



National Digital Readiness Assessment Technical Workshop: Co-creating Mozambique's accelerated digital transformation

27-28 March 2025

Maputo, Mozambique

Website: www.itu.int/en/ITU-D/Regional-Presence/Africa/Pages/EVENTS/2025/mozambique-landscape-workshop.aspx

WORKSHOP TAKEAWAYS

Summary

This document summarizes the activities of a two-day co-creation workshop conducted in Maputo, Mozambique on 27 and 28 March 2025. The objective of the workshop was to explore how Mozambique's legal, regulatory and institutional environment can be strengthened to better support digital transformation¹ by:

- Considering key findings in the ITU-developed draft Mozambique Digital Transformation Landscape Report, a baseline assessment of the digital ecosystem; and
- Co-creating to assess gaps and opportunities and propose potential solutions to accelerate digital transformation.

The event brought together over 50 participants from ministries, Government agencies, private sector, academia, and civil society. Discussions highlighted the need for strong institutional leadership and coordination going forward, adequate capacity and resources in key institutions, and an ecosystem-wide, collaborative approach. There is also a need to prioritise digital transformation among other national priorities, ensuring adequate budgets, and monitoring and evaluation.

1. Introduction

The workshop was organised under the "[Laying the foundation for VaMoz Digital!](#)" project, a joint ITU-EU Delegation project in Mozambique in support of the Government's digital transformation effort. The technical workshop enabled stakeholders to contribute to assessments made in the policy and regulatory, market, and institutional areas. It also contributed to awareness raising and momentum toward national digital transformation. Expected outcomes of the workshop included the confirmation of key findings of the draft Mozambique Digital Transformation Landscape Report, and development of a common understanding of the major policy, regulatory and market gaps to be closed for accelerated digital transformation.

Workshop participants were drawn from public, private, development and civil society sectors across the national digital ecosystem. The workshop was facilitated by ITU Experts, Mandla Msimang and Anthony Githiari.

¹ The workshop supports achievement of the SDGs, the UN Global Digital Compact, and Mozambique's draft National Development Strategy (ENDE 2025–2044) among other global and regional frameworks.

2. Workshop opening and welcoming remarks

The workshop was opened by the Permanent Secretary in the Ministry of Communications and Digital Transformation, Sra. Nilza Miquidade, who highlighted digital transformation as one of the key priorities in the current government cycle. Important objectives in this regard include internet for all by 2030, establishment of digital transformation centres, schools connectivity, and the digitisation of government. She reinforced the importance of digital transformation in development, noting the government decision to consolidate digital transformation under one ministry.

Deborah Capela of the Delegation of the European Union to the Republic of Mozambique reinforced the Permanent Secretary’s words, while also explaining the importance of the broader VaMoz Digital! programme which is funded under the Global Gateway initiative. She highlighted the EU’s partnership with the government, and collaboration with its two implementing partners, ITU and the Italian Agency for Development Cooperation (AICS). The EU initiative emphasises working with all stakeholders, digital entrepreneurship, and inclusivity.

Christine Sund of the ITU Regional Office for Africa provided background to the ‘Laying the Foundation for VaMoz Digital!’ project under which the two-day workshop was organised. The project aims to strengthen the enabling environment for digital transformation across all sectors, including policy and regulatory frameworks, and institutional capacity-building of public stakeholders. It also aims for a stronger digital economy, using the digital innovation profile methodology to be explored in its own workshop on 30 March-1 April 2025. She touched on the importance of local ownership of outcomes in all ITU supported projects.

3. Short Presentation of the Draft Mozambique Digital Transformation Landscape report

To set the scene for the co-creation sessions, the ITU Experts made a short presentation of the Draft Landscape Report for Digital Transformation in Mozambique. The presentation included a review and assessment of the status quo as regards the enabling policy and regulatory frameworks, the existing institutional frameworks, and support ecosystems for digital transformation in the country. The presentation highlighted notable progress, however, significant challenges remain. Mobile penetration is low at 59%, and nearly 80% of the population remains offline. Affordability, limited digital literacy, and infrastructure limitations — particularly in rural and northern regions — continue to limit access. Fragmented policy frameworks, limited interoperability between systems, and the absence of a unified digital identity have further slowed progress.

