscriber penetration continues to grow, however there remains around 50% of Malawi's population that are not using mobile broadband services. MACRA reported, in December 2024, that there were 14.9 million (73.99% population) mobile cellular subscribers and 9.5 million (47.01%) mobile broadband subscribers (Figure 8).³¹

Figure 8
MACRA - Mobile cellular subscriber penetration 2021-2024.



Source: MACRA key telecommunications indicators Q1 2021 to Q4 2024

27 Airtel Malawi is a subsidiary company of Airtel Africa, which holds 80% shareholding, and is listed on the Malawi Stock Exchange (source: [Malawi Stock Exchange](#)).

28 TNM is wholly Malawian owned listed on the Malawi Stock Exchange with the following shareholders; Press Corporation Limited 43.72%, Old Mutual Life Assurance Company (Mw) Limited 23.57%, NICO Life Insurance Company Limited 8.16% and 24.55% other shareholders (source: [TNM website - corporate profile](#)).

29 Public Version of a Market Analysis Report to Malawi Communications Regulatory Authority (MACRA/IPC/EAD-MDCA/2021/04), July 2022.

30 MTL is now owned by Telecomm Holdings Limited (THL) which holds 80% and the Malawi Government which retains 20%. THL is a consortium comprising Press Corporation PLC as the majority shareholder, Old Mutual, NICO Holdings and Investments Alliance Limited (source: [Malawi Telecommunications Limited](#)). In Malawi Government 2025/2026 Budget Policy Statement, the Minister of Finance stated that the Government is acquiring MTL to be merged with Malawi Digital Broadcasting Network Limited, ESCOM Optical Fiber Communication, and Government Wide Area Network (source: Budget Policy Statement by Minister of Finance and Economic Affairs, 28 February 2025, Pg 32).

31 MACRA Summary of Key Telecommunications Indicators from Q4 2022 to Q4 2024.

The GSMA undertakes analysis of the number of unique mobile subscribers across countries in Africa and globally to inform economic analysis and policy development (noting that the GSMA total mobile subscriber data is similar to as reported by MACRA ~ 14 million in 2025).³² This analysis finds that Malawi had 8.28 million unique mobile subscribers

(37% market penetration, 6% annual growth) and 2.78 million unique mobile internet subscribers (12.5% market penetration, 8.5% annual growth) in 2025. **When comparing this data with Eastern Africa and Africa, Malawi's mobile subscriber penetration rates, especially unique mobile internet, are significantly lower.**

Figure 9
GSMA Intelligence – unique mobile and mobile internet subscriber penetration 2025.

	Malawi	Eastern Africa	Africa
Unique mobile penetration	37%	43%	48%
Unique mobile internet penetration	12.5%	21%	28%

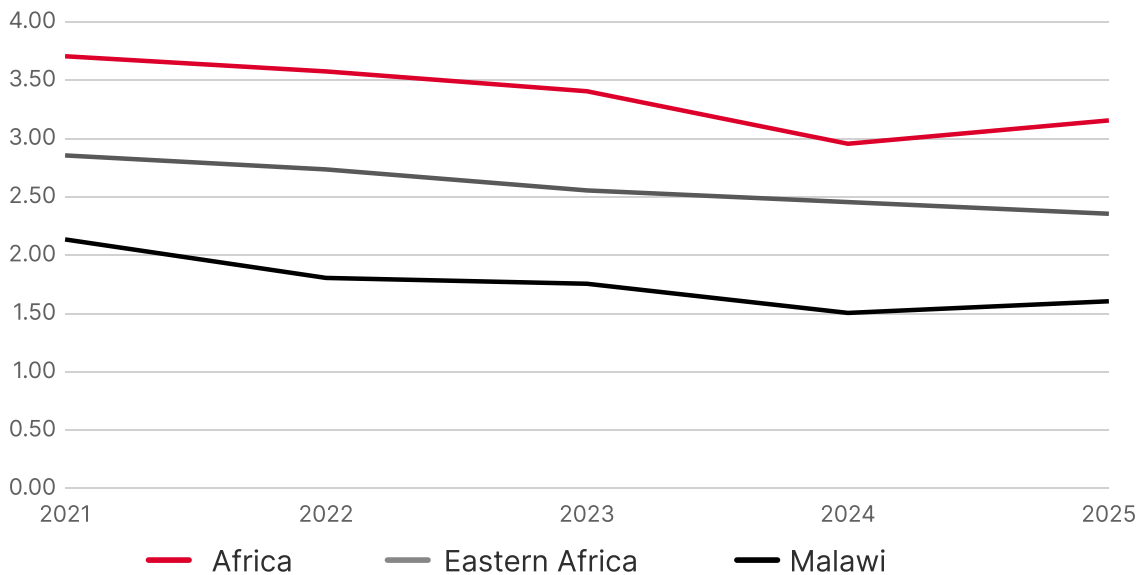
Source: GSMA Intelligence

2B.2 Mobile tariffs and usage

International benchmarks indicate that Malawi has amongst the lowest mobile data tariffs in Africa.³³ This is shown in GSMA Intelligence data,

which shows that Malawi has lower ARPU per mobile connection when compared with Eastern Africa and Africa benchmarks.

Figure 10
GSMA Intelligence - ARPU by mobile connection (USD) comparison.



Source: GSMA Intelligence

32 The GSMA unique subscriber penetration rates are lower than reported by MACRA because many customers have multiple SIM cards. The GSMA estimates the number of unique users to measure how many individual people have access to mobile services. The GSMA uses mobile operator data and a range of different techniques, including surveys and modelling, to estimate the number of unique mobile users using a consistent methodology that allows cross-country comparison for economic analysis and policy development.

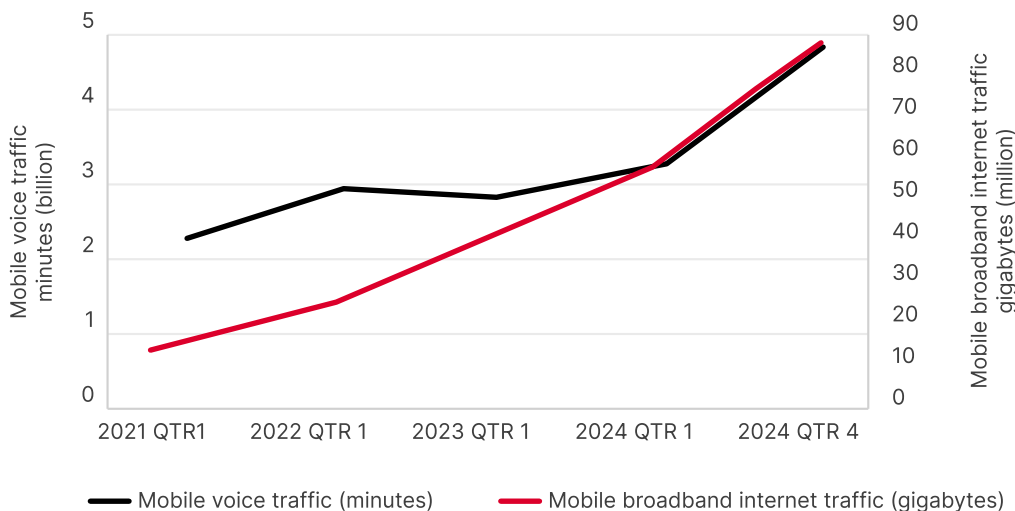
33 MW Nation Online Article - Data cost down - MACRA, July 2025.

Interviews and research for this report describe that these lower tariffs have been driven by macro-economic conditions impacting citizens' disposable income and price sensitivity, market competition, and MACRA's regulatory approach which led to a reduction of mobile data tariffs from USD 25 per gigabyte in 2020 to USD 0.34 per gigabyte in 2023. This regulatory approach was supported by MACRA lowering operator spectrum fees by 20% in 2023, reducing domestic and international wholesale (including cross-border transit fees with Tanzania and Zambia) costs, and deploying infrastructure and demand-side investment and programmes under the

Malawi Digital Foundations Project from 2017 to 2024 supported by the World Bank.³⁴

This has contributed to traffic increases. MACRA reports that domestic mobile voice traffic has increased from 1.9 billion minutes in 2021 (1st Quarter) to 4.1 billion minutes in 2024 (4th Quarter) and mobile broadband internet traffic has significantly increased from 14,660,000 gigabytes in 2021 (1st Quarter) to 83,734,245 gigabytes in 2024 (4th Quarter) (Figure 11).³⁵ The GSMA also reports mobile data traffic growth from 55,958 terabytes in 2021 to 277,921 terabytes in 2025.³⁶

Figure 11
MACRA - Mobile voice and broadband traffic 2021 - 2024.



Source: MACRA key telecommunications indicators Q1 2021 to Q4 2024

However, similar to mobile internet connections, GSMA analysis shows that Malawi's data traffic per mobile connection (1,691 megabytes) is lower than Eastern Africa (2,399 megabytes) and Africa (4,398 megabytes) in 2025.

One contributor to low data usage is the need to convert more subscribers from basic/feature phones to smartphones, with the GSMA reporting that Malawi has lower smartphone and mobile data-only device penetration than Eastern Africa and Africa in 2025.

Figure 12
GSMA Intelligence - Mobile phone/device penetration 2025.

	Malawi	Eastern Africa	Africa
Smartphone penetration	33%	43%	59%
Mobile data-only device penetration	0.24%	4%	5%
Basic/ feature phone penetration	31%	41%	30%

Source: GSMA Intelligence

34 Interviews for this report. Unsustainable Magazine article - Data cost fall progress in Malawi, September 2025. World Bank article - Digitalizing Malawi to improve access to education, public services, and income opportunities, June 2025.

35 Ibid.

36 GSMA Intelligence.

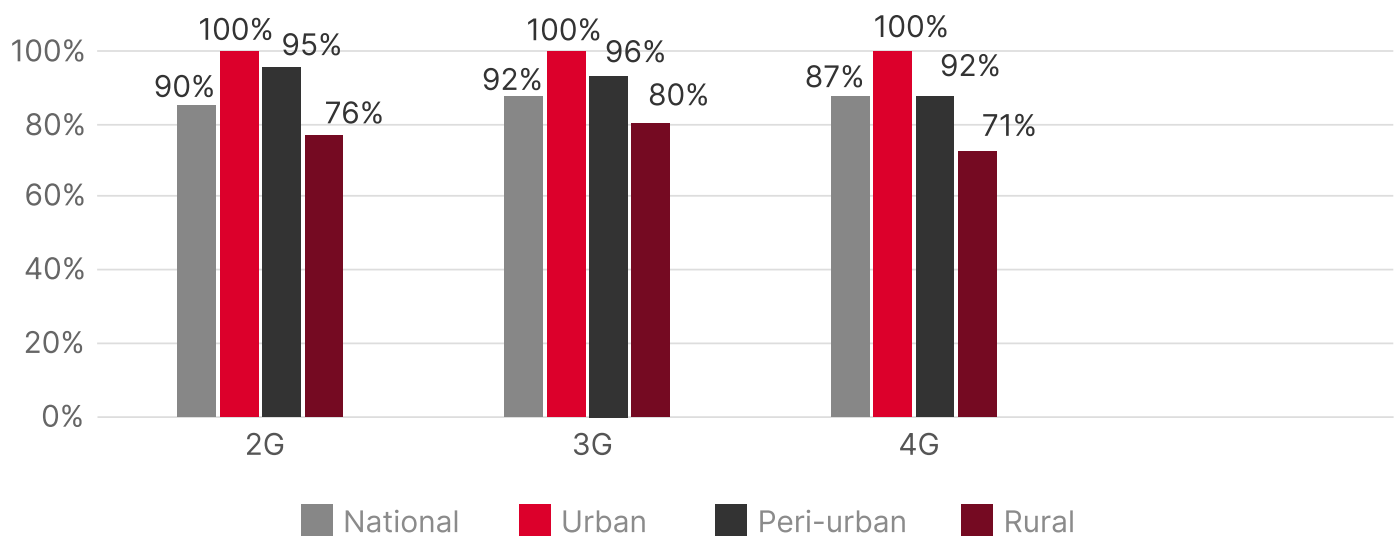
2B.3 Mobile coverage and the internet usage gap

The GSMA Mobile Connectivity Index 2025 measures how well countries enable mobile internet connection and use. Malawi has an overall index score of 40 points, an infrastructure score of 58 points, and a network coverage score of 79 (on a scale of 100, which represents the highest score), all are amongst the top 25 countries in Africa.³⁷

MACRA reported in 2025 (Quarter 1) that mobile operators together provide 90.20% 2G population, 89.41% 3G population, and 88.99% 4G population.³⁸

GSMA Intelligence analysis for this report finds that Malawi's 4G total population coverage is 87%, similar to MACRA information, with rural coverage at 71% population. This is behind other countries where GSMA has conducted similar analysis in 2025: Senegal 97% total population and 92% rural population, and Uganda 98% total population and 89% rural population.³⁹ Investment is being made by mobile operators with 5G coverage covering the major cities (for example, Airtel deployed 95 5G sites as of March 2026), however there is more to do on 5G coverage in other areas of the country.⁴⁰

Figure 13
Mobile network population coverage by technology and degree of urbanisation.



Source: GSMA Intelligence. Urban and rural classification are based on Global Human Settlement Layer (GHSL) "Degree of Urbanisation Classifications"

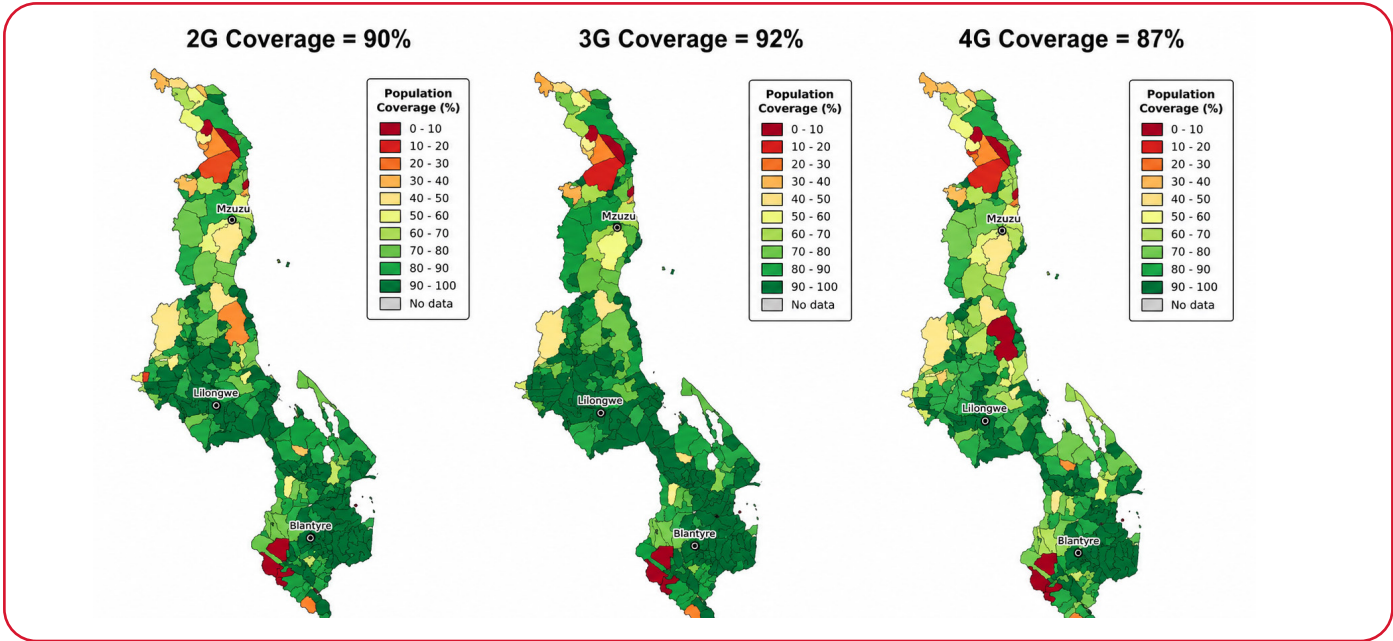
37 GSMA Mobile Connectivity Index 2025.

38 MACRA Telecoms Update - Quarter 1 2025.

39 GSMA Intelligence - 4G Coverage and Investment analysis for: Senegal (October 2025) and Uganda (October 2025).

40 GSMA Intelligence - 4G Coverage and Investment in Malawi, February 2026. Mobile operator information provided for this report, March 2026.

Figure 14
Population coverage maps by 2G, 3G, and 4G mobile technology.

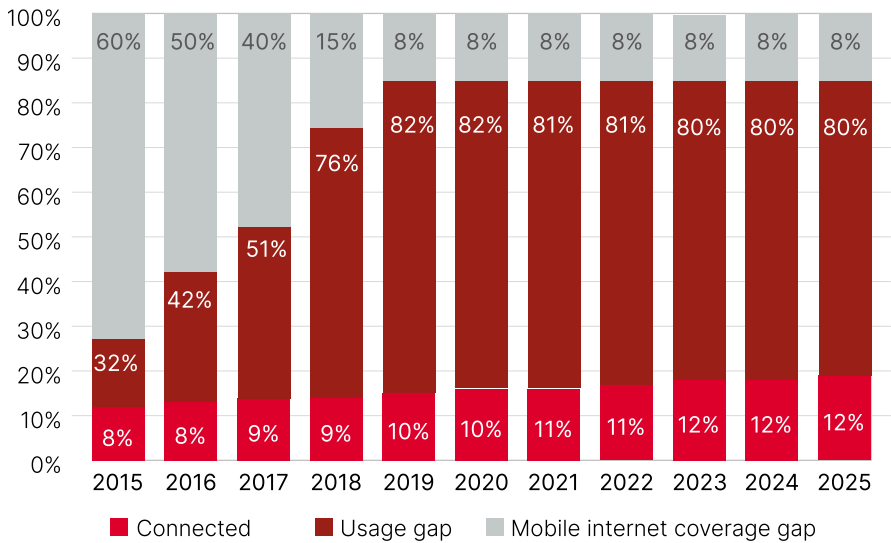


Source: GSMA Intelligence. Urban and rural classification are based on Global Human Settlement Layer (GHSL) “Degree of Urbanisation Classifications”

The GSMA undertakes “usage gap” analysis⁴¹ by comparing the number of unique mobile internet (broadband) users with the size of the population covered by the mobile broadband networks. This is a measure of the number of individuals covered by mobile networks, but who do not use it.

Whilst there is good 3G, 4G and increasing 5G mobile network coverage in Malawi, the usage gap is around 80%, meaning that around 18 million people are not using mobile internet services when mobile network coverage is available to them. This usage gap is larger than Eastern Africa and Africa as a whole (see Figures 15 and 16).

Figure 15
Mobile internet usage gap in Malawi 2015 - 2025.⁴²



41 GSMA State of Mobile Internet Connectivity Report 2025.
 42 “Connected” refers to unique mobile internet users as a % of population; “Usage gap” refers to populations that live within the footprint of a mobile broadband network but who are not using mobile internet; “Coverage gap” refers to populations that do not live within the footprint of a mobile broadband network (3G or above).

Figure 16
Mobile internet usage gap in Malawi compared to other African countries (2025).

	Malawi	Eastern Africa	Africa
Usage gap	80%	73%	64%

Source: Calculated from GSMA Intelligence data and GSMA Mobile Economy Africa 2025

2B.4 National and international fibre transmission

Complementing Malawi’s mobile network infrastructure, the national and cross-border fibre transmission connectivity are critical for Malawi’s digitalisation and connectivity with Africa and

globally as a geographically landlocked country. Malawi’s fibre transmission infrastructure has been improved with private public partnerships and funding, in recent years, including:

Figure 17
National and cross-border international fibre routes⁴³

Fibre route type	Description
National fibre backbone	Government national fibre-optic backbone of 1,300 kilometres, connecting major cities and border points deployed by Huawei in 2018.
National fibre backbone expansion	Additional 3,600 kilometres of the government’s national fibre backbone deployed by Huawei during 2020 - 2025, and financed by China Exim Bank.
ESCOM	National power transmission and distribution company provides wholesale fibre transmission capacity within Malawi and cross-border transit routes.
Airtel Malawi	2,000 kilometres of fibre deployed, supplemented by ESCOM fibre wholesaled for resilience and redundancy.
MTL	MTL provides a national fibre backbone, which is also used to support wholesale ISP services, under CarrierNET brand, and enterprise connectivity.
Cross-border: Tanzania	ESCOM and MNOs fibre backbone providing transit to Tanzania’s National Broadband Backbone from 2023.
Cross-border: Zambia	711 kilometre fibre route provided by Liquid cross-border to Zambia and then through to South Africa (including data centres) from 2023.
Cross-border: Mozambique	ESCOM and MNOs fibre backbone transit to Mozambique and undersea cables SEACOM and EASSy.

Under the Malawi Digital Acceleration Program 2025 - 2030, the Ministry of Information and Digitalization through the Public Private Partnership Commission with funding from the World Bank, is to deploy an additional

2,000 kilometre fibre-optic backbone by 2030, which will improve connectivity across 2,500 government institutions, including 2,000 schools and 500 government offices.⁴⁴

43 Authors research - Ministry of Information and Digitalisation website, Malawi Public Private Commission website, Airtel Malawi website, MTL website, Liquid Intelligence Technologies website.

44 Malawi Public Private Commission article - \$150 Million Digital Malawi Acceleration Project to expand internet access and digital services, December 2024.

Continuing this investment in domestic fibre and cross-border transmission coverage, capacity and redundancy, with an enabling regulatory environment, are critical to meet Malawi's digital infrastructure requirements, including for mobile

telecoms and mobile money services, data centres, digital public infrastructure, and the digital demands for consumers and essential services and strategic economic sectors.

2B.5 Data centres

Data centres are a critical part of the country's digital infrastructure. Malawi opened its new primary national data centre in 2025, complementing other data centres operating

in the country (see Figure 18). Continuing investment in data centre capacity is an urgent requirement for Malawi's digital transformation.

Figure 18
Data centres in Malawi.

Government national data centres	Tier III primary data centre, funded by the World Bank, opened last year in Lilongwe. Hosts all government services and systems. Tier II (now secondary) data centre located in Blantyre. Provides redundancy and back up for government services and systems.
Telecoms operator data centres	Airtel and TNM both have Tier II data centres located in Lilongwe and Blantyre for telecoms and mobile money operations and providing hosting and cloud for enterprise services.
Other private data centres	MTL also operates Tier II in Blantyre for enterprise and government services. Skyband, SimbaNET, and Globe operate Tier II data centres hosting enterprise and cloud services.

2C Mobile money sector

Mobile money services, provided by Airtel Money and TNM Mpamba, are making a significant contribution to the Ministry of Finance National Financial Services Development Strategy 2022-2026 and the RBM National Strategy for Financial Inclusion (III) 2024 - 2028 objectives, contributing 94% of national payment system transaction volumes in 2025 (Quarter 2).⁴⁵ The GSMA estimates that mobile money services contributed between 2% to 4% of GDP in 2023.⁴⁶

2C.1 Mobile money subscribers

The RBM reported that there were over **20 million mobile money subscribers in 2025 (Quarter 2)**, growing from 7 million in 2020 (Quarter 2). The RBM highlights that female financial inclusion remains a priority, with a gender gap of 55.3% male and 44.7% female.

45 RBM National Payment Systems Report Q2 2025.
46 GSMA Mobile Money State of Industry Report 2025.

2C.2 Mobile money usage

Mobile money transactions totalled 576 million volume and MWK 8.6 trillion value in 2025 (Quarter 2), increasing significantly from 91.6 million volume and MWK 548 billion value in 2020 (Quarter 2). However, the RBM reported that in Quarter 2 2025 usage has declined in recent quarters with the 90-day activity rate from 59% to 52% and 30-day activity rate from 47% to 40% since Quarter 4 2024 respectively.

The RBM report in 2025 (Quarter 2) that mobile money services usage is primarily mobile telecoms airtime top-ups (44%) and cash in/out transactions (33%). The RBM states that a key priority is to work with the sector to increase usage of digital financial payments and services for person to person (9%) and merchant (7%) payments.

2C.3 Mobile money agents

Mobile money agents’ distribution continues to grow in Malawi, with the RBM reporting 656,276 registered agents (412,862 90-day active agents) growing from 69,055 in 2020 (Quarter 2), contributing to digital financial services and inclusion, and creating business and job creation.

However, the RBM also reports that there remains the need to increase mobile money agent distribution in rural areas, which contribute 28% of registered agents in 2025 (Quarter 2).⁴⁷

Figure 19
Summary of Malawi mobile money indicators 2020 - 2025.⁴⁸

	2020 (Quarter 2)	2025 (Quarter 2)
Subscribers	7 million	20 million
Usage – volume	91.6 million	576 million
Usage – value	MWK 548 billion	MWK 8.6 trillion
Agents	69,055	656,756

A key contributor to Malawi’s mobile money sector progress is the regulatory framework. This is recognised by the high 94 score in the GSMA Mobile Money Regulatory Index.⁴⁹

Sections 3 and 4 of this report identifies some challenges and provides policy recommendations to continue this progress and contribution to Malawi 2063, digital and financial inclusion objectives.

47 RBM National Payment Systems Reports - Q2 2020, Q4 2024, and Q2 2025.
48 RBM National Payment System reports Q2 2020 and Q2 2025.
49 GSMA Mobile Money State of Industry Report 2025.

2D Malawi digital economy case studies

As described in this Section 2, **Malawi through its digital policies and strategies has made some progress**, which provide a foundation, towards having ICT infrastructure with cross-country coverage of reliable and affordable services fostering technological adoption and digital access as required in the Malawi 2063 vision.

Figure 20 provides some examples of this progress, using the “components” of the Malawi Digital Acceleration Project as a framework. These case studies illustrate the potential for what digitalisation of economic sectors and public services can contribute to Malawi.

Figure 20
Malawi digital economy case studies.

