



United Nations
Economic Commission for Africa

**Review of the legal and
regulatory frameworks
in the information and
communications
technology sector
in a subset of African
countries**



**WHAT LESSONS
CAN WE LEARN?**

Review of the legal and regulatory frameworks in the information and communications technology sector in a subset of African countries

What lessons can we learn?



United Nations
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Table of contents

1. Introduction	3
2. The context: ICT Legal and Regulatory Framework in Africa	5
2.1 National ICT legal and regulatory frameworks	5
2.2 Implementing the WSIS Action Line on Legal and Regulatory Environment	7
2.3 Harmonization of policies, legal and regulatory frameworks at national, subregional and regional levels	7
3. Country examples (Cameroon, Ethiopia, the Gambia, Morocco and Mozambique)	10
3.1 Country cases	10
3.1.1 Cameroun	12
3.1.2 Ethiopia	13
3.1.3 The Gambia	13
3.1.4 Morocco	14
3.1.5 Mozambique	15
3.2 Conclusion	16
4. Some additional challenges to the ICT Legal and Regulatory Frameworks	17
4.1 Technology	17
4.2 Content regulations	17
4.2.1 Equity and consumer protection	17
4.2.2 Infrastructure issues – interconnection, spectrum management, etc.	17
4.2.3 Challenge of cybercrime and cyber-security	18
5. Emerging issues for regulators	19
5.1 Mobile banking	19
5.2 Right to privacy, Internet surveillance versus State security	19
6. Conclusion	20

List of tables

Table 1: Cybercrime Legislation in selected countries in Africa	6
Table 2: Regulatory issues addressed by regional economic communities	8
Table 3: “Market structure” in selected countries	11
Table 4: Basic information communication technology statistics	11

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1. Introduction

The present report reviews the legal and regulatory framework for the information and telecommunications sector in five African countries, namely: Cameroon, Ethiopia, the Gambia, Morocco and Mozambique. Given that these countries are members of regional economic communities, it also includes a review of the legal and regulatory frameworks of those communities. The reason for including the regional economic communities and the African Union in this study is premised on the fact that national policies are in large measure shaped by decisions of their RECs and the African Union.

There has been turmoil in the African telecommunications sector since the beginning of the 21st century driven by rapid advances in information and communications technology (ICT). This turmoil has resulted in the phasing out of government-owned telecommunications monopolies in all but a few African countries, in deregulation and increased complexity of the sector, and increase in competitiveness and in tangible benefits for the consumer. But it has also resulted in regulatory turmoil in some countries and in regulatory inefficiencies in practically all the countries on the continent.

Regulatory efficiency has been fettered by the rapid change in technology globally, rapid expansion of the ICT sector on the continent not only in terms of infrastructure (which has expanded at a fast clip when compared to other infrastructure sectors in Africa) but also in terms of the portfolio of services on offer. There is also the dimension of ensuring that ICT regulation is not such as would fetter the technology's and sector's contribution to development. For more than a decade, ICTs have played a role as one of the key drivers of socioeconomic transformation of Africa. Evidence suggests that they played an important role in the continent's progress towards the targets of the Millennium Development Goals (MDGs) and are poised to play an even greater role

towards the attainment of the recently adopted Sustainable Development Goals (the successor global development agenda to the MDGs) and the African Union's Agenda 2063¹.

Flowing from the above and in response to global best practices, most African countries are engaged in structural and regulatory reforms, in varying degrees, of their ICT sector. Most of these reforms owed their origin to the structural adjustment policies (SAP) that African countries adopted in the 1980s and 1990s to address serious balance of payments problems and to correct structural imbalances in their economies². A key component of the SAP was deregulation and the phasing out of government provision of certain services, including telecommunications that are best provided by the private sector. Government was to limit itself to regulation and to providing a conducive environment for efficient private provision of services.

These reforms have enabled the entry of private providers in the telecommunications market thus increasing competition, the decoupling of provider from regulator, and resulted in the establishment of "independent" regulatory agencies. The reforms aim to protect and advance consumer welfare, provide clarity to participants in the sector, and attract more private and foreign investment to finance both the development of the sector and foster economic and social development.

The reforms have been anchored on national ICT policy, plans and sector strategies. Development partners, including ECA,³ have played a pivotal role in the articulation and formulation of these policies, plans and strategies due to inadequate national capacity in ICT policy and strategy formulation in most African countries. The adoption of ICT policies and the development of derivative e-strategies by most of African countries were given added impetus and urgency by the outcomes of the World Summit on the Information Society (WSIS).⁴ The first phase of the WSIS process identified sound policies and enabling efficient legislative and regulatory

¹ This is because outcome documents of recent United Nations summits, including the 2030 Agenda for Sustainable Development, explicitly identify technologies, including ICT, as a means of implementation.

² The argument that telecommunications was a natural monopoly lost strength and credibility with the break-up of AT&T in the United States of America in 1982 and the privatization of British Telecommunication in 1984.

³ ECA launch of the African Information Society Initiative (AISI) in 1996. AISI provides the roadmap to guide African countries in addressing the challenges of emerging technological developments by developing and implementing National Information and Communication Infrastructure (NICI) and the National Spatial Data Infrastructure (NSDI) policies and plans. see www.uneca.org/aisi.

⁴ This includes the "WSIS Declaration of Principles"; the "WSIS Action Plan, and the "Tunis Commitment", the "Tunis Agenda".

frameworks as one of the critical issue for ICT development in Africa. WSIS Action Plan (C6) specifically states as follows: “[T]o maximize the social, economic and environmental benefits of the Information Society, governments need to create a trustworthy, transparent and non-discriminatory legal, regulatory and policy environment”.

Simultaneously, the African Union and the regional economic communities⁵ adopted a series of decisions to support the creation of a harmonized policy space and regulatory framework for ICT development on the continent. These decisions include the decision on an optimal regulatory environment necessary to attract investments. Regional economic communities are supporting African countries through promotion of harmonized regulatory frameworks on ICT in general and electronic commerce in particular to harness ICT for socioeconomic development and regional integration. Similarly, the African Union has adopted the African Union Convention on Cyber Security with the purpose of harmonizing e-legislation related to e-transactions development, personal data protection, cyber-security promotion and efforts to combat cybercrime across the continent.

However, factors such as technological convergence (by the provision of various services on a common platform), the development of online services and cloud computing, the management of critical Internet resources, the growing concern for cyber-security as well as threats to the sanctity of fundamental rights and freedoms have combined to fundamentally modify the nature of the market and require countries to develop, modify or revise their regulatory framework if they are to succeed in the new environment.

In general, there is sufficient scope for significantly raising the level of competence among African ICT regulatory institutions. In many countries, a wide array of new technologies has been adopted while regulations are yet to be updated to reflect the changed circumstances. The key challenge for developing an effective regulatory framework for ICT in Africa is building

human and institutional capacity to articulate the drivers and components of ICT sector reform nationally, regionally and internationally as well as to harmonize domestic laws, regional laws and international conventions in order to ensure an enabling environment for ICT development in the context of the growing knowledge economy.

This report aims to review progress on legal and regulatory framework for ICT and to highlight some key challenges. There is no doubt that an appropriate legal and regulatory environment ensures that there is a set of rules and regulations which allow the ICT sector to be more competitive, thus promoting the expansion of the economy⁶. The report draws on country case studies commissioned by ECA in 2013 in five selected African countries representing the five regions of the continent: Ethiopia (East Africa), Cameroon (Central Africa), the Gambia (West Africa), Morocco (North Africa) and Mozambique (Southern Africa) to assess the ICT policy development and implementation processes in these countries in the context of their respective country’s overall infrastructure. The countries differ significantly in the structure of their ICT markets and by implication in their regulatory governance structures and regulations. While the Ethiopian ICT market remains a government monopoly, the Moroccan market is fully liberalized and competitive. This diversity provides significant variation from which lessons can be drawn.

⁵ Regional economic communities include the Economic Community of West African States (ECOWAS), East African Community (EAC), Economic Community of Central African States (ECCAS), and South African Development Community (SADC).