In summary, the Experts noted:

- Great strides made towards digital transformation especially in infrastructure rollout; now there is need to focus on inclusive, meaningful and affordable access which is still lacking.
- Significant policy and regulatory gaps, with many policy instruments under development.
- Digital skills and digital literacy gaps were highlighted.
- The need for clear management of overlapping and underlapping institutional mandates.
- The importance of collaboration across all the various stakeholders.
- Lack of adequate and accurate data, including to measure inclusiveness.

The presentation was followed by a robust discussion and the following comments were discussed.

- A participant questioned the report’s finding that only 5% of people use e-commerce in Mozambique, noting the already high penetration of mobile money. The Experts clarified that the figure represents the percent of the population aged 15 years or more who used a mobile phone or the internet to buy something online, as measured by the Global Findex (World Bank 2021). People who made a purchase in person and paid via mobile money would not be included. This is the methodology adopted by United Nations Conference on Trade and Development (UNCTAD) in developing its widely used Global B2C E-Commerce Index 2020.

- Participants suggested to add Bazara.co.mz to the listed online platforms, and also noted the lack of sufficient online vendors, limited number of people online, and sometimes restrictive payment regulations.
- Participants noted the need to focus on digital literacy through stakeholders rolling out more programmes especially in rural areas.
- Participants sought comment on what policy makers are doing to address high prices of telecommunication services. As part of the answer the Experts clarified that the analysis focused on affordability (i.e. basket price as a percent of Gross National Income for which the UN Broadband Commission has a target of 2 percent), and not absolute prices.
- Clarification was provided that there is no E-commerce Law in-progress. An E-Commerce Regulation is being developed under the E-Transactions Law of 2017.
- There was a comment to a possible suggestion that INCM and INTIC have overlapping mandates. The Experts clarified the potential sources of overlap, i.e. emergence of new areas such as artificial intelligence and digital convergence, and emphasised that such overlaps can be actively managed.
- Participants emphasised the importance of interoperability if digital transformation is to be achieved.

4. Co-Creation Sessions

The ITU Expert presented the rationale for co-creation, and its relevance for digital transformation in Mozambique, emphasising the need for ecosystem approaches, particularly as countries and stakeholders prepare for an ICT-focused future and accelerated innovation. Co-creation approaches for public sector innovation is a natural evolution of traditional approaches, going further to encourage active engagement, innovative thinking and collective brainstorming and consensus-building.

In the current context the main question to be answered was identified as follows: *What constrains the pace of Digital Transformation in Mozambique, and given this, what gaps and opportunities should we prioritise to address for accelerated digital transformation?* Seven co-creation sessions were proposed to address this question with day 1 focusing on defining the problem and stakeholders; while day 2 focused on defining the desired future, gaps and opportunities, and identifying wider ecosystem issues that need to be dealt with. The sessions were based on tools from the ITU Policy Acceleration Playbook², with evidence from the Digital Transformation Landscape Report and participants’ knowledge and experiences.

Session 1: Problem tree

To better understand the challenge, used the problem tree canvas to define the problem at hand and its root causes. The exercise was done in four groups, and there emerged consistent themes across the definition of the main problem, its root causes and consequences.

The themes that emerged in regard to the main problems to be resolved include the following:

- Limited telecommunications and energy infrastructure.
- Limited access to affordable, digital end-use devices.
- Low digital literacy.
- Low adoption of ICT services by consumers.
- Limited relevance and utility of ICT services to consumers.
- Resistance to use of ICTs.
- Lack of a monitoring and evaluation culture to ensure policies are implemented.

² The Playbook is a co-creation framework that enables stakeholders to jointly assess and prioritise challenges, gaps and opportunities, and to collaboratively propose context-specific solutions.

These challenges can only be resolved if stakeholders address underlying root causes, directly or through appropriate mitigating measures. The following root causes were identified:

- Lack of adequate investment, which results in critical gaps in telecommunication and electricity infrastructure.
- High cost of end user devices due to high taxes and lack of local production facilities.
- Negative impact of bureaucracy and corruption.
- Demographic, social and cultural factors manifesting in high illiteracy rates, lack of qualified human resources, high poverty rates and low purchasing power, social inequalities, and low acceptance of ICTs.
- Lack of implementation of digital technology policies, and lack of critical elements such as local digital content and digital education policies.

