ITUPublications

International Telecommunication Union
Development Sector

Tanzania – A solid base for moving to G5 regulation

Tanzania – A solid base for moving to G5 regulation

DISCLAIMER

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of ITU concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by ITU in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by ITU to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader.

The opinions, findings and conclusions expressed in this publication do not necessarily reflect the views of ITU or its membership.

ISBN

978-92-61-34361-3 (Electronic version)
978-92-61-34371-2 (EPUB version)
978-92-61-34381-1 (Mobi version)

Please consider the environment before printing this report.

Acknowledgments

This case study is part of the series of reports on national approaches to collaborative regulation. This initiative has been carried out in the framework of ITU's work stream on collaborative regulation with the financial support of the Republic of Korea.

The case study was prepared by the ITU Regulatory and Market Environment Division (RME) of the ITU Telecommunication Development Bureau (BDT). It was authored by Ms Mandla Msimang, Chairperson of Pygma Consulting and Chief Executive Officer at Nozala Investments, in her capacity of ITU expert.

Foreword

I take great pleasure in introducing this series of Collaborative Regulation Country Case Studies. They provide a high-value, authoritative analysis of the regulatory landscape and offer a step-by-step pathway to our members as they progress towards their G5 destination.

The case studies reflect the journeys undertaken by selected countries from different regions as they analyse their regulatory and institutional frameworks and advance towards more collaborative governance. Each captures a unique, diverse experience of policy that enables decision-makers to explore both the challenges and opportunities that collaborative regulation offers in our journey towards inclusive digital transformation. Each case study generates discussion – and invites a better understanding of the role and impact of collaborative governance and on new tools for regulating digital markets.

Our case study approach is highly collaborative, thorough, tightly structured and inclusive, through an extensive fact-finding questionnaire and one-on-one interviews with key national stakeholders. They elicit views on the future facing G5 regulation and on drivers for regulatory evolution.

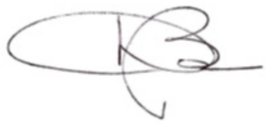
The case study lays out the country's regulatory landscape and points both to existing best practice and to areas for future progress. In addition, a high-level policy brief for ICT policy-makers provides a clear view of the value and benefits of collaborative regulation together with its challenges and solutions.

The library of collaborative regulation case studies, launched at the Global Symposium for Regulators 2021 (GSR-21), will expand to include additional country experiences. We are integrating insights from this process into a global project on the transition to collaborative regulation, which will be launched at the upcoming WTDC.

These case studies sit alongside the G5 Benchmark – the gold standard tool that fast-tracks countries along the path of collaborative, cross-sectoral regulation. The 2021 updated, G5 Benchmark provides an actionable and precise country readout on progress towards G5 collaborative regulation.

The case studies are an important element in a major global effort by ITU to measure the impact and the many benefits of G5 collaborative regulation. For more than twenty years now, we – ITU and our partners in the global regulatory community – have made enormous progress in analysing, mapping and understanding the changing role that regulation plays in society and in economies. This two-decade-long investment is increasingly bearing fruit – and is now offering a clear-eyed view of the path ahead for all countries, no matter where they are, in their journey towards G5 regulation. These country case studies are an important element in this larger, ongoing body of work and mark a step forward on our journey to achieving the Sustainable Development Goals (SDGs) and digital transformation.

I hope that the Collaborative Regulation Country Case Studies together with our regulatory metrics and tools will prove invaluable to many different types of readers, but especially to ICT regulators and policy-makers in all regions.



Doreen Bogdan-Martin
Director, ITU Telecommunication Development Bureau

Table of Contents

List of figures

1 Executive summary

1.1 Generations of regulation

The ability to successfully collaborate, is one of the key building blocks of a digital economy, and a key marker of a fifth generation (G5) regulator. In an information and communication technology (ICT) sector known for change, G5 regulation represents yet another shift – not of technology, but of paradigm – for governments and regulators globally. G5 regulation forces the reconsideration of existing institutional frameworks and the harmonisation of policy priorities and regulatory rules in recognition of the interplay between digital infrastructure, services and content across industries and national borders.

This interplay is described in the 'generations of regulation' framework developed by the International Telecommunication Union (ITU) that assists in analysing the maturity of modern regulatory regimes. The framework is based on a view of collaboration, high-level principles, digital development toolbox, and digital economy policy agenda. In summary:

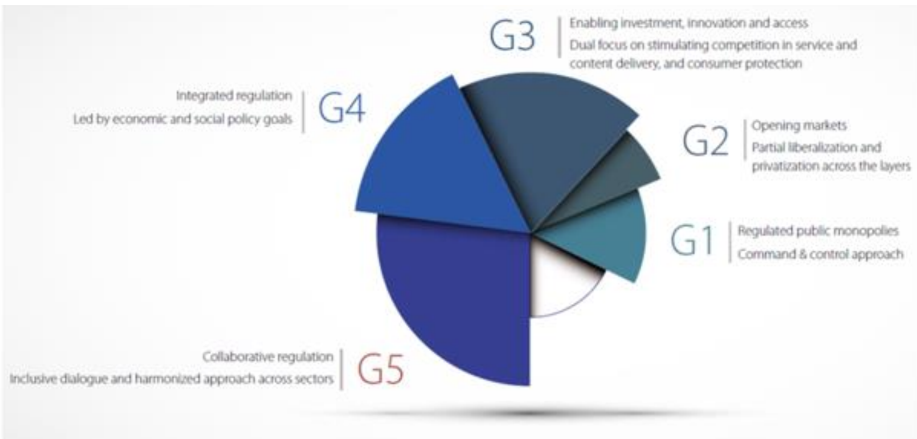
(1) Collaboration is the dominant element of modern digital regulation – the very watermark of G5 regulation. It measures the breadth and depth of cross-sector collaboration between the ICT regulator and peers that play a role in the digital economy;

(2) High level, principle-based regulation is important – as regulation shifts from rules to principles, the design of frameworks and what keeps them together have acquired special importance. While rules will and should not disappear soon, in some instances in the digital value chain, principles are better suited for finding balanced, sound solutions, especially in complex areas;

(3) Digital Development Toolbox – retooling regulatory inventory and the development of coherent, outcome-oriented policy instruments can accelerate the achievement of broader social and economic goals.

(4) Digital economy policy agenda – new consumer needs, business models and market dynamics call for expanding the focus of regulatory policies to new areas to reflect, induce and support the race to digital.

Figure 1: The five generations of regulation



Source: ITU

Figure 2: Outlining the generations

RATIONALE FOR GENERATIONS OF REGULATION

Source: ITU.

	1. Regulatory authority	2. Regulatory mandate	3. Regulatory regime	4. Competition framework
G1	• Consolidated with policy-maker and/or industry	• Business as usual	• Doing as we have always done	• State-owned monopoly
G2	• Separate agency	• First wave of regulatory reform	• Doing more	• Liberalization
G3	• Separate agency, autonomous in decision-making	• Advanced liberalization of ICT sector	• Doing the right things	• Partial competition
G4	• Separate agency with enforcement power	• Adjacent issues become core mandate	• Doing the things right	• Full competition
G5	• Separate agency as part of a network of partner regulators	• **Active collaboration across the board**	• Doing things together	• Intra-modal competition

Source: ITU

The objective of this case study is to analyse the current institutional and regulatory framework of Tanzania to understand how it reflects the principles and nature of collaborative regulation. The case study also highlights areas of strength and possible improvements as Tanzania journeys towards digital transformation and collaborative regulation, enabling it to seize opportunities and address challenges. The analysis and results are based on publicly available information (reports, legal acts, studies) and information obtained during interviews with stakeholders from Tanzania (see Box below on the methodology of the ITU Collaborative Regulation Case Studies). Gathering information from different perspectives spotlights strengths and opportunities for the country, while identifying areas for further consideration that could bring Tanzania into the group of G5 countries.

Collaborative regulation case studies: The methodology

To better understand the role and impact of collaboration and collaborative governance, ITU has launched a series of collaborative Regulation case studies. They focus on regulatory and institutional frameworks and on collaborative governance in countries across different regions. The case studies detail diverse experiences and varied policy and regulatory patterns, and set out challenges, new ideas and lessons learnt by regulators as they journey towards G5 collaborative regulation. Each case study follows a similar methodology, is tailored to the needs of each region and has been achieved through close cooperation with all stakeholders.