⁶ Vere, Angeline (2009), Legal and Regulatory Frameworks for the Knowledge Economy: Concept Paper prepared for ECA, First Session of the Committee on Development Information, Science and Technology (CODIST-I), Addis Ababa, Ethiopia, 28 April – 1 May 2009.

2. The context: ICT Legal and Regulatory Framework in Africa

ICT has a significant impact on socio economic performance of countries. For instance, it is estimated that mobile telephony will create about 6.6 million jobs in Africa by 2020.⁷ The current ICT spending in sub-Saharan Africa is approximately \$70 billion today and it will nearly double by 2015⁸. In addition, mobile applications have become more than tools of communication: in 2011 more than 50 mobile money initiatives existed including in the banking sector.

Reforms of the ICT sector have had a strong impact on the economy of most African countries along many dimensions. The most remarkable impact of these reforms is the widespread liberalization of the telecommunications markets in the region and the developments in mobile technology use. ICT has had a transformative effect on the economy. For example, ICTs have significantly reduced transactions cost, the time and cost of acquiring and disseminating information, and introduced new payments systems.

2.1 National ICT legal and regulatory frameworks

Creating an appropriate legal and regulatory environment is the key strategic decision variable if African countries are to harness the full possibilities presented by ICT. Regulation, if there is to be one, must be fair, neutral, nimble and such that will not impose unnecessary (regulatory) burden on providers, stifle innovation and fetter the sector's contribution to economic growth.

With this in view, ECA, through the African Information Society Initiative (AISI),⁹ assisted African countries to develop a legal and regulatory environment as a matter of first order priority. The AISI document started as follows: "The African

information society cannot be realized without the appropriate institutional, legal and regulatory framework and mechanisms at the national level as well as at the regional level. It is essential to address the legal, regulatory and institutional practices in African countries which inhibit the development of national information services and connectivity to the global information infrastructure".

In the framework of implementing the AISI since 1996, ECA has provided support to over 46 African countries in the development, formulation and implementation of National Information and Communication Infrastructure policies and strategies. Almost all NICIs included creating legal and regulatory framework and the enabling environment as one of their strategic pillars for which specific action plans were developed.

A study by the International Telecommunication Union (ITU)¹⁰ has indicated that a number of African countries have undertaken legal and regulatory reforms to reflect new developments in the sector. Though the levels vary from country to country, the reforms are characterized in general by:

- a. Separation of the regulatory function from the functions of network operators and service providers, and the creation of regulatory agencies charged with responsibility to, among other things, establish and implement the rules that govern the sector, issue licences, settle disputes and protect customers by regulating prices and monitoring the quality of service delivery. Whereas regulators used to focus mainly on controlling the tariffs of the incumbent operator, now they must regulate an increasingly competitive market;¹¹
- b. Privatization of government telecommunications monopoly and the liberalization of the sector to enable entry for companies other than the traditional operators. These policies have introduced competition in the activities of network operators and service providers and in the

7 GSMA (2013). Sun-Saharan Africa Mobile Economy 2013. Available at http://www.gsmamobileeconomyafrica.com/Sub-Saharan%20Africa_ME_Report_English_2013.pdf.

8 <http://www.siliconafrika.com/it-market-growth-in-africa/>.

9 <http://www.uneca.org/publications/african-information-society-initiative-aisi-decades-perspective>.

10 http://www.itu.int/dms_pub/itu-d/opb/reg/D-REG-HIPSSA-2010-PDF-E.pdf.

11 Mark D. J. Williams, et al., Africa's ICT Infrastructure: Building on the Mobile Revolution, World Bank, 2011; http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure_Building_on_MobileRevolution_2011.pdf.

- service market including in some countries, granting of a second fixed line licence;
- c. Formulation of national information and communication policies and masterplans, along with sector e-strategies aimed at harnessing ICT to achieve national development objectives;
 - d. The effective use of these technologies in various socioeconomic sectors is giving rise to a number of legal and regulatory issues for policymakers, parliamentarians, law enforcement agencies, public administrations, the business community and individuals. Such issues include the validity of e-signatures and e-transactions, jurisdiction and dispute resolution, security risks, infringement of Intellectual Property Rights in an online environment, consumer protection, privacy and protection of personal data;
 - e. e-Legislation, including cyber-security legislation; an analysis of the current status of cyber-legislation in Africa shows that although an increasing number of African countries have embarked on designing and formulating ICT policies, the majority are still in the early stages of cyber-security legislation development and enactment as shown in figure 1 below.

Table 1: Cybercrime Legislation in selected countries in Africa

No table of figures entries found.	e-currency, e-transaction, e-payment, e-contract*	Consumer protection and arbitration*	Digital Signature**	Indicative status of specific criminal law provisions on cybercrime and electronic evidence ***
Benin			No	Partial
Burkina Faso	Yes	Yes	No	No
Burundi			No	No
Congo			No	No
Dem. Rep. Congo	Yes	Yes	No	No
Côte d'Ivoire	Yes		Yes	Yes
Egypt	Yes		Yes	No
Ethiopia	Yes		No	No
Gambia	Yes	Yes	Yes	Partial
Ghana	Yes		Yes	Yes
Guinea-Bissau	Yes		No	No
Kenya	Yes	Yes	Yes	Partial
Madagascar	Yes	Yes		Partial
Mali	Yes	Yes	No	No
Mozambique	Yes	Yes	No	Partial
Niger	Yes	Yes	Partial	No
Nigeria	Yes	Yes	Yes	Yes
Senegal	Yes	Yes	Yes	Yes
Sudan	Yes	Yes	Yes	Partial
Togo	Yes	Yes	No	No
Uganda	Yes	Yes	Yes	Yes
Zambia	Yes		Yes	Yes

Source: * based on survey ECA/WSIS 2010/2011.

** based on online sources.

*** Cyber Crime and Cyber Security Trends in Africa; page 53; AUC; 2016.

Overall, widespread regulatory reform has been a major factor in the success of the ICT sector in Africa. The gradual shift from a politically driven decision-making process to a more rules-based, technocratic one has improved investor confidence and allowed competition to develop. Independent regulatory authorities were relatively unknown in Africa before the establishment of telecommunications regulators. Although it has taken time for these institutions to become effective, their technical capacity and experience in carrying out their mandate has improved, and the quality of regulation has increased.¹²

2.2 Implementing the WSIS Action Line on Legal and Regulatory Environment

The WSIS Action Lines related to legal and regulatory environment include C5: building confidence and security in the use of ICTs and C6: Enabling environment.

ECA has undertaken a study in 2009 and 2011¹³ to assess the status of implementation of WSIS Action Lines in African countries. With regard to building confidence and security in the use of ICTs, the countries with cyber-security laws include Benin, Egypt, the Gambia, Ghana, Kenya, Mauritius, the Niger, Nigeria, Senegal, the Sudan and Zambia.

On the other hand, different measures have been taken by some African countries with regard to building confidence and security in the use of ICTs. For example, Burkina Faso has enacted a law on privacy and personal data protection and creation of the related institution and organs; the Gambia, Ghana, Mauritius, the Niger, Senegal and the Sudan have developed guidelines for preventing, detecting and responding to cybercrime.

Regarding the WSIS Action Line on the enabling environment, the same study by ECA showed that new legal and regulatory environments have been created in many countries: the Gambia, Ghana, Guinea, Kenya, Mauritius, Senegal, the Sudan (e-transaction law); furthermore, guidelines on

privacy and data and consumer protection have been developed by some countries, namely: the Gambia, Mauritius, Senegal, the Sudan.

The study also showed that there is no specific Internet related laws and governance framework in practically all countries except Burkina Faso. Regarding the impact of legal and regulatory issues on the ICT industry, the study indicates that tax exemption on mobile telephones has increased their usage in Burkina Faso; liberalization in Burundi opened up the market for six mobile operators; liberalization in the Gambia attracted four mobile operators with more accessibility and improved service; in Ghana, it created confidence, predictability, ease, increase in investment, dispute resolution measures, and expanding infrastructure.