Component	Case studies
1. Affordable Broadband and Secure Data.	87% population 4G national mobile broadband network infrastructure today, however GSMA analysis is that there are 2.8 million unique mobile internet subscribers and an 80% Usage Gap (see Sections 3 and 4 for analysis and recommendations to achieve universal coverage and close the mobile internet usage gap). Government and MACRA partnering with operators, infrastructure providers, and international institutions to deploy fibre national and cross-border infrastructure, data centres, and rural mobile broadband connectivity (see Sections 2A and 2B for more information). MACRA licensed Starlink in 2022 to provide remote area connectivity. Starlink infrastructure has been used by Fast Networks Malawi to provide rural connectivity to 20 rural community WiFi hotspots and 67 schools.⁵⁰
2. Interoperable and Secure Data Platforms.	— Separate digital platforms and portals are operated by a number of MDAs, including: — E-Government Portal - Bomalathu Data Exchange Platform provides information and access to government services, currently health, transport, and finance. It is limited compared to government portals in Africa, and expanding it is a key activity of the Malawi Digital Acceleration Project.⁵¹ — Passports and visas - the Department of Immigration and Citizenship services portal for e-passports, visas & permits helping to reduce backlog and timelines for applications, using digital payments.⁵² — National ID - Malawi has a comprehensive National ID programme with 12.5 million registered, following increased investment (MWK 4.2 billion in 2021 to MWK 65 billion in 2025).⁵³ The National Registration Bureau is transforming this into a full Digital ID programme in 2026, which will be integrated with Digital ID wallet to public and private institutions and services.⁵⁴

50 Broadcast Media Africa article - Malawi Launches Connectivity Initiative Supported By Starlink, December 2025.

51 Bomalathu Data Exchange Platform (accessed January 2026). Malawi Digital Acceleration Project Information Plan, 2024.

52 Malawi Department of Immigration and Citizenship services website (accessed January 2026).

53 UNDP Malawi Digital Readiness Assessment 2024/25, Pages 32-34.

54 NW Nation article - NRB to roll out digital ID by 2026, May 2025.

	— Trade and customs - the Ministry of Trade and Industry's Malawi National Single Window was launched in May 2025 for trade import and export licensing and approvals, and aims to reduce processing time from 14 days to 72 hours.⁵⁵ — Healthcare - the Ministry of Health's Malawi Healthcare Information System, e-register, and other digital health programmes are being deployed, with a new health digital governance framework launched in 2025 with the aim to improve coordination, efficiency, and delivery of digital healthcare.⁵⁶ — Education and digital skills - MACRA Universal Service Fund's "Connect A School" Phase 1 initiative has provided 75 SMART ICT Laboratories in schools nationwide, benefiting more than 635,000 students and 1.25 million community members. A further 120 ICT laboratories are to be implemented in Phase 2 which commenced in 2025.⁵⁷ — Education and digital skills - University of Malawi (UNIMA) and the Lilongwe University of Agriculture and Natural Resources (LUANAR), have introduced e-campus platforms for some academic programmes to enhance access to higher education. These platforms allow students to attend lectures virtually, submit assignments online, and access learning materials remotely, thereby promoting flexibility and continuity in education.⁵⁸ — Education and digital skills - Airtel through its partnership with UNICEF and the Ministry of Education had connected 27 government schools and provided ICT capacity building for teachers and students benefiting 18,800 students as of December 2024. Airtel Foundation is sponsoring 25 undergraduate students from low-income households to study science, technology, engineering, and mathematics (STEM) courses at the Malawi University of Science and Technology.⁵⁹ — Social welfare payments - the Social Support for Resilient Livelihoods Project (SSRLP) is a government project in partnership with the World Bank and the Malawi Social Protection Multi Donor Trust Fund to strengthen social protection delivery systems. A key innovation is the introduction of digital payments to transfer benefits which increases efficiency, reduces risks associated with manual cash handling, and expands financial inclusion. To date, 756,348 out of 820,000 households in 26 districts are receiving benefits through mobile money, banks, and agents.⁶⁰ — Procurement - e-Government Procurement Portal is being implemented by the Public Procurement and Disposal of Public Assets Authority, with registration phase taking place with a view to a second phase to commence e-Tendering. In January 2026, 131 procuring and disposing entities and 2,378 suppliers (including 60 MSMEs) were registered.⁶¹ — Taxation - Malawi Revenue Authority (MRA) is prioritizing use of digital to enhance tax collection, compliance, and transparency, including the Taxpayer Portal, e-Tariff system, and Integrated Tax Administration System. This contributed to a 40% year on year increase in tax collection during 2024/25. The MRA is launching the new Electronic Invoicing System in 2026.⁶² The Malawi Digital Acceleration Plan (and other projects) identifies and prioritises the requirement for Malawi to build on these initiatives by implementing a central, coordinated, and interoperable digital public services (see Annexure 1, Figure 2).
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55 Malawi Ministry of Trade and Industry National Single Window (accessed January 2026). Leyman Publications article - Malawi launches digital licensing platform to cut trade costs and time, May 2025.

56 Malawi Digital Health Governance Framework, 2025.

57 Tech News Africa article - Malawi Expands Digital Education with "Connect-A-School" Initiative, September 2025. MACRA Universal Service Fund website - Connect A School (accessed January 2026).

58 Consultation interview for this report.

59 Malawi24 article - Airtel Africa, UNICEF celebrate milestone in transforming education across Africa, November 2024. Malawi24 article - Airtel bets on Malawi's digital future with new STEM scholarships, January 2026.

60 World Bank procurement portal - procurement number 0002019986, December 2025.

61 Public Procurement and Disposal of Public Assets Authority article - From paper to MANEPS, January 2025.

62 Malawi Revenue Authority Annual Report 2024 - 2025, November 2025.

3. High Impact Digital Services and Productive Digital Usage.	Digital Public Infrastructure - the Ministry of Information and Digitalisation is consulting a national digital transformation strategy (see Annexure 1 for further information). Digital financial services - the adoption of digital financial services and payments enabled by the RBM's NATSWITCH which facilitates electronic payments between ATMs, points of sale devices, and mobile money services is increasing. The RBM reported in 2025 (Quarter 2) that volume and value of digital finance transactions increased by 33% and 79% respectively year on year, with mobile money services making the largest contribution.⁶³ Digital agriculture - an International Fund for Agricultural Development (IFAD) report conducted in 2023/24 identified over 29 agritech solutions in the market, 11 of which were Malawi-owned and developed. This included the Department of Agriculture Extension Services (DAES) within the Malawi Ministry of Agriculture which provides a smart messaging service (SMS)-based weather alerts and agricultural updates to farmers.⁶⁴ Digital manufacturing and mining - IoT solutions are starting to be used by companies in Malawi. For example, Illovo Sugar Malawi uses AI, IoT sensors and energy-monitoring systems for mill production and safety.⁶⁵ Artificial Intelligence - TNM plans to establish artificial intelligence (AI) laboratories from 2026 to develop relevant digital services tailored to Malawi's needs, empowering locals to create AI-driven solutions.⁶⁶ The Ministry of Information and Digitalisation has commenced a consultation on National AI Strategy this year (see Annexure 1 for further information). Digital commerce - supported by mobile money and digital financial services, digital commerce is growing mainly in Lilongwe and Blantyre. This includes online groceries such as Sana; online marketplaces including Lizulu and Facebook Marketplace; car sharing transport apps, for example Ulendowathu; and restaurant food delivery such as Madyo. Digital technology and entrepreneur hubs are emerging - For example - M-Hub which started in 2014 has developed over 40 technology systems, supported over 180 start-ups through incubation, provided over 581,000 people with entrepreneurship training, and provided youth digital skills training for more than 863,000 people.⁶⁷
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63 RBM National Payment System Report, Quarter 2, 2025.

64 International Fund for Agricultural Development report - Conducting a Market Scan of Digital Agriculture Solutions - A Malawi Case Study, July 2023.

65 Illovo Sugar Malawi Annual Report 2024 and LinkedIn article 2025.

66 Business Malawi article - TNM Celebrates 30 Years of Empowering Malawi's Economy: Powering Growth and Prosperity for Businesses and Investors, November 2025.

67 M-hub website (accessed January 2026).

3. Policy challenges and recommendations



3. Policy challenges and recommendations

Malawi is making progress with its digital transformation, and it is welcome that MACRA has commenced a Digital Laws Taskforce to review the Communications Act 2016 and applicable regulatory framework, however international assessments conducted by World Bank, UNDP, and ITU (as summarised in Section 2A2) and the GSMA Digital Africa Index (see Section 3A below) are consistent that there are a number of challenges to address and actions to be taken.

Section 3 of this report identifies 5 important policy recommendations (and measures) to address key challenges and then quantifies the impact of the recommendations⁶⁸, contributing to Malawi 2063, the Government (DPP) Manifesto 2025 - 2030 and other digital objectives, and the Digital Laws Taskforce review:

- Prioritise telecom infrastructure as critical national infrastructure for forex access and sustainable infrastructure investment environment reforms.
- Enable mobile money contribution to financial inclusion.
- Use of digital technologies to increase domestic revenue mobilisation and optimise sector taxation.
- Entry-level smartphone affordability, digital skills & other demand side reforms.
- National Digital Economy Strategy and regulatory modernisation.

In doing so, this report has considered information provided by government, regulators, telecoms operators, industry and other stakeholders; public source reports from national agencies and international organisations; and the GSMA's Digital Africa Index.

3A GSMA Digital Africa Index

The GSMA Digital Africa Index⁶⁹ includes a Digital Nations and Society Index and a Digital Policy and Regulatory Index, and complements other existing GSMA indices (Mobile Connectivity Index⁷⁰ and Mobile Money Regulatory Index⁷¹) in providing a comprehensive assessment of African countries' levels of advancement in integrating digital technologies into society and offering guidance on policy and regulatory interventions required to accelerate digital growth.

The GSMA Digital Nations and Society Index 2025 scored Malawi at 36 out of 100 with a positive digital government pillar score of 62 (driven primarily by digital ID, digital health,

and digital payments although noting govtech and e-government as areas for improvement), followed by a digital consumer pillar score of 33 (with good mobile telecoms and mobile money penetration scores, however mobile internet penetration, mobile data usage and smartphone penetration have low scores), and a low score for digital business pillar of 14 (digital trade has a good score, however there are low scores for mobile commerce, AI and innovation, tech start-ups, and IOT) (please see Annexure 3 for Malawi index scores). Malawi is scored behind countries such as South Africa (65), Kenya (59), Ghana (50), Rwanda (49), and Nigeria (45), and Tanzania (38).

68 See Sections 3B1, 3C1, 3D1, 3E1, and 3F1 (challenges); 3B2, 3C2, 3D2, 3E2, and 3F2 (recommendations)); and 3B3, 3C3, 3D3, 3E3, and consolidated in Section 4 (impact).

69 GSMA Digital Africa Index data, report, and methodology.

70 Malawi has 40 out of 100 GSMA Mobile Connectivity Index 2025 overall score, which is behind South Africa (72), Ghana (58), Kenya (57), Nigeria (53), Rwanda (53), and Tanzania (47). The index finds good infrastructure and network coverage in Malawi; however Malawi needs to address demand-side policies to increase adoption and usage.

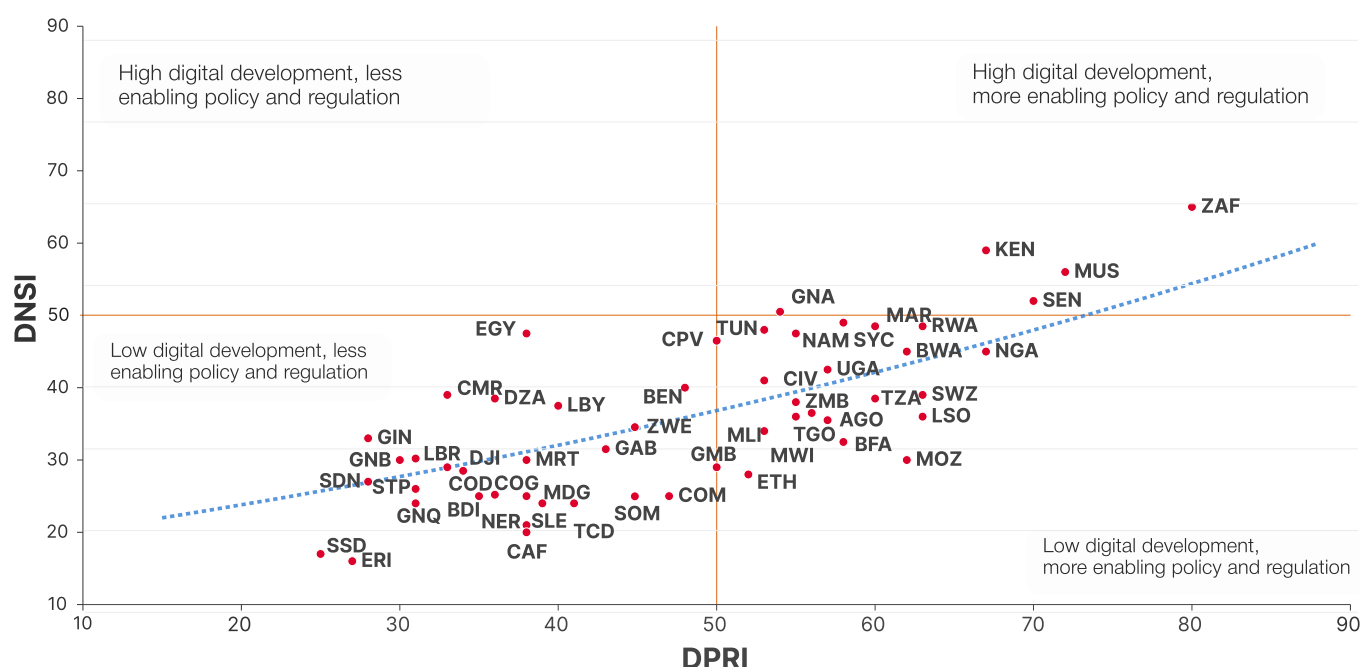
71 Malawi has 94 out of 100 GSMA Mobile Money Regulatory Index score, which is one of the highest in Africa.

The **GSMA Digital Policy and Regulatory Index 2025 ranked Malawi with an overall score of 55** out of 100, which is amongst the good performers (e.g. Ghana 54) but behind leading country scores such South Africa (80), Kenya (65), Nigeria (67), Rwanda (61), and Tanzania (60). This recognises Malawi's good progress with the introduction of public policies focussed on digital skills and inclusion and recent data protection, cyber security, consumer protection legislation and policies. **However, the Index identifies areas for Malawi policy reforms in licensing and spectrum (notably license duration and spectrum roadmap), network regulation (notably enabling network coverage and Quality of Service**

regulations), and taxation (please see Annexure 3 for Malawi Digital Africa Index scores).

The GSMA Digital Africa Index 2025 indicates that countries with higher Digital Policy and Regulatory Index have higher Digital Nations and Society Index scores, and since the first DAI in 2025 countries have improved (or lowered) their respective scores through policy decisions taken. Malawi is currently in the bottom right quadrant of “low digital development, with a more enabling policy and regulation” (Figure 21), albeit behind other countries due to challenges identified. This is consistent with other international institution assessments.

Figure 21
GSMA - Digital Nations and Society Index (DNSI) and Digital Policy and Regulatory Index (DPRI) scores in Africa, 2025.



Source: GSMA Digital Africa Index 2025

Building on the progress to date and addressing the challenges identified in the GSMA Digital Africa Index 2025 (and the research conducted for this report), the policy recommendations made in this report would, if adopted, improve Malawi's GSMA DPRI 2025 score from 55 to 74 out of 100, which would put Malawi amongst the highest DPRI scores on the continent.

This will contribute to an improved DNSI score from 36 to 54 by 2030, with increased benefits of digitalisation for consumers, economy and business, and government and public services, and towards Malawi 2063 and government objectives.⁷²

⁷² GSMA Intelligence analysis of the potential impact of the policy recommendations on Malawi scores in GSMA Digital Policy and Regulatory Index 2025 and GSMA Digital Nations and Society Index by 2030, provided in April 2026.

3B. Prioritise telecom infrastructure as critical national infrastructure for forex and sustainable infrastructure investment environment reforms

3B.1 Context and challenges

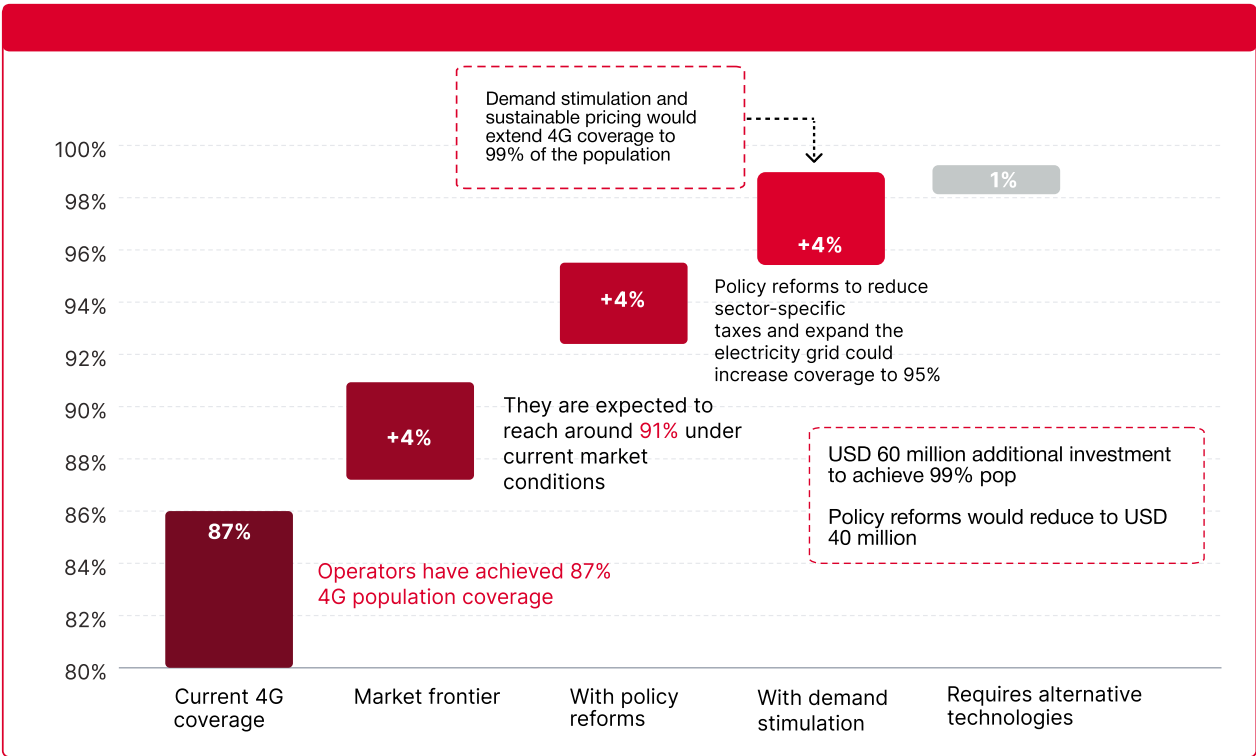
As recognised by the Malawi 2063 and digital programmes, mobile broadband network infrastructure is critical for digitalisation. The Malawi Digital Acceleration Project sets a target of achieving universal mobile broadband coverage and other programmes set targets to increase mobile internet penetration and mobile phone usage (see Section 2A2).

GSMA Intelligence analysis for this report finds that Malawi’s 4G total population coverage is 87% with rural coverage at 71% population (Figure 13). Investment is being made by mobile operators with 5G coverage covering the major cities (For example, Airtel deployed 95 5G sites as of March 2026), however there is more to do on 5G coverage in other areas of the country.⁷³

GSMA Intelligence analysis estimates that expanding 4G coverage from the current 87% total population and 71% rural population to 99% total population (remaining 1% to be addressed by alternative technologies) will require at least USD 60 million (~ MWK 103 billion) additional investment.

The GSMA finds that this additional investment could be lowered to USD 40 million (~ MWK 69 billion) if the following infrastructure challenges outlined below in this Section 3B1 are addressed through policy recommendations (including telecoms infrastructure energy supply (see Section 3B1.3) and sector-specific taxation (see Section 3D2)) to provide a sustainable investment environment. Figure 22 provides a summary of the GSMA analysis and findings.

Figure 22
GSMA analysis - expanding 4G coverage - summary of findings.



Source: GSMA Intelligence

73 GSMA Intelligence - 4G Coverage and Investment in Malawi, February 2026. Mobile operator information provided for this report, March 2026.

The following key structural challenges are described below (Section 3B1), together with policy recommendations (Section 3B2) and the consolidated impact of these measures (Section 3B3), to support a sustainable infrastructure investment environment for Malawi's digital objectives:

- Urgent need for forex access to invest telecoms infrastructure.
- Licensing duration, spectrum roadmap, and fibre deployment.
- Energy supply.
- Infrastructure damage, vandalism, and theft.
- Quality of Service.
- Low-Earth Orbit and Direct-2-Device technology regulation.

3B.1.1 Urgent need for forex access to invest telecoms infrastructure

Malawi's recent foreign exchange shortages have led the Government and the RBM to introduce measures that prioritise access to forex for selected "essential and strategic" sectors and imports, notably fuel and other energy products, fertiliser and agricultural inputs, medicines and other critical goods, as a deliberate policy intervention to stabilise the economy and safeguard growth and welfare. These sectors are rightly prioritised because they are fundamental to food security, economic production, and the delivery of essential public services.

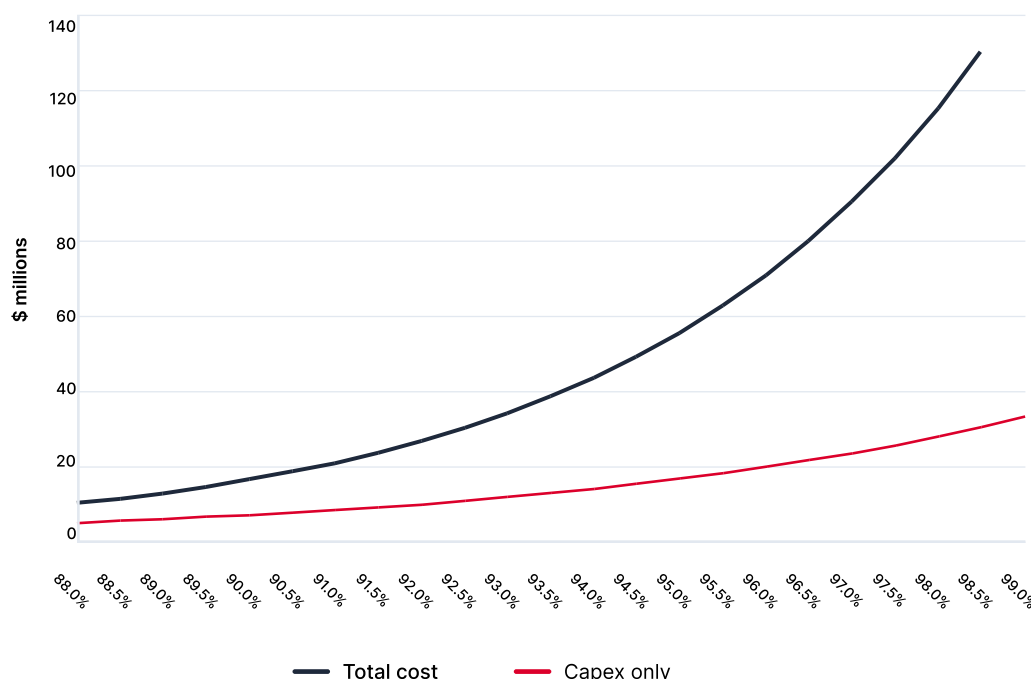
At the same time, **each of these sectors increasingly depends on digital connectivity and services – from digitally enabled logistics and precision agriculture to digital payments, supply chain management, e-health and digital public services – in order to raise productivity, reduce costs, and contribute more strongly to GDP and export performance.**

However mobile operators are currently not included in the RBM Essential Services and Strategic Sectors Framework ("Framework"), despite telecoms and digital infrastructure being recognised by Malawi 2063 and the Government (DPP) Manifesto 2025-2030 as critical national infrastructure underpinning economic development through increased digital adoption and value add in essential services and strategic sectors.

The mobile sector is capital intensive and requires continued investment to upgrade and modernise infrastructure to provide coverage and capacity for increasing voice and data services demand and to utilise global standards and technologies (e.g. 5G, refarmed spectrum for 4G, and LEO satellite and D2D technologies). **Whilst sector revenues are largely earned in Malawi Kwacha, the majority of the required equipment to deploy, operate, and upgrade mobile and fixed telecommunications networks** (e.g. mobile towers, fibre-optic cables, core network routers, and software licenses) **are provided and imported by global companies and paid in foreign currency. Restrictions on forex access are significantly impacting operators' ability to pay such companies and impacting quality of services and network infrastructure operations.**

As part of the GSMA Intelligence coverage analysis described above, the GSMA estimates that the total cost (capex plus 8 years of discounted Opex) is almost USD 130 million (~ MWK 233 billion) on a one operator basis to reach 99% 4G population coverage (Figure 23).

Figure 23
GSMA analysis - total cost of new site deployment to achieve 99% coverage on an operator basis.



Source: GSMA Intelligence

The mobile sector therefore faces a structural mismatch between local-currency income and foreign-currency investment and operating needs. Without prioritised forex access for telecoms and digital infrastructure, this scale of capital investment cannot be mobilised at the pace required, and operators will struggle to import, deploy and maintain the network equipment needed to support the Government (DPP)

Manifesto 2025 -2030 target for 80% affordable broadband coverage, Malawi 2063, and other digital objectives.

Including the telecom sector within the Government's and RBM's priority framework for forex access would not be a narrow, sector-specific concession. It would amplify the impact of forex already allocated to other priority sectors.

3B.1.2 Licensing duration, spectrum roadmap, and fibre deployment

The GSMA DPRI 2025 spectrum score for Malawi is 53, which is behind leading Africa countries such as Tanzania (100), Nigeria (91), Namibia (81) and Uganda (80).⁷⁴

The GSMA DPRI 2025 provides good licensing, spectrum policy, and fibre regulation scores, including unified licenses, technology neutrality, spectrum costs, and mobile backhaul for Malawi.

However, the requirement for MACRA to extend the current 10-year license duration periods, and to consult and publish a longer term and forward-looking spectrum roadmap are identified as key areas to address and would significantly improve Malawi's DPRI spectrum and overall scores (both spectrum roadmap and license durations have zero scores in the GSMA DPRI 2025 - see Section 3A and Annexure 3).

MACRA currently grants 10-year license duration periods, which is shorter than ATU, ITU, and World Bank guidance that telecommunications licenses and spectrum assignments should have longer duration periods (together with related service rights and obligations). 20 years and renewable license duration periods are recommended by the ATU. Longer duration periods provide operators with regulatory certainty for the significant capital infrastructure investment required for 4G and 5G (and future technology) network investment, for financial and operational planning, and to recover investment costs.⁷⁵

Whilst MACRA publishes spectrum frequency allocation tables most recently in 2025, it has not published a longer term and forward-looking spectrum roadmap. Furthermore, MACRA has not completed assignment of 700 MHz and 800 MHz for IMT mobile broadband and 2.6 GHz and 3.5 GHz spectrum for IMT mobile broadband (including 5G).

A spectrum roadmap with 3-to-5-year horizon, consulted fully with industry and other stakeholders, will help provide harmonised and

clear spectrum bands planning (including mobile backhaul), efficient regulatory and spectrum assignment and refarming processes, and achieve Malawi's digital infrastructure requirements. These roadmaps are recognised as international best practice because they give investors and vendors transparency on when key sub-1 GHz "coverage" bands and mid-band "capacity" spectrum (such as 3.5 GHz) will become available, helping align network roll-out, quality of service, financing and policy objectives.

For example, Airtel reports the recent temporary assignment of 800 MHz and 2.6 GHz spectrum has resulted in an immediate positive impact on Quality of Services (QoS) as shown through recent 4G QoS improvements. 4G throughput improved up to 18% and network availability improved from 99.58% to 99.61% in recent drive tests.⁷⁶

Figure 24 provides GSMA spectrum policy recommendations, which could be instructive for MACRA when developing spectrum policy and roadmaps.

Figure 24
GSMA Spectrum Policy Recommendations.⁷⁷

Full-power, licensed spectrum is vital to the success of mobile broadband networks.

Mobile broadband needs spectrum across low, mid- and high bands to deliver capacity in all areas and support the full range of use cases. All three ranges have important roles to play.

- Low-band spectrum (below 1 GHz) is needed to drive digital equality, provide capacity in wider and rural areas, and for deep indoor coverage.
- Increased low-band capacity creates greater equality between urban and rural mobile broadband connectivity and supports addressing the digital divide.
- Mid-bands (1-7 GHz) provide city-wide 5G capacity. They play a core role in delivering enhanced mobile broadband and applications which impact how we manufacture goods, deliver education, and build smart cities. To date, mid-band spectrum has been the most used to launch 5G networks around the globe.
- High-bands or mmWave (above 24 GHz) deliver the fastest broadband speeds and lowest latencies. They deliver the highest performance for 5G but only cover shorter distances so are used for high-capacity hotspots.