Each case study is built on two components:

i) A 50-question survey on fifth generation regulation that explores collaboration across government agencies and ministries, the scope and patterns for collaboration, the involvement of other stakeholders and legal tools, policy tools and processes.
ii) Multiple interviews with key national stakeholders – including representatives of the national regulatory authority, a relevant ministry, and a private sector player or consumer association. Interviews were flexible but structured to explore practical aspects of policy implementation and regulatory reform.

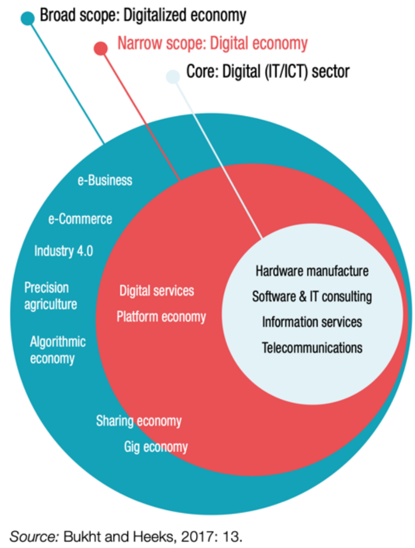
The case studies set out the current policy, regulatory and governance landscape in the country, with focus on current best practice and areas for future enhancement.

Tanzania is on the journey from command and control first generation regulation (G1) to fifth generation collaborative regulation, and according to the ITU Benchmark of Fifth Generation Collaborative Regulation (G5 Benchmark), Tanzania has just entered G4.

The Tanzania ICT sector policy and regulatory environment has long facilitated investment, innovation and access and has had a dual focus on stimulating competition through relative ease of market entry and a focus on consumer protection – classic characteristics of a G3 regulator.

Established in 2003, the Tanzania Communications Regulatory Authority (TCRA) was the first converged regulator on the continent. It is a mature regulator and the institutional framework supporting it reflects the early recognition that regulating communications in silos – at the time telecommunication, postal, and broadcasting – is counterproductive and would inhibit innovation, competition and growth.

Figure 3: A representation of the digital economy[1]



Source: Bukht and Heeks, 2017

In light of the advanced liberalization of the ICT sector, Tanzania has comfortably achieved G3; however, and the G4 journey is just beginning. The sector regulator will be under pressure to embrace its new role in advancing the digital economy, in terms of which adjacent issues become core to its mandate and role. Policy and regulation relating to core or traditional ICT sector issues, will have to be complemented by consideration of applications, services and the platform economy, as well as over time, cross-cutting issues relating to e-education, e-business, e-commerce, and e-agriculture amongst others.

This paper will highlight areas of strength and gaps in relation to Tanzania's progression into G4 and beyond. With the right focus, slight modifications to the policy and regulatory regime, and a clear focus on the implementation of the holistic and collaborative regulatory approach enshrined in policy and legislation, it is poised to achieve the gold standard in regulation. In so doing, the country will "accelerate socio-economic development with potential to transform Tanzania into an ICT driven middle-income economy and society" as envisioned in Tanzania's National ICT Policy Implementation Strategy.

2 Tanzania's journey

2.1 Economic growth interrupted by COVID

Tanzania has experienced strong growth in recent years, with an average growth of 6.5 per cent in GDP in the last decade, due mainly to a high level of exports in natural resources, and developments in the telecommunication, transportation, finance and tourism sectors[2]. Economic growth has furthermore been underpinned by the establishment of a liberalization programme and recently a regulatory reform blueprint.

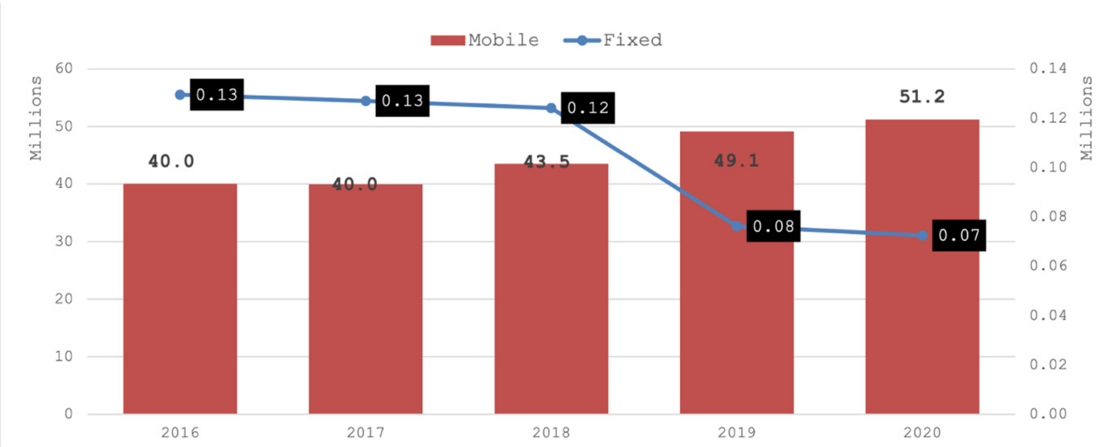
1 UNCTAD Digital Economy Report, 2019, https://unctad.org/system/files/official-document/der2019_en.pdf
2 International Monetary Fund.

Despite the fact that Tanzania did not impose significant lockdown restrictions on economic activity or limit people's movements in response to COVID-19, the effects of the pandemic globally on economies with which Tanzania trades, have had a knock-on impact on Tanzania's tourism, and export sectors, and led to a reduction in foreign investment. Indeed, Tanzania is one of the few countries in the world that did not go into recession; and relative to its regional peers Tanzania's economy has fared well, however real GDP growth fell from 5.8 per cent in 2019 to an estimated 2 per cent in 2020, and per capita growth was negative for the first time in over 25 years. The country's economic recovery will be directly linked to the recovery of the global economy and of the tourism sector. It will also be reflected the ability to implement the Tanzania Development Vision 2025 and refocus the whole of government such that it prioritises investment in developing a digital economy.

2.2 Path from ICT to digital

Tanzania's mobile market is served by seven mobile operators, making it one of the most competitive markets in sub-Sahara Africa. Four operators – Airtel, Halotel, Tigo and Vodacom – together account for over 90 per cent of market share. According to the Tanzania Communications Regulatory Authority (TCRA) by December 2020, the country had approximately 86 per cent mobile penetration, exceeding the regional average of 76.6 per cent. The consistent increases in access to mobile services are evidence of Tanzania's strong ICT sector growth. However, when it comes to broadband access, the Tanzanian story differs. While 49 per cent of the population are estimated to be Internet users, in 2019, Tanzania's active mobile broadband penetration was about 10 per cent – compared to the Africa region average of 17.3 per cent at the time[3].

Figure 4: Mobile and fixed subscriptions

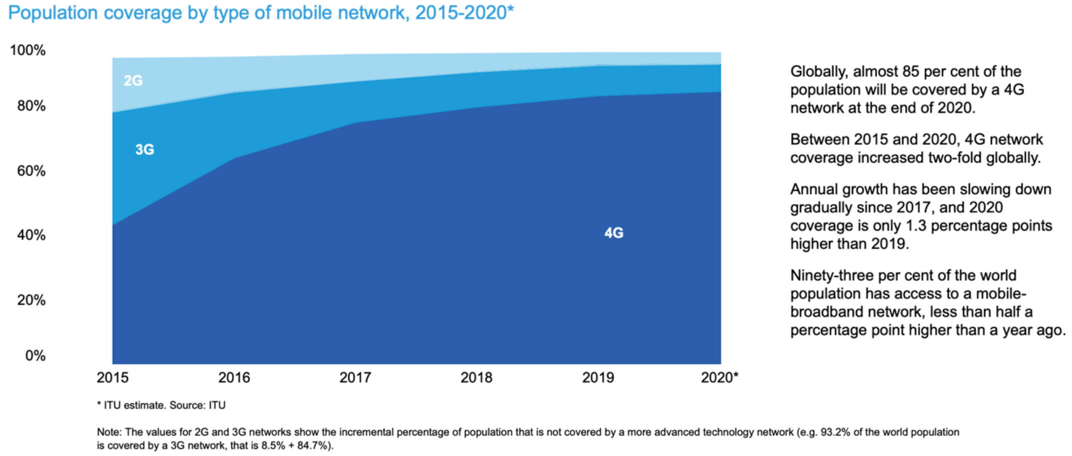


Source: TCRA, Tanzania

A mobile money leader in the region and globally, TCRA notes that there were 32.3 million mobile money accounts offered by six operators in the market at the end of 2020 – this is up from 25.8 million accounts in December 2019. More than half of the country's mobile users use mobile money. The volume of mobile money transactions has increased to about 272 million transactions in mid-2020 (compared to 260.4 million during the same period in 2019)[4].