2.3 Harmonization of policies, legal and regulatory frameworks at national, subregional and regional levels

African governments recognize that regional cooperation and integration is vital for their economic development and structural transformation. Pursuant to this, they have invested and continue to invest enormous resources in promoting and advancing the integration of the continent as set out in the Abuja Treaty establishing the African Economic Community (AEC). Recent assessments of the status of regional integration in Africa show that significant progress has been made¹⁴. For example, all the regional economic communities recognize the importance of information and communication technologies in accelerating economic growth and have, to this end, adopted harmonized, common regional sector policies.

At the continental level, Africa's commitment to deploying ICT for development had been concretized in various resolutions of the African Union Assembly of Heads of State and Government as well as through the NEPAD Action Plan, where ICT sector development is identified as a key priority sector, with projects and initiatives to speed up subregional/regional connectivity and interconnectivity plans.

¹² Economic Commission for Africa (2011). *Benchmarking the WSIS in Africa: Analysis of Country Reports* (2011). Addis Ababa, ECA.

¹³ Report of the Meeting of the Committee on the follow-up to the World Summit on the Information Society (WSIS), 5 May 2011, Addis Ababa, ECA.

¹⁴ See various issues of ECA/AUC/AfDB report "Assessing Regional Integration in Africa" (ARIA).

Nonetheless, at the subregional level, the status of common or harmonized regulatory policies and provisions differs sharply among the regional economic communities and across the regions. In the area of policy and regulatory frameworks harmonization, significant progress has been made in, for example, the Economic Community of West African States (ECOWAS), while a lot remains to be done in others. ECOWAS has been proactive in creating initiatives to foster cooperation and integration of the ICT sector of its member States; its Treaty having foreseen the harmonization of legislation, including in the telecommunications field, similar to the European Union model as a development imperative.¹⁵

Table 2 below highlights the activities of regional economic communities in key ICT regulatory areas and the relative status in terms of: (i) policy in place or under development by regional economic community; (ii) activities taking place in some member States; (iii) partial implementation

by majority of member States; or (iv) the regional economic community has completed regulatory issue¹⁶ while annex 1, table 1 summarizes some of the ongoing regulatory activities by regional economic communities. While most regional economic communities are able to address issues regionally, regulatory activities in the AMU region are currently addressed only at the level of individual member States.

One notable achievement of these efforts is the creation of a network of regional associations of regulators throughout the continent with the aim of promoting knowledge sharing in order to effectuate the harmonization of policies and regulations at the regional level. According to an ITU report¹⁷ on regional regulatory associations, most if not all have similar objectives that include harmonization of policies and regulations; development of model guidelines of ICT legislations; exchange of ideas, views and experiences on all aspects of ICT

Table 2: Regulatory issues addressed by regional economic communities

Regulatory activity	EAC	ECOWAS	SADC	UMA
Regional regulators	4	4	4	-
Harmonization of ICT policies and regulations	3	3	3	1
Market liberalization, pricing and tariff control	3	2	1	1
National regulators established	4	4	3	3
Guidelines and regulatory models on licensing	1	3	3	3
Guidelines on interconnection and or IXPs	3	3	3	3
Guidelines and regulatory models on cyber-security	3	2	2	2
Infrastructure sharing	3	2	2	1
Use of alternative infrastructure	2	2		3
Cyber-security legislation	2	2	1	2
Management of radio spectrum	2	2	2	3
ICT statistics and data	1	1	1	3
Elimination of special taxes on ICTs	1	1		
Total	32	31	26	26

Source: Programme for Infrastructure Development in Africa (2011).

¹⁵ infoDev ICT Regulation Toolkit, <http://www.ictregulationtoolkit.org>.

¹⁶ NEPAD, African Union Commission and African Development Bank (2011). Study on Programme for Infrastructure Development in Africa (PIDA). Phase 1 Report. ICT Sector. 2011. Addis Ababa: PIDA.

¹⁷ http://www.itu.int/dms_pub/itu-d/opb/reg/D-REG-HIPSSA-2010-PDF-E.pdf.

regulation; promotion of efficient, adequate and cost effective telecom networks; harmonization and maximization of the utilization of scarce resources such as electromagnetic spectrum, numbering; identification and sharing of best practices within the region; promotion of human resource development and contribution to the integration of their regions.

At the continental level, an African Telecommunication Regulators' Network was created.

Based on a review of the evidence from countries across the continent, it can safely be concluded that the regulatory environment for ICT development on the continent is under-developed in a number of countries, stagnant in some, and vibrant in others (such as Kenya, Nigeria and South Africa) with significant ICT sector competition and reasonably free democratic institutions. There is thus a compelling need to strengthen the regulatory framework and institutions in order to unleash ICT as a means of implementation of the African structural transformation agenda. The next section uses examples drawn from a subset of countries to review how African countries are advancing regulatory reforms in the ICT sector.

3. Country examples (Cameroon, Ethiopia, the Gambia, Morocco and Mozambique)

ECA commissioned studies in five selected African countries of Ethiopia (East Africa), Cameroon (Central Africa), the Gambia (West Africa), Morocco (North Africa) and Mozambique (Southern Africa), aimed at assessing the ICT policy development and implementation processes in these countries in the context of their respective overall infrastructure, in order to identify the main priority areas that they have targeted regarding ICT and geo-information strategies and plans. A sample questionnaire was provided by ECA to the consultants recruited from each of the five countries. However, consultants were not limited to the questionnaire; they could modify, amend the questionnaire in response to national idiosyncrasies. With regard to data, emphasis was given on providing information and data that is certified official by the respective country governments.

Sufficiently, competent human capital (lawyers and judges especially), legal institutions and national jurisprudence have developed appreciably in most African countries since 1960, the year most African countries threw off the yoke of colonialism to warrant the revision of colonial era laws and the enacted of new laws better suited for the times¹⁸. However, until recently, that has not been possible in part because of the absence of democracy in many countries and also due to the prohibitive cost of legal system reviews.

Conditions have changed and are changing in many countries. The return of democratic rule and democratically elected national legislatures is resulting in the enactment of new laws and the consequent repeal or supersession of colonial era laws.¹⁹ Further, recent economic growth, driven in large part by a commodity export boom, may have attenuated the financing constraint and made it possible for countries to undertake wholesale review of their legal systems.

In this context, this section analyses the trends in the legal and regulatory environment in five countries (Cameroon, Ethiopia, the Gambia, Morocco and Mozambique) as they make efforts in building their knowledge economy.

3.1 Country cases

The liberalization of the ICT and telecom sector enabled the growth and spread of ICT infrastructure and services in the countries studied by ECA as summarized in table 3.

¹⁸ There are three main colonial legal systems in Africa (depending on the colonial power): English common law system, civil law system, and hybrid of common law and Dutch civil law in South Africa.

¹⁹ Rwanda, for example, is in the process of changing its entire legal system from Belgian civil law system to the common law system that is practiced in the other member States of the East African Community-Kenya, the United Republic of Tanzania and Uganda.

Table 3: “Market structure” in selected countries

Country	No of mobile operators	No of ISPs	Remarks
Cameroon	4	25+	This is an oligopolistic market in the operator segment with 5 major providers (Camtel Mobile, MTN, Orange, Nextell) and many ISPs informal; a third mobile operator about to start. Due to increased competition, average revenue per mobile user in Cameroon has fallen.
Ethiopia	1	1	Ethiotelecom, the sole provider in of telecommunications and Ethionet, the sole provider of Internet services in Ethiopia are government-owned monopolies. There is no choice and no competition in this market although VOIP is presenting competition in the services segment. Ethiopia has one of the lowest tariffs in the world.
Gambia	3	4	The Gambia has since joined the Africa Coast to Europe (ACE) submarine cable consortium and it is possible that this may have resulted in some increase in the number of mobile operators and ISPs and thus greater competition.
Morocco	3	30+	This is an oligopolistic market in the operator segment with 3 providers of mobile telephony: MarocTel, Inwi, and Medi Telecom. The market is said to be still operating under its potential. Morocco is connected to the world through several submarine cables. Until recently, Morocco was not a member of the African Union and was therefore not influenced by African Union decisions.
Mozambique	3	25+	Country has three operators, one fixed line operator, Telecomunicacoes de Mozambique (TDM), and two mobile operators, Telecomunicacoes Moveis and VM SARL. However, the ISP market is reasonably competitive with a plurality of providers.