Session 2: Stakeholder mapping

Participants next used stakeholder mapping tools to identify relevant stakeholders and to assess the respective interest and power dynamics at play in regard to digital transformation. Participants concurred that policy makers and regulators are of high importance in the digital transformation process. However, some of the key institutions at the centre of digital transformation were perceived by participants as having low influence on the process due to their limited capacity, for example in terms of policy implementation and lack of enforcement of standards. This indicates a need for the requisite resources and capacity, for example to set and enforce standards more strictly (e.g. adoption of e-government platforms and infrastructure building standards).

Discussions in this regard touched on INAGE, INTIC and FSAU, and participants reflected on their capacity to ensure implementation or to enforce adopted approaches and standards. The role of the Bank of Mozambique and banks in general was also discussed with participants agreeing on the critical role played by bank sector, and their high interest in digital transformation. Discussions converged towards the stakeholder mapping shown on the table below which assumes adequate resources are put in place in the relevant institutions.

Table 1: Stakeholder mapping

Low interest, High Power (keep satisfied) <ul style="list-style-type: none"> • AT (Tax Authority) • ARENE, FUNAE, EDM • Investment sector 	High interest, High power (keep engaged) <ul style="list-style-type: none"> • MCDT, INCM, INAGE, INTIC, FSAU, BoM • Prime Minister’s Office • Donor partners, Technical experts • Telecom operators
Low interest, Low Power (minimal effort) <ul style="list-style-type: none"> • None 	High interest, Low Power (keep informed) <ul style="list-style-type: none"> • Representative of 12 ministries implementing e-government, MEC (Education), MISAU, MAAP (Agriculture) • Confederation of Economic Associations (CTA), National Association of Young Entrepreneurs (ANJE), AMPETIC, FAMOD, Business, Consumers • ADE, ARC, INE, CITT, ENPCT, CEDSIF, MF (Finance), ME (Economy), IPEME • Banks, Broadcasting • Academia

Source: Stakeholder discussions

There was agreement that the large number of stakeholders identified need to be constantly kept closely informed on the digital transformation journey, to ensure their contribution and support as required. This calls for the upcoming Mozambique digital transformation strategy to include a well-funded stakeholder engagement and communications strategy. Some institutions that are outside of the ICT sector but critical to digital transformation (such as the competition, tax and energy regulators) were perceived to have a low interest in digital transformation. Participants noted that these institutions are key to digital transformation. The power of the tax authority was highlighted,

particularly its potential to provide incentives and reduce barriers to investment in the digital sector versus its mandate to increase revenue. In addition, taxes on digital goods have a high impact on adoption of digital services by customers. The role of the competition and statistics authorities in enabling the telecommunications sector to function properly was also discussed. The use of ecosystem approaches can support institutions driving digital transformation in Mozambique.

Session 3: Digital transformation vision and goals

Participants convened into three groups to discuss and propose a vision that encapsulates Mozambique’s objectives for digital transformation. The three groups proposed the following: *“Inclusive digital economy”*; *“Establish a digital platform that allows access to various public services”*; and, *“Every citizen has access to digital services”*.

These three visions reflect a desire for a digital transformation process that is inclusive of all segments of the population, hinting that Mozambique should aim for universal access to digital services. There was also the further idea that universal access should translate into meaningful outcomes, including to enable convenient access to public and private sector services that citizens need for their well-being, and to power the digital economy. The three visions jointly provide a basis for a meaningful digital transformation vision to be achieved through an ecosystem approach.

Participants also considered what the successful realization of this vision means. The discussions highlighted both a customer centric view, as well as a system view. For citizens, convenience was top of mind, with citizens being able to access a wide range of services and information from their handsets. This was expected to translate into further tangible outcomes, such as socioeconomic development, and well-being of citizens. From a system perspective, participants anticipated seeing more optimized processes to serve citizens, as well as a more environmentally friendly economy due to reduced travel in a digital world.