[3] ITU, TCRA in ITU Facts and Figures.
[4] TCRA, 2019.

Figure 5: Population coverage by type of mobile network (2015-2020)



Source: ITU

In terms of network availability and coverage, globally about 85 per cent of the population had 4G coverage by the end of 2020. While 4G rollout is slowing globally, according to ITU[5], Africa bucked the trend and achieved 21 per cent 4G growth in 2020. In Tanzania, by the end of 2018, 3G and 4G networks covered around 85 per cent and 13 per cent of Tanzania's population respectively[6], leaving significant room for expansion. Tanzania's mobile broadband coverage is considerably lower than the national 2G coverage, which is at around 90 per cent.

Much of the broadband infrastructure is government owned, and more progress could be made if the private sector was incentivised to invest in broadband. The government owned National ICT Broadband Backbone (NICTBB) covers the country. NICTBB has cross-border connectivity to Burundi, Kenya, Malawi, Rwanda, Uganda, and Zambia. A private public partnership, NICTBB is funded by licensed operators in Tanzania while the government contribution is through arranging permissions and rights of way and covering their costs[7]. Additionally, the Halotel government supported rural rollout is extensive.

Tanzania's low mobile broadband coverage correlates with the country's mobile broadband penetration figures and effectively means that more than half of the population in Tanzania is unable to benefit from the social and economic benefits of mobile broadband connectivity, a key means of delivering digitization in the Africa region. Tanzania's mobile broadband coverage lags its regional peers in Uganda (3G network coverage) and Kenya and Rwanda (both 3G and 4G network coverage), underscoring the need for more robust enabling policies as well as greater collaboration between mobile operators, and government agencies, including the Universal Communications Service Access Fund (UCSAF)[8].

Strong market performance is an outcome of a successful interplay between the public and private sector that is only possible when the regulator has put in place measures to facilitate investment, encourage innovation, nurture competition and promote universal service and access – all of which TCRA has done. However, given advances in technology and digitization, a regulator cannot rest on its laurels. Despite significant successes until 2015, the market in

5 ITU Eye, 2019.
6 GSMA, 2019.
7 Measuring the Information Society Report 2018 – Volume 2; https://www.itu.int/en/ITU-D/LDCs/Documents/2017/Country%20Profiles/Country%20Profile_Tanzania.pdf
8 GSMA.

Tanzania seems to have stagnated. According to the World Bank, in 2020 "Tanzania's ICT costs are no longer low by regional standards; mobile broadband coverage is mediocre; smartphone penetration is relatively low; data usage is limited and concentrated in large cities"[9]. These indicators do not auger well for digital development; however, given the country's policy and institutional framework for ICTs, this pattern can be reversed.

3 Policy context

The Tanzania Development Vision 2025 (Vision 2025) was passed at the turn of the century and has the clear objective of transforming Tanzania from a low-productivity, agricultural economy to a semi-industrialised, middle-income economy, with a GDP per capita of USD 3 000 or more by 2025. In mid-2020, five years ahead of schedule, the country met its ambitious Vision 2025 target of becoming a middle-income economy. Despite good economic fundamentals, retaining the position may be challenging in light of the impact of COVID-19 on the country and the global economy, and given the increase in poverty and challenges of encouraging investment that the country faces.

Vision 2025 recognizes the important role of ICT as a key contributor to socio-economic development and to fulfilling its objectives. It furthermore highlights the cross-cutting nature of ICTs and the need to create a knowledge-based society to make best use of technological developments. Vision 2025 states that:

> *"These technologies (ICTs) are a major driving force… They should be harnessed persistently in all sectors of the economy and should be put to benefit of all social groups with a view to enabling the meeting of basic needs of the people, increasing productivity and promoting competitiveness.*
>
> *The new opportunities which the ICTs are opening up can be harnessed to meet the goals of the Vision. However, appropriate skills and capabilities would have to be put in place. This task demands that adequate investments are made to improve the quality of science-based education and to create a knowledge society generally".* [10]

Vision 2025 is supported by Tanzania's second Five Year Development Plan (FYDP II). Launched in 2016, FYDP II is based on the theme of "Nurturing Industrialization for Economic Transformation and Human Development." It focuses on growth, transformation, and poverty reduction, like FYDP I and the National Strategy for Growth and Regulation of Poverty (2010/11 – 2104/15) before it, and has three pillars: industrialization, human development, and implementation effectiveness. The FYDP II three pillars lend themselves to being facilitated by digitization.

The industrialization pillar relies in large part on increasing productivity and improving efficiency in the production and distribution processes across key productive sectors of the economy. It identifies manufacturing, construction, agriculture, trade, natural resources management, tourism, mining and metals, science and technology, and the creative industry as key sub-sectors in the industrialization o agenda. In order to facilitate effective digital regulation the sector

---

9 https://openknowledge.worldbank.org/bitstream/handle/10986/35204/Tanzania-Economic-Update-Raising-the-Bar-Achieving-Tanzania-s-Development-Vision.pdf?sequence=1&isAllowed=y

10 https://mof.go.tz/mofdocs/overarch/vision2025.htm

policies need to be robust enough to enable agile, data driven and evidence-based regulation, as well as collaborative regulation.

3.1 Main ICT sector policy framework

Formulated within the context of Vision 2025, the National ICT Policy (NICTP) 2016 is the second ICT policy for the country following NICTP 2003. The National ICT Policy is based on the basic premise that "Tanzania's accelerated development within the emerging information and digital age of which will not be possible without an ICT-driven development agenda.[11]" The ICT policy has 22 objectives, and with its desired developmental impact, these can be grouped broadly into four categories: (1) access to key services, (2) productivity and efficiency, (3) socioeconomic impact and (4) good governance. NICTP 2016 is supported by the ICT Policy Implementation Plan (2016–2021). Overall, the ICT policy framework has facilitated the effective contribution of ICTs towards national development goals and has moved the country closer to becoming a knowledge-based society. The ICT sector rallies behind the NICTP 2016, however there is a need for it to be embraced more broadly across the rest of the economy.

Many countries have developed sector specific policy frameworks that are complementary to their national ICT policies and strengthen the digital economy. These policies tend to play a role in creating a stable environment, building trust by users and stimulating demand. These include:

- broadband or digital transformation policy and strategy;
- e-government framework;
- electronic transactions framework;
- e-commerce policy and strategy;
- data protection policy, legislation and regulations; and
- cyber-security policy, legislation and regulations.

Tanzania's framework for digital policy and regulation is partially developed. The country has policies on electronic transactions, cybersecurity and e-government. The Electronic Transactions Act recognises electronic evidence, digital signatures and e-payment/digital money. The Cybercrimes Act (2015) defines a number of offences such as the transmission of spam, publication of child pornography or false information and "fake news", illegal interception of communications, violation of intellectual property rights, fraud, and identity theft.

An important piece of the framework is the 2013 Tanzanian e-Government Strategy. The e-government strategy considers that a digital and connected government as a key imperative for service delivery. It expects e-governance to evolve through four key stages: digital presence, interaction, transaction, and transformation. The stages go from digital presence, which refers to the deployment of infrastructure and the development of critical skills, to the final stage "transformation", which in the e-government strategy is characterised by collaboration. It articulates six objectives to be met, the latest of which – e-government institutional framework, government wide electronic infrastructure and government wide shared systems – are codified in the e-Government Act (2019) and regulations (2020) and overseen the e-Governance Authority (e-GA) which has been established to facilitate the implementation of the strategy.