Source: ECA.

With economic growth and the growth of ICT market, the legal and regulatory environment has become one of the important areas for development of the sector which this section of the report tries to assess the developments in five countries.

Table 4: Basic information communication technology statistics

Country	Mobile-cellular subscriptions*	Mobile Broadband Subscriptions per 100 inhabitants*	% of households with Internet*	% of individuals using the Internet*	% of Internet penetration **
Cameroon	71.85	4.27	8.58	20.68	17.7
Ethiopia	42.76	11.95	9.8	11.60	4.2
Gambia	137.85	10.02	13.3	17.12	18.6
Morocco	126.87	39.28	66.5	57.08	60.6
Mozambique	74.24	9.37	13.2	9.00	5.9

Source: *ITU, 2015; **internetworldstats.com, 2016.

3.1.1 Cameroon²⁰

Reform of the telecommunications sector in Cameroon can be described as a two-phased effort: the first phase (1960-1998) was marked by the State monopoly over the telecommunications services while the second phase started in 1998 with the partial liberalization of the telecommunications sector. The national regulatory authority of Cameroon is Agence de Regulation des Telecommunications created in 1998, which is predominantly responsible for the telecom sector.

Rapid developments experienced in the areas of telecommunications and information technology triggered major changes in the global market. The difficult economic situation that beset the country in the 1980s and 1990s made it vulnerable to pressure from the Bretton Woods institutions to undertake structural economic reforms, including the dismantling of state monopolies. As a consequence, in June 1995, the Government adopted a decision limiting its role as a provider of telecommunications services. However, real reform of the sector came with the enactment of Law No. 098/14 of July 1998 which set up a new telecommunications legal and regulatory framework.²¹ The law provided for the following:

- a. Separation of postal activities from those of telecommunications;
- b. The reassignment to the Ministry of Post and Telecommunications responsibilities for defining the strategic policy orientation of the sector, regulations, follow-up and monitoring and evaluation;
- c. The establishment of an independent, autonomous telecommunications regulatory agency, the Telecommunications Regulatory Board (TRB);²²
- d. The granting to Cameroon Telecommunications (CAMTEL) of the exclusive rights to operate and provide fixed-line telephone services.

Further, the law introduced competition into the sector by allowing two private mobile telephone operators, private access/Internet services providers and private provision of other value-added services. An effort in 2001 to privatize CAMTEL failed. In December 2010, with the enactment of the law regulating electronic communication, the liberalization of the ICT sector was taken to its final stage. The 2010 new law allows multi-service authorizations, thus paving the way for competition in all the market segments, including fixed telephone lines.²³ An effort was made in 2012 at regulatory simplification through the enactment of two presidential decrees.

Lessons learned

Regulation should normally facilitate competition, promote private initiatives and reduce prices. However, there is a monopoly in fixed-line telephony, and there is little space for small private sector initiatives to take root. Moreover, the regulator is not entirely independent: it reports to the ministry and a management board appointed by the Head of State.²⁴

Going forward, Cameroon needs to continue to promote a competitive ICT sector by formulating and implementing a dynamic, technological-change-responsive, legal and regulatory framework. It must also enhance the independence and autonomy of the regulator, TRB, including with respect to spectrum management and pricing. There is also need to attenuate the regulatory skills constraint by building the necessary human capital, and regulatory expertise and competence. New regulations must take account of technological convergence and use incentives to bridge the gap between urban and rural areas in access to ICT services. Regulation must manage the tension between government's need for tax revenue and the need to grow the ICT sector and create jobs for the economy.

²⁰ This section is in large measure a summary of ECA (2012). Assessing ICT Policy Development and Implementation process: The Case of Cameroon, a study undertaken by Dr. Olivier Nana Nzepa for ECA. Addis Ababa, ECA.

²¹ See Cameroon, (2005), The Sector Strategy for Telecommunications and ICT (2005 - 2015).

²² Agence de régulation des télécommunications (ART) in French.

²³ Ibid 2.

²⁴ Lange, P. (2008). The Case for "Open Access" Communications Infrastructure in Africa: The SAT-3/WASC cable - Cameroon case study. APC. Available at: www.apc.org/en/node/6142.

3.1.2 Ethiopia

Reform of the telecommunications sector in Ethiopia began in 1996 with the enactment of a law that created a single operator. Prior to 1996, one single entity, Ethiopian Telecommunications Authority served as both provider of communications services and as regulator. The 1996 law abolished Ethiopian Telecommunications Authority; it separated provision from regulation by creating two new entities: The Ethiopian Telecommunications Agency as regulator and the government-owned Ethiopian Telecommunications Corporation as monopoly provider of ICT services.

In 2010, Ethiopia established the Ministry of Communications and Information Technology as the primary authority in the sector. Within the Ministry, a new directorate, the Communications and IT Standardization and Regulation Directorate, was “created to handle all regulatory issues across the entire ICT sector”.²⁵ Among its many functions, the Directorate is responsible for developing standards for telecommunications, information technology and postal services; establishing standards in the telecommunications, information technology and postal services; setting of base fees for different services; and monitoring the implementation in the IT, telecom and postal sectors.

The Ethiopian Broadcasting Agency is responsible for the regulation of the media, that is, television, radio and the press while the regulator, the Ethiopian Telecommunications Agency is responsible for spectrum management. Due to Government monopoly of the telecommunications sector, the legal and regulatory framework has not developed significantly. However, with the Government’s ambitious investment in ICT infrastructure and the growing services sector, particularly the financial services and banking sector, the need for modernizing the legal and regulatory environment is well recognized.

The regulator, the Ethiopian Telecommunications

Agency, remains weak in terms of its legitimacy in monitoring the behaviour of the monopoly operator and its ability to deal with regulatory challenges, such as licensing, frequency assignment and monitoring, setting and enforcing tariffs, dispute resolution, maintaining quality of service and promoting universal access. Considerably unable to attract and retain skilled employees with legal, regulatory, management and technical skills, due partly to low public sector remuneration and the absence of such skills, Ethiopia relies significantly on the support of partners to draft its ICT laws and regulations.²⁶ No new regulations and guidelines were issued by the regulator over the past three to five years, an indication of the stalled communication-sector regulatory process. Studies suggest that pro-competition policy intervention is important to deal with current poor service penetration, low quality of service and high cost of broadband access.²⁷

Lesson learned

The main lesson from Ethiopia is that regulations matter for all facets of ICT sector development. The absence of competition in the ICT sector has resulted in a retarded legal and regulatory environment and constrained the growth of ICT infrastructure and services. Clearly, this has not benefited the Ethiopian consumer. The development of the legal and regulatory environment of the ICT sector is severely constrained by a significant skilled human-resources shortage; while technical, analytical and regulatory skills needed for planning, implementation and management of a modern Next Generation Network and its regulation are in short supply.²⁸

3.1.3 The Gambia

The Gambia has witnessed spectacular developments in the ICT sector which can be attributed to a number of policy initiatives and programmes that contributed immensely to providing an enabling environment in the country. Key initiatives include the passing of

²⁵ FDRE Ministry of Communications and ICT “ICT policy and regulatory environment” <http://www.mcit.gov.et/web/english/ict-policy-and-regulatory-environment>.

²⁶ Economic Commission for Africa has recently drafted an e-commerce bill.

²⁷ Lishan Adam (2010). Ethiopia ICT Sector Performance Review 2009/2010. Towards Evidence-based ICT Policy and Regulation. Volume 2, Policy Paper 9, 2010. Johannesburg: Research ICT Africa.

²⁸ Ibid 5.

the Information and Communications Act in 2009, and the Public Utilities Regulatory Act, and preparation of various other ICT policies and strategies. The Gambia's Public Utilities Regulatory Authority established in 2004 is the multi-sectoral regulatory body. The Information and Communication Act (IC Act 2009) aims to address issues such as computer misuse and cybercrime, and electronic signatures and transactions. In consequence, competition has increased with the increase in the number of service providers such as telecoms operators, and Internet Service Providers, and prices have declined.