Among the high-level goals identified to measure progress towards the top-level vision include:

- Access to digital devices.
- Access to digitalized public and private sector services.
- Access to infrastructure (telecommunications, internet and electricity).
- Access to unique digital identification system.
- Level of digital literacy.
- Interoperability between different institutional systems.
- Creation of digital accessibility policies.

There was broad agreement on principles and values needed to drive digital transformation. Values most highlighted include inclusivity, accessibility, integrity, innovation and modernisation. Participants also identified data protection and safety from cybercrime as important. The enforcement of regulations (i.e. eliminating impunity), simplicity, accountability, collaboration, empowerment, and sustainability were also highlighted as being necessary. While it was clear that inclusivity should be a core principle, there was a discussion on what “inclusion” means and whether it is necessary to address smaller marginalized groups such as Persons with Disabilities. The one view was that the issue was either negligible or largely already addressed in Mozambique, however, in the end it was agreed that inclusion of Persons with Disabilities and other marginalized communities is of fundamental necessity.

Session 4: Policy gap analysis

Participants were provided a summary of laws and regulations that underpin digital transformation in Mozambique – including those in place, in planning or being developed, and resulting gaps. There was overall appreciation of the list, as it is currently difficult to get a consolidated list covering the digital transformation landscape – emphasising the silo approach to digital transformation that needs to be

replaced with the ecosystem/consolidated approach. The participants discussed the list, with an updated version shown in **Annex 1**.

In the second part of the policy gap analysis session, participants categorised ‘missing’ instruments according to the level of their importance, and the complexity / difficulty involved in introducing the instrument. This will inform a high-level roadmap to close identified gaps. The consolidated view of the participants is shown below.

Table 2: Consolidate view on categorisation of missing instruments

Low importance, High Difficulty (Needs doing) <ul style="list-style-type: none"> • Smart cities policies 	High importance, High Difficulty (Foundational pieces) <ul style="list-style-type: none"> • Digital inclusion policies / strategies e.g. disability • Cross-sector infrastructure sharing, fibre co-deployment, and rights of way rules • Unified digital identification • Child online protection • Sectoral ICT strategies and 5-year plans
Low importance, Low Difficulty (Good to start) <ul style="list-style-type: none"> • Strategy on IoT 	High importance, Low Difficulty (Low hanging fruit) <ul style="list-style-type: none"> • Instruments to foster ecosystem approach e.g. regulatory or stakeholder forums • Cross sector collaboration instruments (more MoUs) • Use of refurbished devices

Source: Workshop participant discussions

There is a lengthy list of instruments currently being reviewed, in planning or under development.

An issue that was raised is the need for partnerships, such as where there is need for the ‘foundational instruments’ to be in place. As an example, it was mentioned that a digital inclusion policy had been planned by the former Ministry of Science and Higher Education (MCTES), however it did not materialise due to lack of a partner to support its development. The issue of citizen engagement after policies are passed was discussed, and with it the need for budget. Due to limited citizen engagement after policies are passed, many decisions are being made by other stakeholders in a policy vacuum as many are not aware or have not seen the new instrument. Digital collaboration forums and targeted consultation after the new laws are passed are critical to ensure awareness of new regulations and policies – balanced by the view that stakeholders should maximize use of existing processes.

Session 5: Institutional assessment

There were discussions on institutional capacity across three institutions considered: INCM, INTIC and INAGE. There was underlying sentiment that the capacity of these institutions needs to be boosted to truly drive digital transformation. Financial and human resources, as well as training and ongoing capacity building are needed.

Going forward, a detailed institutional assessment is recommended, to identify areas of support that can be prioritized for digital transformation in each of these institutions, but also more broadly among the institutions collaborating to drive the transformation, as identified in the next section.

Session 6: Collaborative governance

The need for more collaborative governance was a constant theme in many of the discussions, and a formal canvas was not used for this session. In an open discussion, participants agreed that collaboration needs to be strengthened in terms of breadth and depth. Instruments and forums to bring stakeholders together more often are urgently needed. This will help entrench ecosystem approaches to policy development and raise awareness around digital transformation activities among a wide range of stakeholders. The range of stakeholders that need to be involved is shown in the table.