[11] National ICT Policy, 2016 https://www.mwtc.go.tz/uploads/publications/en1509522462-NATIONAL%20ICT%20POLICY%20IMPLEMENATION%20STRATEGY.pdf

The e-government strategy, like many similar strategies in Africa, Asia and the European Union, recognises that to enable successful and secure two-way communication between government and the public, "government Ministries, Departments and Agencies are required to operate in a collaborative, connected manner and reduce the existing operational silos that isolate one organization or department from the other"[12].

3.2 Cross-sector policies

The NICTP 2016 is supported by the ICT Policy Implementation Plan (2016–2021) which has amongst its assumptions "strong institutional collaboration in planning and implementation". Key sectors of the economy, namely health, finance and basic education have also passed complementary digital or ICT strategies and plans. The health and financial services sectors have the most comprehensive and up to date digital policy frameworks.

The heath sector policy is visionary. The National Digital Health Strategy (2019–2024)[13] is supported by the Tanzania Digital Health Investment Road Map 2017–2023[14]. The Strategy is the second such strategy (following the eHealth Strategy, 2013–2018) and focuses on digitizing healthcare systems and processes, including through telemedicine and e-prescriptions, through a focus on improving health governance and, by improving the healthcare workforce competence. The National Digital Health Strategy recognises that digital technologies will assist government and stakeholders to achieve universal health coverage and meet the Sustainable Development Goals, particularly Goal 3 on good health and well-being. Gathering data to enable evidence-based decision making in the healthcare sector is important and is also facilitated by the strategy.

A Monitoring and Evaluation (M&E)/ICT Technical Working Group, comprising senior-level representatives of ICT and M&E of both the ministry responsible for health and the President's Office (regional and local government), ministerial delivery agencies, training and research institutions, and development and implementing partners, collaboration and cooperation is built into the strategy.[15] Guidance from NICTP 2016 is highlighted, however the Ministry of ICT, ICT Commission and TCRA are not explicitly mentioned in the Digital Health Strategy, nor is a role set out for them in terms of facilitating the implementation of this key strategy. This suggests that ICT has not been mainstreamed into sector development plans.

The Tanzania fintech policy and implementation is a success story. The National Financial Framework (2018–2022) is the second framework to be implemented under the Financial Inclusion National Council (Council). In order to realize its vision, which is to see that "Financial products and services meet the needs of individuals and business consistent with supporting livelihood, household resilience and creation of jobs," the current framework draws on three

[12] E-Government Strategy (2013).
[13] Digital Health Strategy, http://www.tzdpg.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/Tanzania_Digital_Health_Strategy_2019_-2024__1_.pdf
[14] Digital Health Investment Roadmap, https://www.path.org/resources/tanzania-digital-health-investment-road-map-2017-2023/
[15] Digital Health Strategy (2019 – 2024), http://www.tzdpg.or.tz/fileadmin/documents/dpg_internal/dpg_working_groups_clusters/cluster_2/health/Key_Sector_Documents/Tanzania_Key_Health_Documents/Tanzania_Digital_Health_Strategy_2019_-2024__1_.pdf

principles, namely flexibility, innovation and collaboration with both ICT and non-ICT players in the economy[16].

The Council responsible for implementing the National Financial Framework is a collaborative effort which includes the Central Bank Governor (Chairperson), supported amongst others by TCRA, which is a Member of Council Steering Committee Technical Team and participates through the TCRA Director General, the Director of Industrial Affairs and a principal financial analyst[17]. TCRA, as the sector regulator, plays a number of roles in the implementation of the fintech strategy from ensuring that technology and infrastructure are in place, to ensuring that subscribers are registered, and supporting cyber security implementation.

Practically, at the implementation level, the use of fintech as a means to support the country's financial inclusion gaols has been enabled by a forward looking and agile approach to policy and regulation. The "test and learn" approach adopted by the central bank departs from traditional and prescriptive regulation, encouraging innovation while maintaining a level of legal certainty and consistency. The test-and-learn approach was applied to the then new mobile money concept in 2008 when the central bank granted "non objection letters" to the TCRA regulated mobile operators and their banking partners. This is a classic G5 approach of letting regulation follow innovation while managing risks. To give effect to this approach the Bank of Tanzania (BOT) made regulations, which ensured that non-banks (such as MNOs) could continue to receive non-objection letters to act as mobile payment service providers[18].

Education is critical to building a digital economy and equipping citizens with the digital literacy skills that will be required in the future. The Tanzania framework needs to be updated to focus on the digitization of education and the upskilling of the population to enable them to effectively participate in the digital economy. Although dated, the ICT Policy for Basic Education (2007) is intended to give life to the desire to transform Tanzania from a knowledge-driven society to information and digital-driven society. Notwithstanding the absence of a sector specific policy framework to guide them, a number of ICT in education projects have been undertaken in Tanzania that are aligned with the broader Vision 2025 objectives, such as the Science, Technology and Higher Education Program, Tanzania National Research and Education Network, e-Libraries, and the Education Management Information System.

A digital strategy would assist in promoting a whole-of-government approach and in bringing all sectors of the economy, not just health, education and fintech, online. Digitization and innovation in the agriculture sector, the largest contributor to the economy, will assist the sector in meeting the Vision 2025 goals of job creation and the eradication of poverty.

16 National Financial Framework (2018–2022). https://www.fsdt.or.tz/wp-content/uploads/2019/01/National-Financial-Inclusion-Framework-NFIF-2018-2022.pdf

17 https://www.itu.int/en/ITU-D/Regulatory-Market/Documents/Events2019/Togo/Ses3.1_%20Nkya_collaboration.pdf

18 Creating Enabling Fintech Ecosystems: The role of Regulations, Alliance for Financial Inclusion, https://www.afi-global.org/sites/default/files/publications/2020-01/AFI_FinTech_SR_AW_digital_0.pdf

4 Institutional framework

4.1 Institutions matter

Effective institutions have clear and distinct mandates in terms of how they operate. Collaboration is a key theme of G5 regulation and is best measured by the breadth (how many sectors are affected and impacted) and depth of cross-sector collaboration between the ICT regulator and other institutions, most notably regulatory equivalence in other sectors. The level of vertical collaboration is also important, i.e. between the regulator(s) and non-government stakeholders such as the ICT industry (MNOs, ISPs and equipment and device manufacturers) and consumers. Successful attainment of G5 status is informed by the institutional framework (ministries, departments, agencies and their mandates) and its capacity to collaborate, both formally and informally.

Regulators work with each other on a formal and an informal basis depending on the extent of their collaboration, which in turn depends on the extent of overlap or concurrency of their functions. TCRA formal cooperation arrangements tend to be with agencies that have mandates that are technical and complement the TCRA mandate or are fintech in nature. This section therefore also highlights opportunities for future collaboration with regulators beyond these two categories that are key in a digital economy.

It also considers the key oversight role assigned to the Ministry of Communications and Information Technology (MCIT) (until the end of 2020, known as the Ministry of Works, Transport and Communication), which is the policy-maker and is responsible for the National ICT Policy (2016), and its supporting institutions.

4.2 Institutions with oversight and coordination mandates

The MCIT oversees communication related policy in Tanzania. It is supported by a number of agencies with specific oversight and coordination roles within the ICT sector, namely:

- The **ICT Commission**, which was provided for in the 2003 ICT Policy, was finally established in 2016 when the current National ICT Policy was passed. It coordinates and facilitates the implementation of national ICT initiatives countrywide[19]. The ICT Commission is meant to fulfil its role through promoting the ICT sector, recognizing and build capacity and skills of ICT professionals, providing foresight and trends in ICT through research in collaboration with ICT stakeholders and fostering strategic investment in ICT.