⁷⁵ ATU-R Recommendation relating to spectrum licensing for mobile/broadband systems, March 2021, Page 36. ITU and World Bank Digital Regulation Platform, Spectrum management: Key applications and regulatory considerations driving the future use of spectrum, 25 April 2025.

⁷⁶ Airtel information provided for this report, March 2026.

⁷⁷ 5G Spectrum GSMA Public Policy Position 2025.

Mobile broadband needs significant harmonised spectrum and clearing prime bands should be prioritised to meet market demand. Regulators should aim to:

- Award 100 MHz of contiguous mid-band spectrum per operator for 5G launch
- Increase low-band spectrum capacity by assigning all available bands (including 600 MHz)
- Make 2 GHz of mid-band spectrum available per market by 2030 (e.g. through 3.5 GHz and 6 GHz assignments)
- Consult with industry over the need for mmWave to cover busy hotspots, allowing for an initial assignment of 800 MHz per operator and potentially making 5 GHz available per market as demand grows.

High spectrum prices should be avoided as this is linked to slower broadband speeds and lower coverage. Excessive reserve prices and poor auction design, high annual fees, or limited spectrum supply (including through set-asides) can all lead to high spectrum costs. Increased network investment can also be supported through coverage and QoS commitments in exchange for cash payments.

Spectrum license commitments and conditions must be related to achievable targets, deducted from reserve prices, and used to benefit broadband connectivity. Arbitrary targets can create unnecessary high costs and impact network investments.

Spectrum policy measures should be adopted to encourage long-term investment in networks. Indefinite or long-term licenses, with a presumption of renewal, should be used for spectrum assignment. Further certainty can be provided through a long-term, technology-neutral spectrum roadmap.

Spectrum for private and local networks can be made available through public mobile networks or through network slicing or sub-leasing of national licenses. Setting spectrum aside for private networks in priority bands could jeopardise the success of public services and has no positive impact on enterprise digitalisation.

Voluntary spectrum sharing and sub-leasing between operators does not reduce the overall amount of spectrum required in any market. However, allowing spectrum sharing between operators may support efficient spectrum use, lower network costs and optimise connectivity.

Regulators should carefully consider mobile broadband backhaul needs, including making additional bands available and supporting wider bandwidths in existing bands. Measures should also be taken to ensure mobile backhaul licenses are affordable and designed effectively.

WRC harmonisation helps the evolution of mobile. Governments and regulators should adopt internationally harmonised bands in their national plans to support affordability through economies of scale. Further harmonisation of mobile spectrum at future WRCs should be sought.

Fibre regulation is rated 100/ 100 in the GSMA DPRI 2025 and progress has been made in the deployment of domestic fibre and cross-border transmission as described in Section 2B4 above. Continuing this regulatory approach and working to address barriers to investment and operations (for example, prioritising forex

access for telecoms infrastructure as described in Section 3B1.1, and critical national infrastructure legislation and its implementation to address increasing damage to fibre infrastructure as described in Section 3B1.4) are critical to Malawi's digital objectives.

3B.1.3 Energy supply

Energy supply, as recognised by the government and international institutional partners, is a key priority for the country as a whole and specifically for the telecoms sector and digitalisation.

In 2023, 26% of the Malawi population had access to electricity with 11% connected through the national grid and 15% through off-grid solutions. Around 57% of urban households have electricity through the national grid, compared to 4% of rural households. In contrast, 16% of rural households rely on off-grid.⁷⁸

Malawi is working with international partners to accelerate energy supply, notably the Mission300 National Energy Compact which sets targets including 70% population energy access (an additional 1.15 million on-grid connections and 1.55 million off-grid connections), extending the national grid infrastructure (22,417 kilometres of distribution line, 1,940 kilometres of transmission line), increasing 848 megawatts production capacity, and increasing renewable energy from 90% to 96% by 2030 (contributing to an increased reduction from the carbon baseline emissions from 1,000 kTCO₂E to 4,090 kTCO₂E).

National Energy Compact key initiatives include an updated National Electrification Strategy and Integrated Energy Resource Plan (including a utility digital strategy to use of digital technology to protect revenue and reduce costs and to provide ESCOM customer database, GIS mapping, and real-time monitoring system), a dedicated taskforce including key government ministries, regulators and sectors to develop and implement the National Electrification Strategy and Energy Resource Plan, and review of legislation and regulation to enable financing and incentive investment (e.g. review of VAT and import on renewable energy equipment (e.g. solar, batteries)).⁷⁹ Malawi is supported by international funding programmes, notably the USD 300 million World Bank funded Accelerating Sustainable and Clean Energy Access Transformation ("ASCENT") Project.⁸⁰

Implementing these programmes to provide access to reliable energy and affordable supply is a critical for mobile operators and infrastructure companies, mobile money agents, and consumers and households to ensure mobile phones and digital devices have sufficient power. Interviews for this report with mobile operators indicated that energy supply challenges include:

- Limited mobile network on-grid supply (with the cost of providing off-grid energy supply for telecoms infrastructure through diesel generators and the increasing use of solar-hybrid solutions being ~ 3 times the cost of using on-grid).
- Restricted on-grid energy capacity due to loadshedding and outages (daily average of 6-8 hour national grid outages).
- Increasing ESCOM grid energy tariffs (12% increase approved by the Malawi Energy Regulatory Authority (MERA) in January 2026, with further increases announced in April 2026).
- Increasing diesel and petrol prices (41% approved by MERA in January 2026, with further increases announced in April 2026) raising cost of generators used for backup and off-grid energy).⁸¹
- Taxation applied to telecoms-related energy supply and renewable energy equipment.⁸²

This significantly raises operating costs, increases foreign currency needs (for fuel and imported equipment), and undermines the business case for network expansion in low-income and rural communities. Without addressing energy as a structural constraint, it will be difficult for operators to sustain and extend 4G and 5G coverage at the scale – especially in remote and rural areas – required to support Malawi 2063 and the Government's digital objectives.

78 National Energy Compact for Malawi, Section 1.2.

79 National Energy Compact for Malawi, Section 2.2.

80 Republic of Malawi Accelerating Sustainable and Clean Energy Access Transformation Malawi Project, Stakeholder Engagement Document, December 2024.

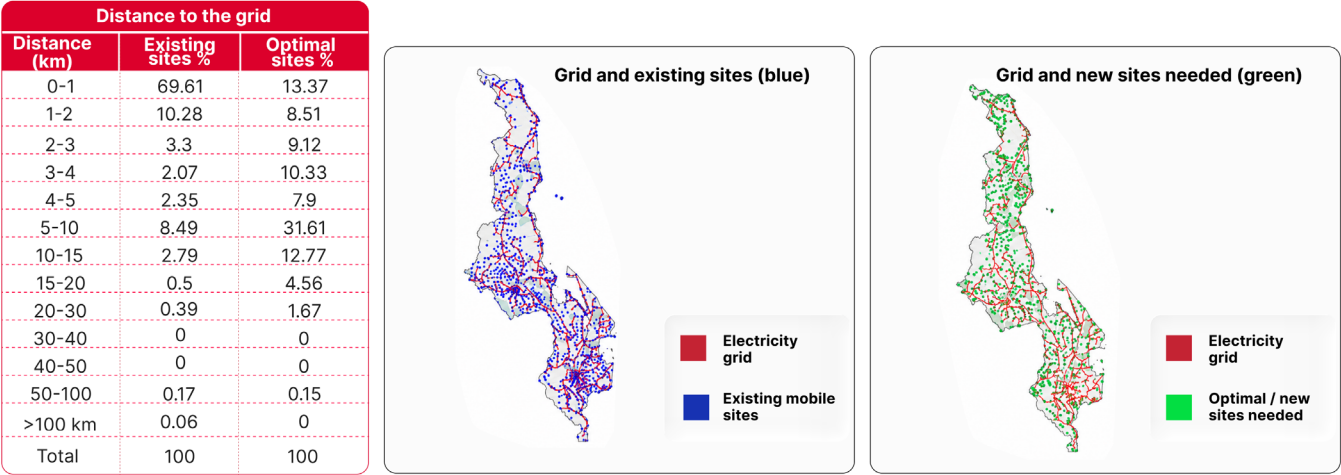
81 Malawi24 article - MERA cites costs, market pressures behind fuel and electricity hike, January 2026. Malawi24 article, MERA hikes pump prices as global fuel costs surge, April 2026.

82 Consultation interviews for this report.

GSMA Intelligence, using geospatial mapping and analysis, for this report finds that 30% of existing 4G mobile network sites are outside of 1 kilometre and more than 87% of new sites

potentially required to expand 4G coverage from 87% to 99% population are outside of 1 kilometre of the national electricity grid (see Figure 25).⁸³

Figure 25
Electricity grid and mobile site locations.

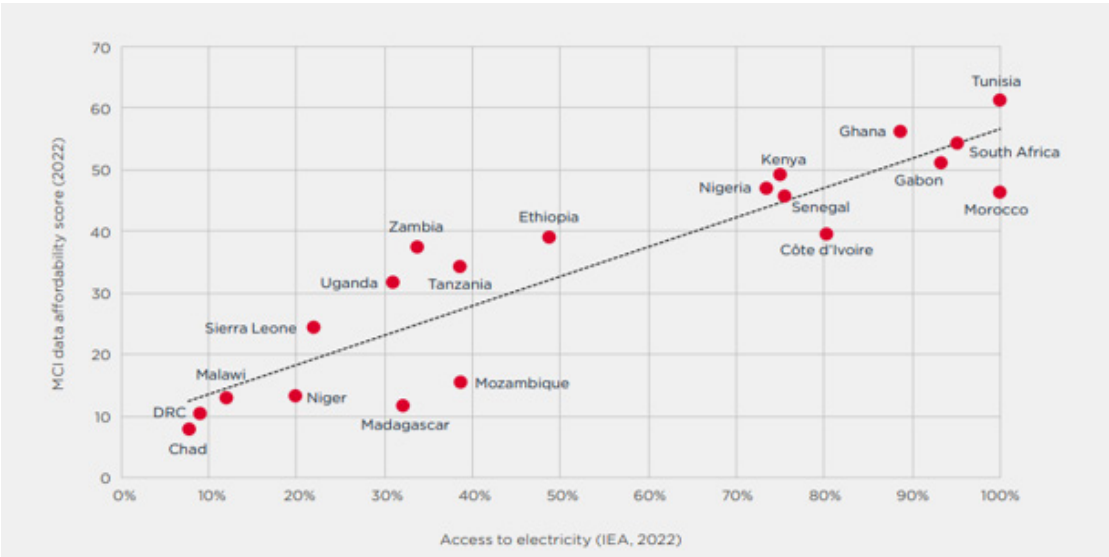


Source: GSMA Intelligence analysis of operator, GHSL, and World Bank data

GSMA Intelligence has also found that energy supply costs impact the affordability of mobile data services. In Malawi and other countries, lower energy supply and higher energy costs

result in higher mobile data prices, conversely where operators have better supply and lower costs this results in improved affordability of mobile telecoms services (Figure 26).

Figure 26
Relationship between energy costs and data affordability in selected African countries.



Source: GSMA⁸⁴

83 GSMA Intelligence - 4G coverage and investment in Malawi, February 2026.
84 GSMA Intelligence - Rural Renewal: Telcos and Sustainable Energy in Africa, December 2024.

To achieve the 80% affordable broadband coverage objective set in the Government (DPP) Manifesto 2025 - 2030, the universal mobile broadband coverage objective set in the Malawi Digital Acceleration Project and to reduce the mobile usage gap will require the Government (including Ministries of Energy, Information and Digitalisation, Finance and Economic Affairs), ESCOM, MERA, MACRA and supporting international organisations to take targeted steps on telecoms energy supply that would reduce costs for operators and support national objectives on energy access and decarbonisation, Priority measures include:

- Integrate telecommunications infrastructure into national energy programmes, including Malawi's Mission 300 Energy National Compact, ASCENT⁸⁵, and related initiatives, recognising telecoms as critical national infrastructure and incorporating demand into electrification and least-cost planning. This includes aligning grid and minigrid rollout plans; streamline permitting for off-grid and hybrid solutions serving telecom sites; and monitor progress on powering priority towers, with clear annual targets and reporting.
- Leverage GSMA geospatial analysis and operator data to support coordinated planning of energy and connectivity infrastructure, prioritising underserved areas and enabling efficient public and private investment. For example, directing Mission 300 and minigrid investments first to the roughly 30% of existing 4G sites that are more than 1 km from the grid, and the over 87% of new sites needed to reach 99% 4G coverage that are also located beyond 1 km of existing grid infrastructure.
- Reduce taxes, import duties and levies (including VAT) on solar-powered telecom equipment and energy systems, including batteries, inverters, and hybrid solutions, and review electricity tariffs applied to telecom operators to improve energy affordability, transition from diesel to cleaner more cost-effective power solutions, and lower their foreign-currency fuel bill.

- Promote the adoption of renewable and distributed energy solutions for telecom sites, including solar-hybrid systems and battery storage, and enable telecom towers to act as anchor loads for mini-grids to support wider rural electrification.
- Facilitate private sector participation and investment by supporting blended finance models and enabling partnerships between mobile network operators, tower companies, energy service companies and mini-grid developers.
- Strengthen coordination between energy and communications authorities to streamline permitting processes and support integrated infrastructure deployment.
- Improve the resilience of telecom energy supply by promoting backup power solutions, prioritising telecom sites in power restoration and reducing reliance on diesel through cleaner alternatives.
- Establish monitoring frameworks and targets to track progress on telecom energy access, including renewable energy use, diesel reduction and rural coverage expansion.

These energy recommendations would lower the cost and improve the reliability of power for mobile networks, enabling operators to invest more sustainably in 4G and 5G rollout and rural coverage. In turn, this would strengthen the digital foundations needed to support productivity and service delivery in priority sectors such as agriculture, health, education, and public administration, and help deliver on Malawi 2063 and digital objectives.

⁸⁵ World Bank supporting Malawi government with the Accelerating Sustainable and Clean Energy Access Transformation ("ASCENT") Project.

3B.1.4 Infrastructure damage, vandalism, and theft

High rates of damage (notably due to new buildings and road construction, and extreme weather events), theft and vandalism of telecoms and energy infrastructure are raising costs and affecting network performance in Malawi. For example:

- Airtel experienced over 200 fibre cuts due to other parties' construction and vandalism during October to December 2025 resulting in MWK 144 million repair costs, Airtel invested MWK 4.4 billion in relocation of fibre due to road construction between April 2025 and January 2026.
- ESCOM reported MWK 3 billion annual cost due to vandalism of energy infrastructure in July 2025.
- MACRA recently operated the Emergency Telecommunications Operations Centre from December 2025 to January 2026 to coordinate telecoms infrastructure restoration following heavy rainfall which had severely affected critical infrastructure (including fibre-optic road corridors, electricity supply disruptions, access roads and bridges damaged impacting ability of operators to repair damaged infrastructure and transport diesel fuel to generator-powered sites), particularly in the Southern, Central, and Northern regions.⁸⁶

International experience shows that CNI designation and coordinated protection frameworks can significantly reduce infrastructure damage and improve service resilience. For example:

- Governments are seeking to address this by designating telecommunications as critical national infrastructure status in applicable legislation and regulations (e.g. Kenya Protection of Critical Infrastructure Bill 2024, with measures including the introduction of telecoms CNI security standards (deployment of human security guards, installation of CCTV and surveillance systems, and installation of proximity alert systems) and increased criminal penalties).⁸⁷
- Law enforcement authorities, regulators, and operators are working to coordinate activities to protect infrastructure security (e.g. South Africa's Communication Risk Information Centre and other programmes established by mobile operators with the police forces).⁸⁸
- Many countries have put in place Emergency Telecoms Operation Control processes, similar to MACRA.⁸⁹

This requires operators to invest in the replacement of affected infrastructure (including additional security) and constrains operators' ability to expand coverage and improve quality of service. Operators are also working closely with MACRA, law enforcement authorities, and other authorities overseeing new buildings and road construction to address these issues and in event of national emergencies including extreme weather.

⁸⁶ Consultation information provided for this report, March 2026. Tech Africa News article - Airtel Malawi faces wave of vandalism, June 2025. Business Malawi article - K3 Billion Lost: Vandalism's Devastating Blow to Malawi's Economy and Business Bottom Line, July 2025. Tech News Africa article - MACRA Confirms Full Recovery of Telecommunications Amid Southern and Central Floods, February 2026.

⁸⁷ Business Day Kenya article - Infrastructure vandals face Sh10m fine, jail term in proposed law, August 2024.

⁸⁸ IT Web article - New entity to fight telecoms theft, vandalism, January 2022.

⁸⁹ ITU National Emergency Telecommunication Plans Best practices and guidelines presentation, December 2024. GSMA National Emergency Telecommunications Plans: Enablers and Safeguards, December 2021. Malawi National Emergency Telecommunications Plan, May 2023.

It is welcomed that there is a draft Malawi critical national infrastructure legislation under consideration.⁹⁰ It is recommended that this Critical National Infrastructure (CNI) legislation and future amendments to the Communications Act should include and implement the following measures:

- Clear designation of telecoms as CNI.
- A National CNI Protection Plan covering security and emergency standards, coordination, reporting and auditing, redundancy and restoration.
- A national CNI oversight and coordination organisation across government, regulatory, and emergency and law enforcement agencies.
- Significant criminal penalties for interference, vandalism and theft.
- A mechanism for compensation payments for damaged CNI.
- The CNI coordination organisation to undertake regular nationwide communication and education campaigns against infrastructure damage, vandalism and theft and in event of national emergencies including extreme weather.

3B.1.5 Quality of Service regulation

Quality of Service (QoS) is a critical priority for Malawi's mobile operators because it directly affects customer experience, churn and revenue, and underpins confidence in digital and mobile money services.

The level of mobile broadband Quality of Service (QoS) was cited as an area for improvement in the UNDP Digital Readiness Assessment 2024/25, with the majority of respondents rating broadband coverage as either average (30%), poor (30%), or very poor (30%).⁹¹

Since this UNDP assessment, it is noted that mobile operators have continued investment and network optimisation to improve QoS. The MACRA Quality of Service 1st Quarter 2025 report recognised this measuring that mobile operators had complied with the key QoS performance indicator targets. Airtel reports from its drive tests that 4G throughput performance has improved by 8% to 18% with the deployment of 800 MHz and 2.6 GHz spectrum assignment.⁹²



90 Consultation interviews for this report.

91 UNDP Malawi Digital Readiness Assessment - connectivity section, 2024/25.

92 MACRA 1st Quarter 2025, Quality of Service Report. Airtel information provided for this report, March 2026.

The challenge, therefore, is not lack of commitment by MNOs, but the structural barriers that limit how far and how fast QoS can be improved. With continuing increases in voice traffic and data consumption, it is critical that MACRA (working with other government institutions) and operators continue to work together to improve QoS, ensure regulatory requirements and the measurement are in line with national requirements and international standards, and address the underlying QoS barriers (which are described in more detail in Section 3B1) including the following actions:

- Urgent requirement for the Ministry of Finance and RBM to prioritise forex access to enable telecoms infrastructure capacity and coverage investment and modernisation (see Section 3B1.1).
- MACRA to expedite operator spectrum assignment requirements (including permanent 800 MHz and 2.6 GHz assignment, spectrum for mobile backhaul), issuing a spectrum roadmap for future spectrum assignment, and continuing regulatory measures to improve national fibre and cross-border transmission capacity (see Section 3B1.2).
- Government (including Ministries of Energy, Information and Digitalisation, and Finance and Economic Affairs) and applicable agencies to address telecoms energy supply in M300 National Compact and ASCENT programmes, and reduce off-grid costs, including solar power equipment tax and fuel duties (see Section 3B1.3);

- Government (including Ministry of Information and Digitalisation, Ministry of Justice, Ministry of Homeland Security, Ministry of Energy, Ministry of Transport and Public Works, Ministry of Land) to introduce CNI legislation and coordinated implementation programme to provide effective deployment procedures, and to address telecoms infrastructure damage from new infrastructure deployment, extreme weather, vandalism and theft (see Section 3B1.4).
- MACRA to issue regulations for the approval and rollout of Low-Earth Orbit (LEO) satellite and Direct 2 Device (D2D) technology partnerships to support rural coverage and outage resilience (see Section 3B1.6).
- MACRA and the Universal Service Fund to continue partnerships with the operators and international institutions on prioritised and sustainable rural and remote infrastructure coverage programme, notably the new Malawi Digital Acceleration Plan initiative for 4G remote coverage capex and opex subsidy programme.^{93 94}

Further, it is welcome that MACRA is consulting on updates to QoS performance indicators in the QoS Regulations 2019⁹⁵. Operators have proposed the following adjustments to ensure QoS indicators reflect current network realities, the above QoS barriers, and are in line with international standards.⁹⁶

93 International experience shows that well-designed USF subsidy programmes can accelerate rural broadband expansion, see recommendations in GSMA and ATU report, Universal service funds in Africa Policy reforms to enhance effectiveness, October 2023.

94 Interviews indicate that the Malawi Digital Acceleration Plan initiative is similar to successful initiatives in other countries, such as the Tanzania Universal Communications Service and Access Fund subsidy programme, supported by the World Bank, which has resulted in 4G mobile broadband coverage of 1,643 towers, covering 4,250 villages and reaching 18.5 million people. The subsidy programme includes capex and opex for 4G towers (e.g. energy, backhaul transmission, access roads, and other utilities). Source: Tanzania Universal Communications Service and Access Fund (UCSAF) article - Connecting Rural Communities: UCSAF's Role in Tanzania's Digital Transformation. For description of the subsidy mechanism and recommendations - see World Bank Group report, Allocating Universal Service Subsidies Using Electronic Multi-Round Reverse Auctions: Telecommunications in Tanzania, June 2023.

95 MACRA Communications Quality of Services Regulations 2019.

96 Consultation interviews for this report.

Figure 27
Industry proposals to adjust QoS regulations.

QoS KPI	2019 Regulation	Operators proposal
Dropped call rate	2%	1.5%
Listening voice quality (MOS)	3%	Retain 3%
Network availability	99.8%	Urban 99% Rural 98%
Radio coverage	-75.6 dBm (90%)	- 110 dBm (90%) for 3G and 4G
Radio quality	>14 dB Energy per Chip over Noise (EcNo) for 3G (90%)	>18 dB for 3G EcNo
Network latency	National 100 ms International 300 ms	National 100 ms International 200 ms
Data transmission speed	> 1 Mbps (mean), > 0.5 Mbps (minimum)	>3 Mbps (mean), > 1.5 Mbps (minimum)
Trunk utilisation	< 70%	<80%

These proposed amendments to the QoS Regulations, together with proposed actions outlined above, can unlock sustained improvements in QoS that operators are

technically ready and financially committed to deliver reliable network services, providing the backbone for the digitalisation of the economy and public services.

3B.1.6 Low-Earth Orbit and Direct-2-Device technologies

GSMA Intelligence analysis finds that 1% of the population will require use of alternative technology such as LEO satellite to provide 4G coverage in the most remote areas (see Figure 22).

It is acknowledged that MACRA has licensed Starlink in the market in 2022.⁹⁷ Since, there have been advancements in non-terrestrial and Low-Earth Orbit (LEO) satellite network communications and evolving Direct-2-Device (D2D) technologies, and increasing commercial partnerships between mobile operators and satellite providers to extend broadband coverage to sparsely populated or inaccessible areas, and to provide outage redundancy (e.g. Airtel

Africa partnership with Starlink, Orange Group partnership with Eutelsat, and Vodacom Group partnership with Starlink⁹⁸).

It is recommended that MACRA review and update the regulatory framework to approve commercial partnerships by mobile operators to use of LEO satellites for D2D to support rural coverage objectives and to provide redundancy.

In 2025, the GSMA published positions on spectrum for D2D and the use of satellites to supplement mobile coverage which provide a clear framework for regulators and could be instructive for MACRA to consider (Figure 28).

⁹⁷ Connecting Africa article - Malawi grants Starlink license to operate, October 2025.

⁹⁸ Tech Africa News article - Airtel Africa Partners SpaceX to Roll Out Starlink Direct-to-Cell Connectivity Across 14 Markets, December 2025. Orange Group press release - Eutelsat and Orange reinforce partnership with new multi-year LEO agreement, June 2025. Vodacom Group press release -Vodacom Group and Starlink Forge Ahead to Transform Connectivity Across Africa, November 2025.

Figure 28
 GSMA positions spectrum for D2D and the use of satellite to supplement mobile coverage.

D2D in IMT Spectrum	1. D2D using mobile spectrum should be provided through MNO licenses: — D2D operating in IMT spectrum bands provides a supplemental service to terrestrial networks and enables MNOs to collaborate, under commercial arrangements with satellite network operators (SNO), to extend the MNO’s coverage. — With the regulator’s permission, this should be done through the spectrum license of the MNO; i.e., the rights of use by satellite for any given terrestrial band should derive from the exclusive rights on MNO licenses, through lease agreements or other authorisation tools as applicable in each country. — Authorising the utilisation of an MNO’s licensed spectrum with a D2D satellite provider may mean the MNO remains responsible for ensuring the mitigation and management of interference under the terms of its original license, depending on how the authorisation of satellite use of the mobile spectrum is framed. — In this case, the MNO may also remain responsible for compliance with other regulations. This approach will allow MNOs to decide how best to use their licensed mobile spectrum bands to enable satellite connectivity for subscribers. — Such market-led choices will support the most efficient and optimal use of mobile licensed spectrum as MNOs are best positioned to determine how to leverage spectrum to better-support customers in remote, rural, suburban or urban settings. This includes determining which licenses or portions of licenses might be best used to extend their network coverage via satellite. 2. When using IMT spectrum, D2D must protect IMT networks in accordance with the ITU Radio Regulations: Noting that the ITU World Radiocommunications Conference 2027 (WRC-27) is looking at establishing an international framework to facilitate the development of D2D services, where regulators plan to introduce D2D services soon they may need to define cautious national regulatory frameworks for D2D in IMT spectrum. As such, regulators could create a regulatory framework based on one of the following options: — D2D operations should protect existing services in accordance with the ITU Radio Regulations. As there is no satellite allocation in some of the mobile bands being used at present, D2D should thus operate on a no interference / no protection basis. — Create secondary allocations in certain mobile bands along with some conditions, in order to make sure that D2D operations do not cause harmful interference to the services it is designed to supplement. Any approach to D2D introduction should be based on regulatory and technical conditions which ensure coexistence with mobile terrestrial networks. This means managing the risk of harmful interference with an operator’s own terrestrial network, with mobile operators licensed to operate in the same band in adjacent areas (including neighbouring countries), and with users licensed to operate in adjacent frequency bands.
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D2D in IMT Spectrum	3. Standard handsets may be used for D2D using IMT spectrum: — As D2D services using IMT mobile bands share the frequencies already licensed to MNOs for terrestrial mobile services, standard mobile handsets should be able to work seamlessly between both systems, and no tailoring should be required. — Economies of scale through the use of mobile handsets benefit both forms of D2D to some extent, but while D2D using MSS spectrum requires either proprietary standards or 3GPP Release 17+ handsets that are also designed to tune to specific satellite bands, D2D using mobile spectrum can use standard handsets. This will allow for D2D using IMT spectrum to become available both in recycled and second-hand handsets, as well as all new handsets including the most affordable ones. 4. Agreement with MNOs must be in place to use their licensed spectrum in the licensed area: — Regulators should not grant separate licenses to D2D operators for the same frequencies and areas as existing terrestrial licenses. This would undermine the regulatory ecosystem currently supporting mobile terrestrial infrastructure investment and services for billions of consumers. — Access to MNO spectrum for D2D should derive from the MNO license rights, not any separate license from the regulator. — The MNO licensee must provide consent to the satellite operator via a lease agreement or similar commercial transaction. — The D2D satellite entity will need satellite authorisations to operate their constellations but its rights of use of terrestrial MNO spectrum licenses should derive from the rights of the MNO. 5. Ahead of WRC-27, interference needs to be managed through domestic regulations: — WRC-27 will endeavour to agree internationally harmonised parameters to ensure coexistence between terrestrial mobile and D2D services when using adjacent frequencies or using the same frequencies in adjacent areas. — Where regulators plan to introduce D2D services soon, they may need to define specific national arrangements to authorise MNOs to share their spectrum with D2D satellite providers. Various schemes are available for authorising use of mobile devices to transmit to the satellites, including a license exemption option, but authorisation of transmissions from satellite space stations to user devices may not currently be in scope of some national regulatory frameworks. — Where countries wish to provide a framework, regulations should ensure both the compatible operation of D2D in one spectrum block next to terrestrial mobile in the adjacent spectrum block, and that terrestrial mobile operating in one licensed geographic location is protected from D2D in a neighbouring licensed geographic location. 6. Any new Mobile Satellite Service (MSS) allocations at WRC-27 must protect IMT networks: — WRC-27 aims to define internationally harmonised technical and regulatory provisions for D2D services operating in IMT bands under Agenda Item 1.13. Any new allocations to MSS that come about in bands identified for IMT must be on a secondary basis, so that MSS does not cause harmful interference to IMT networks, nor claim protection from them, in accordance with the ITU Radio Regulations. — Local regulations developed ahead of WRC-27 may be revised in order to ensure that D2D services using mobile spectrum are harmonised as widely as possible.
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1. Existing MSS regulations may allow D2D using MSS spectrum:

- Where in-country regulations allow the operation of D2D using MSS spectrum, technical and regulatory provisions to address possible interference already exist in the ITU Radio Regulations. In this case, satellite service providers must meet all eligibility and any other legal requirements of the national legislation of a given country. Some regulations may require updating (e.g. to include low-earth orbit satellite constellations) and “same services, same rules regulation” principle must always apply.
- When using MSS spectrum, the license holder will typically be an entity separate from the MNO (e.g. a specialised MSS satellite network operator (SNO)). The service will then operate under the technical requirements of the MSS spectrum license.
- As a result of this separate licensing regime, it may not be necessary for the SNO to enter into any partnership with the MNO. However, users may adopt services more seamlessly where SNOs enter into commercial partnerships with MNOs at a wholesale level rather than trying to compete with them in the retail market.