Lessons learned

The Information and Communication Act included several relevant e-legislations which needed stand-alone and detailed legislation on their own such as the e-transactions, e-signature and cybercrime legislation. Therefore, there is a need to update and separately develop these important e-legislations.

3.1.4 Morocco

Morocco has gone through a series of complementary stages in the ICTs policy and regulatory development process. The first stage (1993-2002) targeted mainly the liberalization of telecommunications and its related regulations and legislations. The regulatory body, Agence Nationale de Réglementation des Télécommunications (ANRT) was established in 1997 with a launch of its liberalization programme the same year adopted by parliament to set up a liberal legal framework. In 1998 it undertook several major structural transformations. The 24-96 law enabled the splitting of the former National Post Office and Telecommunication Agency into two different institutions: "Maroc-Telecom" for Telecommunication services and "Poste-Maroc" for postal services. In the same vein, this year witnessed the creation of the National Telecommunications Regulatory Agency and the National Secretariat of ICT (SEPTI) under the oversight of the Prime Minister. The second phase (2002-2009) mainly targeted the development of the first e-Services and

the elaboration of an ICT national strategy. In 2002, it awarded eight new satellite licences and launched in 2004 the audio-video liberalization programme (television and radio).²⁹

With the slow progress in implementation, there was a need to launch a second phase of ICT reforms and initiatives led and directed by a national comprehensive cyber-strategy elaborated in consultation with diverse actors/stakeholders. This resulted in the launching of Morocco's first national strategy towards developing the Information Society and Knowledge Economy known as e-Maroc-2010 late in 2005. The main goal of e-Maroc-2010 was to integrate Morocco into "knowledge economy" also known as the "global village"³⁰ whose main objectives include, among others, to enhance the regulatory and legal framework and reinforce the Moroccan telecoms network.

Consequently, a new law (55-01) was promulgated to reinforce and strengthen law no. 24-96 which mainly empowered the ANRT and gave it more prerogatives to monitor, plan, control and revive the telecoms sector. Among other things, the new law obliged the telecoms companies to regularly provide specific statistics and facts pertaining to the monitoring and planning of the activities, better defined the relations between the telecom operators and ANRT and clearly stated access rules to the common infrastructure of the historical operator. This law also made it mandatory for all telecom operators to provide ANRT with 0.25 per cent of their net benefit to be injected in ICTs Research and Development Projects, 2 per cent for the universal service and 0.75 per cent for training and skills development.

Lessons learned

Morocco has developed a series of policies, strategies and has made the necessary review and update to the legal and regulatory environment together with the development of the infrastructure and services.

Evaluating the outcomes of e-Maroc strategy which concluded to a poor performance overall brought about a new **Maroc-Numeric 2013** ICT national strategy (e-Maroc 2013).

²⁹ ECA (2012). Assessing ICT Policy Development and Implementation in Africa: Morocco Country Report. Prepared for ECA by Professor Driss Kettani. Addis Ababa, ECA.

³⁰ Ibid 7.

3.1.5 Mozambique

The enabling legal instrument for telecommunications sector reforms in Mozambique is Telecommunications Law No. 8 of 1992.³¹ This law set out the general legal framework for the sector and prescribes a detailed institutional framework. It also created the telecommunications regulatory authority, Instituto Nacional das Comunicações de Mozambique (INCM) with powers to license, promote competition, and assure quality service. INCM also charged with responsibility for interconnection, managing universal access and service, tariffs regulation, and has powers to impose penalties and sanctions on operators for non-compliance. INCM reports to the Ministry of Transport and Communications.

However, real reforms can be said to have started in the early 2000s with the promulgation of Basic Telecommunications Law 2004. The goals of these reforms were to liberalize the sector, promote competition by privatizing the national telecommunications carrier to ease the entry of new operators, and expand the menu of services available to the consumer. Other elements of the reform included: the introduction of an appropriate legal framework for the sector, postal sector reform, and the establishment of a Universal Service Fund to promote rural connectivity and access. The national telecommunications carrier, the then-incumbent Government-owned monopoly operator, was also significantly reorganized in order to make it attractive to private investors; it legally became a “private” company (SARL) in 2002³², with the State holding 80 per cent of the capital and its employees holding the remainder (20 per cent). In 2009, it became a shareholder company (TDM, SA).³³ It is as yet to be opened up to private investors and still holds the monopoly on national backbone infrastructure.

Further, the National ICT Institute (INTIC)³⁴

undertakes some regulatory functions, in close coordination with the INCM. Value-added telecommunications services have all been liberalized. The Universal Access Fund created in 2004, and managed by the national regulator (INCM)³⁵ aims to promote investments in the provision of ICT services in rural areas at a fair and affordable price, with clearly defined targets for access to telephony and Internet access.

New areas requiring the attention of regulators have emerged as a consequence of the rapid development of the sector and demands for diversified services by consumers. One such new area is data security. The Mozambican Constitution of 2004 establishes the right to protection of personal data stored in databases and computers, and the prohibition of access to digital archives and files for the purpose of searching for such data unless in terms of the law or judicial decision. It also establishes the right of citizens to know what data is being stored about them, and to correct errors. However, the appropriate legislation and regulation has not yet been passed.

The ability to make commercial and other transactions online safely, with the necessary guarantees, is vital to both small and large business development and to citizens’ ability to take advantage of public services online. The acceptability of faxed or e-mailed invoices and receipts and the obligation of original signatures are some of the extremely basic questions that need to be determined. However, the approval of the draft law on electronic transactions is long overdue.³⁶

Lessons learned

The regulatory ecosystem needs to be streamlined. The key lesson that emerges from Mozambique is the need for countries to examine deeply the issue of whether, in the age of technological convergence and digitalization, it is appropriate

31 Basic Telecommunications Law 2004 and Amended Telecommunications Law 2016 provided refinements to the 1992 law.

32 Decree 47/2002, from 26 December.

33 BR III Série – No. 13, from 3 April, 2009.

34 Established by law in 2002.

35 See GSMA (2014) http://www.gsma.com/publicpolicy/wp-content/uploads/2012/03/Sub-Saharan_Africa_USF-Full_Report-English.pdf. See also Mabila, F., Mboane, J.M. and Mondlane, A. Mozambique ICT Sector Performance Review, 2009/2010, Towards Evidence-based ICT Policy, Research ICT Africa, 2011.

36 ECA (2012). Assessing ICT Policy Development and the Implementation Process: The Case of Mozambique. Study undertaken for ECA by Francisco Mabila Chamango. Addis Ababa, ECA.

and cost-effective to have separate regulators for telecommunications and ICTs, and broadcast media, each taking decisions that necessarily have an impact in the other sector. While INCM regulates the ICT sector, Government Information Bureau and the Supreme (or High) Mass Media Council regulate the broadcast media, resulting in regulatory confusion and inefficiency. Technological convergence will intensify the need for clarity of regulations in the various segments of the market.

Another lesson is the need for regulatory independence. Both INTIC and INCM are subordinate to the Ministry of Transport and Communications, giving rise to questions or concerns about the degree to which their decisions are independent of government and political influence.

3.2 Conclusion

The studies show that African countries are making progress in creating a responsive and dynamic legal and regulatory environment conducive to the growth of the ICT sector. They also demonstrate the inhibiting constraint of the colonial past and ideological legacies. The studies also show how the legal and regulatory environment is affecting the evolution of the structure of the ICT market, and the conduct and performance of the operators. Countries with more liberal and competitive environments appear to be doing better in terms of Internet and mobile telephony penetration as well as quality of service than those that remain Government-owned monopolies.