  Although it appears that the ICT Committee should be a focal point for digital transformation, it is not explicitly defined as such, nor is it experienced as such on the ground. It does not seem to have carved out its own space and there seems to be an overlap between its work and the work of other agencies such as those promoting investment across the economy, including ICT (Tanzania Investment Centre), developing ICT skills, and coordinating government ICT (e-GA). There is little practical evidence of how the ICT Committee differentiates itself.
- **The-Government Authority (e-GA)** established in 2019, replaced the e-Government Agency, which was initially established to support the implementation of the e-Governance Strategy (2013) and dissolved seven years later. The new e-GA is the focal point for the administration, management and operations of e-government services and provides for the management of electronic data. The e-GA by its very mandate embraces and

[19] Presidential Decree GN No. 532 published in the Government Gazette No. 47 Vol. 96 dated 20th November, 2015 and https://www.ictc.go.tz/index.php/about-us/2

facilitates collaboration across government. It has had some successes. Tanzania features amongst leading least developed countries such as Bangladesh, Kenya, Pakistan, Rwanda, and Uganda in offering online services according to the 2020 UN E-Government Survey. Tanzania's scores 0.55 on the E-Government Development Index, close to the global average of 0.60[20].

Tanzania has established the institutions to lay the foundation for a digital future according to global best practices, however there is a need for clarification of mandates and roles, and a focused and practical commitment to a digital future by those institutions not directly involved in the ICT sector. The well-articulated Vision 2025 objectives as well as the UN Sustainable Development Goals and regional targets set out in the African Union Agenda 2063 and the East African Community (EAC) Vision 2050, must be supported by practical implementation on the ground.

Digitizing government services

Mobile technology has been found to be a key tool in improving efficiency and good governance, for example:

- The Dar es Salaam Water Supply and Sanitation Authority (DAWASA) https://www.dawasa.go.tz/en was an early adopter of technology and accepts online registrations and collects bill payments via mobile money via the e-government portal provides.
- Tanzania Revenue Authority (TRA) collects VAT payments and motor vehicle licence payments via mobile money and allows online filing via its payment gateway (https://gateway.tra.go.tz). In 2016, mobile operators, along with the TCRA and TRA, implemented an initiative to notify their customers, mainly through SMS, of the amount of VAT paid to the Treasury when they pay for a mobile service.
- e-RCS, operated by the TRA and the Zanzibar Revenue Board (ZRB), enables real-time tax remittance, particularly VAT and excise duty. It provides transparency for taxpayers on the exact amount of revenue collected from online transactions by automatically calculating and collecting the right amount of taxes from companies and sending it directly to relevant accounts of both TRA and ZRB without human intervention.
- Tanzania Electrical Energy Supply Company (TANESCO) uses telecommunication operator mobile money platforms to receive payments from customers, as well as banking partnerships to enable payments via ATMs.
- Selcom, the largest cross segment financial and payment services provider in Tanzania, provides a full range of e-payment products and services and links customers to the payment platforms of services such as 'luku' or electricity, airtime and satellite TV, through its partnerships with all six mobile operators in the country and over 35 banks.

Source: Various sources, and adapted from GSMA https://data.gsmaintelligence.com/api-web/v2/research-file download?id=39256224&file=2736-180319-Tanzania.pdf

[20] United Nations E-Government Survey, 2020: https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/2020%20UN%20E-Government%20Survey%20(Full%20Report).pdf

4.3 Internal collaboration: Tanzania Communications Regulatory Authority

Reporting to the Ministry of Communications and IT, TCRA is the electronic communications, broadcasting and postal sector regulator of Tanzania. Established under the Tanzania Communications Regulatory Act (2003), it was one of the first to embrace convergence in the region and effectively took over the functions of the Tanzania Communications Commission, the Tanzania Postal Commission and Tanzania Broadcasting Commission respectively after the passing of Electronic and Postal Communications Act (2010) (EPOCA). TCRA has reliably overseen Tanzania's journey from G1 to G4 – this journey has seen the liberalization of the ICT sector, the increase in competition from a fixed line monopoly to the current seven player mobile market, and the passing of core regulations. A few of the initial liberalization gains were reversed with the government regaining control of the Tanzania Telecommunication Company Limited (TTCL) in 2016 and increasing its shareholding in Airtel in 2019.

The TCRA role mirrors that of many ICT regulators in that it is responsible for developing core regulations relating to the setting of technical standards, quality of service regulation, scarce resources regulation, broadcasting regulation, licensing, monitoring compliance, type approval, interconnection and all manner of ICT-specific regulatory functions. In addition, TCRA is also responsible for digital economy regulations on cybersecurity, spectrum management and licensing, consumer protection, facilitating innovative applications and services such as mobile money, and the regulation of competition – areas where other regulators in the country may also have a role to play. With digitization the TCRA role shifts from being central to complementary in many instances.

With a mandate covering ICT, broadcasting and postal service, the TCRA has responsibility for many aspects of the digital economy. However, despite regulating horizontally for convergence, in the absence of a digital transformation policy, an e-commerce policy and a data protection policy it does not have a clear digitization mandate. Therefore, opportunities in related ICT sub-sectors to strengthen the digital economy, are not fully exploited. For example:

- The importance of strengthening the postal system and the implementation of the National Addressing and Postcode System (NAPS), overseen by TCRA in its capacity as a postal regulator, is an important pillar for local e-commerce and digitization.
- The opportunity of regulation to increase demand through promoting local content, and increasing digital literacy, amongst others, has not been used to date. An amendment to the 2020 Online Content regulations saw TCRA require that "online content service providers" be registered, thus enabling the regulator to take action against non-compliance, including the slippery slope of ordering the removal of or barring access to what is subjectively defined as "prohibited content".

Broadly speaking, the passing of these regulations, which straddle traditional ICT, postal and broadcasting spaces, did not demonstrate the presence of a long-term demand side strategy. In fact, they deter usage of the Internet and in the case of the Online Content Regulations, put the development of local content at risk. In the context of COVID-19, and despite the intent to preserve public interest, the regulations have had the effect of limiting access by the public to health information by prohibiting the publication of "content with information with regards to the outbreak of a deadly or contagious disease in the country or elsewhere without the approval of the respective authorities."[21]

[21] https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=26117&LangID=E

4.4 Collaboration between regulators and across sectors

Tanzania, like many countries, has a significant number of laws, regulations and policies that overlap and that are overseen by a multitude of regulators. This can create a duplication of regulatory oversight, uncertainty and bureaucracy. The 2018 Blueprint for Regulatory Reforms to Improve the Business Environment (regulatory reform blueprint) is one of a number of measures to address this with the aim of realising the 2025 Vision of developing an industrial economy.

In the ICT sector, steps have been taken to limit the duplication, create certainty and reduce opportunities for private sector to "forum shop" for favourable decisions. TCRA has successfully entered into formal cooperation arrangements with regulators for competition and consumer protection (Fair Competition Commission), and financial services (Bank of Tanzania), and needs to extend this cooperation to regulators across the economy to maintain its journey to G5 status. Amongst the collaborative success stories are relationships forged with authorities in the fintech and financial inclusion space:

Bank of Tanzania (BOT) In the area of financial inclusion and mobile money, TCRA and BOT have embraced a G5 mindset and moved beyond 'concurrent jurisdiction' to collaboration. On the financial side of the mobile money equation, BOT is responsible for regulating, monitoring, and supervising the national payments system, including payment products, and clearing and settlement systems products. Through the combined mandates of the two regulators, effective mobile money regulation is possible. In terms of collaboration, mobile money is considered a value-added service under the ICT sector regulatory regime, and the BOT and TCRA has signed an MOU to support coordination between the two regulators.

The country has seen the positive results arising from this approach as Tanzania has made strides towards achieving financial inclusion through finding ways to enable digital financial solutions despite the inadequacy of existing siloed regulations, and the absence of appropriate holistic regulatory processes or frameworks. In response to the advent of mobile money, and later other digital financial services, BOT adopted a 'test and learn' approach which enabled it to allow players over which it had no legal or regulatory oversight (i.e. mobile operators) to provide services over which it has a very clear mandate (i.e. financial services).

Tanzania Revenue Authority (TRA) Mobile is a significant contributor to the fiscus and is one of the most heavily taxed sectors in Tanzania. Operators subject to a range of different taxes, including excise tax of airtime (17%) and mobile money services (10%) along with regulatory fees and charges[22]. Notwithstanding the negative impact of such taxes on investment and on pricing passed on to consumers (and therefore uptake), there is a need to enforce said regime. There is an MOU between TRA and TCRA dealing with how they coordinate revenue collection from the TCRA licensees. The development of the MOU showed foresight, however the implementation appears to require strengthening. The 2020 Auditor General report found that there has been under collection in part due to the fact that the implementation of the MoU has not been satisfactory and coordination is insufficient, as is oversight by the Ministry[23].