Table 3: Institutions that need to collaborate for digital transformation

Entity driving collaboration: Lead Regulators i.e. INCM / INTIC	
1. Internal (Within ICT / digital sector) <ul style="list-style-type: none"> • Universal Access Service Fund (FSAU) • INAGE (e-Government) • ADE (Geospatial Planning) • ARC (competition and consumer protection) • ENPCT (Science Parks) • CITT (Research and technology) • GABINFO (Press Regulator) • Ministry of Interior (Identity Management) • ARENE (Energy) • Sector Associations (AMPITEC, FAMOD) • Bank of Mozambique • Public and Private Operators • Development and technical Partners 	2. Cross-government <ul style="list-style-type: none"> • Office of Prime Minister • AT (Tax) • INAE (Consumer protection) • CEDSIF • Key ministries implementing e-government and / or overseeing priority sectors e.g.: MF (Finance), ME (Tourism, Commerce), MEC (Education), MISAU (Health), MAAP (Agriculture, Environment), MIREME (Energy) • Ministry of Interior • State Administrative Modernization Agency • Government Reforms and Strategic Projects Coordination office
3. Stakeholder outreach <ul style="list-style-type: none"> • Policy Makers, Regulators and ICT Agencies • Priority Sectors (health, education, etc.) • Public and Private Sector players • Development banks, partners, NGOs • Associations, e.g. FAMOD, CTA • Academia and other thought leaders • Mozambican public 	4. International <ul style="list-style-type: none"> • Counterpart regulators • Regional bodies • International bodies • International Partners

Source: ITU research and participant inputs

Session 7: High level policy issues and bottlenecks

Participants reviewed a proposed list of high-level policy issues and bottlenecks to be addressed as part of the policy reform. The issues resonated with participants, who suggested that lack of innovation should be added, and potential solutions. These are included in **Annex 2**.

A critical issue identified is the need to elevate the digital transformation among other national priorities. Participants noted that it was essential to demonstrate the value of digital transformation through effective implementation of ICT projects over an extended period of time. They also discussed that uniting INCM and INTIC into a single entity could strengthen the institutional set up, in synergy with recent consolidation of ministries. In addition, the ministry should ensure adequate resources, and training and awareness effort. Lead institutions should be role models for digital transformation – and use of gmail was pointed out as an area that needs to be addressed.

The number of licenced players was felt to be adequate however given the state role in the sector there is benefit in ensuring that decisions taken in the sector are depoliticized, and a level playing field is maintained among existing players. Measures to promote market efficiency were discussed.

Participants noted that many cross-sector players do not have ICT resources or capacity and for example it is difficult for a ministry unrelated to ICT to manage cybersecurity. Technical capacity could be made available centrally to serve cross-sector ministries. Further, institutions should be assisted to build capacity in finance management, and to make use of shared infrastructure.

The slow pace of ICT project implementation within the sector and in cross sector ministries was noted, and there is potential to set up a project coordination office. Each key ministry or institution involved in digital transformation should have a focal point to ensure projects in its purview are implemented. More research and sharing of experiences with cross sector ministries would also be useful to build capacity. Lead institutions to build up capacity in new technical areas to better support digital transformation, and players at the forefront should invest more to build stakeholder capacity.

Resistance to change was highlighted as a critical barrier. Education, dialogue and digital literacy are among the strategies proposed. Bureaucracy, corruption and inefficiency were also highlighted.

Automating more processes, aligning performance evaluations, sanctions for inappropriate behaviour and fraud reporting lines were suggested as potential solutions.

5. Conclusions, Recommendations and Way forward

The workshop held over two days saw lively discussions and useful contributions. Participants were keen that this mode of engagement and inclusiveness could be continued into the future. The key outcomes and recommendations emanating from the workshop can be summarised as follows:

Review of landscape report findings: The workshop engagement confirmed many of the draft findings of the Digital Transformation Landscape Report, such as stakeholders to be engaged; policy instruments in place, development, planned and missing; and institutional and collaborative governance gaps.

The importance of digital transformation in Mozambique was reaffirmed as a mechanism for supporting the achievement of developmental goals as outlined in key policy frameworks. The important steps already taken should be followed by the introduction of mechanisms to coordinate and lead stakeholders towards anticipated digital transformation outcomes. This should be backed up by appropriate budget allocations, intra and cross-sector collaboration, and robust M&E.