2. 3GPP specification is in place but handset availability remains low:

- 3GPP completed the standardisation of several mobile satellite bands including the 1610-1626.5 × 2483-2500 MHz as band n254, 1626.5-1660.5 × 1525-1559 MHz band as n255, and 1980-2010 × 2170-2200 MHz as n256. 3GPP standardisation of the MSS bands was an important step forwards but does not guarantee that they will be included in mobile handsets (over 60 terrestrial 5G bands have been standardised by 3GPP, only a portion of which are commonly used in handsets).
- As D2D develops, handsets may increasingly make use of n254, n255 and n256 in the future. As of today, these are limited to a small number of high-end models and handset availability is one of the issues that D2D using MSS spectrum needs to overcome before it is successful.

3. Any new MSS allocations at WRC-27 must protect IMT networks:

- WRC-27 will assess other bands for MSS. It contains two Agenda Items (1.12 and 1.14) that will consider additional allocations of spectrum to the mobile satellite service. The bands being considered under these two Agenda Items are: — 1427-1432 MHz — 1645.5-1646.5 MHz — 1880-1920 MHz — 2010-2025 MHz — 2120-2170 MHz.
- All these bands except the 1645.5-1646.5 MHz band (i.e. all bands in bold) hold an IMT identification. As such any introduction of new mobile satellite services including D2D must protect the existing IMT identification in accordance with the Radio Regulations.

3B.2 Recommendations

The following policy recommendations are proposed to address the challenges outlined above and provide a sustainable infrastructure environment to support the mobile sector and

contribute to the achievement of Malawi 2063 and digital objectives, with forex allocation prioritisation for the sector being the most critical.

Figure 29

Policy recommendations on prioritising forex allocation and sustainable infrastructure investment environment reforms.

Recommendations to enable further investment in digital infrastructure, resulting in increased digital value add across essential services and strategic sectors, including agriculture, economic infrastructure, manufacturing, and public services:

- ☑ Ministry of Finance and RBM to prioritise telecoms infrastructure as critical national infrastructure for forex access as requested by telecoms licensees for this year and on an annual basis. RBM to formally classify telecoms and digital infrastructure under the Essential Services and Strategic Sectors Framework to implement this forex access prioritisation.
- ☑ MACRA to update the spectrum roadmap that promotes efficient assignment and investment in digital infrastructure, including 20-year duration licenses and license renewals.
- ☑ Government (including Ministries of Information and Digitalisation, Ministry of Energy, and Finance and Economic Affairs), ESCOM, MACRA, MERA and other applicable agencies to take targeted steps on telecoms energy supply that would reduce costs for operators and support national objectives on energy access and decarbonisation. Priority measures include:
 - Integrate telecommunications infrastructure into national energy programmes, including Malawi’s Mission 300 Energy National Compact, ASCENT⁹⁹, and related initiatives, recognising telecoms as critical national infrastructure and incorporating demand into electrification and least-cost planning. This includes aligning grid and minigrid rollout plans; streamline permitting for offgrid and hybrid solutions serving telecom sites; and monitor progress on powering priority towers, with clear annual targets and reporting.
 - Leverage GSMA geospatial analysis and operator data to support coordinated planning of energy and connectivity infrastructure, prioritising underserved areas and enabling efficient public and private investment. For example, directing Mission 300 and minigrid investments first to the roughly 30% of existing 4G sites that are more than 1 km from the grid, and the over 87% of new sites needed to reach 99% 4G coverage that are also located beyond 1 km of existing grid infrastructure.
 - Reduce taxes, import duties and levies (including VAT) on solar-powered telecom equipment and energy systems, including batteries, inverters, and hybrid solutions, and review electricity tariffs applied to telecom operators to improve energy affordability, transition from diesel to cleaner more cost-effective power solutions, and lower their foreign-currency fuel bill.

99 World Bank supporting Malawi government with the Accelerating Sustainable and Clean Energy Access Transformation (“ASCENT”) Project.

- Promote the adoption of renewable and distributed energy solutions for telecom sites, including solar-hybrid systems and battery storage, and enable telecom towers to act as anchor loads for mini-grids to support wider rural electrification.
 - Facilitate private sector participation and investment by supporting blended finance models and enabling partnerships between mobile network operators, tower companies, energy service companies and mini-grid developers.
 - Strengthen coordination between energy and communications authorities to streamline permitting processes and support integrated infrastructure deployment.
 - Improve the resilience of telecom energy supply by promoting backup power solutions, prioritising telecom sites in power restoration and reducing reliance on diesel through cleaner alternatives.
 - Establish monitoring frameworks and targets to track progress on telecom energy access, including renewable energy use, diesel reduction and rural coverage expansion.
- ☒ To designate telecoms infrastructure as constituting Critical National Infrastructure (CNI) in law and implement measures to provide more effective deployment procedures and to protect against infrastructure damage resulting from new infrastructure deployment, extreme weather, vandalism, and theft, including:
- Clear designation of telecoms as CNI;
 - A National CNI Protection Plan covering security and emergency standards, coordination, reporting and auditing, redundancy and restoration;
 - A national CNI oversight and coordination organisation across government, regulatory, emergency and law enforcement agencies;
 - Significant criminal penalties for interference, vandalism and theft;
 - A mechanism for compensation payments for damaged CNI; and
 - The CNI coordination organisation to undertake regular nationwide communication and education campaigns against infrastructure damage, vandalism and theft and national emergencies including extreme weather.
- ☒ MACRA (with government and regulatory agencies) and operators to work together on QoS improvement programme, including:
- Adopt industry proposal on amendments to urban and rural QoS regulations performance indicators (see Figure 27) to provide improved service quality balancing operational conditions and investment requirements.
 - Address underlying barriers to QoS, including: prioritise forex access for telecoms infrastructure; expedite spectrum assignment; improve national fibre and cross-border transmission capacity; address telecoms energy supply; CNI legislation and coordinated implementation; and prioritised and sustainable remote coverage programmes (e.g. Malawi Digital Acceleration 4G remote coverage subsidy programme).
- ☒ MACRA to update licensing and regulatory framework, considering GSMA recommendations (Figure 28) to allow mobile operators to commercially partner and use LEO and D2D technologies to supplement mobile broadband coverage in rural and remote areas and provide outage redundancy.

3B.3 Impact

As described in Section 1 (to be read with Annexure 2), this report provides a quantitative model of Malawi's mobile sector to evaluate the impacts on the wider economy - including essential services and strategic sectors including agriculture, manufacturing, transport, trade, healthcare, and public services - of the proposed policy recommendations to address the challenges and to maximise the digital economy potential to contribute to Malawi 2063 and digital objectives.

Using the GSMA Intelligence coverage and investment analysis described above (and summarised in Figure 22) and outputs from the report quantitative model find that if the infrastructure policy recommendations outlined in Section 3B2 are adopted it would result in an increase of 60,000 unique mobile internet users (+0.2% of the population) (Figure 30).

This does not include any reduction in network damage that could be avoided by designation of mobile networks as Critical National Infrastructure. By way of example, were the cost of damage from fibre cuts due to vandalism and relocation of fibre due to roadworks to be reduced by half, it is estimated that pass through of the cost reductions to prices would increase take-up of mobile broadband services by a further 10,000 unique subscribers by 2030 (i.e. 70,000 when combined with the impact on investment and coverage under this policy recommendation).

Figure 30

Mobile broadband uptake in Malawi with reforms to stimulate sustainable investment in mobile infrastructure.

Unique mobile internet users (millions)	2025	2026	2027	2028	2029	2030
BAU	2.79	3.02	3.28	3.55	3.84	4.15
% of unique mobile internet users (% BAU)	12.5%	13.2%	14.0%	14.7%	15.5%	16.4%
Sustainable investment measures	2.79	3.03	3.3	3.58	3.89	4.21
Y-on-Y difference to BAU	0.0%	0.3%	0.7%	0.9%	1.2%	1.4%
Increase in growth vs BAU	0.0%	0.4%	0.8%	1.2%	1.7%	2.2%

Strengthening mobile and digital infrastructure, with the adoption of these infrastructure policy recommendations, provide a critical foundation for Malawi's digital development and a significant contribution to the combined impact of all of the policy recommendations outlined in Section 4 of this report on adoption and the use of mobile and digital services across essential services and strategic sectors.

Further, the infrastructure policy recommendations, if adopted, would contribute to the improvement of Malawi's GSMA Digital Africa Policy and Regulatory Index (DPRI) 2025 score from 55 to 74 out of 100, which would put Malawi amongst the highest DPRI scores on the continent, and an improved GSMA Digital Africa Nations and Society Index (DNSI) score.¹⁰⁰

100 See Section 3A and Annexure 3 for more information on Malawi's scores in the GSMA Digital Africa Index 2025.

3C Enable mobile money contribution to financial inclusion

3C.1 Context and challenges

Malawi's mobile money sector with over 20 million mobile money subscribers (97% total population and 156% of population above 15 years old) and over 10 million 90-day active usage (48% of total population and 75% of population above 15 years old)¹⁰¹, as reported by RBM in 2025 (Quarter 2)¹⁰², **is making a significant contribution to the National Financial Development Strategy 2022-2026 objective to achieve over 70% of eligible Malawians accessing formal digital financial services and products and the RBM National Financial Inclusion Strategy III objectives** (see Section 2B and Annexure 1 Figures 8 and 9).

A key contributor to Malawi's mobile money sector progress is the regulatory framework. This is recognised by the high 94 score in the GSMA Mobile Money Regulatory Index, although "agent condition" is identified as an important area to improve.¹⁰³

A robust and sustainable agent distribution network, which has grown to over 656,000 registered agents, is critical for mobile money services and financial inclusion. However, only 28% of registered agents are in rural areas¹⁰⁴ and actions are required to create a financially and operationally sustainable agent network to achieve the RBM National Financial Inclusion Strategy III objective of 200 rural access points per 100,000 adults.

Recent changes, in the Mid-Year Budget Statement 2025/26, to mobile money wallet structures (transaction limit was increased from MWK 750,000 to MWK 5,000,000 per day, cash-out limit increased from MWK 750,000 to MWK 1,000,000 per day; and individual wallet holding increased from MWK 1,000,000 to MWK 5,000,000 per day) **and merchant accounts** (wallet holding limit and daily mobile money transaction limit have been increased from MWK 25 million to MWK 50 million) **are examples of the positive actions required.**¹⁰⁵

However, the Mid-Year Budget Statement 2025/26 also introduced a new 0.05% levy on mobile money transfers above MWK 100,000. The introduction of new taxes on mobile money will have negative impacts on financial inclusion and digitalisation, which are described in Section 3D1.2.

Both the National Financial Services Development Strategy and National Financial Inclusion Strategy III set actions to complete a review and update the regulatory framework, and to develop a new digital financial services law. This is critical to ensure that Malawi's mobile money sector and the broader digital financial services continue to grow and contribute to Malawi's financial inclusion and digital objectives, taking into consideration macro-economic conditions and other developments.

It is welcomed that the RBM is undertaking consultation on the review of the Payment Systems Act 2016, the Payment Systems (E-Money) Regulations 2019, and the draft Digital Bank Directive. Consultation for this report has identified the following key areas to be addressed.

101 Calculation based on 20.7 million total population and 13.3 million population of 15 years above. Sources: Malawi National Statistics Office and UN WPP estimate.

102 RBM National Payment System Report, Quarter 2, 2025.

103 GSMA Mobile Money Regulatory Index 2025.

104 RBM National Payment Systems Reports - Q2 2020, Q4 2024, and Q2 2025.

105 Mid-Year Budget Statement 2025/26, November 2025.

3C.1.1 Regulation 18 of the Payment Systems (E-Money) Regulations 2019 - Cash-out fees

The RBM is proposing to apply bank Electronic Fund Transfer (EFT) 1% fee cap on mobile money cash-out and transfer fees¹⁰⁶.

However, there are important operational and economic differences between Banks and Mobile Money Operators (MMO) which need to be considered when setting fees and regulating digital financial services pricing in a fair and competitive manner (Figure 31).

Figure 31
Differences between Banking and Mobile Money services.

Item	Banking	Mobile Money
License	Full Banking License	E-Money License
Infrastructure	Branches with salaried employees and ATMs, primarily in urban areas	Mobile platforms. Self-employed agents across the country in urban, peri-urban, and rural areas. Agents are paid commission by MMOs.
Fee Design & Cost Structure	High value flat fees (typically over MWK 200,000), subsidised via cross-product income (e.g. high margin interest income, loans, saving accounts and investments).	Transaction fees (typically micro-transactions under MWK 200,000) MMO receives transaction fee less agent commission, float costs, operating expenses, and dealer support. *Example see below

Mobile Money Economics (MWK 105k Deposit Example)

Metric	Current % MWK 105k Deposit example	RBM Proposal% MWK 105k Deposit example
Average customer transaction fee	3.7% 4,000	1.4% 1,500
Less: VAT at 16.5% of customer charge	0.5% 567	0.1% 212
Less: Agent commission	2.1% 3,150	2.1% 3,150
Net Profit to MMO (% of deposit)	1.1% 283	-1.2% -1,862

Source: Authors analysis and information provided in consultation interviews

106 Consultation interviews.

Reducing from the current average customer charge of 3.7% to 1% would have a significant impact on the financial sustainability of the mobile money sector and its contribution to financial inclusion and digitalisation objectives, including:

- Unable to cover MMO operational and regulatory compliance costs.
- Unable to maintain current commission structure for agents, impacting agent viability to continue operations (including cash liquidity, security, logistics and equipment) and employment especially in peri-urban and rural areas.

3C.1.2 Regulation 18 of the Payment Systems (E-Money) Regulations 2019 - Platform to Platform fees

The RBM is proposing to apply bank Electronic Fund Transfer (EFT) 1% fee cap on Platform to Platform (P2P) fees¹⁰⁷. However, there are important differences between the transaction design and cost structure of Banking EFT and Mobile Money transactions which need to be

considered when setting fees and regulating digital financial services pricing in a fair and competitive manner. (Figure 32). Industry has proposed maintaining the current tiered pricing structure.

Figure 32
Differences in transaction design and cost structure of Banking EFT and Mobile Money

Banking EFT	Mobile Money
Medium to high value transactions, typically over MWK 200,000.	Micro-transactions, typically between MWK 100 to MWK 100,000.
Transactions sent within 1 day with interest income on funds in transit.	Transactions sent instantaneously.
Typical customers are bank account holders, formal sector, salaried, and urban.	Typical customers are low-income, informal sector, unbanked rural and underserved areas.
	Cost to provide transaction, includes agent commission, float costs, operating expenses, and dealer support.

Source: Authors analysis and information provided in consultation interviews

Noting operators estimate that approximately 92% of P2P transactions are within MWK 100 to MWK 19,999, if a flat EFT fee equivalent fee was applied – for example MWK 700 applied to MWK 1,000 transfer this would be 70% of the cost, and would have a significant impact on the financial sustainability of the mobile money sector and its contribution to financial inclusion objectives, including:

- Low income users would have to pay a higher fee percentage.
- Unable to cover MMO operational and regulatory compliance costs.
- Unable to maintain current agent commission structure impacting agent viability to continue operations (including cash liquidity, security, logistics and equipment) and employment especially in peri-urban and rural areas.

107 Consultation interviews.

3C.1.3 Regulation 18 of the Payment Systems (E-Money) Regulations 2019 - Know Your Customer

Mobile Money Know Your Customer (KYC) (and also relevant to mobile telecoms SIM registration, and national and digital ID programmes) is critical to increase digitalisation of financial, commerce, and public services and to support safety, security and fraud management.

However currently there are different processes and requirements for mobile money KYC and telecoms SIM registration which results in duplication, creates challenges for consumers

especially those without required IDs, higher costs for service providers, and places restrictions on access to digital and financial services.¹⁰⁸ Figure 33 provides recommendations for consideration.

The new digital ID programme provides an opportunity to review this and provide one trusted digital ID process to support Malawi Digital Acceleration Plan and IDT4M activities and objectives for digital government and public services, and digital commerce.

Figure 33
KYC and SIM registration recommendations.

- ✓ Current separate MACRA SIM-registration and RBM KYC regulations should be replaced with a harmonised and integrated digital KYC regulation for telecoms and national payment system licensees to provide a real time and robust process integrated with the National Registration Bureau.
- ✓ The new regulations and implementation programme should be developed and implemented by a cross-sector working group including MACRA, RBM, Ministry of Justice, National Registration Bureau, MNOs, MMO, consumer groups, banks and other stakeholders.
- ✓ Investment requirements for current SIM registration, Mobile Money KYC, and the proposed new integrated digital KYC (including integration of biometric, CEIR, AML, data protection, privacy, cybersecurity and other compliance requirements, and agent and merchant requirements) – capex and opex – should be fully quantified and consulted upon before finalising operational and regulatory requirements. Public private partnership shared investment models and phased rollout should be considered.
- ✓ Common standards, processes, reporting, and appeal/redress mechanisms should be established to provide clear, harmonised, cost-efficient and robust implementation and performance. For example, regulations should provide simple and clear KYC requirements for mobile money wallet tiers, balancing a robust KYC process with enabling digital and financial inclusion. Known issues with identification should be considered when deciding upon permissible identification documents for registration and verification.
- ✓ Testing, pilot phase, and phased rollout phases are required for implementation of systems, processes, and comprehensive education programme for regulators, operators, agents, merchants, and citizens.

108 GSMA report - Commercially Sustainable Roles for Mobile Operators in Digital ID Ecosystems, April 2021.

3C.1.4 Regulation 18 of the Payment Systems (E-Money) Regulations 2019 - other issues

Interviews for this report also requested further consultation on:

- The need to update the regulation with the Financial Inclusion Strategy III, including developing standards, measures, and tax rebates/incentives for stronger MMO and agent liquidity management, efficient float management, and cash-out networks, especially in remote and underserved areas.
- Ensure 3 - 6 month phased implementation of new regulations to allow for system development and testing ensuring quality of service and fraud prevention and compliance in place; and to complete comprehensive agent and customer education.

3C.1.5 Payment Systems Act 2016 and the draft Digital Bank Directive

The review of the Payment Systems Act 2016 and the draft Digital Bank Directive provide an important process to develop a digital finance regulatory framework to accelerate financial inclusion and digitalisation. Interviews for this report identified the following key areas for consideration:

1. The requirement for a new regulatory framework for digital financial and mobile money services, including:

- Separate and clear license categories for mobile money providers and mobile money agents.
- Regulatory obligations and fees should be simplified, proportionate, and evidence-based rather than applying “traditional” telecoms and banking regulation (e.g. KYC and tier levels, AML, electronic fund transfer fee regulation, different requirements for trust accounts, deposit and non-deposit services).
- Introduction of regulatory sandboxes and fast track approvals for new products and innovations.
- Harmonised regulation and legislation, improve coordination, remove regulatory overlap, and duplicative requirements and taxation between RBM, MACRA, DPA and other applicable authorities.

2. Increase public private partnerships and coordination to work together on the National Financial Services Development Strategy and National Financial Inclusion Strategy III programmes and initiatives.

3C.2 Recommendations

The following policy recommendations are proposed to address the above key issues and to further mobile money contribution to Malawi

2063, National Financial Services Development Strategy 2022-2026, National Financial Inclusion Strategy III, and digital objectives.

Figure 34

Policy recommendations to enable mobile money contribution to financial inclusion.

- ☑ Ministry of Finance and Economic Affairs to remove 0.05% levy on mobile money transfers above MWK 100,000 and reduce regulatory fees to support financial inclusion strategy objectives.
- ☑ RBM to revise proposed amendments to the Regulation 18 of the Payment Systems (E-Money) Regulations 2019 to reflect macro-economic realities and support National Financial Inclusion Strategy III (2024 – 2028) :
 - Do not apply Bank Electronic Fund Transfer (EFT) 1% fee cap on mobile money cash-out, transfer, and Platform to Platform fees – and retain tiered pricing structure – due to important operational and economic differences between Banks and MMOs which puts at risk the viability of mobile money sector agents and jobs.
 - Align regulation with the Financial Inclusion Strategy, including developing standards, measures, and tax rebates/incentives for stronger MMO and agent liquidity management, efficient float management, and cash-out networks – especially in remote and underserved areas.
 - 3 - 6 month phased implementation of new regulations to allow for system development and testing ensuring quality of service and fraud prevention and compliance in place; and to complete comprehensive agent and customer education.
 - Current separate RBM KYC and MACRA regulations should be replaced with a harmonised and integrated digital KYC regulation, standards, and procedures for telecoms and national payment system licensees to provide a real time and robust process integrated with the National Registration Bureau. This must be developed and implemented by a cross-party working group with an approved public private co-investment budget and phased rollout plan.
- ☑ RBM to complete consultations to review Payment Systems Act 2016 and the draft Digital Bank Directive 2025 to develop a digital finance regulatory framework to accelerate financial inclusion, reduce costs, and generate economic growth, notably:
 - Provide clear classification, license and regulatory framework for mobile money operators and agents.
 - License and regulatory compliance obligations and fee regulation for mobile money operators and agents should be simplified, proportionate, and designed to enable digital financial inclusion and growth, rather than applying “traditional” telecoms and banking regulation (e.g. KYC and tier levels, AML, electronic fund transfer fee regulation, different requirements for trust accounts, deposit and non-deposit services).
 - Establish a Financial Inclusion taskforce involving RBM, MACRA, mobile money operators, banks, agents, merchants, and other fintech participants to develop and implement coordinated programmes (with subsidies, incentives, and tax reliefs) to deepen financial inclusion in rural and underserved areas.
 - Regulatory sandbox and fast track approvals for new products and innovations.
 - Harmonised legislation and regulation, improve coordination and remove regulatory overlap between RBM, MACRA, and Data Protection Authority including one digital KYC process, alignment with data protection and cyber security legislation to build user’s trust, and remove duplicative oversight and taxation on value added services and mobile money.

3C.3 Impact

As described in Section 1 (to be read with Annexure 2), this report provides a quantitative model of Malawi's mobile sector to evaluate the impacts on the wider economy.

Figures 35 and 36 show the impact of the above mobile money policy recommendations (including 0.05% reduction on cash withdrawal transaction

fee and the removal of MACRA fee and EFT levy) on active mobile money accounts (90 days) and the number of transactions respectively, contributing to Malawi 2063, National Financial Services Development Strategy 2022-2026, National Financial Inclusion Strategy III, and digital objectives.

Figure 35

Mobile money active accounts in Malawi with policy recommendations.

Mobile money active accounts (millions)	2025	2026	2027	2028	2029	2030
BAU	10.46	12.32	14.51	17.09	20.13	23.71
% of total population (BAU)	48%	56%	64%	73%	84%	97%
Mobile money policy reforms impact	10.46	12.98	16.06	19.83	23.36	27.52
Y-on-Y difference to BAU		5%	11%	16%	16%	16%
Increase in growth vs BAU		6%	15%	26%	31%	36%

Figure 36

Mobile money transactions in Malawi with policy recommendations.

Mobile money transactions (millions)	2025	2026	2027	2028	2029	2030
BAU	2,025	2,386	2,810	3,310	3,899	4,592
% Increase per year BAU		17.8%	17.8%	17.8%	17.8%	17.8%
Mobile money policy reforms impact	2,025	2,578	3,262	4,109	4,839	5,700
Y-on-Y difference to BAU		8%	16%	24%	24%	24%
Increase in growth vs BAU		9%	22%	39%	46%	55%

3D Use of digital technologies to increase domestic revenue mobilisation and Optimise sector taxation

3D.1 Context and challenges

3D.1.1 Use of digital technologies

The government outlined the importance of digitalisation for government services, including increasing domestic revenue mobilisation, tax efficiency and compliance in the Budget Policy Statement 2026/27.

For example, as part of the government programme to automate government functions, it has set the objective to eliminate cash transactions and to use mobile money and bank payments across all MDAs.¹⁰⁹

109 Paragraph 144, Malawi Budget Policy Statement 2026/27, February 2026.

This is consistent with other African countries (see Figure 37 for examples). Malawi authorities have made some good progress (as described in case studies in Section 2D Figure 20) and can accelerate this through the implementation of digital government and digital payment

programmes under the Malawi 2063, Malawi Digital Acceleration Project, National Financial Services Development Strategy 2022-2026, and Malawi Revenue Authority digitalisation strategy.

Figure 37
Use of digital government and payments case studies.

Fuel subsidy in Ethiopia	Ethiopia has used digital payment channels to pay with coupons for subsidised fuel mandated by the government to prevent illegal activities, fuel wastage and promoted digital payments adoption. As of October 2024, more than 1,600 gas stations were participating in the scheme with 141,000 vehicles paying through Telebirr with the subsidy transaction and 1.1 million vehicles paying without the subsidy. The total transaction value through the scheme was ETB 255 million, of which 52% were transactions with the subsidy. It is estimated that this has generated a saving for the government on the monthly cost of fuel subsidies from ETB 7 billion to ETB 188 million, a reduction of over 95% of the cost of the subsidy to the government. ¹¹⁰
Digital government services and revenue mobilisation in Ghana and Kenya	Ghana.Gov provides 1,500 government agency services and has collected GHC 210 billion between launch in 2020 to 2024. ¹¹¹ Kenya e-citizen provides over 22,000 government and public services digitally, collects KSH 700 million to 1 billion daily, and has collected over KSH 550 billion in the last three years prior to 2025. ¹¹²
Taxation collection and compliance in South Africa	The South African Revenue Service reported in FY 2023/24 that 77% of taxation payments were made through e-filing and is investing in digital platforms (including AI and machine learning) to increase tax efficiency and compliance. ¹¹³

3D.1.2 Taxation

Malawi's mobile sector is subject to significant levels of taxation, including 10% excise duty on services which is one of the highest in Africa (Figure 38). It is noted that there is no import duty or excise tax on mobile phones which is

welcomed, however there are a number of other taxes which increase the cost of mobile phones, notably the payment of the difference between mobile phone import VAT and sales VAT to the Malawi Revenue Authority (MRA).¹¹⁴

110 GSMA report - Driving Digital Transformation of the Economy in Ethiopia Opportunities, policy reforms and the role of mobile, October 2024, Page 28.