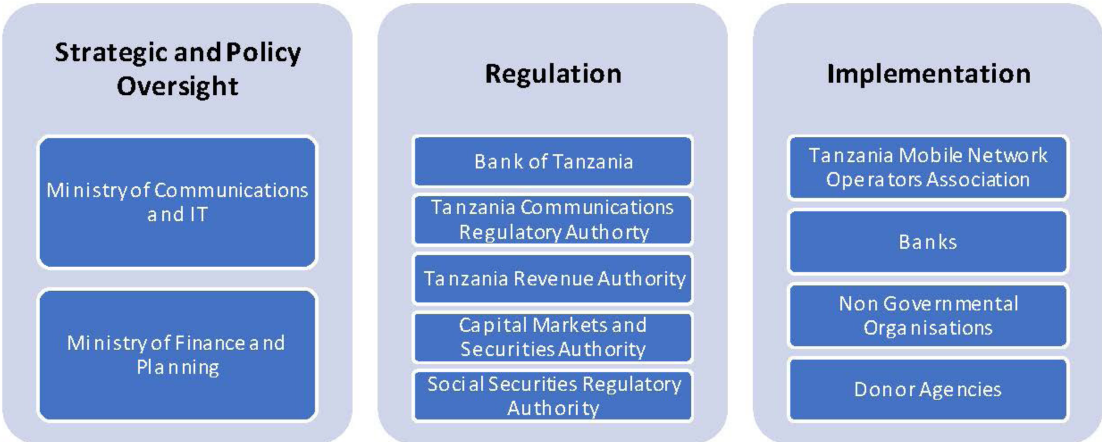
As mobile money evolves and additional and more complex digital financial services related to insurance, e-commerce services and the like are offered, the breadth of collaboration extends

[22] Money transfer services, electronic communication services, pay to view television services are charged under ad-valorum rates. https://www.tra.go.tz/index.php/excise-duty

[23] https://www.nao.go.tz/uploads/MANAGEMENT_OF_REVENUE_COLLECTION_FROM_TELECOMMUNICATION_SERVICE_PROVIDERS.pdf

beyond TCRA, TRA and BOT to the Capital Markets and Securities Authority (CMSA) and the Social Securities Regulatory Authority (SSRA). Given the influence exerted by non-governmental organizations (NGOs) and the donor community in Tanzania, collaboration has necessarily involved them, an example being the World Bank Financial Sector Supporting Project.

Figure 6: Collaboration to ensure digital financial services



Competition regulation

The TCRA is responsible for ex post and ex ante competition regulation in the ICT sector and stipulates in its Competition Regulations (2018) that it uses the principles and methodology set out in the Tanzania Fair Competition Act in fulfilling its mandate. The Fair Competition Commission (FCC) has jurisdiction over the rest of the economy. Where the FCC believes a sector specific regulator is permitting anti-competitive conduct, this will be referred to the relevant ministries[24]. Licensees furthermore have recourse to the Fair Competition Tribunal if they wish to appeal. In this way, the concurrent jurisdiction between TCRA and the FCC on competition matters is managed, however there remain opportunities for more holistic, forward looking collaboration that will be needed as digitization blurs more sectoral boundaries.

Technical regulation

TCRA has further memoranda of understanding (MoUs) that it develops on a case-by-case basis as the need arises. This includes agreements with a number of universities and academic institutions, including Costech, to promote research in various areas where ICT can be used. It also includes MoUs with technical bodies such as the Tanzania Bureau of Standards (TBS, https://www.tbs.go.tz) on equipment, and the Atomic Energy Commission (https://www.taec.go.tz), which formed a committee with TCRA to assess electromagnetic field (EMF) radiation following the signing of an MOU in 2011. The MOU enhances cooperation vis-a-vis inspections, technical standards, enforcement, research, public awareness campaigns, complaints handling, public and environmental protection studies and consultancies relating to the effect of electronic communication equipment that generate radio frequency and microwave radiation[25].

The strength of the TCRA appears to lie in the arrangements it has with institutions that directly support or complement its technical mandate, and financial inclusion related institutions, where

---

[24] https://www.wipo.int/edocs/lexdocs/laws/en/tz/tz006en.pdf
[25] The Regulator, October – December 2011 https://www.tcra.go.tz/report/Fifty%20(50)%20Years%20of%20Communications%20in%20Tanzania

technology clearly cuts across regulator and agency areas of responsibility. However, as it increasingly takes responsibility for facilitating the digital and broadband economies, TCRA should extend its collaboration efforts and cooperate with:

- Regulators involved in the broadband value chain. An important example is the Tanzania Rural and Urban Roads Agency (TARURA) that is responsible for issuing rights of way to licensees rolling out optical fibre networks. In countries where the charges for rights of way are prohibitive, this has the effect of increasing the cost of deployment and therefore ultimately increase the cost of communications, deterring uptake and usage of digital technologies.
- Regulators that support various sectors that contribute to the digital economy. Despite carrying out regulatory impact assessments on other sector regulations and policies, TCRA is less involved with adjacent institutions where the link is not direct and goes beyond their traditional mandate. This is a key factor that TCRA has to address to solidify its G4 status. Despite issuing licences to applications service providers, TCRA leaves the regulation of services such as e-hailing, online education, e-agriculture and e-health to the responsible departments and ministries. TCRA believes that its role in respect of these applications ends at creating a conducive regulatory environment to facilitate market entry.

TCRA will increasingly be called upon to collaborate with regulators in adjacent sectors such as transport, energy and aviation, once overlaps are identified and begins to impact business models and consumers. The policy and institutional framework will need to be strengthened to support this regulatory collaboration – possibly through coordination by an agency such as the ICT Commission if the TCRA role is strengthened and it is supported at the highest levels.

Thus while the foundation has been laid for future digital success stories, Tanzania's success in creating an enabling environment for mobile money and supporting fintech in general can only be translated into broader digitization successes across the economy in agriculture, health, education and other key sectors, through a paradigm shift – an evolution to G5 collaborative, holistic, principle-based and fit-for-purpose policy and regulation.

5 Regulatory maturity and tools

5.1 Regulating with a digital mindset

Tanzania has adopted best practices in terms of the implementation of infrastructure sharing regulations, open access frameworks, and SIM card registration / know your customer (KYC) regulations, all of which will facilitate the transition to a digital economy. TCRA furthermore conducts Regulatory Impact Assessments on all of its regulations, as well as on the policies and regulations of other government agencies and departments – it then provides advice on these where they inhibit the growth or use of ICTs[26]. This solid foundation confirms that TCRA is a mature regulator with most of the key tools in place to facilitate effective regulation.

Many of the core regulations made by TCRA cover issues such as standards, type approval and interconnection, are foundational and facilitate ICTs and digital innovation. The bulk them, however, are drafted in a manner reminiscent of the traditional G3 'command and control' framework. They were initially passed in 2005, revised in 2011, and then updated in 2018 after

[26] Interview with TCRA, March 2021.

public consultation. These infrequent updates have mainly been made to align with broader legislative changes.

Notably however, in the last two years more frequent amendments have been made to regulations that support digitization. Regulations relating to online content, SIM card registration/KYC, numbering and addressing, and TV and radio broadcasting content were made in 2018 and amended in 2020. While these amendments should facilitate digital transformation in some cases the regulatory action taken in Tanzania has not served to do this, largely because of gaps in the policy and regulatory framework. For example,

- The new biometric SIM card registration regulations would be more effective if a data protection framework were in place, and if the national ID system was digitized. The national ID system is key to unlocking the potential of digital in Tanzania – it will improve subscriber registration through enabling validation, financial services regulation through enabling KYC and credit checking, and support health, education and other systems through enabling personalised solutions.
- The 2020 online content regulations deter local content development and also exist in a data protection vacuum.

Notwithstanding these exceptions, regulation overall has facilitated the entry of the players that have brought about much of the innovation and development in the mobile market. Regulation is then complemented by other government players in the environment and the private sector itself. In addition, there are many partnerships between entrepreneurs and mobile companies and/or donor organizations to promote the development of emerging technologies in health, education and agriculture. Good regulation makes these possible.