Ecosystem approaches need to replace the previously siloed approach to policy development and implementation. Digital transformation cannot happen unless all stakeholders are involved and play their part in developing the ecosystem. Appropriate cross sector forums need to be put in place, to raise awareness of ongoing activities, enhance capacity of various ecosystem players, and enable joint approaches to policy development and implementation. Collaboration mechanisms with the full spectrum of stakeholders, and citizen engagement after policies and interventions are put in place should also be prioritised.

The future vision for Digital transformation in Mozambique to prioritise inclusivity, universal access, and meaningful outcomes that result from the use of the digital services. Among the priorities should be enabling access to public and private sector services that citizens need for their well-being, and to power the digital economy. This means a shift from access towards inclusive, meaningful and affordable access, and disaggregated data collection to track progress.

Principles and goals are an important part of the journey. Principles to be considered include inclusivity, accessibility, integrity, safety and security, innovation and modernisation. To track progress over the next three years, the following could be considered for measurement: (i) access to digital devices; (ii) access to digitalized public and private sector services; (iii) access to telecommunications, internet and electricity infrastructure; (iv) access to a common digital identification system; (v) level of digital literacy; (vi) interoperability between different institutional systems; (vii) Creation of digital accessibility policies; and (viii) Disaggregation of data.

Policy gaps should be addressed. Policies currently in development should be prioritised for completion, followed by the ‘low hanging fruit’ i.e. collaboration instruments and use of refurbished devices, perhaps with a timeline of 24 months at most. In parallel, partnerships to develop ‘foundational policies’ should be established, i.e. (i) Cross-sector infrastructure sharing, fibre co-deployment, and rights of way rules; (ii) Unified digital identification; (iii) Child online protection; (iv) Sectoral ICT strategies and 5-year plans; and (v) Digital inclusion policies / strategies.

Capacity of institutions at the centre of digital transformation should be enhanced, to ensure that they can lead and coordinate effectively. Relevant institutions outside ICT such as the competition, tax, consumer protection, statistics and energy are critical to digital transformation and should also be prioritised for ICT capacity support. Use of ecosystem approaches will be useful to bring these institutions closer to the centre of digital transformation in Mozambique. These institutions should be canvassed to ensure increased ICT sector investments and adoption of digital services.

Infrastructure sharing should be prioritised given the limited resources available. The issue of standards enforcement, and state ownership, need to be taken into account. Infrastructure sharing should be more systematically expanded outside of the ICT sector, e.g. with energy companies.

The role of the State as an operator in the sector needs to be carefully considered in the medium to long term. The state-owned operator was perceived as a challenge, given that it is not in a position to meet minimum requirements in some respects. Decisions taken in the sector are to be depoliticized, and a level playing field maintained among the players.

Resources at centre (i.e. within MCDT or its agencies) should be made available for cross sector players as they do not have adequate ICT capacity. This could initially be considered in the form of (i) technical officers to serve cross-sector ministries; (ii) a strong national CSIRTs to support cross sector players; and (iii) a project coordination office. Through this mechanism, critical institutions should be supported to improve their ICT related capacity.

A project coordination office should be set up, to centralise the existing multiple Project Implementation Unit (PIU) structures, to enhance the pace of ICT project implementation within the sector including in cross-sector ministries. Each key institution involved in digital transformation should have a focal point allocated to MCTD.

Resistance to change, bureaucracy, corruption and inefficiency need to be addressed, with increased dialogue. MCTD should take ownership and provide leadership to ensure that mitigating strategies are put in place in partnership with related ministries. In the short-term stakeholders should automate more processes, work with relevant authorities to align performance evaluations, introduce sanctions for inappropriate behaviour, and set up more fraud reporting lines.

Next steps

The workshop discussions have effectively used co-creation to identify some tangible steps that could be taken to improve the enabling environment for digital transformation.