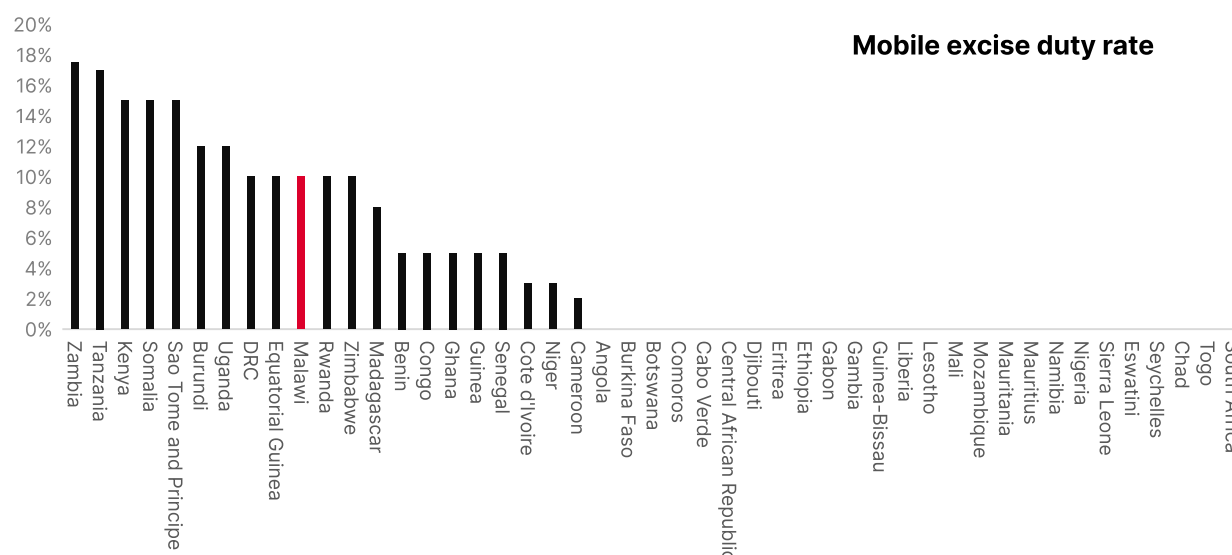
111 BusinessGhana article, "Ghana.gov revenue platforms: Govt bags GHC210bn... as revenue since introduction in 2020", February 2024.

112 The Star Newspaper Kenya article, "E-Citizen now collects up to Sch 1 billion daily", September 2025.

113 South Africa Revenue Service Tax Statistics 2024, Page 1. TechCentral Article, "Advanced' data analytics, AI to help Sars reach 'tougher' collections target", May 2025.

114 2025/26 Budget Policy Statement, para 131(b).

Figure 38
Mobile excise duty rate in Africa.



Source: GSMA Intelligence. Chart excludes South Sudan as it's an outlier at more than 30%.

More recently, the Mid-Year Budget Statement 2025/26 in November 2025 introduced the following:

- Corporate tax - 40% high-rate threshold reduced from MWK 10 billion to MWK 5 billion.
- VAT rate increased from 16.5% to 17.5%.
- New 0.05% levy on mobile money transfers above MWK 100,000.
- Removal of withholding tax (WHT) thresholds for betting winnings (previously MWK 100,000 to MWK 500,000) and increase WHT from 10% to 15%.
- PAYE - new 40% rate applies to incomes MWK 10 million per month.
- Capital Gains Tax exemption on share disposals has been removed.
- New Minimum Alternative Tax of 0.5% on turnover for companies that report losses for more than 3 consecutive years.

This was followed by the Budget Policy Statement 2026/27 in February 2026, which included:

- Introduction of 17.5% VAT on digital services (e.g. video and music streaming, social media advertising, and digital subscriptions) supplied by foreign non-resident companies.

Foreign companies will be required to register with the MRA, charge VAT on services to Malawian customers at time of payment, and the VAT is to be paid electronically to the MRA by the foreign companies.¹¹⁵

- Introduction of an export duty on scrap metal to disincentivize vandalism and theft of energy, telecommunications and other infrastructure.¹¹⁶

Taxation of the sector may be seen by governments as an effective tax collection channel, however high and complex taxation and fees results in reducing sector revenues due to higher prices to consumers, as the taxation cost is passed on by operators to consumers, and lowers all revenue-based taxes and fees.

Studies have found that 90% of changes to the value of consumer taxes (e.g. sales and usage taxes) are passed through to consumers, while 85% of changes to the value of operator taxes (e.g. revenue and profit taxes, spectrum and license fees) are passed through to consumers.¹¹⁷ Studies also show that higher mobile data and handset prices, impacted by taxation, lowers mobile broadband adoption.¹¹⁸

¹¹⁵ Paragraph 137, Malawi Budget Policy Statement 2026/27, February 2026.

¹¹⁶ Paragraph 126, Malawi Budget Policy Statement 2026/27, February 2026.

¹¹⁷ World Bank 2022, "Using Geospatial Analysis to Overhaul Connectivity Policies", Table A.2.

¹¹⁸ See separate methodological document for details on the elasticities used.

For example, UNECA finds that sector excise duty directly reduces the net revenue a telco receives and lowers all revenue-based taxes and fees - an increase of 10% for an excise duty results in an overall tax increase of less than 10%, and in some cases may actually reduce tax revenues due to its chilling effect of mobile broadband growth. **UNECA also finds that simplifying the tax regime and reducing sector-specific taxes will not only enhance broadband penetration but also lead to a significant increase in revenues due to enhanced productivity and growth as well as widening of the tax base.**¹¹⁹

The introduction of taxes on mobile money payments, similar to the November 2025 taxes applied in Malawi, have had a significant negative impact on both uptake and usage of mobile money services in other countries.

For example, in Ghana, a 2023 GSMA paper found that the introduction of a 1.5% mobile money levy had a strong negative impact on the number of users (5% fewer at end of 2023 than if pre-levy uptake trends continued), value and volume of person-to-person transactions, a negative impact on mobile operator revenue, and a net negative effect on government tax revenue.¹²⁰ Ghanaian governments have since reduced the levy, and it was removed completely in April 2025.

A number of international (for example, UNDP Malawi Digital Readiness Assessment¹²¹) and Malawi organisations (for example, Ministry of Finance and Economic Affairs National Financial Services Development Strategy) reports recommend that a review of taxation levels on the sector is required.

3D.2 Recommendations

The following policy recommendations are proposed to increase the use of digital technologies for domestic resource mobilisation and to optimise mobile sector taxation to

support Malawi 2063, National Financial Services Development Strategy 2022-2026, National Financial Inclusion Strategy III, and digital objectives.

Figure 39

Policy recommendations on use of digital technologies for domestic resource mobilisation and optimise sector taxation.

Continue government programmes to increase government revenue mobilisation through accelerating the use of digital technology for cashless payments, to improve accuracy in filed tax returns and tax compliance, and public service delivery.

Ministry of Finance and Economic Affairs (in consultation with Ministry of Information and Digitalisation, MACRA, and RBM) to adopt forward looking fiscal policies to optimise sector specific taxation on telecoms, mobile money and entry-level smartphone devices to broaden the tax base, thereby increasing affordability and promoting digital inclusion, including:

- ☑ Remove 10% excise levy on data and mobile telecom services (noting that the 2023 budget reduction from 10% to 7.5% has not been implemented).
- ☑ Remove the 17.5% VAT on the margin (sales price less costs where VAT is reclaimable) of imported entry-level smartphones (please see Sections 3E1.1 and 3E2 for further recommendations on entry-level smartphones).
- ☑ Reduce mobile money levy, remove duplicative levies by MACRA, USF, and RBM, and apply same levies to other National Payment System licensees.
- ☑ Regulatory fees in local currency as opposed to USD due to sector forex challenges.
- ☑ Regularly assess the impact of the new taxes on the digital sector and its contribution to Malawi 2063 and government objectives, including those introduced in Mid-Year 2025/26 and 2026/27 budget policy statements.

119 UNECA Presentation “Optimizing Africa’s ICT Tax Regimes Towards Economic Growth and Job Creation” dated 18 March 2025.

120 GSMA, The E-levy in Ghana: Economic Impact Assessment, 2023.

121 UNDP Malawi Digital Readiness Assessment 2024/25, Page 44.

3D.3 Impact

Adopting these taxation recommendations would make a significant contribution to Malawi's digital objectives, as shown in the results from this report's quantitative modelling below (and also see Annexure 2 for methodology and assumptions).

Further, the recommendations would contribute to an improvement of Malawi's GSMA Digital Africa Policy and Regulatory Index (DPRI) 2025 score from 55 to 74 out of 100, which would put Malawi amongst the highest DPRI scores on the continent.¹²²

3D.3.1 Reduction in taxation on the telecoms sector

The results from modelling the impact of removing the 10% excise duty on telecoms is outlined below.

Figure 40

Mobile broadband uptake in Malawi with reduction in taxes on telecoms services.

Unique mobile internet users (millions)	2025	2026	2027	2028	2029	2030
BAU	2.79	3.02	3.28	3.55	3.84	4.15
BAU (% of population)	12.5%	13.2%	14.0%	14.7%	15.5%	16.4%
Reduction of taxation on the telecoms sector	2.79	3.03	3.3	3.59	3.9	4.23
Y-on-Y difference to BAU	0.0%	0.2%	0.7%	1.2%	1.6%	1.9%
Increase in growth vs BAU	0.0%	0.3%	0.8%	1.5%	2.1%	2.8%

3D3.2 Removal of VAT from entry-level smartphones

Figure 41 provides the results of the modelled impact of removing VAT from the margin (sales price less costs where VAT is reclaimable) of imported handsets. For the purposes of

this modelling, it is assumed a 50% margin on imported handsets, a 90% pass through of the saved tax.

Figure 41

Mobile broadband uptake with removal of taxation on entry-level smartphones.

Unique mobile internet users (millions)	2025	2026	2027	2028	2029	2030
BAU	2.79	3.02	3.28	3.55	3.84	4.15
% increase per year for BAU	—	8.2%	8.6%	8.2%	8.2%	8.1%
Reduction of costs on smartphone importation	2.79	3.05	3.33	3.63	3.95	4.29
Y-on-Y difference to BAU	0.0%	0.8%	1.5%	2.2%	2.8%	3.4%
Increase in growth vs BAU	0.0%	0.9%	1.8%	2.8%	3.9%	5.0%

122 See Section 3A and Annexure 3 for more information on Malawi's scores in the GSMA Digital Africa Index 2025.

3D.3.3 Impact of tax policy (and other) recommendations on economic growth and tax revenue

Should the proposed sector tax policy recommendations be adopted, combined with the other policy recommendations, economic growth generated by increased mobile digital usage across all sectors of the economy will have a MWK 179 billion net tax impact (including an estimated gross additional tax revenue of MWK

197 billion from stimulated economic growth, a further MWK 51 billion from digitalisation of tax collection,¹²³ and a net loss of MWK 73 billion in taxes from the mobile sector) by 2030. Contributing to government revenue mobilization and tax collection objectives (please see Section 4, Figures 54 and 55 for further detail).

3E Entry-level smartphone affordability, digital skills & other demand side reforms

3E.1 Context and challenges

Malawi has good mobile network connectivity (noting additional mobile coverage required to achieve Malawi Digital Acceleration project target of universal mobile broadband coverage as described in Section 3B), however there is a 80% mobile broadband usage gap, low internet penetration, and low smartphone penetration (Malawi had 33% smartphone penetration in 2025, compared to 43% in Eastern Africa and 59% in Africa¹²⁴).

The Malawi Digital Acceleration Project, UNDP Digital Readiness Assessment, GSMA Digital Nations and Society Index identify the urgent need to address smartphone affordability, digital skills, further digital government, accelerate digital business, and other demand side reforms to achieve Malawi 2063 and other digital and financial services objectives.

Addressing these demand-side challenges will make a significant contribution to reduce the mobile broadband usage gap, increase internet and smartphone penetration, and accelerate Malawi's digital adoption.

3E.1.1 Entry-level smartphone affordability

Access to smartphones – especially entry-level smartphones – and their affordability is one of the key barriers to digital transformation and inclusion – and the mobile internet usage gap – in Malawi and other African countries. GSMA analysis is that only 2 in 5 mobile internet

subscribers in Sub-Saharan Africa access the internet on a 4G or 5G smartphone.¹²⁵ Prices for internet-enabled phones for Sub-Saharan African consumers are amongst the highest when compared with low- and middle-income regions (Figure 42).

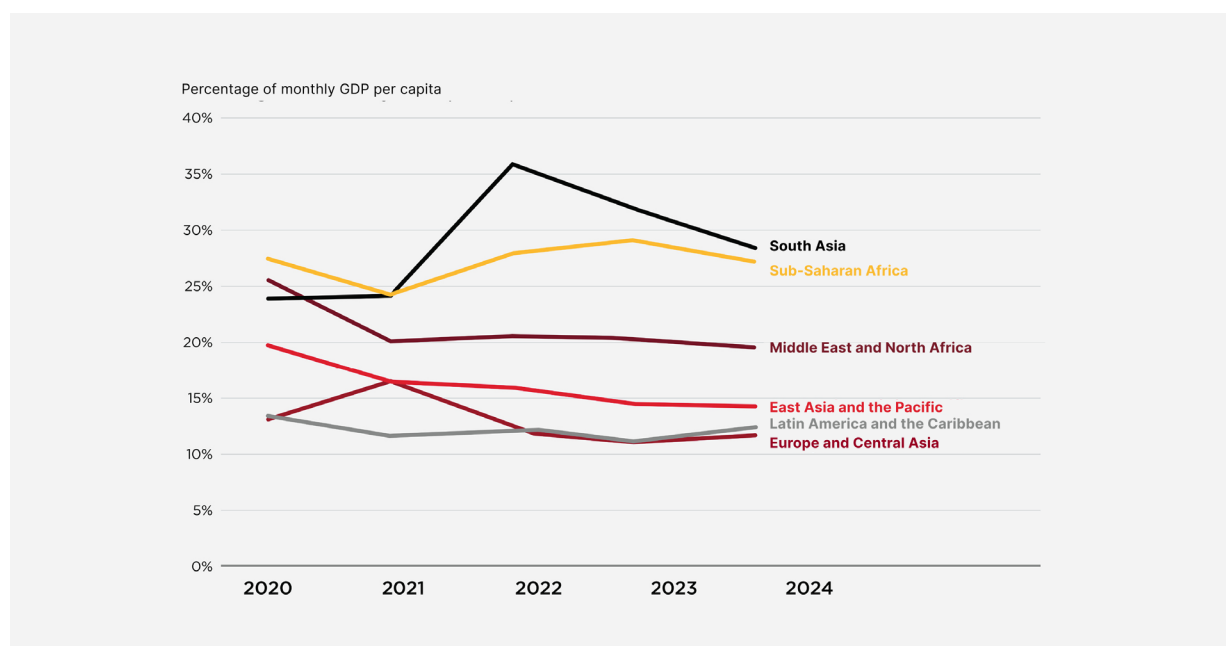
123 Authors calculate the impact using the results of the IMF study “Exploring the Adoption of Selected Digital Technologies in Tax Administration, A Cross-Country Perspective”, Manabu Nose and Andualem Mengistu, NOTE/2023/008. See Table 1, parameter for “TADAT: Use of electronic payment methods”.

124 GSMA Intelligence 2025.

125 GSMA Intelligence – Accelerating Smartphone Affordability in Africa, November 2025.

Figure 42

Affordability of an internet-enabled handset across low- and middle-income countries by region.¹²⁶



To address this, the **GSMA Handset Affordability Coalition, with the objective of lowering the cost of entry-level smartphones to USD 40**, was launched in 2025 by the GSMA in collaboration with six of Africa's mobile operators, including Airtel. This includes:

- Engagement with the Original Equipment Manufacturers (OEMs) and technology companies on the development of reduced cost entry-level smartphones, using baseline minimum requirements including memory, RAM, camera quality, display size, battery performance and other features.
- A call to action for governments to remove taxes on entry-level smartphone prices below USD 100.

Such action could reduce the cost of entry-level smartphones by around 50% in many African countries. GSMA Intelligence estimates that USD 40 and USD 30 priced smartphones could bring mobile internet within reach for additional 20 and 50 million people in Sub-Saharan Africa respectively.¹²⁷

In Malawi, GSMA analysis conducted in 2024, found:

- entry-level internet enabled smartphone price was at USD 23;
- which equated to 54% of monthly GDP per capita, and 121% of monthly GDP per capita for the poorest 40% of the population; and
- that taxation contributes to 15% of smartphone cost.

Addressing entry-level smartphone affordability is critical, and it is welcome that the Malawi Digital Acceleration Project includes an action to reduce device costs. Reforms and initiatives recommended for this project include reducing taxation on entry-level smartphones (see Section 3D3.2 for the policy recommendation impact of lowering taxation on smartphones in Malawi)) and the following recommendations developed following a review of African case studies by the GSMA in 2025 (Figure 43).

¹²⁶ GSMA, The Mobile Economy Africa 2025, Page 40.

¹²⁷ GSMA press release - GSMA and Leading African operators propose minimum requirements for affordable 4G smartphones, October 2025. GSMA Intelligence report - Accelerating smartphone adoption in Africa, November 2025. GSMA press release - Pioneering Affordable Access in Africa: GSMA and Handset Affordability Coalition Members Identify Six African Countries to Pilot Affordable \$40, March 2026.

Figure 43
GSMA recommendations on accelerating smartphone adoption in Africa.¹²⁸

Factors	Recommendations
Domestic production	Assess the long-term sustainability of local assembly before initiating domestic production programmes. Key considerations include economies of scale, global competitiveness, and supply chain resilience.
Device customisation	Encourage user feedback and iterative localisation to improve features based on ongoing input. This process helps address changing user requirements, such as adjusting storage for high media consumption in urban youth demographics while avoiding allocation of resources to less relevant features.
Pre-owned smartphones	Formalise the pre-owned smartphone market, recirculating already imported devices. This can be achieved by introducing trade-in schemes, establishing dedicated refurbishment and repair centres, and providing both online and offline sales channels complete with after-sales support.
Distribution and supply chain	Utilise existing agent networks for smartphone distribution and incorporate smartphones into existing rural and multi-product delivery systems. Governments have a vital role in facilitating smartphone distribution, particularly in addressing challenging customs procedures.
Financing and bundling schemes	Targeted schemes for individuals and micro entrepreneurs with irregular income streams, including market women, students, farmers, and informal workers are essential. Innovative approaches are required to reach consumers in lower income brackets, who tend to be more risk averse.
Disposable income	Smartphone subsidies and bundled airtime for vulnerable individuals within this category and community-based strategies, such as utilising women's savings groups or cooperative lending structures.
Awareness and literacy	Adopt a multipronged approach with solutions tailored to various consumer categories, based on their unique circumstances and social factors. Pair device purchases with practical digital skills training, covering essentials such as using the phone, installing apps, and staying safe online, to help lower the intimidation barrier for first-time users.
Social and cultural norms	Understand the specific social norms present within any given context. Implement trust-based strategies, such as engaging female retail agents, local champions, or implementing community-driven campaigns that emphasise the social and economic advantages of smartphone ownership, especially for women and young people.
Individual behaviours and preferences	Adopt flexible and customisable approaches to bridging the smartphone access gap. Targeting market segments most ready to adopt smartphones, such as college-age students currently using featurephones but who could benefit from educational data plans, or high-volume mobile money users on featurephones who could take advantage of advanced financial products offered through smartphones, will be essential.

Fiscal policies	Governments across Africa should remove taxes on entry-level smartphones priced below USD 100. Such action could reduce the cost of entry-level devices by around 50% in many African countries, increasing the prospects of achieving the sub-USD 40 target for affordable 4G smartphones. For example, in South Africa, the Government exempted handsets priced below ZAR 2,500 (USD 143) from a luxury handset tax in April 2025. GSMA analysis from March to July 2025 found: — Exempted handset sales were 49% higher. — Market share of exempted handsets increased from 23% to 31%. — Consumers purchased entry-level smartphones instead of featurephones, with a 30% decline in featurephone sales.
Enabling infrastructure	Facilitate cross-sector collaboration between the energy and telecoms sectors to bridge the energy gap in Africa (see Sections 3A1.3 and 3B2 for recommendations)

3E.1.2 Digital Skills

The importance of advancing digital literacy and skills is widely accepted as being critical for digital and economic development, noting that GSMA research finds that underserved population groups (such as women, rural communities, older people, and persons with disabilities) are more likely to report literacy and digital skills as a barrier to mobile internet adoption and use.¹²⁹

The AI Talent Readiness Index 2025 ranks Malawi with a digital skills score of 10.5, placing it 26th out of 54 African countries¹³⁰ and the UNDP Malawi Digital Readiness Assessment conducted a stakeholder survey which identified addressing

digital skill as critical to increasing mobile and digital usage, with 60% respondents believing people are not well-equipped.¹³¹

Interviews for this report indicate that there are good digital skills initiatives by a number of organisations underway (see Figure 20), **however this needs to be developed into a more coordinated and comprehensive national digital skills and public awareness programme to fully address Malawi's digital skills needs, reduce the mobile Usage Gap, and accelerate Malawi's digitalisation objectives.**

3E.1.3 Digital government

Governments are using digital technology to deliver enhanced and inclusive public services (including government, transportation, logistics, education and healthcare), reduce costs and improve efficiencies, contribute to economic growth, improve transparency, increase fiscal revenue, and increase data to inform government policies and decisions (see Figure 37 for case studies and Annexure 2 Figure 1).¹³²

The Malawi Digital Acceleration Project, UNDP Malawi Digital Readiness Assessment, the Ministry of Information and Digitalisation 2026 consultations on National Digital Transformation Strategy (with key focus on Digital Public Infrastructure) and National AI Strategy, National Financial Services Development Strategy, 2022-2026, and other policies identify a centralised, coordinated, and integrated digital government programme as a key priority. This is urgent, whilst there are some successful initiatives (see Figure 20 for examples), **Malawi is now behind other African countries and globally.**

¹²⁹ GSMA Digital Inclusion Policy Brief - Advancing digital skills for great digital inclusion, November 2025.

¹³⁰ Quita Hub - AI Talent Readiness Index for Africa, Page 73, April 2025.

¹³¹ UNDP Malawi Digital Readiness Assessment 2024/25, Pages 84-85.

¹³² World Bank briefing - digital transformation drives development in Africa, January 2024.

The UNDP Malawi Digital Readiness Assessment survey results found 80% of respondent said there was no centralised platform, 44% of respondents indicating data management is disintegrated across government, 20% of respondents have limited awareness of government digital payments, and there is more to do to increase awareness of Digital ID for government services (50% or less recognition for employment, education enrolment, insurance, and public health).¹³³

The United Nations e-Government Index (EGDI), conducted most recently in 2024, ranks Malawi 163rd out of 193 countries. This is part of the “lower” EGDI group and is ranked after countries such as South Africa (40), Kenya, (105), Ghana (108), Rwanda (120), Nigeria (132), and Tanzania (140).

The EGDI includes an “online government index” which has moderately declined from 0.51 in 2020 to 0.46 in 2024 as other countries have expanded their digital government programmes.¹³⁴

To advance Malawi’s digital government and public services, the Ministry of Information and Digitalisation’s National Digital Transformation Strategy 2026 consultation recommendations (to provide centralised and integrated public services government portal, using digital payments, and digitalised data management systems), together with the Malawi Digital Acceleration Project’s digital government programme, should be implemented by the Government as part of a new national digital economy strategy (as recommended in Section 3F1.1).

3E.1.4 Digital Business

Digital technologies including connectivity, big data, cloud, and Artificial Intelligence across economic sectors (including agriculture, manufacturing, transportation, trade and commerce) are unlocking improvements in productivity, job creation and formalisation of the economy in Africa (see Annexure 2, Figure 1).

Malawi 2063, digital and financial strategies identify this as an area for significant improvement and opportunity. Interviews for this report highlight the following issues facing businesses in Malawi:

- Limited digital and energy infrastructure, especially for SMEs in rural areas.
- Low levels of digital literacy and trust in security and data protection means many businesses rely on manual systems and not yet adopting digital tools for trade, finance, and business management.
- Lack of integration of government platforms leads to inefficiencies for businesses.
- Limited availability and awareness of financing for digital and tech SMEs and entrepreneurs.¹³⁵

International organisation assessments confirm this, including UNCTAD e-commerce index 2020 ranked Malawi at 141 out of 152 countries¹³⁶ and Malawi has a low digital business score of 16 out of 100 in the GSMA Nations and Society Index 2025 (see Annexure 3, Figure 1).

Malawi is taking actions to address this, including the launch of the National Single Window launched in 2025 (see Figure 20), the Ministry of Trade and Industry (MTI) e-commerce strategy, MTI-UNCTAD e-trade readiness programme 2025-2026, Malawi Digital Acceleration Project initiatives, an African Development Bank USD 13 million programme to finance digital reforms, with a focus on expanding digital financial services and improving Malawi’s competitiveness in online trade, and participation of AfCFTA’s Digital Trade Protocol and the Pan-African Payment and Settlement System.¹³⁷

133 UNDP Malawi Digital Readiness Assessment 2024-25, Pages 27-34.

134 UN E-Government Development Index 2024 and 2020.

135 Consultation interviews for this report.

136 UNCTAD B2C E-commerce Index 2020.

137 Malawi Nation Online article - Digital gaps slow Malawi’s e-commerce drive, September 2025.

These are welcome, however **it is recommended that the Government develop a comprehensive and implementable national digital business strategy, together with financing and incentives reforms, aligned with 2026 consultations on National Digital Transformation Strategy and National AI Strategy recommendations, utilising the Malawi Digital Acceleration Project, and using the AfCFTA Digital Trade Protocol and learnings from Malawi and other countries' good practice case studies** (GSMA currently ranks South Africa, Rwanda, and Ghana as having the highest Digital Business scores in the Digital Africa Nations and Society Index 2025, and beyond Africa, Singapore and South Korea have the highest Digital Scores in the Digital Asia Pacific Nations and Society Index 2025¹³⁸), in partnership and consultation with the business community and international organisations to accelerate Malawi's digital transformation of business.

One area to be included in this strategy is the use of embedded solutions and APIs in online services and apps which tailor content based on user location, device type, and local language requirements in accordance with applicable cyber security, data protection and privacy regulations. The GSMA Open Gateway initiative, launched in 2023, aims to harness the capabilities of mobile network operators worldwide by providing access through standardised APIs. As of September 2025, there are 60 APIs available for development and 14 mobile network operators across 12 countries have adopted this initiative in Africa. This includes Airtel.¹³⁹ It is recommended that Malawi works in partnership with local and international technology companies, mobile operators, and app developers to use embedded solutions and APIs in government public services and commercial services.