Private-public partnerships facilitated by good regulation

- Since May 2016, the Vocation Education Training Authority (VETA) has partnered with Airtel and Dar Teknohama Business Incubator, hosted at COSTECH to develop and implement a mobile e-learning platform called VSOMO. Even before the COVID pandemic, VSOMO App expanded the reach of VETA by providing digital content to clients who cannot physically attend classes[1].
- NINAYO is a Tanzania-based online trading platform for agriculture in East Africa. The start-up launched its operations in Tanzania in 2015 and in late 2019 joined the World Food Programme Innovation Accelerator Sprint Programme. Over 500 farmers are engaged with NINAYO WhatsApp groups – they can purchase agro-inputs via NINAYO. NINAYO also leverages its digital channels to batch orders at bulk rates, passing on savings to farmers[2].
- The Registration Insolvency and Trusteeship Agency (RITA), in partnership with mobile operator Tigo and UNICEF, launched an initiative to help parents register their children's births by mobile phone as part of efforts to better plan health, education and other public services[3].

1 https://teknohama.or.tz and https://airtel.africa/airtel-tanzania-CSR-through-technology
2 https://innovation.wfp.org/project/ninayo
3 https://www.unicef.org/tanzania/press-releases/tigo-teams-unicef-champions-innovations-tanzanias-children and "Innovations in Mobile Birth registration" (GSMA) https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/01/Innovations-in-Mobile-Birth-Registration_Insights-from-Tigo-Tanzania-and-Telenor-Pakistan.pdf

5.2 Incentives: Bringing everyone on board

It is important to put in place incentives to encourage private sector participation in the deployment of infrastructure, creation of jobs and promotion of skills development, amongst others. To that end, on one hand, the mobile tax regime is quite onerous with sector specific airtime and SIM card taxes; on the other, the tax regime for incentivising certain new businesses, specifically those involved in special economic zones (SEZs), is progressive.

The Special Economic Zones Act puts in place a regime to foster entrepreneurship through incentivising new businesses to invest in SEZs. The ICT sector has been prioritized in the SEZ framework and an ICT Park has been conceptualised where technology firms can be incubated. The law provides incentives for qualifying investors to promote economic activity, accelerate domestic production, promote exports and generate employment. COSTECH, the Tanzania Commission for Science and Technology, has been identified as central to the implementation of this strategy in partnership with the private sector. Incentives relate mainly to the tax regime and include:

- ten-year exemption from corporate tax, property tax, stamp duty and withholding tax on rent, dividends and interest;
- VAT exemption in utility charges;
- exemption from paying taxes and duties for machinery, equipment, building and construction materials, and capital goods used to develop the SEZ infrastructure.

The Export Processing Zone Authority (EPZA) oversees the special economic zones (SEZ) framework and, while not ICT specific, the EPZA issues three types of authorisations: *developer licences* for the purposes of developing and leasing infrastructure, including IT and ICT infrastructure, and providing services to other investors in SEZs; *investor licences* for the purposes of carrying on business within the SEZ; and *non-core business licences* for the purposes of providing services to investors in the SEZ. Although these licence holders do not qualify for fiscal incentives, this framework provides a good basis for new digital businesses to enter the Tanzania market.

6 Implementation, monitoring and evaluation

The pace of change in the ICT sector and the recent economic shocks brought about by the COVID-19 pandemic, make the implementation of existing policies and plans more urgent. They also demand a more holistic, forward looking and agile approach to developing regulatory and policy responses. Recovery will rely on the urgent elevation of digitization on the national agenda, especially through a digital policy and strategy. Collaboration and coordination, with clear role definition, will need to be overlaid on the solid institutional and policy foundation already present in the ICT sector. There will furthermore need to be clarity at the top – a digital champion at the highest level of government can centralise and bring focus to Tanzania's digitization efforts.

Tanzania's successes have tended to be in terms of supply side measures where government and the regulator have had a sole mandate and directed the sector accordingly (e.g. NICTBB, undersea cables). However, prioritizing digitization will require that the current policy gaps – data protection rules, online content regulation, digital literacy and skills, and other demand side strategies – are closed and that the entire digital ecosystem is addressed. In addition, more players will need to be brought into the fold and incentivised to participate in achieving the country's aspirations – particularly the private sector and consumers. This will require an outcome- and principle-based approach, increased coordination, and the development of more effective cross sector polices.

7 Looking forward: High level policy recommendations

The first country in Africa to introduce a converged licensing framework, Tanzania has a mature regulatory framework and has long recognised that regulating communications in silos – which at the time were split into telecommunications, postal and broadcasting – was counterproductive and would inhibit innovation, competition and growth.

Similarly, it has recognised that in a digital age, if the country is to reap the benefits of broadband and digital technologies, the regulatory regime must facilitate market entry and innovation, and that the principles of collaborative regulation must be applied across the ICT sector and the economy. To move into the next generation of regulation, and to increase uptake and usage of digital technologies, TCRA and other associated ministries, agencies and regulators will have introduced more highly coordinated collaboration, with clear roles and mechanisms and well-defined goals and anticipated outcomes into the regulatory and oversight environment. In addition, Tanzania's move to G5 will require the regulator in particular to embrace a shift to guidelines and high-level principles rather than traditional prescriptive regulation. As has been done in the local fintech area, in particular around the introduction and promotion of mobile money, agility and innovation in the use of new policy instruments is key to enable "test and learn" approaches.

Regulation and institutional foundations

Tanzania has a history of regulation and strong institutional foundations. The ICT sector policies and regulations are robust and the institutions responsible for implementing them have been stable over the past two decades. This has enabled them to effectively liberalize the ICT sector. Some key features of the Tanzania policy framework include:

- **Strong institutional framework**: The institutional framework for ICT is well constructed and has clearly defined roles for ministries, departments and agencies enabling good governance. However, the framework needs to evolve to support digital transformation. This does not require the establishment of new institutions, but rather a review of their mandates, roles and regulatory mechanisms to consider adjacent industries and an increase in collaboration between them. Where there is already collaboration, for example between TCRA and many of the financial sector regulators and agencies, there is a need to monitor implementation of these institutional arrangements to ensure that the collaboration (in most cases governed by Memorandum of Understanding) is outcome oriented and well-coordinated.
- **Clear mandates**: TCRA has a clear understanding of its seemingly discrete expert role (i.e. spectrum management, type approval, licensing), but at the same time it is able to see the connection between its role and the entire ecosystem – the same holds true for the Ministry of Works, Transport and Communication, recently replaced by the Ministry of Communications and Information Technology (MCIT). They see themselves as facilitators of the delivery of the infrastructure and services that underpin the digital economy. On the other hand, in the absence of a digital policy or strategy and associated implementation

mechanisms, the ability of TCRA to bring other institutions on board to use digital to achieve national socio-economic targets is somewhat limited.

- **Incentive based**: There is a wide range of incentives for stakeholders to collaborate with government to achieve identified targets – these include tax incentives and industrial policy tools such as special economic zones (SEZ). SEZs also encourage entrepreneurship and innovation, however the implementation of these has not advanced significantly since the passing of the SEZ Act in 2006 and has not yet resulted in the ICT Park that was envisaged.
- **Outcome based and principle-based policy and regulation**: Where there are policies in place, Tanzania's goals and targets are clear. However, the associated strategies, implementation plans and roadmaps that clearly articulate the desired outcome, and that can be used to measure progress are not yet in place. An exception is the ICT Policy Implementation Plan – however this is not mirrored in other sector policy frameworks that will facilitate a digital framework, such as the health, education and agriculture sectors. At a regulatory level, the focus of outcome and principles-based regulation is not in compliance with exact stipulations; instead, emphasis is placed on whether the internal processes and systems of licensees can produce the outcomes sought. Thus principles-based regulation, by its very nature, tends to afford regulators a level of discretion[27].

Policy and regulatory recommendations for G5 regulation

Tanzania's policy and regulatory base facilitates mobile broadband coverage, particularly in urban areas, and innovative mobile services and mobile money. Furthermore its institutions are credible and mature. Government usage is increasing steadily, a gap however, is in the increase of usage and uptake of ICTs in particular by business and individual users.