Inadequate regulatory independence is common across all countries. According to the Association of African Communications Lawyers, in a liberalized environment the concept of regulatory independence is paramount for a country that desires to realize key socioeconomic objectives. The Association of African Communications Lawyers defines an independent regulator as one that is: (i) independent from those it regulates; (ii) protected from political pressure; (iii) given full

ability to regulate the market by making policy and enforcement decisions; and (iv) adequately funded from reliable and predictable sources. These studies and many others provide evidence on the challenges of governance, institutional independence and capability that regulators in many African countries face, and challenges that often eroded their legitimacy. Policies are generally far behind the regulatory provision and the political will to change the status quo is often not forthcoming in most countries. The lack of political will manifests itself in several ways including protection of incumbents, delays in regulatory and policy approval through the legislative process and inadequate provision for financial independence of regulators.³⁷

Another source of regulatory weakness is the unidirectional movement of human capital from government institutions and regulatory authorities to the private sector where there are more attractive incentives and remuneration.³⁸ This migration presents real risks, in societies characterized by high levels of corruption, for regulatory capture.

Inadequate skills in key areas of ICT, economics of regulation, as well as legal drafting, limit the effectiveness of regulatory authorities. The consequence is that regulators appear to be more engaged in the passing of new laws, regulations and guidelines than in actual enforcement of existing laws. Regulation is made much more complex by the rapid technological change (notably convergence technologies) and the emergence of new, technology-enabled, services. The need remains, based on the basic nature of the laws and regulations of the countries in this study, to enhance regulatory skills with respect to e-commerce, e-transactions, cyber-security issues, and pricing, for example.

³⁷ African Development Bank Group (2012). Assessment of Post Connect Africa Summit. Vol. 1, Main Report prepared by Albert Butare, Lishan Adam, Dorothy Okello and George Mulamula for AfDB. Tunis, AfDB.

³⁸ SADC ICT Policy and Legal Framework: A Review and Update in the view of Convergence; HIPSSA; 2010.

4. Some additional challenges to the ICT Legal and Regulatory Frameworks

Legal and regulatory frameworks do matter for the development of an economy and society. They are in sure confidence, facilitate a common understanding of the rules of the game and minimize transactions cost. A major challenge for any developing country is to successfully take the process of law reform from initial recognition of an issue and the preparation of draft measures to their formal adoption by the national political institutions and implementation in a manner that has a real impact on business and administrative attitudes and practices. Delayed or non-implementation of policies is often a signal of fundamental weaknesses in a country's legal and regulatory framework.

This section of the report highlights some key challenges in legal and regulatory framework in Africa drawn from the five country studies referred to above and other recent ECA subject-area studies.

4.1 Technology

A great challenge which African regulators currently face is the ability to effectively and reliably forecast the future of technology and its likely impact, through the introduction of new products and services, on the demand for and supply of regulations. Advances in ICTs particularly as the industry move towards all IP-based Next Generation Network has led to converged regulatory environments. Convergence regulation demands the move away from vertical regulation based on services and technology to a horizontal technology and service-neutral licensing framework. Other challenges pertinent to convergence include dispute resolution and interconnection and

access to wholesale services and essential facilities³⁹. For example, converged regulators have been set up in Kenya, Mauritius, South Africa, Uganda, United Republic of Tanzania, to regulate the telecommunications, broadcasting, and information technology sectors. More and more countries need to move towards this direction.

4.2 Content regulations

Content regulation in the context of protecting minors is increasingly becoming an important area with proliferation of social networks. Content issues are getting more complex due to convergence of services and devices and increasing uptake of digital broadcasting. Regulators are increasingly required to address complex content-related issues that demand better understanding of the online market.⁴⁰

4.2.1 Equity and consumer protection

Consumer-driven regulatory approach including universal service and access to ICTs particularly broadband and quality of services are important to attain affordable access and use of ICTs infrastructure. Countries⁴¹ such as Ghana, Morocco, Mozambique, Nigeria and South Africa, and recently Egypt and Tunisia have introduced legislation on universal access according to which telecommunications operators are required to pay a percentage of their net profit to a common pool to provide last mile connectivity and services, especially in rural areas. While this law is designed to bridge spatial inequity, it could also constrain other areas of operation such as the delivery of quality services if it imposes unnecessary regulatory burden on operators.

4.2.2 Infrastructure issues – interconnection, spectrum management, etc.

With the growing interest in efficiency using existing resources, regulators are also faced with the challenge of making the sharing of infrastructure a key area of focus. This will enable reduction of financial burden on operators and in return promoting the growth of new applications

³⁹ ITU, Trends in Telecommunication Reform 2007: The Road to Next-Generation Networks (NGN), <http://www.itu.int/pub/D-REG-TTR.9-2007>.

⁴⁰ Ibid 21.

⁴¹ See for example GSMA (2014) Sub-Saharan Africa Universal Service Fund study http://www.gsma.com/publicpolicy/wp-content/uploads/2012/03/Sub-Saharan_Africa_USF-Full_Report-English.pdf.

and services with enhanced competition by reducing entry barriers. In some liberalized markets, there are already several models of infrastructure sharing such as co-location, national roaming and local loop unbundling.⁴² With regard to spectrum management, there is still an issue of significant interference challenges that needs to be monitored and coordinated across national borders. Regulators need to monitor trends and capacities in spectrum planning, setting fees, harmonization, refarming and reserving for future use.

4.2.3 Challenge of cybercrime and cyber-security

Cybercrime and cyber-security are a growing concern. The poor development of cyber-security legislation in African countries has a negative impact on businesses. There is a strong correlation between economic growth and cybercrime and consequent demand for cyber-security.⁴³ As more African countries experience positive growth, they also become vulnerable to cybercrime. According to IT News Africa, cybercrimes annually cost the Nigerian economy an estimated \$200 million, while the cost to Kenya and South Africa is \$36 million and \$573 million, respectively.⁴⁴ There is a need to create a legal and regulatory environment to mitigate cyber vulnerabilities, and to foster national and international cooperation to handle cybercrime and threats.

The mandate of the regulators in addressing cyber-security issues and cybercrime is unclear in many African countries. Nonetheless, it would be appropriate to encourage their participation as part of ensuring consumer protection and the safe use of ICTs. In this regard, with the necessary capacity-building to equip regulators with the necessary tools and resources to tackle cybercrime, they could be engaged with stakeholders to raise awareness, put in place the legal and regulatory (including institutional) framework to address cyber-security issues. Due to the cross-border nature of cyber-security, it would be important to coordinate efforts with various stakeholders within the country and collaborate in fighting cybercrime between countries and across regions.⁴⁵ In this regard, promoting the implementation of the African Union Convention on Cyber-security could be of paramount importance.

⁴² International Telecommunications Union, Trends in Telecommunication Reform 2008: Six Degrees of Sharing, <http://www.itu.int/pub/D-REG-TTR.10-2008>.

⁴³ International Data Group Connect (2013).

⁴⁴ *Ibid.*

⁴⁵ ITU, Trends in Telecommunication Reform 2009: Hands-on or hands-off? Stimulating growth through effective ICT regulation, <http://www.itu.int/pub/D-REG-TTR.11-2009>.

5. Emerging issues for regulators

As discussed in this report, rapid advances in technology and innovation are creating new products and services that present challenges to regulators because they cut across sectors. There is need for effective oversight of emerging in a way that does not stifle innovation and competitiveness. Some of the new issues requiring the attention of regulators include mobile banking, privacy, surveillance and human rights. We discuss some of them below, beginning with mobile banking.

5.1 Mobile banking⁴⁶

ICT is becoming one of the prominent platforms for new business practices. Africa is at the forefront of the mobile money revolution.⁴⁷ In 2013, more than 208 mobile money initiatives (including 116 in Africa) had been developed. Monetary authorities in a number of African countries⁴⁸ have issued regulatory frameworks to create an enabling environment for the orderly introduction (in countries where they do not exist) and/or management (in countries where they do exist) of mobile money services. However, with the ease of access, the ratio of fraudulent mobile banking transactions has increased and as a result, the emergence of mobile money has revealed a number of gaps, given the unbundling of conventional banking services.