3E.2 Recommendations

The following policy recommendations are proposed on entry-level smartphone affordability,

digital skills and other demand side reforms to accelerate Malawi's digital adoption and achieve Vision 2063 and other digital objectives.

Figure 44

Policy recommendations on entry-level smartphone affordability, digital skills and other demand side reforms.

Ministry of Information and Digitalisation (in consultation and working with other MDAs and sector) to develop and implement a new National Digital Economy Strategy - aligned with the 2026 consultations on the National Digital Transformation Strategy and National AI Strategy - to accelerate Malawi's digital adoption, including:

- ☒ Entry-level smartphone affordability programme, considering GSMA Handset Affordability Coalition and Accelerating Smartphone Affordability in Africa Report recommendations.
- ☒ Coordinated and comprehensive national digital skills and public awareness programme.
- ☒ Expand Malawi Digital Acceleration Project's digital government programme and adopt Ministry of Information and Digitalisation National Digital Transformation Strategy 2026 consultation recommendations to provide centralised and integrated public services government portal, using digital payments, and digitalised data management systems.
- ☒ A national digital business strategy, together with financing and incentives reforms, utilising the Malawi Digital Acceleration Project, the AfCFTA Digital Trade Protocol and learnings from highest score GSMA Digital Nations and Society Index countries in Africa and globally (e.g. GSMA Open Gateway Initiative for APIs).

138 GSMA Digital Africa Index 2025. GSMA Digital Asia Pacific Index 2025.

139 GSMA, The Mobile Economy Africa 2025, Pages 25 - 26.

3E.3 Impact

As described in Section 1 (with further information provided in Annexure 2), the report quantitative model measures the impact of the proposed demand-side policy recommendations entry-level smartphone affordability programme, digital skills, digital government, and digital business. These policy recommendations would contribute

to an increase of 530,000 unique mobile internet users by 2030 (+2.1% of population) (Figure 45), and make a significant contribution to reducing the demand-side barriers to digital adoption and usage which can accelerate the benefits and opportunities from increased digitalisation (as found by the GSMA Digital Africa Index, see Section 3A).

Figure 45
Mobile internet uptake with demand side measures.

Unique mobile internet users (millions)	2025	2026	2027	2028	2029	2030
BAU	2.79	3.02	3.28	3.55	3.84	4.15
% of unique mobile internet users (% BAU)	12.5%	13.2%	14.0%	14.7%	15.5%	16.4%
Demand side reforms	2.79	3.1	3.44	3.82	4.23	4.68
Y-on-Y difference to BAU	0.0%	2.5%	5.1%	7.6%	10.2%	12.7%
Increase in growth vs BAU	0.0%	2.8%	6.0%	9.7%	14.0%	18.9%

3F National Digital Economy Strategy development and Regulatory Modernisation

3F.1 Challenges and context

The continual and rapid evolution of technology and business models means that the regulation of the sector needs to continually change to ensure that it reflects current market realities.

Many countries are moving forward on this, developing national digital economy strategies, and evolving their regulatory frameworks to both reflect the way the market is changing and also to support further digitalisation of the economy.

3F.1.1 National digital economy strategy

In line with the Malawi 2063 objectives, the government has developed ICT and digital policy strategies and masterplans, and has worked in partnership with World Bank and other institutions on regulatory reforms. This resulted in the introduction of the Communications Act 2016, the Electronic Transactions and Cyber Security Act 2016, and the Data Protection Act 2024 amongst others. This has contributed to Malawi's GSMA DPRI 2025 score of 55, which is good but behind leading African countries.

A common feature of countries with higher GSMA DPRI scores, and also GSMA DNSI scores, are those that have a holistic, prioritised, coordinated, and implementable national digital strategy, with senior government sponsorship and backed with financial support.

It is recommended that Malawi develop a new overarching national digital economy strategy for the next 5 to 10 years with clear, implementable, and sustainable objectives and initiatives with financial support, aligned with the Malawi 2063, the Government (DPP) Manifesto 2025 - 2030, the Malawi Digital Acceleration Plan, the 2026 Ministry of Information and Digitalisation 2026 consultations on National Digital Transformation Strategy (with its key focus being Digital Public Infrastructure) and National AI Strategy, and National Financial Services and Inclusion strategies.

Past implementation issues have been referred to in World Bank reports and the UNDP Malawi Digital Readiness Assessment, **it is recommended that the development and the implementation of the proposed national digital economy strategy will require President office and cabinet oversight and coordination with participation of all important stakeholder groups** (similar to the Digital Transformation and AI Council and Delivery Unit institutional arrangements proposed in 2026 consultation documents).

3F.1.2 Digital laws taskforce and digital financial services regulation

It is welcome that the Digital Laws Taskforce has been commenced by MACRA and the RBM consultation of digital financial services regulation. These reviews should be advanced as the current laws (e.g. Communications Act 2016 and Electronic Transactions and Cyber Security Act 2016) are now over 10 years old, and the recommendations made in this report highlight key areas and reforms to be considered in these reviews (see Section 4 for consolidated policy recommendations).

It is important that these reviews consider both the updating of the legal and regulatory legislative text and also how to ensure more effective implementation of the policies and regulations. The UNDP Digital Readiness Assessment survey found 40% of respondents said that laws exist but are only sometimes enforced and cited inconsistent implementation.¹⁴⁰ **Interviews for this report cited the need for improved harmonisation of applicable laws and regulations, enhanced coordination and reduced duplication (including regulatory fees) by MACRA, RBM and other regulatory authorities.**

3F.1.3 Safety and security

A barrier to digital adoption is commonly the level of trust in digital services. In 2023, a GSMA survey (conducted across Egypt, Ethiopia, Ghana, Kenya, Nigeria and South Africa) found that 48% of MSMEs identified customers' lack of trust in e-commerce marketplaces and websites as a challenge to growing their e-commerce business.¹⁴¹

Building trust in the safety and security of digital and financial services is cited as a key area in the UNDP Malawi Digital Readiness Assessment, noting improvements made by Malawi in recent years through the National Cyber Security Strategy,

the Data Protection Act 2024, and Malawi's participation in the African Union Convention on Cybersecurity and Personal Data Protection ("Malabo Convention"). The ITU Global Cyber Security Index 2024 showed an improvement to reach the "establishing tier" by Malawi of 80 out of 100 score compared to 36 in 2020¹⁴² and the GSMA Digital Policy and Regulatory Index 2025 score of 80 out of 100.¹⁴³

140 UNDP Malawi Digital Readiness Assessment 2024/25, Pages 58-61.

141 GSMA article "Scaling e-commerce in Africa; why trust is key", November 2023.

142 ITU Global Cyber Security Index 2024.

143 See Appendix 3, Figure 2.

Continuing this progress - in terms of cyber security and data protection operations by government and operators; policy, legal and regulatory development; and increasing digital skills and awareness to build trust - must remain a key priority of the recommended new digital economy strategy and the review of digital and financial services laws and regulations.

The Digital Laws Taskforce should review of the Electronic Transactions and Cyber Security Act 2016, and the Data Protection Act 2024.

Recommendations for these reviews are provided in Figures 46 and 47.

Figure 46
Electronic Transactions and Cyber Security Act (ETCSA) 2016.

Recommended reforms to ETCSA:

- ☒ Make amendments and/or introduce subsidiary regulations to provide clear and proportionate operator obligations, including the legal process for national security and law enforcement requests.
- ☒ Review the required systems, requirements and processes to ensure that they are fully budgeted, and that associated fees are cost-based and proportionate to the regulatory requirements and processes.
- ☒ Ensure that there is harmonisation, coordination and reduced regulatory overlap across applicable laws and regulations.
- ☒ Put in place coordination mechanism involving regulator and operators to resolve operational issues effectively and to work together on capacity building, public awareness and education programmes,
- ☒ Provide clear and proportionate appeal and redress mechanism.

Figure 47
Data Protection Act (DPA) 2024.

Recommendations following industry learnings since the DPA came into force:

- ☒ Replace current annual “per data subject” paid by data controllers and data processors (currently MWK 20 per data subject per year) with a flat annual fee paid by the data controller of a micro, SME, and large entity or group companies. Malawi’s approach is an outlier compared to other African countries impacting the use of digital services by the public and private sectors (e.g. Ghana - flat fee tiered by sector classification and renewed every year. Kenya - flat fee tiered by company employee and turnover and renewed every 2 years. South Africa - once-off registration, no fee. Tanzania - flat fee tiered by sector classification and renewed every 3 years¹⁴⁴).
- ☒ Review learnings from the first 18 months of DPA, and develop supplementary guidelines to provide clarity, consistency, and streamlined requirements. This should include harmonisation, coordination and reduced regulatory overlap with MACRA and RBM.
- ☒ Request an extension of 12 – 24 months to comply with DPA requirements, including system changes, staff training, and internal compliance and audit processes.
- ☒ Introduce incentives or reduced fees to entities with high performing DPA compliance.

144 Ghana Data Protection Commission website (accessed January 2026). Kenya Data Protection Commission - Guidance Note on Registration of Data Controllers and Data Processors, 2024. Tanzania Data Protection Commission website (accessed January 2026). South Africa Protection of Personal Information Act, 2013.

3F.1.4 Artificial Intelligence

It is welcome that the Ministry of Information and Digitalisation has undertaken an AI Landscape Assessment (supported by UNDP and other partners, see Annexure 1 Figure 5) **and is consulting on the National AI Strategy 2026 - 2031. This strategy's proposals and recommendations** (see Annexure 1, Figure 6) **are broadly supported.**

AI is a rapidly evolving technology, an enabler of digital transformation, and a policy priority for governments across the continent. Recent estimates suggest that AI could boost Africa’s economy by USD 2.9 trillion, equivalent to increasing annual GDP by 3% by 2030.¹⁴⁵

Mobile operators, global technology companies, and local start up technology companies are scaling up investment in AI for smart solution services to businesses and enhanced services for consumers. For example, Airtel Africa has

partnered Bharti Airtel subsidiary Xtelify to roll out an AI powered software platform in 14 African markets, including Malawi.¹⁴⁶ Google is investing USD 37 million to expand AI development in Africa supporting start-ups and education institutions to accelerate AI talent and local solutions, local tech companies are using AI solutions in agriculture, healthcare, and credit-rating analysis.¹⁴⁷

Policymakers globally and in Africa are responding by developing AI strategies at a continental and country level, which Malawi may find instructive. The African Union has launched a Continental AI Strategy (Figure 48) and several Africa countries have developed (or are under development) their national AI strategies, including Benin, Egypt, Kenya, Mauritius, Nigeria, Rwanda, and South Africa. A critical requirement to be addressed in these strategies is for AI development in local languages to increase adoption.¹⁴⁸

Figure 48
Focus areas for African Union Continental AI Strategy.¹⁴⁹

Focus Area	Description
Maximising AI’s benefit	Ensuring AI technologies contribute to economic growth, social inclusion and improved public services across the continent.
Minimising AI’s risk	Putting in place safeguards to manage ethical, security and privacy risks while preventing misuse of AI systems.
Enabling infrastructure and skills that underpin AI development	Building digital infrastructure, investing in data ecosystems and equipping the workforce with the skills needed to develop and use AI responsibly.
Fostering cooperation and partnerships	Promoting collaboration between governments, the private sector, academia and international partners to accelerate AI adoption and governance.
Stimulating investment	Encouraging public and private investment in AI research, innovation and startups to drive sustainable growth and competitiveness.
Creating an inclusive governance and regulatory framework	Establishing clear, inclusive and adaptive governance structures to ensure AI deployment aligns with societal values. Policies must balance innovation with accountability, promoting transparency, fairness and equitable access to AI benefits.

145 AI in Africa – The state and needs of the ecosystem, AI4D Africa, 2024.
146 Malawi Nation online article - Airtel Africa partners firm to push for AI in 14 countries, August 2025.
147 Connecting Africa article - Google commits \$37M to advancing AI in Africa, July 2025.
148 GSMA – The Mobile Economy Africa 2025, Pages 13 – 16.
149 GSMA Intelligence based on the Continental Artificial Intelligence Strategy, GSMA The Mobile Economy Africa 2025, Page 13.

3F.2 Recommendations

The following policy recommendations are proposed with regard to the policy and regulatory framework to accelerate Malawi's digitalisation.

Figure 49

Policy recommendations - National Digital Economy Strategy and Regulatory Modernisation.

MACRA to complete Digital Laws Taskforce consultation of regulatory reviews (including the National Communications Act 2016, Electronic Transactions and Cyber Security Act (ETCSA) 2016, Ministry of Trade e-commerce framework).

Ministry of Information and Digitalisation to develop a harmonised National Digital Economy Strategy (aligned with the Ministry of Information and Digitalisation 2026 consultations on National Digital Transformation Strategy and National AI Strategy) with a central government program office to set priorities, consult, coordinate and implement delivery with MDAs, LGs, operators, and public and private partners. This includes:

- ☑ The key policy recommendations made in this report on sustainable infrastructure investment, mobile money regulation to accelerate financial inclusion (including harmonised regulation, cooperation and reduced regulatory overlap between RBM and MACRA), use of digital technology and optimise sector taxation and fees to enable investment, entry-level smartphones and other demand side reforms.
- ☑ Build trust in digital cybersecurity, data protection, and privacy – including:
 - Revisions to the ETCSA 2016 and Data Protection Act 2024 to provide clear operator obligations (including legal process for national security and law enforcement requests).
 - Replace the Data Protection Act 2024 annual “per data subject” registration fees for data controllers and data processors to a one-time registration fee.
 - Ensure that required systems and initiatives are fully budgeted and developed in consultation with stakeholders.
 - Implement a clear and proportionate appeal/redress mechanism.
 - Provide harmonisation, coordination and reduced regulatory overlap across applicable laws and regulations.
- ☑ Adopt and implement the Ministry of Information and Digitalisation National AI Strategy framework.

4. Conclusion

Policy recommendations contribution to Malawi's digital objectives



Conclusion: Policy recommendations contribution to Malawi's digital objectives

The following policy recommendations balance short-term objectives with long-term investment and development to achieve Malawi 2063 vision, the Government (DPP) Manifesto 2025 - 2030, digital and financial inclusion objectives, and realise the full potential of the digital economy and transformation in Malawi across essential services and strategic sectors.

Achieving the wide-ranging benefits of the digital economy and transformation will require bold actions to support demand, reduce the cost of supply and promote a policy environment that supports investment.

The economic and social value of digital and emerging technologies relies on mobile networks as the backbone of digitalisation of the economy and the mobile sector is a committed partner with the government to achieve Malawi 2063 and digital objectives across the economy and delivery of public services.

The following proposed policy recommendations (Figure 50) will accelerate the mobile sector's contribution to Malawi 2063 and digital objectives, including:

- **Extend from 87% to 99% 4G mobile network population coverage** (with the remaining remote area covered by alternative technology), contributing to the Government Manifesto 2025 - 2030 target of 80% population affordable broadband coverage and the Malawi Digital Acceleration Plan universal mobile broadband connectivity objective.
- **An additional 810,000 unique mobile internet (broadband) subscribers (3.2% population), totalling 5 million by 2030, reducing the mobile internet usage gap by 5 percentage points from 80% to 75%**, and contributing to Malawi 2063 internet penetration objectives (20% in 2030) and National Financial Inclusion Strategy III (75 mobile phones per 100 inhabitants).
- **An estimated 3.8 million additional mobile money registered accounts by 2030 (24% of the adult population, totalling 28 million accounts)**, and contributing to the National Financial Inclusion Strategy III goal to increase at least one formal financial service to 95% of the country's adult population by 2028 and reduce financial exclusion from 12% to 5%.

Figure 50

Report Policy recommendations and contribution to Malawi's Digital Strategy objectives.

Recommendations	Measures	Impact 2030 contributing to Malawi's digital objectives (compared to base case)
Prioritise telecoms infrastructure as critical national infrastructure for forex access AND Sustainable digital infrastructure investment environment reforms	Recommendations to enable further investment in digital infrastructure, resulting in increased digital value add across essential services and strategic sectors, including agriculture, economic infrastructure, manufacturing, and public services:	87% 4G population coverage (2025) ¹⁵⁰ is currently contributing to universal mobile broadband coverage objective.

150 GSMA Intelligence 2025. Please note that population 4G coverage is calculated from combined MNO network coverage data and mapped against Global Human Settlement Layer (GHSL) population estimates for 2025. This is used to calculate the state of coverage for each population settlement in the country, and the average geographic and population coverage for each administrative area in the country.

	1.Ministry of Finance and Economic Affairs and RBM to prioritise telecoms infrastructure as critical national infrastructure for forex access as requested by telecoms licensees for this year and on an annual basis. RBM to formally classify telecoms and digital infrastructure under the Essential Services and Strategic Sectors Framework to implement this forex access prioritisation. 2.MACRA to update the spectrum roadmap that promotes efficient assignment and investment in digital infrastructure, including 20-year duration licenses and license renewals. 3.Government (including Ministries of Information and Digitalisation, Ministry of Energy, and Finance and Economic Affairs), ESCOM, MACRA, MERA and other applicable agencies to take targeted steps on telecoms energy supply that would reduce costs for operators and support national objectives on energy access and decarbonisation. Priority measures include: — Integrate telecommunications infrastructure into national energy programmes, including Malawi's Mission 300 Energy National Compact, ASCENT¹⁵¹, and related initiatives, recognising telecoms as critical national infrastructure and incorporating demand into electrification and least-cost planning. This includes aligning grid and minigrid rollout plans; streamline permitting for offgrid and hybrid solutions serving telecom sites; and monitor progress on powering priority towers, with clear annual targets and reporting. — Leverage GSMA geospatial analysis and operator data to support coordinated planning of energy and connectivity infrastructure, prioritising underserved areas and enabling efficient public and private investment. For example, directing Mission 300 and minigrid investments first to the roughly 30% of existing 4G sites that are more than 1 km from the grid, and the over 87% of new sites needed to reach 99% 4G coverage that are also located beyond 1 km of existing grid infrastructure.	These infrastructure policy recommendations would result in: — An increase to 99% 4G population coverage with a required USD 40 million investment (at least USD 60 million without the policy recommendations). — An additional 60,000 unique mobile internet users by 2030 (+ 0.2% of population). — This would generate an estimated MWK 55 billion of value added, 20,000 jobs and MWK 9 billion of tax revenue in essential economic sectors.
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151 World Bank supporting Malawi government with the Accelerating Sustainable and Clean Energy Access Transformation ("ASCENT") Project.

	— Reduce taxes, import duties and levies (including VAT) on solar-powered telecom equipment and energy systems, including batteries, inverters, and hybrid solutions, and review electricity tariffs applied to telecom operators to improve energy affordability, transition from diesel to cleaner more cost-effective power solutions, and lower their foreign-currency fuel bill. — Promote the adoption of renewable and distributed energy solutions for telecom sites, including solar-hybrid systems and battery storage, and enable telecom towers to act as anchor loads for mini-grids to support wider rural electrification. — Facilitate private sector participation and investment by supporting blended finance models and enabling partnerships between mobile network operators, tower companies, energy service companies and mini-grid developers. — Strengthen coordination between energy and communications authorities to streamline permitting processes and support integrated infrastructure deployment. — Improve the resilience of telecom energy supply by promoting backup power solutions, prioritising telecom sites in power restoration and reducing reliance on diesel through cleaner alternatives. — Establish monitoring frameworks and targets to track progress on telecom energy access, including renewable energy use, diesel reduction and rural coverage expansion. 4. Government (including Ministry of Information and Digitalisation, Ministry of Justice, Ministry of Homeland Security, Ministry of Energy, Ministry of Transport and Public Works, Ministry of Land) to designate telecoms infrastructure as constituting Critical National Infrastructure (CNI) in law and implement measures to provide more effective deployment processes and to protect against damage resulting from new infrastructure deployment, extreme weather, vandalism, and theft including: — Clear designation of telecoms as CNI; — A National CNI Protection Plan covering security and emergency standards, coordination, reporting and auditing, redundancy and restoration.	
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	— A national CNI oversight and coordination organisation across government, regulatory, emergency and law enforcement agencies. — Significant criminal penalties for interference, vandalism and theft. — A mechanism for compensation payments for damaged CNI. — The CNI coordination organisation to undertake regular nationwide communication and education campaigns against infrastructure damage, vandalism and theft, and national emergencies including extreme weather. 5. MACRA (with government and regulatory agencies) to work together with operators on a QoS improvement programme, including: — Adopt industry proposal on amendments to urban and rural QoS regulation performance indicators (see Figure 27) to provide improved service quality balancing operational conditions and investment requirements. — Address underlying barriers to QoS, including: prioritise forex access for telecoms infrastructure; expedite spectrum assignment; improve national fibre and cross-border transmission capacity; address telecoms energy supply; CNI legislation and coordinated implementation; prioritised and sustainable remote coverage programmes (e.g. Malawi Digital Acceleration 4G remote coverage subsidy programme); and regulatory approval of commercial partnerships by mobile operators to use Low-Earth Orbit (LEO) satellite and Direct 2 Device (D2D) technology partnerships. 6. MACRA to update licensing and regulatory framework, considering GSMA recommendations (Figure 28), to allow mobile operators to commercially partner and use LEO and D2D technologies to supplement mobile broadband coverage in rural and remote areas and provide outage redundancy.	
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	Noting that recent GSMA analysis finds that: — Expanding 4G coverage from the current 87% total population and 71% rural population to 99% total population will require at least USD 60 million additional investment, which could be lowered to USD 40 million if policy recommendations are adopted. — USD 130 million total forex allocation per operator required to achieve 99% total population coverage (based on capex plus 8 years of discounted opex). — finds that 30% of existing 4G mobile network sites are outside of 1 kilometre and more than 87% of new sites potentially required to expand from 87% to 99% population 4G coverage are outside of 1 kilometre of the national electricity grid.¹⁵²	
Enable mobile money contribution to financial inclusion	1. Ministry of Finance and Economic Affairs and RBM to remove 0.05% levy on mobile money transfers above MWK 100,000 and reduce regulatory fees to support financial inclusion strategy objectives. 2. RBM to revise proposed amendments to the Regulation 18 of the Payment Systems (E-Money) Regulations 2019 to reflect macro-economic realities and support National Financial Inclusion Strategy III (2024 – 2028) objectives: — Do not apply Bank Electronic Fund Transfer (EFT) 1% fee cap on mobile money cash-out, transfer, and platform to platform fees – and retain tiered pricing structure – due to important operational and economic differences between Banks and MMOs, which puts at risk the viability of mobile money sector agents and jobs. — Align regulation with the Financial Inclusion Strategy, including developing standards, measures, and tax rebates/incentives for stronger MMO and agent liquidity management, efficient float management, and cash-out networks – especially in remote and underserved areas. — 3-6 month phased implementation of new regulations to allow for system development and testing ensuring quality of service and fraud prevention and compliance in place; and to complete comprehensive agent and customer education.	Contributing 3.8 million mobile money registered active accounts (24% of the adult population) contributing to RBM goal to increase access to at least one formal financial service to 95% of the country's adult population by 2028 and reduce financial exclusion from 12% to 5%. Contributing to the increase of RBM target of 90% digitalised government payments.

152 GSMA Intelligence - 4G Coverage and Investment in Malawi, February 2026.

	— Current separate RBM KYC and MACRA regulations should be replaced with a harmonised and integrated digital KYC regulation, standards, and procedures for telecoms and national payment system licensees to provide a real time and robust process integrated with the National Registration Bureau. This must be developed and implemented by a cross-party working group with an approved public private co-investment budget and phased rollout plan 3. RBM to complete consultations to review Payment Systems Act 2016 and the draft Digital Bank Directive 2025 to develop a digital finance regulatory framework to accelerate financial inclusion, reduce costs, and generate economic growth, notably: — Provide clear classification, license and regulatory framework for mobile money operators and agents. — License and regulatory compliance obligations and fee regulation for mobile money operators and agents should be simplified, proportionate, and designed to enable digital financial inclusion and growth, rather than applying “traditional” telecoms and banking regulation (e.g. KYC and tier levels, AML, electronic fund transfer fee regulation, different requirements for trust accounts, deposit and non-deposit services). — Establish a Financial Inclusion taskforce involving RBM, MACRA, mobile money operators, banks, agents, merchants, and other fintech participants to develop and implement coordinated programmes (with subsidies, incentives, and tax reliefs) to deepen financial inclusion in rural and underserved areas. — Regulatory sandbox and fast track approvals for new products and innovations. — Harmonised legislation and regulation, improve coordination and remove regulatory overlap between RBM, MACRA, and Data Protection Authority including one digital KYC process, alignment with data protection and cyber security legislation to build user’s trust, and remove duplicative oversight and taxation on value added services and mobile money.	
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Use of digital technologies to increase domestic revenue mobilisation AND Optimise sector taxation	Continue government programmes to increase government revenue mobilisation through accelerating the use of digital technology for cashless payments, to improve accuracy in filed tax returns and tax compliance, and public service delivery. Ministry of Finance and Economic Affairs (in consultation with the Ministry of Information and Digitalisation, MACRA and RBM) to adopt forward looking fiscal policies to optimise sector specific taxation on telecoms, mobile money and entry-level smartphone devices to broaden the tax base, thereby increasing affordability and promoting digital inclusion, including: — Remove the 10% excise levy on data and mobile telecoms services (noting that the 2023 budget intended to reduce the rate to 7.5% although this was never implemented). — Remove the 17.5% VAT on the margin (sales prices less costs where VAT is reclaimable) of imported entry-level smartphones. — Reduce mobile money levy, remove duplicative levies by MACRA, USF, and RBM, and apply same levies to other National Payment System licensees. — Regulatory fees in local currency as opposed to USD due to sector forex challenges. — Regularly assess the impact of the new taxes on the digital sector and its contribution to Malawi 2063 and government objectives, including those introduced in Mid-Year 2025/26 and 2026/27 budget policy statements.	These taxation policy recommendations would result in an increase of 220,000 unique mobile internet users by 2030 (+ 0.9% of population). This would generate an estimated MWK 200 billion of value added, 90,000 jobs and MWK 32 billion of tax revenue in essential economic sectors. If all policy recommendations are implemented, increased mobile digital usage across all sectors of the economy would generate gross additional tax revenue of MWK 197 billion with an additional MWK 51 billion from increased use of digital tax filing at a net loss of MWK 70 billion in taxes from the mobile sector by 2030, giving a net gain of MWK 179 billion.
Entry-level smartphone affordability, digital skills & other demand side reforms	Ministry of Information and Digitalisation (in consultation and working with other MDAs and sector) to develop and implement a new National Digital Economy Strategy (aligned with the Ministry of Information and Digitalisation 2026 consultations on National Digital Transformation Strategy and National AI Strategy) to accelerate Malawi's digital adoption, including: — Entry-level smartphone affordability programme, considering GSMA Handset Affordability Coalition and Accelerating Smartphone Affordability in Africa Report recommendations. — Coordinated and comprehensive national digital skills and public awareness programme. — Expand Malawi Digital Acceleration Project's digital government programme and adopt 2026 National Digital Transformation Strategy recommendations to provide centralised and integrated public services government portal, using digital payments, and digitalised data management systems.	These demand-side policy recommendations would result in an increase of 530,000 unique mobile internet users by 2030 (+ 2.1% of population). This would generate an estimated MWK 482 billion of value added, 210,000 jobs and MWK 76 billion of tax revenue in essential economic sectors

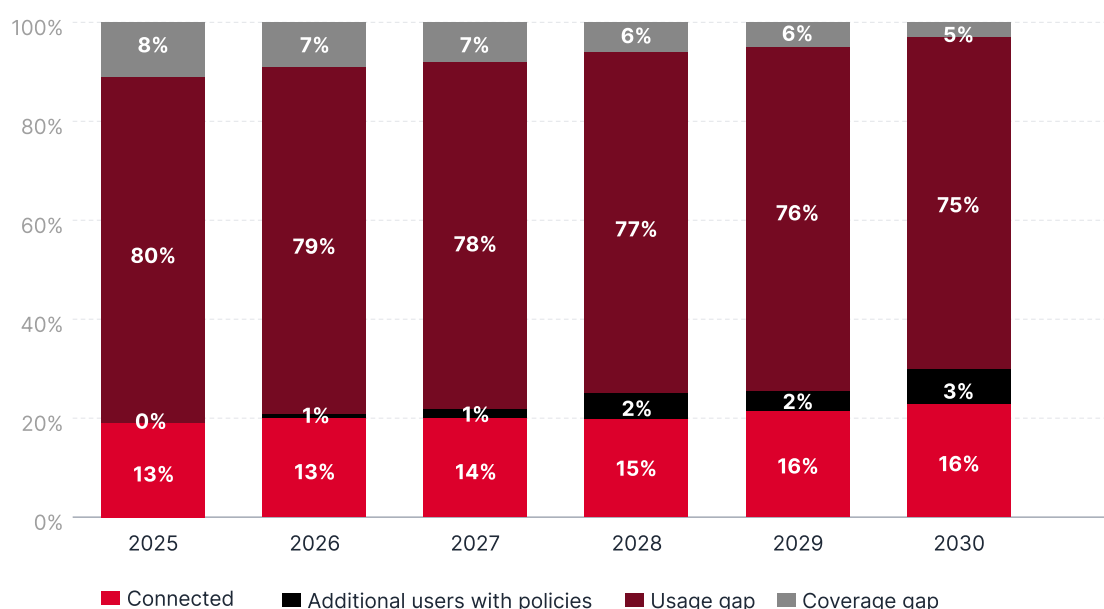
National Digital Economy Strategy AND Modernise regulatory framework	MACRA to complete Digital Laws Taskforce consultation of regulatory reviews (including the National Communications Act 2016, Electronic Transactions and Cyber Security Act (ETCSA) 2016, Ministry of Trade e-commerce framework). Ministry of Information and Digitalisation to develop a harmonised National Digital Economy Strategy (aligned with the Ministry of Information and Digitalisation 2026 consultations on National Digital Transformation Strategy and National AI Strategy) with a central government council and program office to set priorities, consult, coordinate and implement delivery with MDAs, LGs, operators, and public and private partners. This includes: 1. The key policy recommendations made above on sustainable infrastructure investment, mobile money regulation to accelerate financial inclusion (including harmonised regulation, cooperation and reduced regulatory overlap between RBM and MACRA), use of digital technology and optimise sector taxation and fees to enable investment, entry-level smartphones and other demand side reforms. 2. Build trust in digital cybersecurity, data protection, and privacy – including: – Revisions to the ETCSA 2016 and Data Protection Act 2024 to provide clear operator obligations (including legal process for national security and law enforcement requests). – Replace the Data Protection Act 2024 annual “per data subject” registration fees for data controllers and data processors to a one-time registration fee. – Ensure that required systems and initiatives are fully budgeted and developed in consultation with stakeholders. – Implement a clear and proportionate appeal/redress mechanism. – Provide harmonisation, coordination and reduced regulatory overlap across applicable laws and regulations. 3. Adopt and implement the Ministry of Information and Digitalisation National AI Strategy framework.	These would contribute to the total combined policy recommendations impact outlined in Figure 51 below.
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If these proposed policy recommendations are adopted, it would have a material impact on the mobile broadband (internet) adoption. It is estimated that they could result in higher adoption by up to 19% over the period to 2030 (Figure 51) and contribute to the closing of the usage gap by 5 percentage points (Figure 52).