In practice, the country has undertaken many measures and facilitated several projects that demonstrate a commitment to using ICTs for development, however this is not captured in cross-sector policy and regulatory frameworks. Some of the areas that Tanzania can consider strengthening its frameworks include:

- **Strengthen digital policy framework**: Tanzania should consider reviewing and/or updating the current sector policies to move from an ICT for development focus to a digital economy approach. This can be done through reviewing existing policies such as the ICT Policy for Basic Education (2007). All key departments including transport, agriculture and health should furthermore be encouraged to put in place digital strategies that can be coordinated by the ICT Commission. This is above and beyond the e-government strategy. All policies and strategies should be supported by an implementation plan that sets out: the responsible ministries, departments and agencies; budget considerations; and timeframes for implementation. A plan for effective monitoring and evaluation should also accompany all strategies to facilitate the move from policy to action.
- **Close access gaps, including skills gaps**: The digital economy will rely on pervasive network coverage, and a large proportion of the population having access to ICTs at affordable rates. Thus, the age-old goal of achieving universal service and universal access is brought to the fore in the future digital landscape. Tanzania should consider implementing measures to increase awareness, affordability and accessibility of basic ICT services in preparation for the use of digital applications, services and platforms. A tangible approach could include the drafting of a digital access policy, as well as policies for accessible mobile, including audio-visual and Internet access provisions for persons with disabilities.

27 https://cenfri.org/wp-content/uploads/2018/01/Regulating-for-innovation_Cenfri-FSDA_January-2018_updated-15-March-2018.pdf

- **Encourage consultation and collaboration**: Consultation and collaboration should be an intrinsic part of the policy making process – from policy formulation to the development of complementary policy instruments (regulations, guidelines, etc) to ensure buy in by all stakeholders. Effective consultation and the encouragement of collaboration across sectors will facilitate smooth policy implementation. Full-fledged consultation with industry, academia, consumer associations and end-users is key to the successful implementation of Vision 2025 and any subsequent policy instruments.
- **Increase regulatory toolkit**: To formally recognise guidelines and light touch licensing instruments (i.e. non objection letters, temporary licences, waivers, exemptions) so that innovation can be encouraged. Prescriptive and at times outdated regulations should not stand in the way of future regulation, such as principle-based regulation, which is facilitated through guidance to stakeholders and arrangements with agencies with joint responsibility, rather than prescriptive rules that might stifle innovative business models and the application of new technologies. This approach needs to be provided for in the TCRA founding legislation.

Office of the Director
International Telecommunication Union (ITU)
Telecommunication Development Bureau (BDT)
Place des Nations
CH-1211 Geneva 20
Switzerland

Email: bdtdirector@itu.int
Tel.: +41 22 730 5035/5435
Fax: +41 22 730 5484

Office of Deputy Director and Regional Presence
Field Operations Coordination Department (DDR)
Place des Nations
CH-1211 Geneva 20
Switzerland

Email: bdtdeputydir@itu.int
Tel.: +41 22 730 5131
Fax: +41 22 730 5484

Digital Networks and Society (DNS)

Email: bdt-dns@itu.int
Tel.: +41 22 730 5421
Fax: +41 22 730 5484

Digital Knowledge Hub Department (DKH)
Email: bdt-dkh@itu.int
Tel.: +41 22 730 5900
Fax: +41 22 730 5484

Partnerships for Digital Development Department (PDD)
Email: bdt-pdd@itu.int
Tel.: +41 22 730 5447
Fax: +41 22 730 5484

Africa

Ethiopia
International Telecommunication Union (ITU) Regional Office
Gambia Road
Leghar Ethio Telecom Bldg. 3rd floor
P.O. Box 60 005
Addis Ababa
Ethiopia

Email: itu-ro-africa@itu.int
Tel.: +251 11 551 4977
Tel.: +251 11 551 4855
Tel.: +251 11 551 8328
Fax: +251 11 551 7299

Cameroon
Union internationale des télécommunications (UIT)
Bureau de zone
Immeuble CAMPOST, 3e étage
Boulevard du 20 mai
Boîte postale 11017
Yaoundé
Cameroon

Email: itu-yaounde@itu.int
Tel.: + 237 22 22 9292
Tel.: + 237 22 22 9291
Fax: + 237 22 22 9297

Senegal
Union internationale des télécommunications (UIT)
Bureau de zone
8, Route des Almadies
Immeuble Rokhaya, 3e étage
Boîte postale 29471
Dakar - Yoff
Senegal

Email: itu-dakar@itu.int
Tel.: +221 33 859 7010
Tel.: +221 33 859 7021
Fax: +221 33 868 6386

Zimbabwe
International Telecommunication Union (ITU) Area Office
TelOne Centre for Learning
Corner Samora Machel and Hampton Road
P.O. Box BE 792
Belvedere Harare
Zimbabwe

Email: itu-harare@itu.int
Tel.: +263 4 77 5939
Tel.: +263 4 77 5941
Fax: +263 4 77 1257

Americas

Brazil
União Internacional de Telecomunicações (UIT)
Escritório Regional
SAUS Quadra 6 Ed. Luis Eduardo Magalhães,
Bloco “E”, 10º andar, Ala Sul
(Anatel)
CEP 70070-940 Brasilia - DF
Brazil

Email: itubrasilia@itu.int
Tel.: +55 61 2312 2730-1
Tel.: +55 61 2312 2733-5
Fax: +55 61 2312 2738

Barbados
International Telecommunication Union (ITU) Area Office
United Nations House
Marine Gardens
Hastings, Christ Church
P.O. Box 1047
Bridgetown
Barbados

Email: itubridgetown@itu.int
Tel.: +1 246 431 0343
Fax: +1 246 437 7403

Chile
Unión Internacional de Telecomunicaciones (UIT)
Oficina de Representación de Área
Merced 753, Piso 4
Santiago de Chile
Chile

Email: itusantiago@itu.int
Tel.: +56 2 632 6134/6147
Fax: +56 2 632 6154

Honduras
Unión Internacional de Telecomunicaciones (UIT)
Oficina de Representación de Área
Colonia Altos de Miramontes
Calle principal, Edificio No. 1583
Frente a Santos y Cía
Apartado Postal 976
Tegucigalpa
Honduras

Email: itutegucigalpa@itu.int
Tel.: +504 2235 5470
Fax: +504 2235 5471

Arab States

Egypt
International Telecommunication Union (ITU) Regional Office
Smart Village, Building B 147,
3rd floor
Km 28 Cairo
Alexandria Desert Road
Giza Governorate
Cairo
Egypt

Email: itu-ro-arabstates@itu.int
Tel.: +202 3537 1777
Fax: +202 3537 1888

Asia-Pacific

Thailand
International Telecommunication Union (ITU) Regional Office
Thailand Post Training Center
5th floor
111 Chaengwattana Road
Laksi
Bangkok 10210
Thailand

Mailing address:
P.O. Box 178, Laksi Post Office
Laksi, Bangkok 10210, Thailand

Email: ituasiapacificregion@itu.int
Tel.: +66 2 575 0055
Fax: +66 2 575 3507

Indonesia
International Telecommunication Union (ITU) Area Office
Sapta Pesona Building
13th floor
JI. Merdan Merdeka Barat No. 17
Jakarta 10110
Indonesia

Mailing address:
c/o UNDP – P.O. Box 2338
Jakarta 10110, Indonesia

Email: ituasiapacificregion@itu.int
Tel.: +62 21 381 3572
Tel.: +62 21 380 2322/2324
Fax: +62 21 389 5521

CIS

Russian Federation
International Telecommunication Union (ITU) Regional Office
4, Building 1
Sergiy Radonezhsky Str.
Moscow 105120
Russian Federation

Email: itumoscow@itu.int
Tel.: +7 495 926 6070

Europe

Switzerland
International Telecommunication Union (ITU) Office for Europe
Place des Nations
CH-1211 Geneva 20
Switzerland
Email: eurregion@itu.int
Tel.: +41 22 730 5467
Fax: +41 22 730 5484

International Telecommunication Union
Telecommunication Development Bureau
Place des Nations
CH-1211 Geneva 20
Switzerland

ISBN 978-92-61-34361-3

Published in Switzerland
Geneva, 2021
Photo credits: Shutterstock