Kenya is currently the only country in Africa that has responded with specific regulation to try and address some of these gaps with the draft regulation for the Provision of Electronic Retail Transfers and the Draft E-Money Regulation.⁴⁹ It is important to note that the Central Bank of

Kenya and the Communications Commission of Kenya have admitted their lack of reactivity in the regulation of e-financial sector and have decided to develop a new regulatory system that serves as a defence against emerging risks.⁵⁰

There is need for African countries to create/improve an enabling policy environment for doing business electronically by strengthening regulatory frameworks and instituting policy reforms in order to increase activities aimed at linking the e-commerce applications with various types and practices of business. A simple framework indicates how mobile money has partitioned conventional banking services into a number of different functions.⁵¹

5.2 Right to privacy, Internet surveillance versus State security

ICTs, by making it easier for terrorist organizations to recruit, plan and carry out attacks have reduced the private cost of terrorism while increasing the social cost. The Al-Shabab attack at Westgate Mall in Kenya, the activities of Boko Haram in Nigeria and the Al Qaeda in the Islamic Maghreb in Northern Africa highlight the increasing use of ICTs in the planning, coordination, implementation and promotion of terrorist attacks by terrorist organizations. Along similar lines, ICTs have reduced the cost of organizing protests.⁵² In response to the threat of terrorism, States are increasingly using the Internet to monitor their citizens, in many cases in violation of constitutional and legal protections⁵³. These developments have highlighted the tension and trade-off between the right to privacy and the requirements of state security in so far as it is the responsibility of the state to ensure the security of all. Most regulations on the continent defer to State security and do not recognize the tension or trade-off.

46 A good reference is Jones, EN, Woods and N. Ndungu (2016) Consolidating Africa's Mobile Banking Revolution http://www.geg.ox.ac.uk/sites/geg/files/Africas%20Mobile%20Banking_2016.pdf.

47 Kabir Kumar & Toru Mino (2011). "Five business case insights on mobile money," <http://technology.cgap.org/2011/04/14/five-business-case-insights-on-mobile-money>.

48 Kenya, Nigeria, Rwanda, South Africa, and, more recently Egypt and Tunisia have introduced regulations governing mobile banking.

49 www.centralbank.go.ke/downloads/nps/Electronic%20Retail%20and%20E-regulations.pdf.

50 <http://www.africanewswire.net/story.php?title=kenya-de-la-regulation-du-mobile-banking>.

51 Dittus, Peter and Klein, Michael. (2011) "On Harnessing the Potential of Financial Inclusion." BIS Working Paper No. 347, Bank for International Settlements, Communications, CH-4002 Basel, Switzerland. | Klein, Michael and Mayer, Colin. (2011) "Mobile Banking and Financial Inclusion: The Regulatory Lessons." Working Paper No. 166, Frankfurt School of Finance & Management.

52 Reference is made here to recent civil protests in Cameroon and Ethiopia which began in late 2016 and resulted in Internet shutdown (in varying degrees and geographical coverage) in both countries.

53 Snowden's revelations as well as WikiLeaks have made Internet surveillance a front-burner issue.

6. Conclusion

This brief report, inspired by case studies of the ICT regulatory environment in five African countries, has shown the diversity of laws, rules and regulations governing the sector. The wide differences in outcomes, particularly in terms of market structure, conduct and performance of operators in the study countries show that the regulatory environment matters. The ICT market in Ethiopia is a monopoly, rates are set by the regulator. In the other markets, the market structure ranges from oligopoly in terms of operators to monopolistic competition in terms of services.

The study also identified increasing technology convergence as a factor that will define the regulatory environment in the near term. Regulators need to begin to think very seriously how to deal with it. African countries and regional economic communities need therefore to ensure that their legal and regulatory instruments are well suited for the times and are crafted in a manner that would allow the ICT sector to be nimble, innovative and competitive, thus allowing the economy to grow.

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Annex I: Regional ICT policy and regulatory frameworks and activities through regional economic communities

REC	ICT policies, legal and regulatory frameworks and activities
Common Market for Eastern and Southern Africa (COMESA)	<p>The regulators association for the region is the Association of Regulators of Information and Communication in Central and Eastern Africa (ARICEA). Through ARICEA, COMESA has been very proactive in member states capacity building. It has initiated programmes to harmonize ICT policies and attract foreign investment to the region, and drafted model ICT policies, licensing rules, and frameworks. It also has established an agenda to stimulate regulatory harmonization.</p> <p>In 2011, ARICEA and COMESA began a study on cyber-security in the region, which resulted in draft policy guidelines and a draft model bill. They have also developed a national IT policy model bill; consumer protection; Universal Service/Access; equipment type approval and standards; pricing; spectrum management; regulatory guidelines on: interconnection; Universal Service; licensing; satellite and other wireless services; and e-government and e-legislation guidelines help governments in creating environments that support e-commerce.</p>
East African Community (EAC)	Regional Framework for Harmonization of National ICT Policies; EAC Legal Framework for Cyber Laws
Economic Community of Central African States (ECCAS)	<p>Four policy and regulatory harmonization guidelines, namely, Adoption of the framework for harmonization; Support to member States to harmonize national regulations and policies through assembly of ICT regulators; Adoption of master plan development of basic infrastructure and ICT advocacy partners for its effective implementation; Creation of an observatory on ICT policies.</p> <p>ECCAS agreed on the following directives:</p> <p>Directive on harmonizing the modalities for setting and controlling tariffs for communication services;</p> <p>Directive on harmonizing the legal regimes for electronic communication activities;</p> <p>Directive on interconnection and access for electronic communication networks and services;</p> <p>Regulation on the harmonization of regulations and regulatory policies for electronic communications.</p>

Economic Community for West African States (ECOWAS)	<p>ECOWAS' regulatory harmonization efforts are being carried out through the West African Communications Regulators Assembly (WATRA). ECOWAS has undertaken a Telecommunications Regulation Harmonization Project aimed at designing a strategy for the harmonization of telecommunications policies in ECOWAS. To date, each ECOWAS country, with the exception of one, has commenced liberalization of the telecommunications sector and has separated postal and telecommunications operation from regulation.</p> <p>In 2009, ECOWAS adopted a legislative framework in cyber-security.</p>
Arab Maghreb Union (AMU)	<p>With support from African Development Bank*, UMA has commenced a study on harmonization of the legal and regulatory framework of the ICT sector¹. The study is expected to lead to harmonized legislation within UMA and is addressing the following areas: Interconnection; Licensing; Numbering plan management; Frequency spectrum management; Universal access and service; The regulatory authority; e-commerce; Protection of personal data; and Fight against cybercrime.</p>
Southern African Development Community (SADC)	<p>In policy and regulatory framework, SADC's focus is to pursue:</p> <p>Development and implementation of the e-SADC initiative; Implementation of a regional digital migration plan; Development of a framework for SADC Regional Roaming Regulation; SADC frequency band plan; and Harmonization of Cyber-Security Regulatory Frameworks in SADC.</p> <p>SADC's regulatory harmonization activities are spearheaded by the Communications Regulators Association of Southern Africa (CRASA).</p>
West African Economic and Monetary Unit (UEMOA)	<p>UEMOA is currently working on directives aimed at the harmonization of telecommunications laws of the member countries. Given that all its members are also members of ECOWAS, UEMOA has actively participated in ECOWAS and WATRA workshops on the ECOWAS guidelines and aims to harmonize its directives with ECOWAS.</p>

* African Development Bank. Unlocking North Africa's Potential through Regional Integration: Challenges and Opportunities. 2012. op.cit.