Figure 51
Combined impact of policy recommendations on mobile internet uptake in Malawi.

Unique mobile internet users (millions)	2025	2026	2027	2028	2029	2030
BAU	2.79	3.02	3.28	3.55	3.84	4.15
% of unique mobile internet users (% BAU)	12.5%	13.2%	14.0%	14.7%	15.5%	16.4%
Combined policies	2.79	3.14	3.54	3.97	4.45	4.96
Y-on-Y difference to BAU		3.9%	8.0%	11.9%	15.7%	19.4%
Increase in growth vs BAU		4.3%	9.4%	15.2%	21.7%	28.9%

Figure 52
Combined policy impact of the mobile internet usage gap in Malawi.



Increased digitalisation would significantly contribute to economic transformation and digital strategy objectives across essential economic sectors (agriculture, manufacturing, transport, trade) and in public services

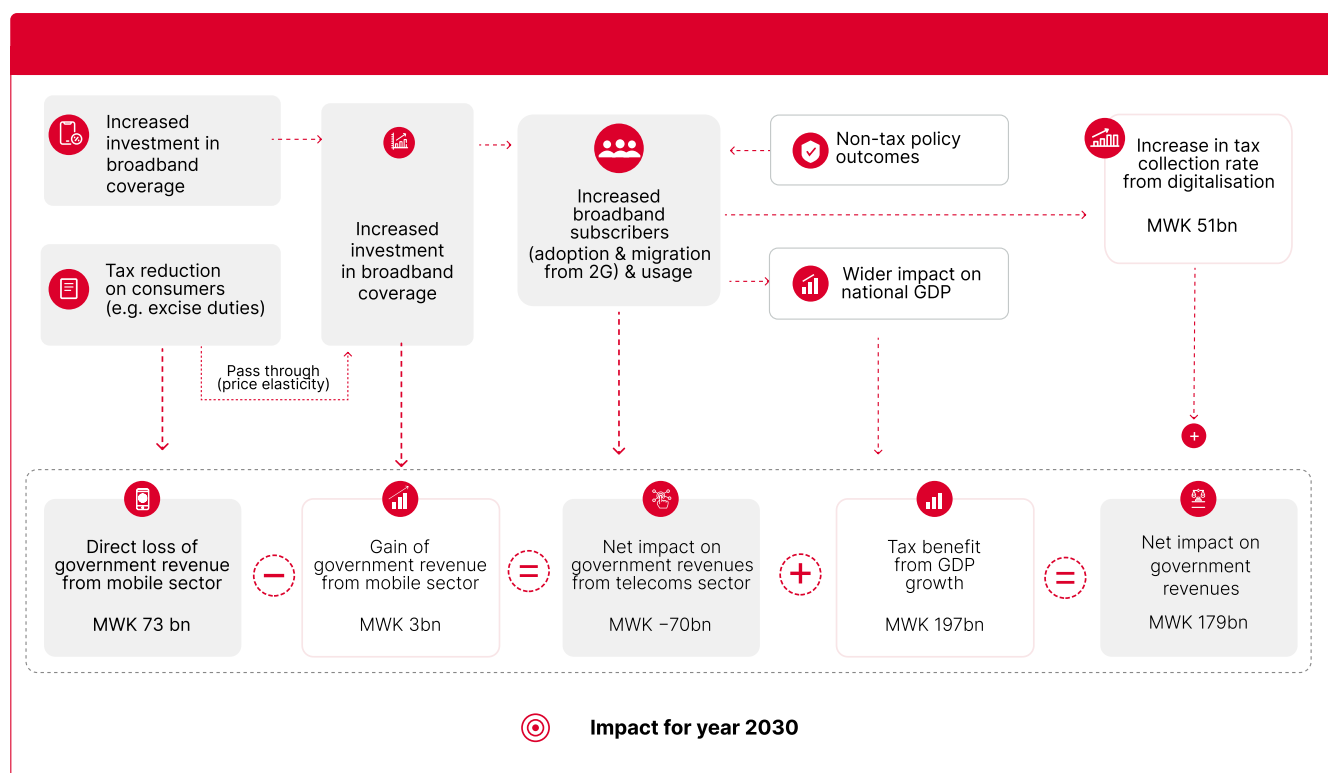
(healthcare, government), resulting in an additional MWK 1,103 billion value add, 490,000 jobs, and MWK 174 billion tax revenues (Figure 53). Contributing to the Government Manifesto 2025 - 2030 targets of 150,000 digital jobs and 5,000 tech-enabled small businesses, and +70% government services online and AI optimised.

Figure 53
Sectoral impact of increased digitalisation following telecommunications policy reforms.¹⁵³

	Agriculture	Manufacturing	Transport	Trade	Healthcare	Government
Increased value-added (MWK billion)	350	221	109	86	161	176
% of sector GDP	4.90%	5.80%	7.30%	2.40%	8.70%	3.50%
% of Total GDP	1.10%	0.70%	0.40%	0.30%	0.50%	0.60%
Employment	340.000	50.000	20.000	20.000	30.000	30.000
Tax revenue (FCFA billion)	47	29	11	11	21	52

Figure 54 shows the methodology used to estimate the tax impact of the policy recommendations in this report.

Figure 54
Tax impact methodology.



153 For methodology: See Annexure 2 of this report, and the GSMA Driving digital transformation of African economies Evidence and methodology document, 2024. (*) sum of tax revenue raised from digitalisation of sectors.

Should the proposed sector tax policy recommendations, combined with the other policy recommendations outlined in this report, be adopted it is estimated that the **economic growth generated by increased mobile digital usage across all sectors of the economy will have a MWK 179 billion net tax impact (including an estimated additional tax revenue of MWK 197 billion from expansion of economic output**

across the economy, an additional MWK 51 billion from increased usage of digital tax filing, and at a net loss of MWK 70 billion in lost taxes from the mobile sector (which itself is a net effect for lower tax rates on higher demand)) by 2030. Contributing to government objectives of economic recovery and fiscal responsibility (Figure 55).

Figure 55
Overall tax impact of combined scenarios.

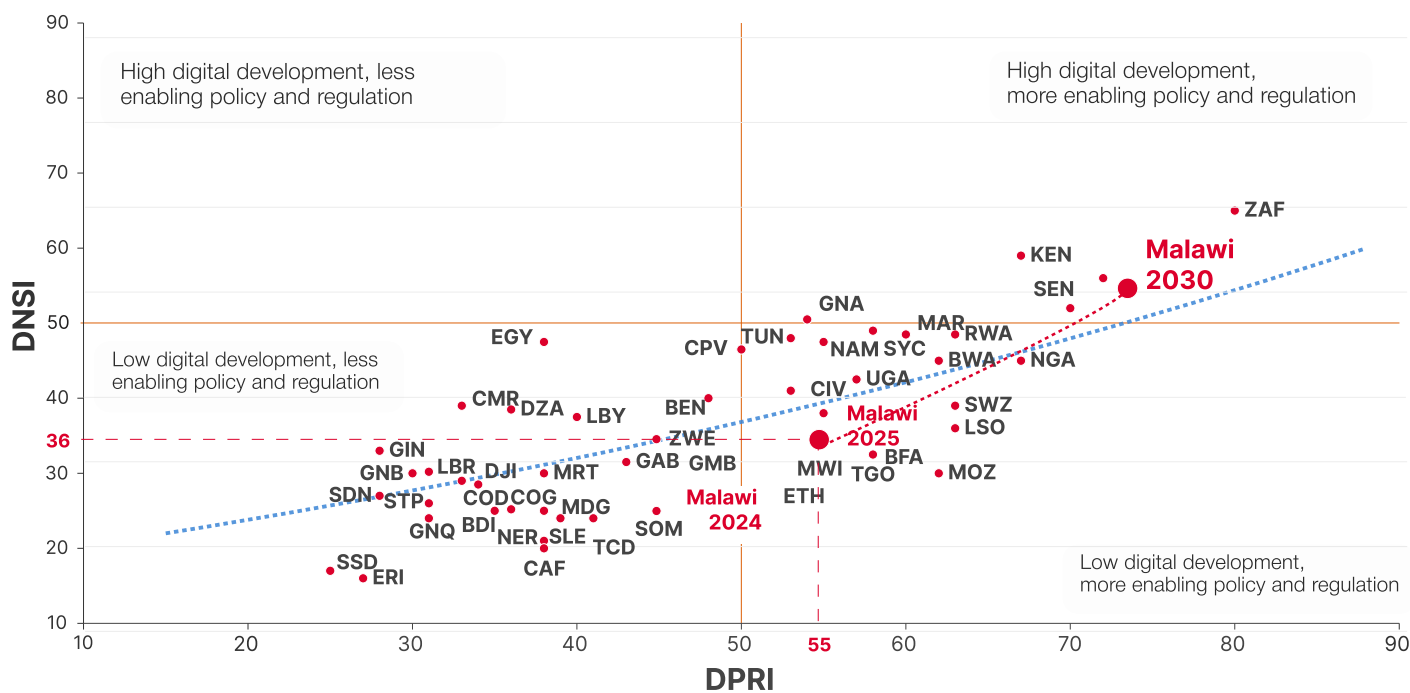
Combined scenario	2026	2027	2028	2029	2030
Tax gain from mobile sector growth (MWK billion)	0	1	2	2	3
Tax loss from removed mobile sector taxes (MWK billion)	-55	-56	-57	-64	-73
Tax increase from wider economy (MWK billion)	43	89	137	166	197
Additional tax collected from digitalisation (MWK billion)	2	7	16	31	51
Net tax impact (MWK billion)	-10	40	98	135	179

GSMA Intelligence finds that the proposed policy recommendations, if adopted, would put Malawi amongst Africa's leading digital nations in the GSMA Digital Africa Index. Malawi's GSMA Digital Africa Policy and Regulatory Index (DPRI) 2025 score would increase from 55 to 74 out of 100.

This would contribute to an improved GSMA Digital Africa Nations and Society Index (DNSI) score from 36 to 54 by 2030 (Figure 56), with increased benefits of digitalisation for consumers, economy and business, and government and public services.¹⁵⁴

¹⁵⁴ GSMA Intelligence analysis of the potential impact of the policy recommendations on Malawi scores in GSMA Digital Policy and Regulatory Index 2025 and GSMA Digital Nations and Society Index by 2030, provided in April 2026. See Section 3A and Annexure 3 for more information on Malawi's scores in the GSMA Digital Africa Index 2025.

Figure 56
Policy recommendations impact on DPRI and DNSI.



Source: GSMA Intelligence

Annexure 1 - Malawi digital strategies and programmes

This annexure provides authors’ summaries of Malawi’s current digital strategies and programmes: The Government (Democratic Progressive Party) Manifesto 2025 - 2030; Malawi Digital Acceleration Project 2024-2030; Inclusive Digital Transformation for Malawi; UNDP Malawi Digital Readiness Assessment 2024; Ministry of Information and Digitalisation, UNDP and partners Digital Transformation Strategy consultation 2026; Ministry of Information and Digitalisation, UNDP and partners Artificial Intelligence Landscape Assessment 2026 and National Artificial Intelligence Strategy consultation 2026;

Ministry of Finance and Economic Affairs Financial Services Development Strategy 2022-2026, and Reserve Bank of Malawi National Financial Inclusion Strategy III.

The Government, elected in 2025, has prioritised digitalisation as a key strategy in the first State of Nation Address in February 2026¹⁵⁵, and included ICT and Artificial Intelligence objectives “to transform Malawi into a 10 top African nation in cybersecurity and innovation readiness, with a smart, competitive, innovation driven, and inclusive digital economy” in its 2025 - 2030 manifesto to support Malawi 2063 (Figure 1).

Figure 1
Extract from Democratic Progressive Party (DPP) Manifesto 2025 - 2030, ICT and Artificial intelligence section.

Statement	Malawi has to step into a new digital era, transforming the country into a smart, competitive, innovation driven, and inclusive digital economy. Grounded in principles of universal access, ethical technology, and citizen empowerment. The DPP government will propel Malawi to be ranked among the top 10 African nations in cybersecurity and innovation readiness.
2030 objectives	☒ Provide access to affordable broadband to over 80% of the population. Malawi will be a digitally empowered nation, with over 2,500 Public Wi-Fi access zones including markets, schools, hospitals, and bus depots. ☒ Invest in a National Cloud Data Center to host government data, support AI processing, and serve as the foundation for a future AI-powered digital state. ☒ To future-proof our cities, smart infrastructure solutions— such as AI-assisted traffic control, surveillance, and waste management—will be piloted in Lilongwe, Blantyre, and Mzuzu as part of our “Mzinda Wamzeru” (Smart City) initiative. ☒ Create more than 150,000 digital jobs, and realise 5,000 tech-enabled small businesses. ☒ Establish a Cybersecurity Academy and build partnerships with the African Institute for Mathematical Sciences (AIMS), IBM, and Google for advanced technical training. ☒ Ensure that every Malawian will have access to a digital ID, which will be fully interoperable with social services, health records, education, mobile money, and agriculture systems. ☒ Ensure that at least 70% of government services will be available online and AI-optimized for efficiency and transparency.

155 State of the Nation Address “The Path to Economic Recovery: Delivering A People-Centered Development” by H.E. President Mutharika, February 2026.

2030 objectives	☑ Roll out a National Artificial Intelligence and Digital Innovation Policy that aligns with the African Union Digital Transformation Strategy and UNESCO AI Ethics guidelines. ☑ Revise the startup ecosystem policy to allow regulatory sandboxes, enable blockchain and cryptocurrency experimentation, and promote local content monetization in the digital economy. ☑ Launch AI tools in agriculture, and provide half a million farmers with real-time insights on weather, market prices, and soil conditions. ☑ In health, equip rural clinics with telemedicine systems and AI-assisted diagnostics, linking patients to specialists, speeding up early detection of diseases, and addressing health worker shortages in underserved areas. ☑ Roll out real-time government dashboards to facilitate open governance, budget transparency, and citizen feedback. ☑ Introduce coding, robotics, and digital citizenship in primary school curricula, and AI-focused programmes in secondary and tertiary institutions.
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The Digital Malawi Acceleration Project 2024-2030 objective is to increase access to, and inclusive use of, the internet and improve the government's capacity to deliver digitally enabled services. Overseen by the Ministry of Information and Digitalisation Technology, implemented by the Malawi Public Private Partnership Commission, and with technical support and USD 150 million funding by the World Bank.

This follows the Digital Malawi Foundations Project 2017-2024, supported by the World Bank, which resulted in:

- ~ 7 million Malawians joined the digital economy for the first time as internet users, while an additional three million existing users experienced faster internet speeds and lower prices.
- Over 19,000 youth (of which 10,000 were female) were trained in digital skills, basic ICT literacy, and entrepreneurship through 10 newly established Tech Hubs, supporting their access to income opportunities.
- Over 83,000 students from 81 higher learning institutions in Malawi gained access to cheaper and reliable internet connectivity through the Malawi Research and Education Network.
- The wholesale price on internet access was reduced from around USD 460 per megabits per second (Mbit/s) per month at the start of the project to below USD 10 by the end of the project.
- Over 100 Free Public Wi-Fi spots available in public locations including post offices, hospitals, schools, libraries, marketplaces, and airports, providing access to free internet for people in these locations.
- Over 600 government sites (including offices, post offices, hospitals, etc.) have internet connectivity, pre-paid for 10 years, which is critical for improved efficiency of government and service delivery.
- The Data Protection Bill was passed by Parliament in December 2023, and the Data Protection Authority is being established at the Malawi Communications Regulatory Authority (MACRA).
- The National Data Centre was constructed to serve the data hosting needs of the entire government.¹⁵⁶

Figure 2 provides a summary of the Malawi Digital Acceleration Project.

¹⁵⁶ World Bank Group briefing - Digitalizing Malawi to improve access to education, public services, and income opportunities, June 2025.

Figure 2
Extract from Malawi Digital Acceleration Project 2024-2030.

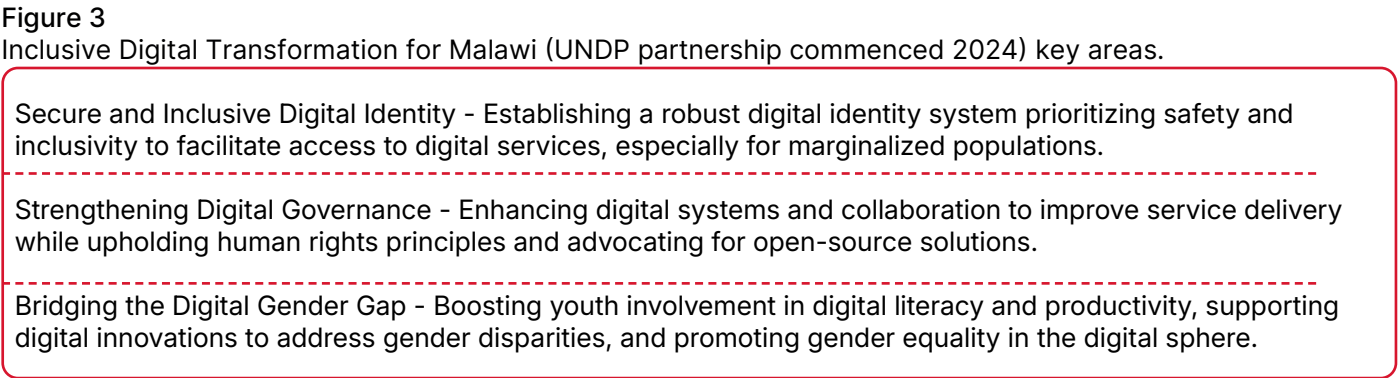
Component	Sub-component	Activities
1. Affordable Broadband and Secure Data Hosting.	1.1 Rural Connectivity	— Expand broadband in rural areas to achieve universal coverage of mobile broadband. — Upgrade 2G to 4G/5G towers. — Close last-mile connectivity gaps for an additional 500 government institutions.
	1.2 Education Sector Connectivity.	— Connect up to 2000 schools. — Coordinate connectivity with renewable energy. — 10,000 youth digital skills training.
	1.3 Regional Connectivity and Climate Resilience.	— Address gaps in cross-border broadband links. — Integrated planning of digital corridors for Southern Africa.
	1.4 Enhancing Data Hosting Capacity and Transition to Cloud Computing Support national data centre.	— Enable cloud services. — Migrate government data to secure data centre.
2. Interoperable and Secure Data Platforms.	2.1 Next Generation Digital ID and Identity Verification Services.	— Transition to cost-effective digital ID. — Develop e-signatures. — Secure digital authentication services.
	2.2 Extending the Bomalathu Data Exchange Platform.	— Onboard more government agencies to the platform. — Expand e-services portal. — Develop APIs for public and private sectors.
	2.3 Enhancing Policy and Regulatory Frameworks.	— Harmonise regional policy and regulatory frameworks. — Operationalize the Data Protection Authority. — Enhance cybersecurity resilience.
3. High Impact Digital Services and Productive Digital Usage.	3.1 Support to Tech Hubs and Sub-Grants for Digital Start-ups.	— Expand support to tech hubs. — Provide sub-grants to digital start-ups. — Establish tech entrepreneur associations.
	3.2 Activities Participation in Regional Program on Device Affordability.	— Reduce device costs. — Develop e-waste management initiatives.
	3.3 Sectoral Deep Dives in Social Protection, Disaster Response, Financial Inclusion, and Land Management.	— Digitize social protection services. — Improve financial inclusion. — Support land management through digital systems.
4. Program Management.	4.1 Operationalize the newly created Malawi Information Technology Authority (MITA).	— Establishment of MITA.
	4.2 Program Coordination and Management.	— Embed consultants in MITA for smooth transition. — Oversee program coordination. — Manage procurement, FM, ESS, and other standard project management functions.

Sources: World Bank Project Information Document - Malawi Digital Acceleration Project, April 2024. Malawi Public Private Commission press release - \$150 Million Digital Malawi Acceleration Project to expand internet access and digital services, December 2024. Malawi Public Private Commission press release - USF Tower Site Initiative set to bridge Malawi's digital divide, January 2026.

The Inclusive Digital Transformation for Malawi (IDT4M) was launched in April 2024 by the Ministry of Information and Digitalisation in partnership with the UNDP focussing on three key areas: secure and inclusive digital identity, strengthening digital governance, and bridging the digital gender gap (Figure 3).¹⁵⁷

The IDT4M was informed by a UNDP Malawi Digital Readiness Assessment, published in 2025, which assessed Malawi's digital readiness at the "opportunistic stage", the second lowest of five stages of digital readiness.

Malawi demonstrates progress in selected areas of digital transformation but lacks a coordinated strategy. The assessment recognised progress (significant 4G network coverage and digital ID registration); however identified challenges including limited rural access to connectivity (27.7% internet penetration), low digital literacy (62% general literacy rate), weak institutional coordination (UN E-Government Development Index score 0.34), regulatory implementation, and affordability barriers; and made recommendations for advancing Malawi's digital readiness (Figure 4).¹⁵⁸



Source: Extracts from UNDP press release - Malawi's IDT4M Project Paves the Way to Inclusive Digital Futures, April 2024.

Figure 4
Extract from UNDP & partners Malawi Digital Readiness Assessment 2024 report.

Pillar	Key Recommendations
Government	☒ Establish a centralized Digital Transformation authority to coordinate national efforts. ☒ Empower the Department of E-Government with greater authority and resources. ☒ Develop a unified framework to improve inter-agency collaboration. ☒ Expand MACRA's regulatory authority to address emerging digital needs.
Connectivity	☒ Expand last-mile connectivity through public-private partnerships. ☒ Explore alternative connectivity solutions like satellite broadband. ☒ Address affordability barriers by revising taxation policies. ☒ Enhance access to sustainable energy sources for reliable digital infrastructure.
Digital Public Infrastructure	☒ Develop a government-wide secure data exchange platform. ☒ Establish a national framework for data governance with clear roles. ☒ Promote Digital ID adoption through public awareness campaigns. ☒ Foster partnerships to create inclusive and interoperable payment systems.
Regulatory	☒ Ensure implementation of Data Protection Act through regulations and procedures. ☒ Develop a proactive regulatory framework for emerging technologies. ☒ Create a National AI and Data Strategy. ☒ Increase funding for regulatory bodies to strengthen enforcement capabilities.

157 UNDP press release - Malawi's IDT4M Project Paves the Way to Inclusive Digital Futures, April 2024.

158 UNDP press release - Malawi Launches First-Ever Digital Readiness Assessment to Guide Inclusive Digital Transformation, May 2025. UNDP Malawi Digital Readiness Assessment report, 2024/25.

Regulatory	☒ Ensure implementation of Data Protection Act through regulations and procedures. ☒ Develop a proactive regulatory framework for emerging technologies. ☒ Create a National AI and Data Strategy. ☒ Increase funding for regulatory bodies to strengthen enforcement capabilities.
Economy	☒ Create a National Innovation Fund to provide seed funding for digital start-ups. ☒ Expand rural incubation programs with mentorship and infrastructure support. ☒ Reduce import tariffs on technology to lower operational costs. ☒ Strengthen partnerships to develop high-tech parks and innovation hubs.
People	☒ Create a repository of existing ICT professionals to map available skillsets. ☒ Establish a National Digital Skills Framework aligned with market demands. ☒ Implement ICT training programs across all education levels. ☒ Develop targeted digital skills programs for marginalized groups.

In 2026, the Ministry of Information and Digitalisation, supported by the UNDP and other partners, have published a National AI Strategic Framework 2026 - 2031 (informed by an AI Landscape Assessment) with the vision to apply AI in a disciplined and responsible manner to strengthen public sector performance, improve productivity in priority sectors, and support Malawi's economic stabilisation agenda.

This would be overseen by a Digital Transformation & AI Council (policy oversight and coordination) and AI Delivery Unit working with regulatory authorities (standards, enforcement, and technical support) with a focus on deploying AI applications in public financial management, agriculture, health, and education¹⁵⁹ (Figures 5 and 6).

Figure 5

Ministry of Information and Digitalisation, UNDP and partners - Malawi Artificial Intelligence Landscape Assessment Report 2026 recommendations, Pages 53 - 55.