Annex 1: Summary of instruments underpinning digital transformation in Mozambique

Existing instruments	Planned instruments or in Progress	Missing instruments
<ol style="list-style-type: none"> 1. National Development Strategy (draft) 2. Telecommunications Law 3. Information Society Policy 4. Broadband Policy 5. Science, Technology and Innovation Policy 6. Electronic Transactions Law 7. Public Administration Reform and Development Strategy, 2012 - 2025 (CIRAP) 8. Business Environment Improvement Action Plan (2019-2022) 9. Cybersecurity Strategy and Policy 10. National Strategy for Spatial Data Infrastructure of Mozambique (IDEMOC) 	<ol style="list-style-type: none"> 1. Digital Transformation Strategy 2. New Electronics Transactions Law 3. E-commerce Regulation 4. Cybersecurity Law 5. Cybercrime Law 6. Data protection Law 7. Interoperability Regulation 8. New Broadband strategy 9. New Universal Service Regulations 10. Artificial Intelligence 11. Infrastructure Sharing regulation 12. New Telecoms Traffic Control Regulation 13. New Registration of Subscribers Regulation 14. New National Roaming Regulation 15. E-waste management Law 16. IDEMOC Action Plan 17. Regulation on construction and licensing of Data Centres 18. Regulation on registering, licensing and operation of Cloud Hosting services 19. Social Communications Law³ 	<ol style="list-style-type: none"> 1. Digital inclusion policies / strategies e.g. disability 2. Cross-sector infrastructure sharing, fibre co-deployment, and rights of way rules 3. Unified digital identification 4. Smart cities policies 5. Strategy on IoT 6. Child online protection 7. Sectoral ICT strategies and 5-year plans 8. Cross sector collaboration instruments (more MoUs) 9. Instruments to foster ecosystem approach e.g. regulatory or stakeholder forums 10. Use of refurbished devices

³ The Social Communication Law regulates social communication activities, including media and digital platforms, with provisions for freedom of expression and access to information

Source: ITU research and participant inputs

Annex 2: Potential strategies to respond to high level policy challenges and bottlenecks

	Policy issue	Impact	Possible high-level actions, policy or mitigation	
			Within ICT sector	To catalyse change
1	Elevating digital transformation nationally	H	<ul style="list-style-type: none"> • Effective implementation of ICT projects over • Unite INCM and INTIC into a single regulatory institution • Adequate resource allocation, training and awareness 	<ul style="list-style-type: none"> • Creation of Ministry dedicated to digital transformation • Serve as a model
2	Number of licensed players	M	<ul style="list-style-type: none"> • Depoliticization of the sector 	<ul style="list-style-type: none"> • Fair competition
3	Level of state control in the telecoms sector	H	<ul style="list-style-type: none"> • Separate state role as regulator from implementer of services • Depoliticization of the sector 	<ul style="list-style-type: none"> • Strong national CSIRT controlled in sector, monitored by State
4	Availability of public resources and financing	H	<ul style="list-style-type: none"> • Improve finance management capacity • Encourage better use of existing digital platforms 	<ul style="list-style-type: none"> • Use of shared infrastructure among service agents • Strengthen public finance management
5	Lack of sufficient cross sector forums to advance digitalization	H	<ul style="list-style-type: none"> • MCTD focal point for key sectors in digital transformation • Research and sharing experience 	<ul style="list-style-type: none"> • A single entity to coordinate digital transformation projects
6	Resistance to change and behavioural challenges	H	<ul style="list-style-type: none"> • Training, education and dialogue 	<ul style="list-style-type: none"> • Prioritise digital literacy
7	Bureaucracy (slow procedures)	H	<ul style="list-style-type: none"> • Automating processes 	<ul style="list-style-type: none"> • Performance evaluation
8	Corruption and inefficiency in the public sector	H	<ul style="list-style-type: none"> • Automating processes 	<ul style="list-style-type: none"> • Sanctions; Reporting Lines, anti-fraud programs
9	Lack of supporting infrastructure (roads, electricity,)	H	<ul style="list-style-type: none"> • Redundancy channels 	<ul style="list-style-type: none"> • Infrastructure financing lines
10	Lack of ICT skills	H	<ul style="list-style-type: none"> • Training, education, workshops 	<ul style="list-style-type: none"> • Training, education, workshops, information exchange
11	Limited innovation	M	<ul style="list-style-type: none"> • Technology innovation incubators - financing 	<ul style="list-style-type: none"> • Lines of finance and tax incentives

Source: Participant discussions