Annex 2 : SWOT analysis and international comparisons

Strengths, weaknesses, opportunities and threats analysis (HISSPA)

Organization	Strengths	Weaknesses	Opportunities	Threats
African Union (AU)	<ul style="list-style-type: none"> > Heavily involved in infrastructure development (with NEPAD). > Regional economic communities are African Union Commission pillars for implementation of policies and regulations. > Wide scope of influence (continental level). > Opportunities to address Heads of State and Government twice a year. > Permanent dialogue with other regional organizations and principle of subsidiarity. > Possibility to gather Ministers of ICT whenever needed. > In a good position to observe good practices of regional organizations with a view to spreading them across the continent. > Has a memorandum of understanding and partnerships with several international organizations (EU, ITU, World Bank, Microsoft, etc.) 	<ul style="list-style-type: none"> > The variety of countries covered may be an obstacle to adopt common rules satisfying each and every member State. > No binding rules in ICT/telecommunications. > Member States are generally part of one or many other regional organizations and this may lead to two consequences: <ul style="list-style-type: none"> - overlapping of rules and risk of legal uncertainty; and - risk of a minima harmonization. > Late on issues such as cyber criminality 	<ul style="list-style-type: none"> > Taking advantage of its size to promote harmonization and dialogue between Member States belonging to different regional organizations. > Orientations on cyber criminality may boost the issue across the continent. 	<ul style="list-style-type: none"> > A lack of consensus regarding the way to harmonize and the contents to be covered by harmonization may hinder the harmonization process. > The large size of the African Union may be an obstacle to implement harmonization on a flexible basis. > There is a risk of being inaudible where many initiatives are taken at different level (international, regional, national, local), and where ICT and telecommunications are only a short field of intervention. > There is a risk of being reduced to the role of policymaker definitely assigning to other organizations the role to take more binding rules.
Arab Maghreb Union (UMA)	<ul style="list-style-type: none"> > Cooperates with ECA (cooperation defined in a memorandum of understanding dated January 2008) 	<ul style="list-style-type: none"> > Poorly involved in telecommunications and ICT. > Low level of cooperation with the African Union. 	<ul style="list-style-type: none"> > May take advantage of the experience of other regional organizations in the future. > Study the possibility to set an observatory of regional integration⁵. 	<ul style="list-style-type: none"> > UMA will lack visibility (i.e. won't have a voice for future international or interregional negotiations), legitimacy in telecommunications and ICT.
Economic Community of West African States (ECOWAS)	<ul style="list-style-type: none"> > Its telecommunication initiatives cover the main issues and are binding. > The "package" strategy allows clarity and legal certainty. 	<ul style="list-style-type: none"> > So far, few member States have implemented the legal framework in telecommunications (UEMOA). 	<ul style="list-style-type: none"> > Electronic transaction, data protection and cyber criminality projects are currently discussed. 	<ul style="list-style-type: none"> > Overlapping and growing risk of conflicts of rules (including conflict of jurisdictions) with UEMOA.

<p>West African Economic and Monetary Union (UEMOA)</p> <ul style="list-style-type: none"> > The "package" strategy allows clarity and legal certainty. > Its telecommunications initiatives cover the main issues and are binding. 	<ul style="list-style-type: none"> > So far, few member States have implemented the legal framework in telecommunications. > No cyber laws have been adopted yet. 	<ul style="list-style-type: none"> > Strengthen partnership with ECOWAS to avoid marginalization. <p>Its package may be considered as having less binding force than ECOWAS package (directives as opposed to supplementary acts to the treaty. ECOWAS package is more recent, ECOWAS totals more member States).</p>	<ul style="list-style-type: none"> > Overlapping and growing risk of conflicts of rules (including conflict of jurisdictions) with ECOWAS. > Its package may be considered as having less binding force than ECOWAS package (directives as opposed to supplementary acts to the treaty. ECOWAS package is more recent, ECOWAS totals more member States).
<p>Economic Community of Central African States (ECCAS)</p>	<ul style="list-style-type: none"> > The proximity with CEMAC and COMESA spaces may create incentives. 	<ul style="list-style-type: none"> > No binding rules (the Treaty has not defined legal instruments enabling harmonization of member States' national laws). > Young regional regulator. > Has just adopted a reference framework. 	<ul style="list-style-type: none"> > ECCAS may take advantage of other regional experiences and be a good follower. > Model laws are to be issued.
<p>Economic and Monetary Community of Central Africa (CEMAC)</p>	<ul style="list-style-type: none"> > A clear strategy (e-CEMAC 2010 dated 2005) to implement > Up-to-date initiatives (most of the initiatives are recent) > The package strategy allows clarity and legal certainty. 	<ul style="list-style-type: none"> > Delay in strategy implementation (second phase started but there are 6 of them). > No initiative taken regarding scarce resources (frequencies and numbering) > Lack of legislation on cyber criminality (missing technical skills) > Few enforcement mechanisms (sanctions and penalties) > Financial needs for monitoring and evaluation of implementation. 	<ul style="list-style-type: none"> > The Council of ministers has requested to the Commission initiatives for electronic transaction and cyber criminality (waiting for ECA support). > Currently focusing more on infrastructure development (Central African Backbone - CAB).
<p>Common Market for Eastern and Southern Africa (COMESA)</p>	<ul style="list-style-type: none"> > A quite complete set of initiatives both in telecommunications and ICT. > A policy and regulatory approach which offer room for manoeuvre and flexibility for member States. 	<ul style="list-style-type: none"> > A too large room for manoeuvre may make it difficult to harmonize. > Overlapping memberships make it difficult to harmonize. 	<ul style="list-style-type: none"> > Initiatives relating to cyber laws might be issued. > The pure guidelines approach may be considered too soft for harmonization at a continental level and therefore may not be retained. > Some members may grant more importance to more binding rules issued by the other regional organizations to which they are also members and this will hinder COMESA harmonization process.

<p>East African Community (EAC)</p>	<ul style="list-style-type: none"> > Multi-regional partnership (RICTSP). > Strategies regularly updated. > Policy approach which allows flexibility. > Involved on cyber laws. 	<ul style="list-style-type: none"> > Few initiatives in telecommunications. > Few binding rules. > Overlapping membership with SADC, COMESA and IGAD 	<ul style="list-style-type: none"> > Multi-partnership may lead to a transfer of skills in policy regulation and law making process 	<ul style="list-style-type: none"> > Having in part reduced its role to framework maker, EAC may find it difficult to adopt in the future more specific rules of a binding nature.
<p>Intergovernmental Authority for Development (IGAD)</p>	<ul style="list-style-type: none"> > Multi-partnership (RICTSP) 	<ul style="list-style-type: none"> > No binding rules > Few initiatives in ICT and telecommunications. > Very young experience in the ICT and telecommunications sectors. 	<ul style="list-style-type: none"> > A relatively clear strategy to follow until 2013 (based on RICTSP). 	<ul style="list-style-type: none"> > Members having also memberships with COMESA will favour COMESA's initiatives in ICT and telecommunications sectors. > If IGAD is not accelerating to catch other regional organizations, it may lack visibility and legitimacy in harmonizing these sectors in the future.
<p>Indian Ocean Commission (IOC)</p>	<ul style="list-style-type: none"> > Involved in multi-partnership (coordination with COMESA, RICTSP) > Involved in infrastructure (SEGANET project). 	<ul style="list-style-type: none"> > IOC totals few member states and as such does not enjoy economy of scale (lack of financial support, lack of expertise etc.). > Few initiatives has been taken in ICT and telecommunications, and where taken they are merely strategic programs. 	<ul style="list-style-type: none"> > The SEGANET project suggests harmonizing legislation where necessary to implement the project. 	<ul style="list-style-type: none"> > SEGANET project lacks finances and human resources. > COMESA is so influential in the area in terms of size and ICT and telecommunications initiatives that IOC may lack visibility and legitimacy in this field in the future, especially if we have regard to the fact that most of its members are also part of COMESA.
<p>Southern African Development Community (SADC)</p>	<ul style="list-style-type: none"> > Quite complete set of regulation (including consumer protection). > Guidelines approach allows room for manoeuvre to member States and be adapted to their specific environment. > Long experience. > Good coordination with the agencies (SADC and CRASA). 	<ul style="list-style-type: none"> > A too large room for manoeuvre may make it difficult to harmonize. > Numerous rules all set in different documents (some are clearly outdated) and this may lead to a lack of legal certainty. 	<ul style="list-style-type: none"> > Broadcasting Model Bill. > Possible three parties' agreement with EAC and COMESA. 	<ul style="list-style-type: none"> > The pure guidelines approach may be considered too soft for harmonization at a continental level and therefore may not be retained. > Some members may grant more importance to more binding rules issued by the other regional organizations to which they are also members and this will hinder SADC harmonization process.