Recommendation	Explanation
1. Adopt a National AI & Data Strategy	As an economic stabilisation instrument, with a funded implementation plan and measurable targets. This provides the overall vision and commitment – ensuring AI initiatives are tied to Malawi's growth and reform agenda, and setting specific goals.
2. Establish an AI Delivery Unit	To execute priority use cases, develop reusable components, and strengthen procurement and change management. This government-wide central team will be the engine of implementation, offering technical support and ensuring consistency across AI projects.
3. Treat data as infrastructure – implement a national data governance framework.	Implement a national data governance framework with shared standards and an interoperability roadmap aligned to the Digital Government Strategy and DPI efforts. In practical terms, this requires the development of core data infrastructure, including a national data exchange layer to enable secure interoperability across government systems, a government-wide data catalogue to identify and prioritise high-value datasets, and common data and metadata standards to improve quality, reuse, and accountability.

¹⁵⁹ Ministry of Information and Digitalisation, UNDP, and partners - Malawi Artificial Intelligence Landscape Assessment 2026, Pages 3 - 5. Ministry of Information and Digitalisation, UNDP & partners - Malawi National Artificial Intelligence Strategy 2026 - 2031, consultation, February 2026.

4. Accelerate early wins by scaling existing AI pilots.	Identify AI pilots (such as an anti-corruption AI, an agriculture advisory tool, and a health supply chain predictor outlined in the report) that showed success, and invest in expanding their reach and integrating them into official workflows.
5. Operationalize responsible AI under the Data Protection Act.	Introduce AI-specific DPIA templates, risk tiering guidelines, mandatory human oversight rules for high-risk AI, and maintain a public-sector AI systems registry. These tools will embed ethics into day-to-day operations, ensuring new AI deployments undergo scrutiny and documentation, thereby preventing abuses or unintended harms.
6. Launch a targeted “Integrity & Efficiency AI” program.	Program - with campaign to build trust - focusing on use cases like payroll and subsidy fraud analytics, procurement transparency, and citizen service chatbots.
7. Make compute affordable and accessible.	Negotiate shared cloud or data center arrangements to provide government and innovators with low-cost computing power; promote efficient, open-source AI models and build shared government compute capacity where justified. Given Malawi’s energy constraints, compute planning should prioritise efficiency, resilience, and sustainability, including hybrid cloud models, energy-efficient infrastructure, and alignment with broader energy-sector reforms and renewable power initiatives where feasible. Reducing the cost barrier will unlock experimentation. This may involve public-private partnerships with cloud providers or investing in a national data center that agencies and startups can use.
8. Build the skills pipeline.	Implement a civil service AI literacy program at scale; create specialist tracks for data scientists, AI engineers, and AI policy/governance experts in academia; support university and TVET labs with equipment and curriculum; and partner with the private sector on AI bootcamps. This pipeline should address distinct needs: basic AI literacy for all civil servants; specialist tracks for data scientists, AI engineers, and AI governance professionals; leadership training for senior officials to apply AI to sector challenges; and youth-facing programmes that link AI skills to employment pathways such as digital services, BPO, and applied analytics.
9. Create demand for AI jobs.	Stimulate an AI innovation market through GovTech procurement reforms (making it easier for local startups to bid), AI innovation challenges, and support for AI-enabled BPO/GBS (Business Process Outsourcing) and SME solutions.
10. Embed cybersecurity and model risk management into AI procurement and operations.	This includes strengthening mwCERT (Malawi’s Computer Emergency Response Team) capacity to handle AI-related cyber incidents, and mandating security and bias audits of AI systems. Proactively include cybersecurity measures and regularly checking AI models for performance drift or emerging biases will protect both systems and citizens.

Figure 6

Ministry of Information and Digitalisation, UNDP and partners - Extracts from Consultation presentation on Strategic Framework for Responsible AI Adoption Supporting Economic Stabilisation and Inclusive Development 2026 - 2031, February 2026.

Vision Statement	☒ Apply AI in a disciplined and responsible manner to strengthen public sector performance, improve productivity in priority sectors, and support Malawi's economic stabilisation agenda.
Enabling pillars	☒ Data & Digital Public Infrastructure - Priority datasets, interoperability, and lawful data sharing. ☒ Responsible & Ethical AI Governance - aligned with UNESCO classification and impact assessments. ☒ Infrastructure & Compute Model - shared cloud, hybrid deployment, and security standards. ☒ Capacity & Institutional Competence - public sector training, university partnerships.
Three phase implementation roadmap	☒ Phase 1: Governance and foundations (2026 - 2027) - establish Digital Transformation & AI Council (policy oversight and coordination) and AI Delivery Unit working with regulatory authorities (standards, enforcement, and technical support); finalise governance standards; strengthen priority datasets; and build capacity. ☒ Phase 2: Flagship pilots (2027 - 2029) - deploy AI applications in public financial management, agriculture, health, education; conduct impact assessments; and evaluate performance. ☒ Phase 3: Institutionalisation (2029 - 2031) - integrate validated tools into standard workflows; reuse shared models; and expand successful systems.
Strategic objectives	☒ Strengthen national data foundations and secure interoperability for AI use. ☒ Deliver a limited set of high impact AI programmes that support stabilisation and productivity. 4 flagship programmes: public financial management, agriculture and food security, health systems, and education and human capital. ☒ Embed ethical and responsible AI as enforceable governance practice. ☒ Build public sector capability and national skills for applied AI. ☒ Ensure financially sustainable infrastructure and inline with "frugal AI principles": fit for purpose solutions, resource efficient deployment, reduced vendor dependency, and sustainable operating costs.
2031 target outcomes	☒ AI tools integrated into high-impact public systems. ☒ Enforceable governance standards operational. ☒ Strengthened institutional capacity. ☒ Improved data quality and interoperability. ☒ Measurable service performance improvements.

The Ministry of Information and Digitalisation (supported by the UNDP and other partners) have also published a Malawi National Digital Transformation Strategy and a 5-year roadmap for consultation in February 2026.

This is primarily focussed on digital public infrastructure, with a vision of a public sector that delivers priority services in a way that is simpler for people and businesses, more reliable, and supports economic reform (Figure 7).

Figure 7

Extracts from Ministry of Information and Digitalisation, UNDP and partners - Malawi National Digital Transformation Strategy and roadmap, draft V0 validation workshop presentation, February 2026

Vision	A public sector that delivers priority services in a way that is simpler for people and businesses, more reliable, and supports economic reform.
Strategic objectives	☒ Tangible service improvements - deliver improvements in priority services, not just broad digitalisation coverage. Focus on high-impact areas. ☒ Value for money and reuse - reduce duplication and improve value for money by reusing shared platforms instead of building bespoke systems. ☒ Lawful data exchange - make lawful and minimal data exchange routine for defined services purposes, ensuring privacy and security. ☒ Coordination and enforcement - establish coordination, delivery capability, and enforcement mechanisms. ☒ AI readiness foundations - build digital foundations (data, infrastructure, skills) that make credible and responsible AI adoption possible over time.
Guiding principles	☒ Build once, reuse widely. ☒ Design for access conditions. ☒ Interoperability by design. ☒ Trust as operational requirement. ☒ Phased delivery. ☒ Enforce standards. ☒ Long term sustainability.
Priorities	☒ Key priority is Digital Public Infrastructure (DPI) utilising existing foundations (including connectivity backbone to over 500 government offices and public institutions, national ID, national data centre, Bomalathu portal and e-services training, public wifi zones in key urban areas, and digital literacy programmes); integration and standardisation across e-government procurement, e-payment gateway, data exchange and API gateway; build government-wide digital services access portal and workflows; and operationalise Data Protection Act 2024 to build trust and security. ☒ Priority sectors and transformations identified: — Agriculture - digital national farmer registry, subsidies, and weather advisory services. — Health - digital patient records, supply chain, and telemedicine pilots. — Education - student and teacher IDs, digital bursary management, and digital learning content. — Social protection - Unified beneficiary registry, digital enrollment, and G2P payments. — Public financial management - end to end digital workflows, e-payments integration, and expenditure controls. — Trade and business - unified business registration system, tax compliance integration, and streamlined licensing. — Civic governance - unified digital services portal, including e-courts system.
Implementation roadmap	Phase 1 - Governance and Foundations (Years 1 - 2): establish Digital Transformation and AI Council (sets priorities, resolves disputes, and enforces reuse), Secretariat (day to day coordination, roadmap tracking, and decision preparation), and Central Digital Delivery Unit - E-Government Department (implementation support); approve standards and DPI architecture; and detailed planning for core DPI blocks. Phase 2 - DPI Development & Integration (Year 2 - 4): build / upgrade core DPI components (data exchange, portals); onboard high-impact priority services; and retire overlapping legacy systems. Phase 3 - Consolidation and sustainability (Years 4 - 5+): reuse becomes default practice across government; O&M funding models fully operational; and expand service coverage to wider sectors.
Target KPIs proposed	☒ Service uptake rate: +40%. ☒ DPI reuse (systems) 5 MDAs. ☒ Incident response time: < 4 hours. ☒ Inclusion reach: 80% rural.

The Last Mile Connectivity project includes the National Fibre Backbone Project (3,000 kilometres fibre from north to south of the country deployed by Huawei for the government), and mobile broadband rural connectivity programme managed by the MACRA Universal Service Fund (136 towers).¹⁶⁰

The Ministry of Finance and Economic Affairs' National Financial Sector Development Strategy 2022-2026 and the Reserve Bank of Malawi's National Financial Inclusion Strategy III 2024-2028 recognise the important contribution of digital transformation. The National Financial

Development Strategy states that the "increased reliance on technological innovation and digital financial services will help in improving the scale and efficiency of financial inclusion interventions" and includes a specific pillar (VII) on digital financial services with an objective to achieve over 70% of eligible Malawians accessing formal digital financial services and products including credit, insurance, etc. by 2026 (Figure 8).¹⁶¹

Figure 8
Ministry of Finance and Economic Affairs National Financial Services Development Strategy 2022-2026 - digital financial services.

Target outcome	Over 70 % of eligible Malawians are accessing formal digital financial services (DFS) and financial services products (FSP) including credit, insurance, etc. by 2026.
Foundational conditions	☒ Conducive legal and regulatory frameworks. ☒ Enabling Financial and digital infrastructures. ☒ Ancillary Government support systems.
Strategies	Strategies include: ☒ Developing Financial and Digital Infrastructure, including Gateway Payment System, Digital ID, and centralising ancillary Government Support Systems (Government Data Platforms, Digital Identification (ID), and Government Financial Management Systems), and opening Application Programming Interface (API) government data systems with robust security. ☒ Supporting Digital Connectivity Infrastructure – telecoms network coverage and energy supply. ☒ Formulating conducive legal and regulatory frameworks, including partnerships between non-banks and banks or other licensed entities that offer the DFS, granting some specialised licenses for digital financial service provisions, regulating agents conduct and liability, access to critical telecom and other data platforms in a fair and transparent manner, and interoperability and connectivity enhancement for efficient FSP delivery. ☒ Protecting consumers legislation, policies and policy approaches, including laws and regulations on data protection and privacy. ☒ Fostering demand for DFS and confidence amongst consumers in DFS, including digitization of private sector wage payments and all other business-related payments, Incentives for financial digitization will also include the government using subsidies and tax inducements to encourage both businesses and consumers to adopt DFS and simplify requirements for firm registration. ☒ Legislation and regulation for Virtual Assets (VAs) and Virtual Assets Service Providers, such as crypto-currency. ☒ Enhancing Credit Infrastructure, using digital tools and automation to support credit reference and lending transactions. ☒ Increasing Public Awareness and Financial Literacy on Electronic Payments.

160 Ministry of Information and Digitalisation website - National Fiber Backbone Project (accessed January 2025).

161 Malawi National Financial Development Strategy 2022-2026; Pages 14, 45 to 51.

The National Financial Inclusion Strategy III includes digital focussed objectives and actions: 1. Increase access, usage and quality of digital financial services; and 2. Promote increased financial, entrepreneurial, and digital education.

The Strategy III recognises the important contribution of mobile money and mobile telecommunications infrastructure and access to these objectives (Figure 9).¹⁶²

Figure 9
RBM National Financial Inclusion Strategy III 2024-2028 - digital related actions.

Strategic priority	Action (digital-related)	Target
1. Creation of a financially capable population to demand and use financial services.	Incorporate entrepreneurship and digital literacy in training modules and ensure they are available in the local languages.	> 10.
2. Increased demand for financial services by creating a strong MSME sector.	Increase ICT adoption to grow online marketing and e-commerce in the agriculture, wholesale and retail, and tourism sectors. Tailor initiatives to each of the specific vulnerable population groups such as women, the youth, forcibly displaced persons and those living with a disability. Foster digitization of MSME business operations to produce sufficient data that can be used to build alternative credit scoring models.	> 80% of MSMEs, e-commerce legal framework enhanced. > 50%.
3. Creation of strong and innovative financial service providers, including increased Digital Financial Services (DFS) Penetration.	Increasing the number of agents in the rural areas. Improving telecommunication infrastructure to increase mobile network coverage (MACRA). Incentivising registration of more DFS providers to increase competition. Enhancing new partnerships and collaboration for delivering digital credit, savings, insurance, securities and investment products. Exploring the use of aggregators and partnering with major retailers to address liquidity challenges for agents. Increasing digitization of Government payments.	> 200 access points per 100,000 adults. > Increase from 52 to 75 mobile phones per 100 inhabitants. > Increase from 12 to 276%. > Increase from 0 to 4 partnerships. > Increase from 0 to 40 partnerships. > Increase from 50% to 90%.

162 Reserve Bank of Malawi, National Financial Inclusion Strategy III, 2024 - 2028.

	Onboarding MFIs and SACCOs on the MFI Hub. Integrate other service providers/systems to National Switch. Include utility companies as reporting institutions to CRBs. Facilitating e-KYC by leveraging on NRB data. Strengthen legal and regulatory framework to promote provision of DFS. Facilitating reduction of the cost of transacting on mobile network platforms. Build public trust in DFS usage through effective literacy programs and consumer protection initiatives delivered in the local language. Enhance security to address fraud in DFS.	➤ Increase from 48 to 120. ➤ Increase from 13 to 16. ➤ Increase from 0 to 11. ➤ Increase from 0 to 6 financial services sub-sectors. ➤ Digital financial services law. ➤ Review tax on mobile wallet. ➤ 10 programmes. ➤ Regulation restricting SIM per person.
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Annexure 2 – Impact methodology and assumptions

This annexure provides details on the methodology and assumptions used to estimate the macroeconomic impacts of increased digitalisation in Malawi resulting from the policy recommendations made in this report.

1) Policy recommendation 1: Infrastructure investment environment

1.1 Assumptions

GSMA Intelligence coverage and investment analysis estimate that policy reforms will raise mobile broadband coverage from 91% (after expected growth under current market conditions) to 95%.¹⁶³ This implies a 4.4% increase in population coverage that we assume will result in a proportionate increase in adoption.

1.2 Impact on government tax revenues

Gain from wider economy = (active user growth) x (GDP elasticity 0.10) x GDP x (Tax/GDP 13%)

2) Policy recommendation 2: Mobile money levies

2.1 Policy recommendation

- 0.05% reduction on cash withdrawal transaction fee
- Removal of MACRA fee and EFT levy

2.2 Impact on mobile money users

Assumptions:

- Total impact of 0.05% reduction in mobile money transaction fee on mobile money transactions – 3.5% (based on experience from Uganda of 35% reduction from 0.5% reduction), with further impact from changes to MACRA fee and EFT levy estimated from benchmarks with other African countries. Overall transactions will rise by 24%.
- Transactions per active user grows to benchmark level of 204
- Period of effect: linearly over 10 years (17.5% after 5 years)
- Elasticity of GDP with respect to active subscribers: 0.10 (GSMA, “The E-levy in Ghana: Economic Impact Assessment”, February 2023, Table 4, footnote)

163 GSMA Intelligence - 4G Coverage and Investment in Malawi, February 2026.

2.3 Impact on government tax revenues

Calculation is the sum of three components:

- Loss of government fee revenue from BAU = $-0.05\% \times \text{BAU transaction value}$
- Gain of fee revenue on new active user growth = $0.05\% \times \text{impact on transactions} \times \text{average transaction value}$
- Gain from wider economy = $(\text{active user growth}) \times (\text{GDP elasticity } 0.10) \times \text{GDP} \times (\text{Tax/GDP } 13\%)$

3) Policy recommendation 3: Optimisation of sector taxation and use of digital technology for government revenue and tax collection

3.1 Excise duties

3.1.1 Policy recommendation:

Remove 10% excise duty on mobile telecoms.

3.1.2 Impact on unique subscribers

Assumptions:

- Price elasticity on network services: -0.90 (Source: World Bank 2022 “Using Geospatial Analysis to Overhaul Connectivity Policies” Table A.3” & GSMA “Mobile taxation studies: Methodology documentation” Table 1)

Impact on growth of new unique subscribers from BAU (“business as usual”):

- $10\% \times 0.85 \times -0.90 = 7.2\%$

Impact on government tax revenue assumption:

- Elasticity of GDP with respect to mobile subscribers: 0.25 (source: ITU “Economic contribution of broadband, digitization and ICT regulation, Econometric modelling for Africa”)

Calculation is the sum of three components:

- Loss of excise revenue from BAU = $-10\% \times \text{APRU} \times \text{BAU subscriber growth}$
- Gain of VAT on new subscriber growth = $+18.9\% \times \text{subscriber impact} \times \text{ARPU}$
- Gain from wider economy = $(\text{subscriber impact}) \times (\text{GDP elasticity } 0.25^{164}) \times \text{GDP} \times (\text{Tax/GDP } 13\%)$

3.2 VAT on the margin of imported devices

3.2.1 Policy recommendation:

Remove VAT on the margin of imported devices.

¹⁶⁴ A more tailored approach is used to the GDP elasticity in essential economic sectors of agriculture, manufacturing, trade, transport, government and healthcare. This reflects features of these sectors. All other sectors use the 0.25 elasticity.

3.2.2 Impact on unique subscribers

Assumptions:

- Margin on import handsets: VAT recoverable cost is 50% of price
- Pass-through and handsets costs: 0.90 (Source: World Bank “Using Geospatial Analysis to Overhaul Connectivity Policies”, Table A.2)
- Price elasticity on handsets: -1.30 (Source: World Bank 2022 “Using Geospatial Analysis to Overhaul Connectivity Policies” Table A.3” & GSMA “Mobile taxation studies: Methodology documentation” Table 1

Impact on growth of new unique subscribers from BAU (“business as usual”):

- $17.5\% \times 0.5 \times 0.9 \times -1.3 = 10.2\%$

Impact on government tax revenue assumption:

- Elasticity of GDP with respect to mobile subscribers: 0.25 (source: ITU “Economic contribution of broadband, digitization and ICT regulation, Econometric modelling for Africa”)

Calculation is the sum of three components:

- Loss of excise revenue from BAU = $-10\% \times \text{APRU} \times (\text{BAU subscriber growth} + \text{Churn} \times \text{BAU subscribers})$
- Gain of VAT on new subscriber growth = $+18.9\% \times \text{subscriber impact} \times \text{ARPU}$
- Gain from wider economy = $(\text{subscriber impact}) \times (\text{GDP elasticity } 0.25^{165}) \times \text{GDP} \times (\text{Tax/GDP } 13\%)$

4) Methodology for additional government revenue from digitalisation

Assumptions:

- Increase in tax/GDP from full take up of digital tax filing: 0.0333 (Source: IMF Notes, “Exploring the Adoption of Selected Digital Technologies in Tax Administration, A Cross-Country Perspective”, Manabu Nose and Andualem Mengistu, Table 1, column 3)

Impact on government tax revenues

- $\text{GDP} \times (\% \text{ impact in adult population with internet access}) \times 0.0333$

5) Policy recommendation 4: Demand side reforms

Assumptions:

- Demand side stimulation potential: 16.2% (Source: World Bank 2022: Mobile Infrastructure in Benin, Figure 6A)
- Period of effect: linearly over 10 years (12.7% after 5 years)

Impact on government tax revenues

Calculation is the sum of two components:

- Gain of VAT on new subscriber growth = $+12.7\% \times \text{subscriber impact} \times \text{ARPU}$
- Gain from wider economy = $(\text{subscriber impact}) \times (\text{GDP elasticity } 0.25^{166}) \times \text{GDP} \times (\text{Tax/GDP } 13\%)$

¹⁶⁵ A more tailored approach is used to the GDP elasticity in essential economic sectors of agriculture, manufacturing, trade, transport, government and healthcare. This reflects features of these sectors. All other sectors use the 0.25 elasticity.

¹⁶⁶ Ibid.

A separate document accompanying this report contains more details on the methodology used for this report and other reports in the GSMA digital economy report programme, summarised in below Figure 1.¹⁶⁷

Figure 1

Macro-economic impacts of increased digitalisation of essential economic sectors and public services.

Agriculture	The availability of information platforms for farmers and livestock keepers and associated mobile apps would enable them to access market prices, weather forecasts, and agricultural advice; enabling better decisions about what to plant or animals to keep, when to harvest, and where to sell produce. The accompanying methodological document finds that access to technology and precision agriculture can increase crop yields between 10.5% and 20%, and profits up to 23%.
Industry	Digital and Industry 4.0 technologies, such as IoT, cloud computing, 3D-printing, big data analytics and AI, have the potential to transform industries including manufacturing and mining. The accompanying methodology document finds that industrial IoT and Industry 4.0 can increase value add between 15-25%.
Transport	Digitalisation is having a transformative impact on improving efficiency and safety of transport, logistics and supply chain, which is critical domestically and internationally. The accompanying methodology document finds that transport upgrades can increase incomes by 10% and digital customs can increase revenue by 54% in 5 years.
Trade and commerce	Digitalisation of trade, services and commerce is driving growth, efficiency, accessibility, innovation, and opportunities for businesses of all sizes, including Small and Medium Enterprises (SMEs) across Africa. UNCTAD estimates that over half a billion people on the continent are becoming e-commerce users, which could potentially add up to USD 180bn in GDP.¹⁶⁸ The IFC estimates that more than 600,000 formal businesses and 40 million microbusinesses in Africa could benefit from digital transformation, citing the need to remove barriers to entry such as higher costs of software and equipment and regulations.¹⁶⁹ The African Continental Free Trade Area (AfCFTA) has introduced a Digital Trade Protocol to create a harmonized framework for digital trade, including market access, data governance, and digital payments, which Malawi is a signatory to.¹⁷⁰ The accompanying methodology document finds that there is the potential to increase e-commerce value to 15% GDP and ICT exports value to 7% GDP, and technology adoption is associated with labour productivity of 2-4% for small firms.
Government and public services	Governments are using digital technology to deliver enhanced and inclusive public services (including government, transportation, logistics, education and healthcare), reduce costs and improve efficiencies, contribute to economic growth, improve transparency, increase fiscal revenue, and increase data to inform government policies and decisions. The accompanying methodology document finds that Digital ID for social protection decreases leakage by 41-47%, digital health solutions enable doctors to increase visits by 30%, and mobile money adoption increases tax revenue by 12% on average.

167 GSMA Driving digital transformation of African economies Evidence and methodology document, 2024.

168 GSMA article - what is the opportunity for e-commerce in Africa? March 2023.

169 IFC report - Digital Opportunities in African Businesses, May 2024.

170 AfCTA press release - Ministers of Justice Adopt AfCFTA Protocol on Digital Trade Annexes, December 2024.

Annexure 3 - GSMA Digital Africa Index 2025 - Malawi

The GSMA Digital Nations and Society Index and Digital Policy and Regulatory Index 2025 scores for Malawi are provided below in Figures 1 and 2.

The GSMA finds that if this report's policy recommendations are adopted, this would improve Malawi's GSMA Digital Africa Policy and Regulatory Index 2025 score from 55 to 74 out of

100, which would put Malawi amongst the highest scores on the continent. This would contribute to an improved GSMA Digital Africa Nations and Society Index score. Section 3 (Figure 22) of the report shows the correlation of higher Digital Policy and Regulatory Index and Digital Nations and Society Index scores.

Figure 1
Digital Nations and Society Index.

Overall Score: 36/100 GSMA Digital Nations and Society Index 2025

DIGITAL CONSUMER		DIGITAL BUSINESS		DIGITAL GOVERNMENT	
33		14		62	
4G/5G smartphone adoption	23	Tech start-ups	0	Digital ID	78
Mobile penetration	65	IoT penetration	2	GovTech maturity	25
Mobile internet penetration	21	AI and innovation	1	E-Govt participation	45
Digital financial services	48	Mobile commerce	17	Digital health	80
Mobile data usage	9	Digital trade	50	G2P/P2G	81

Figure 2
Digital Policy and Regulatory Index.

Overall Score: 55/100 Malawi - GSMA Digital Policy and Regulatory Index 2025

LICENSING AND SPECTRUM		CONSUMER PROTECTION		TAXATION		NETWORK REGULATION		PUBLIC POLICY	
59		68		43		35		73	
Spectrum roadmap	0	Consumer Protection Framework	100	Consumer taxes	20	Harmonised deployment	0	Affordability and digital skills	100
Spectrum assignment	58	Data Protection Framework	50	Consumer handset taxes	90	Small cell deployment	0	Gender and rural inclusion	100
Mobile backhaul	67	Cyber security	80	Operator taxes	0	Fibre regulation	100	USF management	63
Technology neutrality	100	Cross-border data flow	50	Fiscal incentives	0	Infrastructure sharing	80	Competition Policy	100
Spectrum costs	100	SIM registration	60	Tax stability	100	Coverage obligations	0	Start-up regulation	0
Licence duration	0					Quality of Service	0		
Spectrum leasing/trade	0					Commercial flexibility	50		
Unified licensing	100								

Glossary of Abbreviations

Term	Description
AI	Artificial Intelligence
AML	Anti Money Laundering
API	Application Programming Interface
ASCENT	Accelerating Sustainable and Clean Energy Access Transformation Project
ATU	African Telecommunications Union
AU	African Union
D2D	Direct-to-Device connectivity between satellite and mobile handsets
dBm	Decibel-milliwatts
DPP	Democratic Progressive Party
EFT	Electronic Fund Transfer
ETB	Ethiopia Birr
ETCSA	Electronic Transactions and Cyber Security Act
FY	Financial Year
GHC	Ghana Cedi
GDP	Gross Domestic Product
GSMA	GSM Association
GSMA DNSI	GSMA Digital Nations and Society Index (Africa)
GSMA DPRI	GSMA Digital Policy and Regulatory Index (Africa)
GSMAi	GSMA Intelligence

Term	Description
ICT	Information Communication Technologies
IDT4M	Inclusive Digital Transformation for Malawi
IMT	International Mobile Telecommunications
IoT	Internet of Things
ITU	International Telecommunications Union
KSH	Kenya Shilling
KYC	Know Your Customer
LG	Local Government(s)
Mbps	Megabyte per second
MACRA	Malawi Communications Regulatory Authority
MDA	Ministries, Departments, and Agencies
MMO	Mobile Money Operator
MNO	Mobile Network Operator
MSS	Mobile Satellite Spectrum
MW	Megawatt
MWK	Malawi Kwacha
QoS	Quality of Service
RAN	Radio Access Network
RBM	Reserve Bank of Malawi
SIM	Subscriber Identity Module
SME	Small Medium Enterprise

Term	Description
SSA	Sub-Saharan Africa
STEM	Science Technology Engineering Mathematics
TNM	Telekom Networks Malawi
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USD	United States of America Dollars
USF	Universal Service Fund
VAT	Value Added Tax
WRC-27	International Telecommunications Union World Radio Conference 2027

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